



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

**Examination: B.S. 4 Years Program**

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Arabic-III**

**MAX. TIME: 15 Min.**

**Course Code: ARB-201/ISL-21421 Part-I (Compulsory)**

**MAX. MARKS: 10**

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

اس پرچے کے سوالات کو اسی شیٹ (Sheet) پر حل کریں۔

سوال نمبر ۱۔ درست جواب کا انتخاب کریں۔ 10x1

۱۔ جو اسم فعل کے واقع ہونے کا سبب بتلائے، کہلاتا ہے:

(الف) مفعول بہ (ب) مفعول معہ (ج) مفعول لاجلہ (د) مفعول فیہ

۲۔ عاشق النبی صلی اللہ علیہ وسلم بعد وفات جدہ

(الف) مع عمر ابی طالب (ب) مع عمر عباس (ج) مع والدہ (د) مع امہ

۳۔ ربائی مزید فیہ کے اوزان میں سے ہے

(الف) تفعیل (ب) تفاعل (ج) تفعیل (د) استفعال

۴۔ ایسا فعل جو فاعل سے تمام ہو جائے۔۔۔۔۔ کہلاتا ہے۔

(الف) ماضی (ب) مضارع (ج) متعدی (د) لازم

۵۔ وقت پر دلالت کرنے والا اسم کہلاتا ہے

(الف) فاعل (ب) نائب الفاعل (ج) ظرف زمان (د) ظرف مکان

۶۔ مفاعیل خمسہ میں سے ہے۔

(الف) مفعول مطلق (ب) فاعل (ج) نائب الفاعل (د) فعل

۷۔ استفعال کا وزن ہے

(الف) انتفعال (ب) اوصاف (ج) استفعال (د) افعال

۸۔ انتساب باب۔۔۔۔۔ کا مصدر ہے

(الف) افعال (ب) تفعیل (ج) انتفعال (د) افعال

۹۔ حتی۔۔۔۔۔ میں سے ہے

(الف) نواصب المضارع (ب) جوازم المضارع (ج) مشبہ بالفعل (د) حروف غیر عاملہ

۱۰۔ اصح۔۔۔۔۔ مسمیٰ کن افعال میں سے ہے

(الف) افعال مقاربہ (ب) افعال ناقصہ (ج) افعال خمسہ (د) افعال تعجب





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Roll No. ....

PAPER: PAPER: Arabic-III

Course Code: ARB-201/ISL-21421 Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

اس پرچے میں شامل سوالات کے جوابات اپنی امتحانی کاپی میں درج کریں۔

سوال نمبر ۲۔ نیچے دیے گئے اجزا میں سے پانچ کے جوابات تحریر کریں۔ 5x4

۱۔ نائب الفاعل کی تعریف کریں اور دو مثالیں دے کر واضح کریں۔

۲۔ فتح الولد الباب ، انزل الله الكتاب، جملوں کو مجہول میں تبدیل کریں۔

۳۔ ثلاثی مجرد کی تعریف کر کے کوئی چار مثالیں لکھیں۔

۴۔ خبر کی اقسام لکھیں

۵۔ المسلم اخو المسلم لا یظلمه و لا یحقره، ترجمہ کریں

سوالات کے جوابات دیں۔ 3x10

سوال نمبر ۳۔ جوازم المضارع کی تعریف اور عربی مثالیں لکھیں۔

سوال نمبر ۴۔ ثلاثی مزید فیہ کے اوزان مع اشلہ تحریر کریں۔

سوال نمبر ۵۔ سوق الفاکھة کے عنوان پر عربی زبان میں مکالمہ لکھیں





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Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Arabic Language-II

MAX. TIME: 15 Min.

Course Code: ARB-211/GEN-21136 Part-I (Compulsory)

MAX. MARKS: 10

Signature of Supdt.:

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حصہ معروضی

سوال نمبر ۱: (الف) مذکورہ کے مؤنث اور مؤنث کے مذکورہ تحریر کریں: (۵)

جَمَلٌ

اِمْرَأَةٌ

بَقْرَةٌ

نَائِمٌ

جَدَّةٌ

(ب) واحد کے جمع اور جمع کے واحد تحریر کریں: (۵)

اُدْبَاءٌ

عَاصِمَةٌ

طَائِرٌ

كَاتِبٌ

ضَيْوْفٌ





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PAPER: Arabic Language-II

Course Code: ARB-211/GEN-21136 Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

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اس پرچے میں شامل سوالات کے جوابات اپنی امتحانی کاپی میں درج کریں۔

حصہ انشائیہ

سوال نمبر ۲: درج ذیل سوالات کے جوابات عربی میں تحریر کریں: (۱۰)

(i) بِمَاذَا تَكْتُبُ / تَكْتُبِينَ ؟

(ii) مَتَى تَعُودُ / تَعُودِينَ إِلَى بَيْتِكَ ؟

(iii) هَلْ تَمْرُحُ / تَمْرُحِينَ مَعَ الْأُسْتَاذِ ؟

(iv) مَاذَا تَلْبَسُ / تَلْبَسِينَ ؟

(v) مَنْ خَرَجَ مِنَ الْمَنْزِلِ ؟

سوال نمبر ۳: مناسب الفاظ سے خالی جگہ پُر کریں: (۱۰)

(i) هَذِهِ ..... عَالِيَهُ. (أَشْجَارٌ ، نَوَافِدٌ ، رِجَالٌ)

(ii) ..... الْمُدْرَسِ الْكِتَابِ. (أَخَذْتُ ، تَأَخَذُ ، يَأْخُذُ)

(iii) تَلْعَبُ ..... فِي الْحَدِيقَةِ. (الطُّلَّابُ ، الْبَنَاتُ ، الْخُدَّامُ)

(iv) أَنَا ..... بَعِيدًا. (أَرْمِي ، نَزِمِي ، تَرْمِي)

(v) أَخِي يُحِبُّنِي وَ ..... أُحِبُّهُ (نَحْنُ ، أَنْتِ ، أَنَا)

سوال نمبر ۴: درج ذیل حدیث مبارک کا اردو یا انگریزی میں ترجمہ کیجئے: (۱۰)

قَالَ رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ: مَنْ سَرَّهُ أَنْ يُمَدَّ لَهُ

فِي عُمُرِهِ وَ يُوسَّعَ لَهُ فِي رِزْقِهِ وَ يُدْفَعَ عَنْهُ مَيْتَةُ السُّوءِ

فَلْيَتَّقِ اللَّهَ ، فَلْيَصِلْ رَحْمَتَهُ.

(إقلب الورقة)

سوال نمبر ۵: درج ذیل عبارت کا اردو یا انگریزی میں ترجمہ کریں: (۱۰)

وَهُنَا قَامَ الشَّيْطَانُ وَقَالَ لِلشَّابِّ : يَا سَيِّدِي ، أَنَا لَا أُرِيدُ أَنْ أَمْنَعَكَ  
مِنْ قَطْعِ الشَّجَرَةِ ، وَلَكِنْ فَقَطْ أُرِيدُ أَنْ تَتْرُكَهَا لِيَوْمٍ أَوْ يَوْمَيْنِ ، لِأَنَّ  
لِي فِيهَا مَطْلَبًا ، فَإِذَا حَصَلَ مَطْلَبِي فَلَكَ أَنْ تَفْعَلَ مَا تُرِيدُ . وَأَنْتَ  
أَحْسَنْتَ إِلَيَّ الْآنَ وَرَحِمْتَنِي ، فَإِذَا أَحْسَنْتَ إِلَيَّ مَرَّةً ثَانِيَةً تَتْرُكْ لِي  
هَذِهِ الشَّجَرَةَ ، وَأَعْطِيكَ مُقَابِلَ كُلِّ يَوْمٍ مِئَةَ رُؤْيِيَةٍ . فَقَبِلَ الشَّابُّ ،  
وَقَالَ فِي نَفْسِهِ : أَقْطَعُ هَذِهِ الشَّجَرَةَ بَعْدَ أَنْ أَخُذَ عِدَّةَ مِئَاتٍ مِنَ الرُّؤْيِيَّاتِ .

سوال نمبر ۶: درج ذیل کلمات کو اس طرح ترتیب دیں کہ مفید جملے بن جائیں:

(۱۰)

- (i) جَدِيدًا ، حَامِدٌ ، دَرَسًا ، قَرَأَ
- (ii) الْخُبْزَ ، الْخَادِمَةَ ، أَلْكَتْ
- (iii) مَلَكَةً ، تَسَافِرُ ، أَنْتَ ، إِلَى
- (iv) الْوَطْنَ ، الْإِيمَانَ ، حُبُّ ، مِنْ
- (v) إِلَى ، هَدِيَّةً ، أَرْسَلْتُ ، لَكَ





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Roll No. in Fig. ....

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PAPER: Arabic Language

MAX. TIME: 15 Min.

Course Code: ARB-212/GEN-21113 Part-I (Compulsory)

MAX. MARKS: 10

Signature of Supdt.:

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السؤال الأول: اختر الكلمة الصحيحة : Choose the right word 10 = 20 x 0.5

- ۱- عَلمُ باكستان ..... (أخضر، أحمر، أصفر)
- ۲- (ذلك، تلك، أولئك) ..... سبورة.
- ۳- (ذلك، تلك، أولئك) ..... مدرستی.
- ۴- (ذلك، تلك، أولئك) ..... جدارنا.
- ۵- (ذلك، تلك، أولئك) ..... قلم.
- ۶- (هذا، هذه، هؤلاء) ..... سيارته.
- ۷- (هذا، هذه، هؤلاء) ..... دراجتها.
- ۸- تلك (ساعتك، ساعتك) ..... ياخالد.
- ۹- أبي مهندس، هذه (سيارتها، سيارته، سيارتهن) .....
- ۱۰- (دخل، دخلا، دخلوا) ..... المعلم الفصل.
- ۱۱- تلك أشجار ..... (طويل، طويلة، طوال)
- ۱۲- هؤلاء رجال ..... (طوال، طويلة، طويل)
- ۱۳- الغرف ..... وواسعة (كثار، كثيرة، كثير)
- ۱۴- بنت الأستاذ ..... (مجتهدة، مجتهدتان، مجتهدون)
- ۱۵- ..... قريب من المسجد (أنا، هي، هم)
- ۱۶- ..... أسماء الطلاب (هذا، تلك، أولئك)
- ۱۷- فوق المكتب ..... كثيرة (أقلام، قلم، القلم)
- ۱۸- اسمه ..... (سعيد، مريم، التلميذ)
- ۱۹- ..... معلمة في المدرسة (هن، هي، هو)
- ۲۰- رحمة الله (واسعة، واسع، وسيع) .....





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MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

PAPER: Arabic Language

Course Code: ARB-212/GEN-21113 Part – II

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

اس پرچے میں شامل سوالات کے جوابات اپنی امتحانی کاپی میں درج کریں۔

السؤال الثاني: أجب عن الأسئلة الموجزة: Attempt the short Questions

10 Correct the errors in the following sentences صحح الأخطاء في الجمل التالية

- ١- هذه قلمي ٢- هي حامد ٣- في باكستان صناعة طيب  
٤- أنت تلميذ الأحمد ٥- شربت الطفل الحليب ٦- يفتح الخادمة الباب  
٧- تلك أبي ٨- تلك ثلاث أبواب ٩- تلك أخي  
١٠- الشمس طالع

10 Arrange the words to make sentences جمالاً السؤال الثالث: رتب الكلمات لتصبح جملاً

- (١) هذه . الأستاذ . غرفة  
(٢) المدرسة . من . التلميذ . قرية  
(٣) هذا . ضيق . شارع  
(٤) التلامذة . كتب . جديدة  
(٥) خريطة . فوق . السعودية . الجدار  
(٦) الأستاذ . الولد . يعلم  
(٧) العلم . لون . أخضر  
(٨) صغيرة . هذه . النافذة  
(٩) هذه . نظيفة . مدينة  
(١٠) أسماء . هذه . الطلاب

10 Translate into Urdu السؤال الرابع: ترجم الى الأردية

- تشقق الطيور فرحانة بالنور  
تقول في سرور ما أجمل الضياء  
والحقل والزهور و الجدول الصغير  
تقول في سرور ما أجمل الضياء  
والولد الصغير والرجل الكبير  
يقول في سرور ما أجمل الضياء  
ما أجمل الضياء يشرق بالبهاء  
في الأرض و السماء ما أجمل الضياء

(إقلب الورقة)

10

السؤال الخامس : ترجم الى الأردية Translate into Urdu

قال رسول الله صلى الله عليه وسلم :

لا يدخل الجنة من كان في قلبه مثقال حبة من كبر

فقال رجل: إن الرجل يحب أن يكون ثوبه حسناً ونعله حسناً

قال. إن الله جميل، يحب الجمال

الكبر بطر الحق وغمط الناس

10

السؤال السادس: أجب عن الأسئلة التالية باللغة العربية

Answer the following questions in Arabic Language

(١) هل ولده طيب؟

(٢) من تلك؟

(٣) ماذا شرب الولد؟

(٤) متى تعود من المدرسة؟

(٥) كم عدد أصابع يدك؟



# UNIVERSITY OF THE PUNJAB

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Roll No. ....

PAPER: Psychology-I (MAS)

Course Code: APSY-211 Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Give short answers of the following:**

**(2 x 10 = 20)**

1. What is the difference between sensation and perception?
2. What is memory?
3. What are important points of Behaviorism?
4. Briefly explain the process of creativity.
5. What is Insight learning?
6. What is James-Lange theory of emotion?
7. What is motivation?
8. What is the difference between absolute threshold and differential threshold?
9. Define language.
10. What is control group in experimental research method?

**Q.3. Give brief answers.**

**(3 x 10 = 30)**

1. What is Psychology? Briefly describe its schools of thoughts.
2. Give a detailed account of types of thinking with examples.
3. Explain in detail the types of motives with examples.





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PAPER: Psychology-I (MAS)

Course Code: APSY-211 Part-I (Compulsory)

MAX. TIME: 15 Min.

MAX. MARKS: 10

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**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1. John Watson is considered to be the founder of \_\_\_\_\_.  
a). Structuralism  
b). Functionalism  
c). Behaviorism  
d). Gestalt
2. In correlation method, if increase in one variable is correlated with decrease in other variable then such relationship is as:  
a). Positive relationship  
b). Negative relationship  
c). Inverse relationship  
d). Zero relationship
3. The minimum level of energy which can stimulate any sense organ is known as \_\_\_\_\_  
a). Threshold  
b). Absolute threshold  
c). Sensory threshold  
d). Differential threshold
4. False perceptions are called \_\_\_\_\_.  
a). Delusions  
b). Hallucinations  
c). Illusions  
d). Weak eyesight
5. In classical conditioning, the weakening of the conditioned response in the absence of the unconditioned stimulus is called \_\_\_\_\_.  
a). Extinction  
b). Acquisition  
c). Generalization  
d). Discrimination
6. Physiological deficiency in an organism's body is called \_\_\_\_\_.  
a). Motive  
b). Drive  
c). Need  
d). Primary motive
7. Biologically, emotional changes occur due to \_\_\_\_\_.  
a). Limbic System  
b). Pons  
c). Cerebellum  
d). Thalamus
8. The memory of a specific event or autobiographical information is called:  
a). Semantic memory  
b). Episodic memory  
c). Procedural memory  
d). Implicit memory
9. \_\_\_\_\_ are the most basic ingredient of thought which comprised of categories of objects, events or ideas with common properties.  
a). Imageries  
b). Cognitions  
c). Languages  
d). Concepts
10. Doing volunteer work is an example of \_\_\_\_\_.  
a). Extrinsic motivation  
b). Intrinsic motivation  
c). Social support  
d). Social approval







# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Cognitive Psychology

Course Code: APSY-231 Part-I (Compulsory)

MAX. TIME: 15 Min.

MAX. MARKS: 10

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**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- 1- The Candle Problem was first described by \_\_\_\_\_.  
a) Dunker b) Newell c) Moray d) Humphreys
- 2- The transfer from one problem to \_\_\_\_\_ is called analogical transfer.  
a) Another problem b) its solution c) escape d) none of these
- 3- The term 'Cognitive Psychology' was coined by \_\_\_\_\_.  
a) Neisser b) Tolman c) Chomsky d) none of these
- 4- \_\_\_\_\_ is strongly associated with consolidation of memories.  
a) Hippocampus b) Broca's Area c) Brain Stem d) Reticular Formation
- 5- \_\_\_\_\_ effect describes that decisions are influenced by how the choices are stated.  
a) Stating b) Framing c) Decision d) none of these
- 6- Schneider and Shiffrin (1977) indicated that \_\_\_\_\_ can be achieved with practice.  
a) Selective Attention b) Divided Attention c) Covert Attention d) none of these
- 7- \_\_\_\_\_ proposed that overall experience is determined by combining basic elements of experience.  
a) Functionalism b) Gestalt School c) Structuralism d) none of these
- 8- In 1948 \_\_\_\_\_ talked about cognitive map.  
a) Tolman b) Chomsky c) McCarthy d) Watson
- 9- Conditioning can result into \_\_\_\_\_ memories.  
a) Explicit b) Episodic c) False d) none of these
- 10- The process by which short-term memories are converted into long-term memories is named as:  
a) Shaping b) Retention c) Consolidation d) none of these





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MAX. MARKS: 50

PAPER: Cognitive Psychology

Course Code: APSY-231 Part – II

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Give short answers of the following:**

**(2 x 10 = 20)**

1. Draw the flow diagram of Broadbent's filter model.
2. Why Hippocampus is important?
3. What is primacy effect?
4. What is Wernickes's aphasia?
5. What is mnemonic strategy?
6. What is retroactive interference?
7. What is hemispheric specialization?
8. What is a Geon?
9. What is top-down processing?
10. What is color constancy?

**Q.3. Give brief answers.**

**(3 x 10 = 30)**

1. Write a comprehensive note on Syllogism.
2. Explain Linguistic Determination in detail.
3. Write a comprehensive note on long-term memory.





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Environmental Psychology (Revised)**  
**Course Code: APSY-232 Part-I (Compulsory)**

**MAX. TIME: 15 Min.**  
**MAX. MARKS: 10**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer cutting and overwriting is not allowed. (1x10=10)**

1. The state of mental exhaustion similar to overload is called \_\_\_\_\_
  - a. Perceived loss of control
  - b. Learned helplessness
  - c. Directed attention fatigue
  - d. Aggression
2. A condition or situation in which environmental stimulation is controlled to a minimum is called
  - a. Experimental study
  - b. Simulation technique
  - c. Sensory deprivation
  - d. Sensory stimulation
3. Appraising pesticides may invoke perceived threat to one's health can be an example of \_\_\_\_\_ appraisal.
  - a. Performance
  - b. Harm or loss
  - c. Challenge
  - d. Threat
4. Cognitive maps in which environment has become coded in an organized and flexible representation that resembles a 'bird's eye' view are known as \_\_\_\_\_
  - a. Spatial maps
  - b. Sequential maps
  - c. You-are-here maps
  - d. Way-finding maps
5. Change in response to a stimulus is \_\_\_\_\_
  - a. Adjustment
  - b. Adaptation
  - c. Acclimatization
  - d. Habituation
6. According to Baker's ecological perspective, those who meet the membership requirements of a behavior setting and who are trying to become a part of it are called \_\_\_\_\_
  - a. Performers
  - b. Non-performers
  - c. Applicants
  - d. Candidates
7. Snowfall decreases driving on roads but increases winter sports is an example of \_\_\_\_\_
  - a. Determinism
  - b. Possibilism
  - c. Probabilism
  - d. Habituation
8. Framing environmental justice issues in terms of discrimination against justice for disadvantaged groups is called \_\_\_\_\_
  - a. Environmental justice
  - b. Environmental equality
  - c. Environmental press
  - d. Environmental racism
9. Procedures or design components that are based on empirical observations rather than opinions or values are regarded as:
  - a. Positive theory
  - b. Normative theory
  - c. Folk-design tradition
  - d. Grand design tradition
10. Spaces that encourages social interactions are known as \_\_\_\_\_
  - a. Social Isolation
  - b. Sociopetal
  - c. Sociofugal
  - d. Asocial





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Environmental Psychology (Revised)**

**Course Code: APSY-232 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q2. (Short Questions) (4 marks each)**

**(5x4=20)**

1. Explain the difference between high density and crowding.
2. What is a cognitive map? Explain its elements.
3. Explain the various zones or distances of Personal space.
4. How Arousal perspective explains environment-behavior interaction?
5. Briefly explain the effects of environmental stressors.

**Q3. (Brief Questions) (10 marks each)**

**(3x10=30)**

1. What is Environmental Psychology? Explain in detail the future environmental challenges posed to humanity.
2. Explain in the detail the planning and design for human behavior.
3. Explain in detail effects of disasters and human adjustments to it.







# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Principles of Marketing**

**MAX. TIME: 15 Min.**

**Course Code: BBA-201/BUS-21349 Part-I (Compulsory)**

**MAX. MARKS: 10**

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1. \_\_\_\_\_ is defined as a social and managerial process by which individuals and organizations obtain what they need and want through value creation and exchange.
  - a. Advertising
  - b. Selling
  - c. Marketing
  - d. Business
2. Consumer research, product development, communication, distribution, pricing, and service are all core \_\_\_\_\_ activities.
  - a. Exchange
  - b. Marketing
  - c. Management
  - d. Operational
3. Which customer question is answered by a company's value proposition?
  - a. "Why should I buy your brand rather than a competitor's?"
  - b. "How does your brand benefit me and society?"
  - c. "What are the costs and benefits of your brand?"
  - d. "What value the company get out of the proposition?"
4. The \_\_\_\_\_ concept is aligned with the philosophy of continuous product improvement and the belief that customers will choose products that offer the most in quality, performance, and innovative features.
  - a. Product
  - b. Customer
  - c. Marketing
  - d. Advertising
5. When customers don't know what they want or don't even know what's possible, the most effective strategy is \_\_\_\_\_ marketing.
  - a. Customer-driven
  - b. Customer-driving
  - c. Societal
  - d. Ambiguous
6. The set of tools a firm uses to implement its marketing strategy is called the \_\_\_\_\_.
  - a. Promotion mix
  - b. Product mix
  - c. Marketing mix
  - d. Organizational mix

**P.T.O.**

- 
7. Which of the following provides an answer to these questions: What is our business? Who are our customers? What do our customers value? What should our business be?
- Objectives and goals
  - Company Vision
  - A mission statement
  - A business portfolio
8. When compared to consumer markets, business markets are \_\_\_\_\_.
- Approximately the same
  - Smaller
  - Huge
  - Somewhat larger
9. The demand for many business goods and services tends to change more, and more quickly, than the demand for consumer goods and services does. This is referred to as \_\_\_\_\_ demand.
- Fluctuating
  - Derived
  - Inelastic
  - Elastic
10. Product improvements, product modifications, and original products can all be classified as \_\_\_\_\_.
- Pioneer products
  - New products
  - Product concepts
  - Product ideas
-



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Principles of Marketing**

**Course Code: BBA-201/BUS-21349 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Questions with short answers.**

**(10 x 2 = 20)**

- I. What are different types of buying decision behaviours? Explain them.
- II. What is product adoption process? Explain its different stages.
- III. What is customer relationship management (CRM)? Give one example of some company who is doing CRM.
- IV. Explain the concept of Customer Driven Marketing Strategy.
- V. What is market segmentation? What are different parameters to segment a population?
- VI. What is the mechanism to measure the return on marketing investment?
- VII. Differentiate between Micro and Macro environment. Give one example of each environment.
- VIII. Discuss the problems faced in international marketing research, and the strategy to overcome these problems.
- IX. Discuss the new product pricing strategies.
- X. What is competitive marketing intelligence? Explain its sources.

**Long Questions (3 x 10 = 30)**

Q. 3 What do you understand by Price Adjustment Strategies? Explain all the strategies with the help of relevant examples. (2+8=10)

Q. 4 What is meant by New Product Development Process? Explain each step of this process in detail. (2+8=10)

Q. 5 Define marketing research. Explain the process of marketing research. Describe the process to use marketing information. (2+6+2=10)





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Financial Management (Basic)**

**MAX. TIME: 15 Min.**

**Course Code: BBA-202/BUS-21351 Part-I (Compulsory)**

**MAX. MARKS: 10**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1. The long-run objective of financial management is to
  - a. Maximize earnings per share.
  - b. Maximize the value of the firm's common stock
  - c. Maximize return on investment
  - d. Maximize market share.
2. The decision function of financial management can be broken down into the \_\_\_\_ decisions.
  - a. Financing and investment
  - b. Investment, financing, and asset management
  - c. Financing and dividend
  - d. Capital budgeting, cash management, and credit management
3. A project should be accepted
  - a. If its IRR is greater than the cost of capital
  - b. If its IRR is greater than 0 percent
  - c. If its IRR is greater than Rs.0
  - d. If its IRR is equal to zero
4. A firm is evaluating an investment proposal which has an initial investment of Rs.5,000 and cash flows presently valued at Rs.4,000. The net present value of the investment is
  - a. -Rs.1,000
  - b. Rs.0
  - c. Rs.1,000
  - d. Rs.1.25
5. Which of the following best describes liquidation value?
  - a. The price a security "ought to have" based on all factors bearing on valuation.
  - b. The amount a firm could be sold for as a continuing operating business.
  - c. The amount of money that could be realized if an asset or a group of assets is sold separately from its operating organization.
  - d. The market price at which an asset trades

**P.T.O.**

6. An annuity which is for \_\_\_\_\_ time, called perpetuity.
- Limited
  - Fixed
  - Unlimited
  - None of the above
7. A special form of ownership having a fixed periodic dividend that must be made prior to payment to ordinary shareholders :
- Common stock
  - Preferred stock
  - Constant growth stock
  - None of the above
8. The conflict of interest between management and shareholders is called
- Agency issue
  - Financial issue
  - Critical issue
  - None of the above
9. The formula of debt ratio is:
- Total assets / total liabilities
  - Total liabilities / total assets
  - Debentures / Total equity
  - None of the above
10. ----- control the financial activities of the firm.
- Controller
  - Owner
  - Treasure
  - None of the above



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Financial Management (Basic)**

**MAX. TIME: 2 Hrs. 45 Min.**

**Course Code: BBA-202/BUS-21351 Part – II**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Questions with short answers.**

**(5 x 4 = 20)**

1. What is the money market? How does it work?
2. What is the purpose of cash budget? What role does the sales forecast play in its preparation?
3. What relationship exists between the size of the standard deviation and the degree of asset risk?
4. What is meant by the term leverage? How are operating leverage, financial leverage and total leverage related to the income statement?
5. What is the difference between the vertical merger and the horizontal merger? Explain with the help of examples.

**Q.3. Questions with brief answers.**

**(3 x 10 = 30)**

1. Zain Industries is in the process of choosing the better of two mutually exclusive capital expenditure projects namely M and N. The relevant cash flows for each project are given below. The firm's cost of capital is 14 percent.

	Project M	Project N
Initial investment	Rs. 28,500	Rs. 27,000
Year	Cash inflows	Cash inflows
1	Rs. 10,000	Rs. 11,000
2	Rs. 10,000	Rs. 10,000
3	Rs. 10,000	Rs. 9,000
4	Rs. 10,000	Rs. 8,000

- a. Calculate each project's Payback Period.
  - b. Calculate the Net Present Value (NPV) for each project.
  - c. Based on above calculations, which project would you recommend?
2. (a) Suppose Rs.1000 bond has a price today of Rs.800, a coupon rate of 4%, and six years remaining to maturity. If interest is paid annually, calculate the bond's yield to maturity (YTM)

**P.T.O.**

to the nearest whole percent using the hit and trial method. Estimate the bond's YTM using the approximate yield formula. Compare the two results. Marks 5

(b) Technex common stock pays an annual dividend of Rs. 1.80 per share. The required return on common stock is 12 %. Estimate the value of common stock under each of the following growth rate assumptions.

- i. Dividends are expected to grow at an annual rate of 0% to infinity.
- ii. Dividends are expected to grow at an annual rate of 5% to infinity. Marks 5

3. Saeed Corporation is interested in measuring its overall cost of capital. Current investigation has gathered the following data. The firm is in 40 percent tax bracket.

**Debt:** The firm can raise an unlimited amount of debt by selling Rs. 1,000 par value, 10 percent coupon rate, 10-years bonds on which annual interest payments will be made. To sell the issue, an average discount of Rs. 30 per bond must be given. The firm also pays floatation costs of Rs. 20 per bond.

**Preferred Stock:** The firm can sell 11 percent (annual dividend) preferred stock at its Rs. 100-per share par value. The floatation costs are expected to be Rs. 4 per share.

**Common Stock:** The firm's common stock has a par value of Rs. 80 per share. The firm expects to pay cash dividend of Rs. 6 per share next year. The firm's dividends have been growing at an annual rate of 6 percent and this rate is expected to continue in future. The stock will have to be under-priced by Rs. 4 per share and floatation costs are expected to be Rs. 4 per share.

Source of Capital	Weight
Long-term debt	40 %
Preferred Stock	15
Common Stock	45
Total	100 %

- a. Calculate the specific cost of each source of financing.
- b. Calculate the weighted average cost of capital (WACC) for the firm based on the above capital structure.





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Cost Accounting**

**Course Code: BBA-203/BUS-21348 Part-I (Compulsory)**

**MAX. TIME: 15 Min.**

**MAX. MARKS: 10**

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

1. Prime cost means: **(1 x 10 = 10)**  
A. All Production Costs  
B. All Indirect Production Costs  
C. All Direct Production Costs  
D. None of the above
2. Direct material = Rs. 45,000; Direct wages = Rs. 60,000; Factory overheads = Rs. 90,000; Direct labour hours = 15,000; Machine hours = 30,000; FOH Applied Rate on the basis of machine hours =?  
A. Rs. 6 per hour  
B. Rs. 3 per hour  
C. Rs. 1.5 per hour  
D. Rs. 0.5 per hour
3. The method of remuneration that links the payment with the hours worked, is called:  
A. Time work method  
B. Piecework method  
C. Bonus method  
D. None of the above
4. Under which costing method cost of materials is charged to production in the order of purchases:  
A. First-in, First-out Method  
B. Last-in, First-out Method  
C. Average Cost Method  
D. None of the above
5. Carrying cost = 15%; Ordering cost = Rs. 9 per order; Estimated Annual Requirement = 48,000 units; Cost per unit = Rs. 4. The most economical order size is:  
A. 1,440,000 units  
B. 1,200 units  
C. 1,440 units  
D. 12,000 units
6. Journal entry to record the issue of direct material from store is:  
A. Material...Dr Supplier...Cr  
B. Supplier...Dr Material...Cr  
C. WIP...Dr Material...Cr  
D. FOH...Dr Material...Cr
7. For an activity level of 10,000 units, Total cost is Rs. 200,000; for 15,000 units, Total cost is Rs. 275,000. Calculate variable cost per unit using high-low method.  
A. Rs. 15  
B. Rs. 10  
C. Rs. 25  
D. Rs. 20
8. Under-applied factory overheads occur when:  
A. Applied FOH exceed Actual FOH  
B. Applied FOH exceed Budgeted FOH  
C. Actual FOH exceed Applied FOH  
D. Actual FOH exceed Budgeted FOH
9. Normal working day: 8 hours      Basic pay rate per hour: Rs. 5  
Standard time per unit: 4 minutes      Bonus payable at basic rate: 50% time saved
- On a particular day, one employee finishes 150 units. His gross pay for the day will be:  
A. Rs. 40  
B. Rs. 50  
C. Rs. 55  
D. Rs. 45
10. A piece-work system of remuneration focuses on:  
A. Quality of output  
B. Quantity as well as quality of output  
C. Quantity of output  
D. Neither on quality nor on quantity





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Cost Accounting**

**Course Code: BBA-203/BUS-21348 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

Q.2. Give short answers to the following:

(10x2 = 20 marks)

- i. Define profit centre.
- ii. What is service costing?
- iii. What are the components of conversion cost?
- iv. What is meant by safety stock?
- v. Write down any three differences in financial accounting and cost accounting.
- vi. What is meant by bonus schemes?
- vii. What is a standard cost?
- viii. Define semi-variable cost.
- ix. Define factory overheads.
- x. What is the difference between a fixed and a flexible budget?

Q.3. A company uses process costing. The costs for 2<sup>nd</sup> department for January, 2019 were:

Costs of units received from 1<sup>st</sup> department Rs. 20,000

Cost incurred in 2<sup>nd</sup> department: Materials Rs. 21,816; Labor Rs. 7,776; Overheads Rs. 4,104

During the month, 2<sup>nd</sup> department received 5,000 units and transferred 4,000 units to 3<sup>rd</sup> department. At the end of the month, 1,000 units were in process.

The degree of completion of the work-in-process units was: 50% units were 40% complete and the balance units were 20% complete.

**Required: Prepare cost of production report for the month.**

(10 marks)

Q.4. Mudassar Industries has developed the following data to assist in controlling one of its inventory items:

Economic Order Quantity	1,000 kg
Average Daily Use	100 kg
Minimum Daily Use	80 kg
Maximum Daily Use	120 kg
Lead Time	7 days

**Required:**

- (i) Order level
- (ii) Maximum inventory level
- (iii) Minimum inventory level

(10 marks)

Q.5. Following are few figures taken from records of Mahnoor Industry:

Material purchased during the month = Rs. 265,000

Cost of goods sold for the month = Rs. 555,000

Factory overhead absorption rate = 75% of direct labour cost

Inventory accounts showed the following opening and closing balances:

	January 01	January 31
Material	Rs. 15,500	Rs. 20,500
Work in process	Rs. 22,750	Rs. 25,600
Finished goods	Rs. 28,200	Rs. 10,350

**Required:**

**Prepare cost of goods manufactured and sold statement.**

(10 marks)





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

**Examination: B.S. 4 Years Program**

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Data Base Management System**

**MAX. TIME: 15 Min.**

**Course Code: BBA-204/GEN-21131 Part-I (Compulsory)**

**MAX. MARKS: 10**

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- 1) What is full form of SQL Statement
  - a) Structuring Query List
  - b) Structure Query Language
  - c. Simple Query Language
  - d. None of the above
- 2) Which operator perform Pattern matching
  - a) Between
  - b) Liked
  - c. Exists operator
  - d. None of the above
- 3) You can add a new row using SQL in a database with the following?
  - a) ADD
  - b) Delete
  - c. Alter
  - d. Remove
- 4) Which statement is wrong about PRIMARY KEY constraint in SQL?
  - a) The primary key uniquely identifies each record
  - b) Primary key can be made based on multiple columns
  - c) Primary key must be made of any single column
  - d) Primary key must contain a unique value
- 5) In existing table alter table statement is used to
  - a) Delete Column
  - b) Delete Constraint
  - c) Delete Columns
  - d) All of the above
- 6) Wrong statement about the ORDER BY keyword is
  - a) Used to sort the result-set in ascending or descending order.
  - b) The ORDER BY keyword sorts the records in ascending order by default.
  - c) The ORDER BY keyword sorts the records in ascending order by default.
  - d) To sort the records in ascending order, use the ASC keyword.
- 7) If you want to allow age of a person < 55 in the column Age of table Person, then which constraint will be applied to AGE column?
  - a) Default
  - b) Check
  - c) Not Null
  - d) None
- 8) To give a temporary name to a table, or a column in a table for more readability, what is used?
  - a) SQL Wild Card
  - b) SQL Aliases
  - c) SQL LIKES
  - d) SQL Comments
- 9) Logical operators used in SQL are
  - a) AND, OR, NOT
  - b) && !!, ;
  - c) #, \$, %
  - d) None of above
- 10) To specify the number of records to return, which keyword is used
  - a) FIRST
  - b) TOP
  - c) START
  - d) ROW





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Data Base Management System**

**Course Code: BBA-204/GEN-21131 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Questions with short answers.**

**(5 x 4 = 20)**

1. What is the difference between Sequential file system and Index Sequential File system?
2. Explain the concept of Entity and Relationship.
3. What is meant by Referential Integrity?
4. What is the concept of Primary Key, Composite Primary Key and Foreign key?
5. What is the concept of ACID properties of Transaction Processing?

**Q.3. Questions with brief answers.**

**(3 x 10 = 30)**

1. Normalize the Given Table up to 3NF

INV #	Date	Customer ID	Customer Name	Product No	Description	Price
1	2 Dec	C1	Ali & Co	P1	Shirt	500
2	4 Dec	C1	Ali & Co	P2	Pent	1000

2. What is the concept of Master Detail Tables explain with example?
3. What is data mining explain with example?







# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Entrepreneurship**

**MAX. TIME: 15 Min.**

**Course Code: BBA-211/GEN-21125 Part-I (Compulsory)**

**MAX. MARKS: 10**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Select the best answer from given option.**

**(1x10=10)**

1. A person who organizes, manages and assumes the risks of starting and operating a business to make a profit is called a(n):
  - a. Entrepreneur
  - b. Investor
  - c. Speculator
  - d. Small business person
  
2. According to the text, which of the following qualities will increase your chance of succeeding as an entrepreneur?
  - a. Vision
  - b. Risk orientation
  - c. Determination
  - d. All of these
  
3. Which of the following was not cited as a reason for starting a new business?
  - a. Independence
  - b. Challenge
  - c. Profit
  - d. Increase of leisure time
  
4. Mr. X is employed in a corporation to launch new products. He is a(n):
  - a. Entrepreneur
  - b. Intrapreneur
  - c. Innovator
  - d. Franchisor
  
5. Which of the following would be included in the business plan?
  - a. Capital required
  - b. Marketing plan
  - c. Management team
  - d. All of these
  
6. The form of business organization that has the largest sales volume is the:
  - a. Partnership
  - b. Corporation
  - c. Cooperative
  - d. None of these

**P.T.O.**

7. Which of the following is an advantage of a sole proprietorship?
- Ease of starting a business
  - Being your own boss
  - Pride of ownership
  - All of these
8. Organizations in a \_\_\_\_\_ mobilize their resources toward selling, advertising and other promotional efforts:
- Sales orientation
  - Marketing orientation
  - Product orientation
  - Production orientation
9. The first step in the marketing process is:
- Identify need
  - Test marketing
  - Conduct research
  - Build a relationship with customers
10. The two most dominant trends in business are:
- Downsizing and restructuring
  - Technology and globalization
  - Strategic alliances and joint ventures
  - None of these



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Entrepreneurship**

**Course Code: BBA-211/GEN-21125 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

Q. 2 Give Short answers of the following questions:

(10×2=20)

1. What is Entrepreneurship?
2. Define estate planning?
3. What points we should keep in mind to study the market?
4. What is S Corporation?
5. Define business process reengineering?
6. What is SMEDA?
7. Enlist stages of product life cycle.
8. What is an idea?
9. Write down any four advantages of corporation?
10. What do you mean by operation planning?

Q.3 Explain the steps or procedure for buying an existing business.

(10)

Q.4 Explain the characteristics of entrepreneurs?

(10)

Q.5 What is Franchising? Explain the merits and demerits of franchising.

(10)





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Biology**  
**Course Code: BIO-112 Part-I (Compulsory)**

**MAX. TIME: 15 Min.**  
**MAX. MARKS: 10**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1. Pectin is an example of  
A). Disaccharides  
B). Polysaccharides  
C). Monosaccharides  
D). Oligosaccharides
2. DNA is the carrier of  
A). Ribozymes  
B). Genetic Markers  
C). Nuclear Material  
D). Genetic Message
3. The protection of an internal environment from the harms of fluctuations is the definition of which of the followings?  
A). Osmoregulation  
B). Excretion  
C). Thermoregulation  
D). Homeostasis
4. Endoplasmic reticulum (ER) is a complex, \_\_\_\_\_ membrane system.  
A). Two dimensional  
B). Four Dimensional  
C). Three Dimensional  
D). Ten Dimensions
5. Plants growing in waterlogged soils and aquatic environments contain \_\_\_\_\_ tissues.  
A). Storage parenchyma  
B). Pseudoparenchyma  
C). Aerenchyma  
D). Chromoplast Parenchyma
6. A nerve is a .....  
A). Bundles of axons and dendrites of axons  
B). collection of neurons  
C). Concentration of dendrites and axons  
D). None of these
7. Thyroid glands produce .....  
A). Tri-iodothyronine  
B). T3, T4 and calcitonin  
C). Calcitonin  
D). Tetraiodothyronine
8. Mitosis is divided into .....  
A). Interphase  
B). Karyokinesis  
C). Cytokinesis  
D). B and C
9. Which of these is incorrectly matched?  
A). Protoplast- plant cell engineering  
B). DNA polymerase- PCR  
C). DNA ligase- mapping human chromosomes  
D). RFLPS-DNA finger printing
10. Which of the biomass has been increased in area by human activities?  
A). Savana  
B). Grassland  
C). Desert  
D). Coniferous





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Biology**

**Course Code: BIO-112 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

Q. No. 2: Give brief answers of following questions. (10 x 2)

1. What is the Difference between CNS and PNS?
2. What do you know about biodiversity? Also define acid rain?
3. What is the difference between endangered species and threatened species?
4. Differentiate between dominance and epistasis.
5. Why Interphase is defined as a resting phase?
6. What is the function of RNA polymerase in transcription?
7. Define Photoperiodism and its effects.
8. Write down the names of flower parts with labeled diagram.
9. Write down main differences between auxins and Cytokinins.
10. What is neuron? Draw its structure.

Q. No. 3: Define Osmoregulation. Describe Osmoregulation in plants as well as in animals. (10)

Q. No. 4: Define specialized plant cells. Also explain significance of secondary growth. (5)

Q. No. 5: Write a note on Hypothalamus and Pituitary Gland. (5)

Q. No. 6: What is a Gene? Also describe how DNA encodes protein structure? (5)

Q. No. 7: Why meiosis is called reductional division and what is its significance? (5)







# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Biology-II**

**Course Code: BIO-211/21116 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

Q. No. 2: Give brief answers of following questions. (10 x 2)

1. Define Population Genetics.
2. What is the difference between Deforestation and Afforestation?
3. List different types of Ecosystems.
4. Differentiate between Symbiosis, Parasitism and Mutualism.
5. What is difference between rough and smooth endoplasmic reticulum?
6. Distinguish between Osteocytes and Osteoblasts.
7. What are the functions of parathyroid gland?
8. What are the commercial applications of auxins?
9. How is a seed formed?
10. What are amphibious plants? Write down their main characteristics.

Q. No. 3: Define and draw Cell cycle. (05)

Q. No. 4: Write a note on Succession with its types and stages. (5)

Q. No. 5: Discuss Excretion in Plants (5)

Q. No. 6: Describe in Detail Mendel's Law of Segregation and Law of Independent Assortment with the help of different crosses. (10)

Q. No. 7: Give a comparison of mitosis and meiosis. Also describe their importance. (5)





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Biology-II

Course Code: BIO-211/21116 Part-I (Compulsory)

MAX. TIME: 15 Min.

MAX. MARKS: 10

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1. Beta pleated sheets are present in which structure of proteins?

A) Tertiary

B) Primary

C) Secondary

D) Quaternary

2. The combination of a pentose sugar with a base forms a compound known as -----.

A) Nucleotide

B) Nucleoside

C) Phosphoric Acid

D) Nucleic Acid

3. Which type of evolution refers to change within population?

A) Macroevolution

B) Organic Evolution

C) Microevolution

D) None of these

4. Darwin's theory, as presented in "The Origin of Species", mainly concerned

A) How adaptations evolve

B) The origin of life

C) How new species arise

D) The genetics of evolution

5. Selection acts directly on

A) The entire gene pool

B) Phenotype

C) The entire genome

D) Genotype

6. Mannose and Galactose are the examples of?

A) Trioses

B) Tetroses

C) Hexoses

D) Pentoses

7. The metabolic wastes that are ingested into the body and must be removed are -----.

A) Pesticides

B) Drugs

C) Food Additives

D) All of these

8. Brain is protected by

A) Skull

B) Orbits

C) Cranium

D) All of these

9. ----- are three main parts of the gynoecium in a flower?

A) Filament, stigma, ovary

B) Stigma, style, ovary

C) Anther, connective, filament

D) None of these

10. Separation of homologous chromosomes occurs during -----.

A) Prophase

B) Metaphase

C) Anaphase

D) Telophase





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Botany-III (Cell Biology, Genetics and Evolution)

MAX. TIME: 15 Min.

Course Code: BOT-201/21300 Part-I (Compulsory)

MAX. MARKS: 10

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

a. Carbohydrates are present in plasma membrane in the form of:

- i. Starch
- ii. Cellulose
- iii. Hemicellulose
- iv. Glycolipids

b. The main function of Golgi complex is

- i. Translocation
- ii. Fermentation
- iii. Glycosylation
- iv. Phosphorylation

c. Protein essential for chromatin formation is:

- i. Actin
- ii. Tubulin
- iii. Histone
- iv. Myosin

d. The functions of peroxisomes are:

- i. Synthesis of glycine
- ii. Synthesis of serine
- iii. Protection from toxic effects of hydrogen peroxide
- iv. All of the these

e. The two organelle responsible for cytoplasmic inheritance among eukaryotes are:

- i. Lysosomes and Mitochondria
- ii. Mitochondria and Golgi complex
- iii. Chloroplast and Mitochondria
- iv. Chloroplast and Lysosomes

f. Light reactions take place in:

- i. Grana
- ii. Stroma
- iii. Thylakoids
- iv. Quantasomes

g. Nucleolus helps in the formation of:

- i. r-RNA
- ii. m-RNA
- iii. t-RNA
- iv. Golgi body

h. The monomeric units of DNA are:

- i. Proteins
- ii. Nucleosides
- iii. Nucleotides
- iv. Purines and Pyrimidines

i. The term heterosis represents:

- i. Hybrid incompatibility
- ii. Hybrid vigour
- iii. Hybrid sterility
- iv. Structural hybridity

j. Introduction of foreign genes for improving genotype is called:

- i. Vernalization
- ii. Tissue culture
- iii. Biotechnology
- iv. Genetic Engineering





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Botany-III (Cell Biology, Genetics and Evolution)**

**Course Code: BOT-201/21300 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Answer the short questions.**

**(10 x 2 = 20)**

- i. Define Cell theory.
- ii. What is the difference between Simple and Facilitated diffusion?
- iii. What are Leucoplasts ? Mention their functions.
- iv. Differentiate between Prokaryotic and Eukaryotic ribosomes.
- v. What are Peroxisomes? What is their function?
- vi. What are the different types of RNA and their functions?
- vii. What is Transduction?
- viii. What are Cytoplasmic inclusions?
- ix. Differentiate between Population and Community.
- x. What is Synapsis?

**Q.3. Answer the long questions.**

**(3 x 10 = 30)**

1. a. What is the chemical composition of Cell membrane? (7)  
b. Describe the ultrastructure and function of Chloroplast. (8)
2. a. Write a short note on Lac operon. (6)  
b. Explain the Transduction in bacteria in detail. (9)
3. a. Differentiate between Test cross and Back Cross and their importance. (7)  
b. Explain with examples Duplication and Deletion. (8)







# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: National and International Affairs**

**MAX. TIME: 15 Min.**

**Course Code: BSCS-201/MAS-21412 Part-I (Compulsory)**

**MAX. MARKS: 10**

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Select the best answer from given option.**

**(1x10=10)**

- 1) Who was the author of "Emergence of Pakistan"?
  - a) I.H Qureshi
  - b) Waheed-ud-Zaman
  - c) Muhammad Ali Ch.
  - d) D) None of others
2. Which mountain range is located between China and Pakistan:
  - a) Siwaliks
  - b) Hindu Kush Range
  - c) Great Himalayas
  - d) None of these
3. Who was the first president of Constituent Assembly of Pakistan?
  - a) Quaid-e-Azam
  - b) Liaquat Ali Khan
  - c) Sikandar Mirza
  - d) None of these
4. When Indus Water Treaty was signed between India and Pakistan?
  - a) 1960
  - b) 1962
  - c) 1969
  - d) None of these
5. In which constitution the presidential and parliamentary system at centre and provinces were adopted respectively?
  - a) 1956
  - b) 1962
  - c) 1972
  - d) 1973

**P.T.O.**

6. according to 1973 constitution who elects Prime Minister?

- (a) Senate
- (b) National Assembly
- (c) President
- (d) Provincial Assemblies

7. What is the other name of Mohammad Ali Bogra Formula?

- (a) New Law of Pakistan
- (b) Pakistan Report
- (c) Third Report
- (d) Constitutional Formula

8. ISAF stands for -----

9. Who was the Prime Minister of Pakistan during enforcement of first constitution?

- (a) Mohammad Ali Bogra
- (b) Khwaja Nazim Uddin
- (c) Choudhry Mohammad Ali
- (d) Ibrahim Ismail Chundrigar

10. What official name was given to Pakistan in 1956 constitution?

- (a) United States of Pakistan
- (b) Republic of Pakistan
- (c) Islamic Pakistan
- (d) Islamic Republic of Pakistan



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: National and International Affairs

Course Code: BSCS-201/MAS-21412 Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Give short answers.**

**(4x5=20)**

- i. Social media usage and its consequences with references to Pakistan.  
پاکستان میں سوشل میڈیا کے استعمال اور اثرات کے بارے میں لکھیں۔ .i
- ii. Write a note on CPEC.  
سی پیک پر ایک نوٹ تحریر کریں۔ .ii
- iii. Write a note on national action program.  
نیشنل ایکشن پلین پر نوٹ تحریر کریں۔ .iii
- iv. Describe Baluchistan issue with respect to recent developments.  
بلوچستان میں موجودہ پیدا ہونے والی تبدیلیوں کے بارے میں لکھیں۔ .iv

**Q.3. Give answers of the following questions.**

**(3x10=30)**

- i. How corruption can be managed in Pakistan?  
پاکستان میں کرپشن پر کس طرح قابو پایا جاسکتا ہے؟ .i
- ii. Evaluate the significance of water conflict between India and Pakistan in global perspective of climate change.  
دنیا میں ہونے والی تبدیلیوں کے بارے میں پاکستان اور انڈیا کے تعلقات کے حوالے سے پانی کے تنازعہ پر تفصیل سے لکھیں۔ .ii
- iii. Nawaz and Modi relationship with respects to China policy toward both countries.  
نواز اور مودی کے تعلقات خاص طور پر چائے کی دونوں ممالک سے دوستی اور پالیسی کے حوالے سے تفصیل سے بحث کریں۔ .iii





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Mass Communication

Course Code: BSCS-211/MAS-21110 Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Q.2. Give short answers.

(4x5=20)

- Define citizen journalism? Please enlist its major types?
- Describe concept of two steps flow of communication?
- Describe inverted pyramid?
- Briefly discuss the concept of band wagon?

Q.3. Give answers of the following questions.

(3x10=30)

- Define mass communication. What are its different elements and how they differ from interpersonal communication?
- Analyze the effects of private TV channels morning shows on Pakistani young women?
- Define concept of development media theory? How can this concept make media role in Pakistan more beneficial for the society?

سوال نمبر 2: مختصر جوابات تحریر کریں۔

- ۱۔ شہری صحافت کی تعریف کریں۔ اس کی مختلف اقسام کی فہرست ترتیب دیں؟
- ۲۔ ابلاغ کے دو مراحل (ٹوسٹیپ) کے تصور کو بیان کریں؟
- ۳۔ الٹی تکون کو بیان کریں؟
- ۴۔ بینڈ ویگن کا تصور بیان کریں؟

سوال نمبر 3: تفصیلاً جوابات تحریر کریں۔

- ۱: ابلاغ عامہ کی تعریف کریں؟ اس کے مختلف عناصر کو نئے ہیں اور وہ کس طرح سے دو شخصی ابلاغ سے مختلف ہوتے ہیں؟
- ۲: پاکستان کے پرائیویٹ ٹی وی چینلز کے مارنگ شوز کے پاکستان کی نوجوان خواتین پر اثرات کا جائزہ لیں؟
- ۳: ترقیاتی صحافت کے تصور کو بیان کریں؟ یہ تصور کس طرح سے پاکستان کے میڈیا کے کردار کو پاکستانی معاشرے کے لیے موثر بنا سکتا ہے؟





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Mass Communication**

**MAX. TIME: 15 Min.**

**Course Code: BSCS-211/MAS-21110 Part-I (Compulsory)**

**MAX. MARKS: 10**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Select the best answer from given option.**

**(1x10=10)**

1. PEMRA stands for .....  
A. Pakistan electronic mechanism regulatory action assembly  
B. Pakistan electronic machine regulatory  
C. Pakistan electronic media regulatory authority  
D. Pakistan election media regulatory
2. Facebook was launched in .....  
A. 2010  
B. 2000  
C. 2002  
D. 2004
3. PTV was established in .....  
A. 1964  
B. 1955  
C. 1965  
D. 1971
4. First movie was screened in .....  
A. 1899  
B. 1900  
C. 1895  
D. 1889
5. .... manages information and media relation of Pakistani federal government.  
A. PID  
B. Rental media  
C. DGPR  
D. Syndicate
6. Noise produced because of cultural differences is called .....  
A. soft noise  
B. environmental  
C. mechanical  
D. semantic
7. In Laswell's model 'what' stands for .....  
A. feedback  
B. receiver  
C. message  
D. sender
8. Bab-e-sahafat is the title of .....  
A. Maulna Muhammad Ali Joher  
B. MajeedNizami  
C. Maulana Zafar Ali Khan  
D. Hamid Mir
9. ....theory justifies government control over press.  
A. Authoritarian press  
B. framing  
C. Libertarian  
D. social responsibility
10. Idea of global village was coined by .....  
A. Bill gates  
B. Murdock  
C. Steve jobs  
D. Marshall McLuhan

**P.T.O. FOR URDU VERSION**







# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

(Clash)

PAPER: Chemistry-III (Organic Chemistry)

MAX. TIME: 15 Min.

Course Code: CHEM-201/CHM-21304 Part-I (Compulsory)

MAX. MARKS: 10

Roll No. in Fig. ....

Roll No. in Words. ....

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

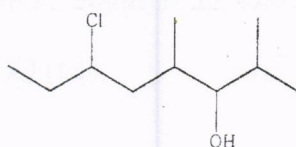
1. Which of the following statement is most suitable to an  $S_N1$  reaction?

- I) The rate limiting step of the reaction involves the alkyl halide and the nucleophile.
- II) The order of reactivity is methyl > 1 > 2 > 3 (i.e., methyl is most reactive)
- III) The rate limiting step of the reaction involves only the alkyl halide.
- IV) Attack of nucleophile on substrate from rear would give product with inverted configuration.

2. Conversion of an optically active compound into an equimolar mixture of enantiomers is known as:

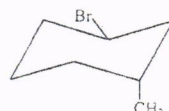
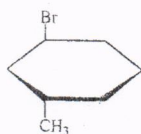
- (I) Tautomerization
- (II) Racemization
- (III) Epimerization
- (IV) None of them

3. How many stereoisomers are possible for given compound?



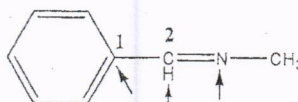
- (I) 12
- (II) 8
- (III) 4
- (IV) 16

4. What is the stereochemical relationship between the following two molecules?



- I) Geometrical isomers
- II) Enantiomers
- III) Diastereomers
- IV) Identical

5. Which set of hybridization states of C1, C2, and N of the following molecule is correct?



- (I) C1  $sp^2$ , C2  $sp^3$ , N  $sp^3$
- (II) C1  $sp^2$ , C2  $sp^2$ , N  $sp^3$
- (III) C1  $sp^2$ , C2  $sp^2$ , N  $sp^2$
- (IV) C1  $sp^2$ , C2  $sp^3$ , N  $sp^2$

P.T.O.

6. Which of the following is not a meta director.

- (I) CN      (II) OH      (III) COOH      (IV) CHO

7. How many pi molecular orbital are present in molecular presentation of benzene.

- (I) 8      (II) 2      (III) 4      (IV) 6

8. The reaction of benzene with an acid chloride in presence of lewis acid as catalyst is known as

- (I) Perkin Reaction      (II) Friedel Craft acylation  
(III) Wurtz reaction      (IV) Williamson's synthesis

9. The oxidation of isopropyl alcohol with  $\text{Cr}_2\text{O}_7$  in Glacial  $\text{CH}_3\text{COOH}$  would yield

- (I) Propane      (II) Propanol      (III) Propanone      (IV) Propanoic acid

10. Which one of the following molecules has a dipole moment?

- (I)  $\text{CS}_2$       (II)  $\text{CHCl}_3$       (III)  $\text{CCl}_4$       (IV)  $\text{O}_2$



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

(Clash)

Roll No. ....

**PAPER: Chemistry-III (Organic Chemistry)**

**Course Code: CHEM-201/CHM-21304 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

Q2. Give brief answers to the following questions.

- (1). Why aniline is less basic than cyclohexylamine (2)
- (2) Explain Torsional strain with example. (2)
- (4) Why ethanol has higher boiling point than that of dimethyl ether. (2)
- (5) Draw all conformers of 1-tert-butyl-4-methylcyclohexane and point out most stable conformer and give reason. (4)
- (6) Why tertiary alcohol reacts with HBr faster than secondary alcohol. (2)
- (7) Why o-hydroxybenzoic acid is more acidic than p-hydroxybenzoic acid. (2)
- (9) How will you convert  $C_2H_5Br$  into propane. (2)
- (10) How could you differentiate between nonaromatic and antiaromatic by huckel rule. (4)

Q3. (a) How will you convert followings. (6)

- |                                    |  |
|------------------------------------|--|
| (i) vic-dihalide into 1-propyne    | (ii) 2-butene into cis-butane-2,3-diol |
| (iii) Prop-1-ene into propane      | (vi) Prop-1-ene into 3-bromoprop-1-ene |
| (v) Prop-1-ene into 1-bromopropane | (vi) Ethylene oxide into 1-propanol    |

(b) Design suitable syntheses of the following compounds starting from benzene. Show all the steps in each case. (6)

- (i) Benzophenone      (ii) 4-bromo-3-nitrobenzoic acid      (iii) Phthalic anhydride

(c) Explain the difference between: (8)

- (i) Conjugation and hyperconjugation
- (ii) Resonance and tautomerism
- (iii) Constitutional isomerism and Stereoisomerism
- (iv) Center of symmetry and axis of symmetry

(d) Explain  $SN_1$  mechanism with examples. (5)

(e) Draw both the geometrical isomers for the following compounds and assign Z or E to each of them. (5)

- |                                   |                         |                       |
|-----------------------------------|-------------------------|-----------------------|
| (i) 2-pentene                     | (ii) 3-methyl-2-pentene | (iii) 2-Iodo-2-butene |
| (iv) 1-Bromo-1,2-dichloroethylene | (v) Maleic acid         |                       |





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Chemistry-III (Organic Chemistry)

MAX. TIME: 15 Min.

Course Code: CHEM-201/CHM-21304 Part-I (Compulsory)

MAX. MARKS: 10

Signature of Supdt.:

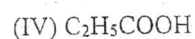
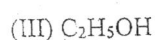
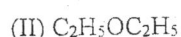
**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

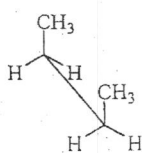
**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

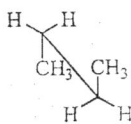
1. Which of the following compound would not show hydrogen bonding.



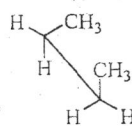
2. Which of the following conformers is least stable?



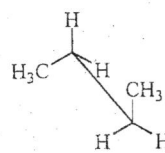
(I)



(II)



(III)



(IV)

3. Which of the following symbol is used to represent principal quantum number?

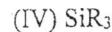
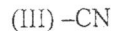
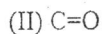
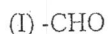
(I)  $l$

(II)  $n$

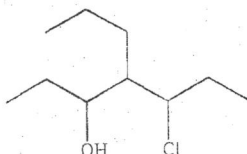
(III)  $m$

(IV)  $s$

4. Which of the following group exhibit positive inductive effect (+I).



5. A correct IUPAC name for the following compound is:



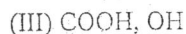
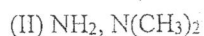
(I) 4-propyl-5-chloro-heptan-3-ol

(II) 4-propyl-3-chloroheptan-5-ol

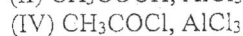
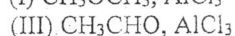
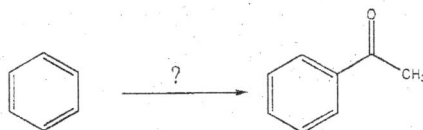
(III) 4-(1-chloropropyl)-heptan-3-ol

(IV) 5-chloro-4-propylheptan-3-ol

6. Which pair of groups contains both ortho and para directing group.



7. Which of the following reagents would be the best reactants for the following synthesis.



8. How many Number of lone pair of electrons occupied by oxygen of water molecule are

(I) one

(II) Two

(III) Three

(IV) Four

9. Williamson's synthesis is method for the preparation of .....

(I) Alcohol

(II) Ester

(III) Ether

(IV) Carboxylic acid

10. An acid chloride react with hydrazine to yield a.....

(I) Hydrazone

(II) Oxime

(III) Hydrazide

(IV) semi carbazone





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Chemistry-III (Organic Chemistry)**

**Course Code: CHEM-201/CHM-21304 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

Q2. Give brief answers to the following questions.

1. Explain and illustrate  $sp$ ,  $sp^2$  and  $sp^3$  hybridization with examples. (6)
2. How will you prepare 2-phenylpropan-2-ol from acetone. (2)
3. Why chloroacetic acid is more acidic than acetic acid. (2)
4. Why acetamide is a weaker base than methylamine. (2)
5. Why and how nitro group is deactivating and meta directing. (2)
6. Define hyperconjugation with examples. (2)
7. Explain why  $SO_2$  is a polar molecule while  $CO_2$  is a non polar molecule. (2)
8. Why diethyl ether would not show hydrogen bonding. (2)

Q3.(a) How would you distinguish between Primary, Secondary and tertiary alcohols by chemical tests and write chemical equations. (6)

(b) Design suitable syntheses of the following compounds starting from benzene. Show all the steps in each case. (6)

- (i) 2-chlorobenzoic acid      (ii) 1-methyl-3-nitrobenzene      (iv) Benzophenone

(c) Draw the structures of the following compounds. (4)

- (i) spiro[4,5]decane      (ii) 3-ethyl-4-isopropyl-1-heptene  
(iii) 1,6-dimethyl cyclohexene      (iv) p-methylanisole

(d) Write different methods for preparation cycloalkane. (4)

(e) Describe different methods for resolution of racemic mixtures. (5)

(f) Give a comparison of  $SN_1$  and  $SN_2$  reaction. (5)







# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Advanced Financial Accounting-I**  
**Course Code: COMM-201/COM-21356 Part-I (Compulsory)**

**MAX. TIME: 15 Min.**  
**MAX. MARKS: 10**

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

Q 1. ENCIRCLE THE CORRECT ANSWER (1\*10)

10

1. Bonds with the issuing corporation may pay off before the scheduled maturity date are called:
  - a) Callable bonds.
  - b) Serial bonds.
  - c) Convertible bonds.
  - d) Debenture bonds.
2. Which of the following is not a characteristic of corporate bonds?
  - a) A highly liquid, transferable investment.
  - b) Has a specific maturity date.
  - c) Represents ownership of the issuing corporation.
  - d) Pays interest, usually semiannually.
3. When a corporation declares a cash dividend on common stock, which of the following should be excluded in determining the total amount of the dividend?
  - a) Shares issued in exchange for preferred stock.
  - b) Shares held by officers and directors.
  - c) Shares held by other corporations.
  - d) Shares acquired and held in treasury.
4. If sales increase by 10% from Year 1 to Year 2 and cost of goods sold increases only 6%, the gross profit on sales will increase by:
  - a) 4%.
  - b) 10%.
  - c) 6%.
  - d) Some other percentage.
5. An acquisition is the same thing as:
  - a) An amalgamation.
  - b) A takeover.
  - c) A merger.
  - d) A spin-off.
6. Mybank Ltd merged into Summit Bank, what kind of merger was this?
  - a) Horizontal.
  - b) Vertical.
  - c) Joint venture.
  - d) Conglomerate.
7. The first item in order of payment to be made by the liquidator is:
  - a) Secured creditor.
  - b) Preferential creditor.
  - c) Liquidation expenses
  - d) Debenture holders.
8. In liquidation process a contributory is:
  - a) A creditor.
  - b) A shareholder.
  - c) A debenture holder.
  - d) A liquidator.
9. If the total of the fair value of assets acquired is Rs 100,000 and the amount of purchase consideration paid is Rs 110,000, the difference should be treated as:
  - a) Loss on acquisition.
  - b) Goodwill.
  - c) Acquisition expense.
  - d) Negative goodwill.
10. Which of the following is the method of valuing of shares?
  - a) Super profit method.
  - b) Average profit method.
  - c) Fair value method.
  - d) Yield valuation method.





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019  
Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Advanced Financial Accounting-I  
Course Code: COMM-201/COM-21356 Part – II

MAX. TIME: 2 Hrs. 45 Min.  
MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

Q2: Give short answers to the following questions: (2\*10)

20

1. Define bonus shares.
2. Write down the formula of value of right.
3. Describe the usefulness of statement of cash flow.
4. What is the formula of calculating the gross profit percentage?
5. What are synergy benefits under amalgamation and absorption?
6. Define negative goodwill.
7. What are main items that appear on the debit side of profit & loss appropriation account?
8. What is the yield valuation method for the valuation of shares?
9. How treasury stock is reported in the stockholders' equity section of the balance sheet?
10. What are the modes of winding up of joint stock companies?

Q3: X Company performs adjusting entries every month, but closes its accounts only at year end. The Company's adjusted trial balance dated December 31, 2017, appears below. (Bear in mind, the balance shown for Retained Earnings was last updated on December 31, 2016.)

(15)

**X Company**  
**Adjusted Trial Balance**  
**December 31, 2017**

	\$	\$
Cash	171,100	
Account receivable	9,400	
Prepaid Rent	3,000	
Unexpired Insurance	7,200	
Supplies	500	
Equipment	18,000	
Accumulated Depreciation: equipment		7,200
Notes Payable		10,000
Accounts payable		3,200
Salaries Payable		4,000
Income tax payable		6,000
Unearned revenue		8,800
Capital Stock		100,000
Retained Earnings		40,000
Dividends	6,000	
Revenue Earned		165,000
Salary expense	85,000	
Supply expense	3,900	
Rent expense	12,000	
Insurance expense	1,900	
Advertising expense	500	
Depreciation expense- equipment	1,800	
Interest expense	900	
Income tax expense	23,000	
	344,200	344,200

P.T.O.

**Required:**

Prepare an Income statement and Balance sheet dated December 31, 2017.

**Q 4:** A joint stock company was registered with an authorized capital of Rs 5,000,000 divided into 500,000 shares of Rs 10 each. On 1<sup>st</sup> November 2017 the company issued 350,000 shares with following details: (15)

50,000 shares were issued to promoters towards preliminary expenses.

100,000 shares were issued to directors of the company for cash.

200,000 shares were issued to the general public.

On 20 November 2017, the company received applications for 300,000 shares. Shares were not allotted to applicants of 100,000 shares, therefore their application money was refunded.

**Required:** Record the above information in the books of the Company and show the figures in the Balance Sheet.



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Business & Industrial Law

MAX. TIME: 15 Min.

Course Code: COMM-202/COM-21357 Part-I (Compulsory)

MAX. MARKS: 10

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1. Exemplary damages are awarded to:
  - a) To compensate aggrieved party .
  - b) Not to compensate aggrieved party.
  - c) Burden of proof
  - d) Non-profit organizations
  
2. An expressed contract is a contract when terms of contract are:
  - a) Created with conduct of parties.
  - b) Not properly explained.
  - c) Unenforceable
  - d) Black & white.
  
3. In an executory contract:
  - a) Terms of contract are clear.
  - b) Contract is written.
  - c) Some obligations remain to be fulfilled.
  - d) None of these
  
4. An agreement between two firms to avoid competition is void because it creates:
  - a) Competition
  - b) legal complication
  - c) Uncertainty.
  - d) Monopoly
  
5. An agreement not enforceable by law is said to be:
  - a) None of these.
  - b) Voidable contract
  - c) Void contract
  - d) Void agreement
  
6. It is not necessary that the consideration must be equal to the value of promise.
  - a) Agree
  - b) disagree
  - c) Neither agree nor disagree.
  - d) None of these

**P.T.O.**

7. Ratification means.
- a) Acceptance of offer
  - b) Refusal of offer
  - c) Correction of agreement.
  - d) None of these.
8. An agreement with a person of unsound mind is;
- a) Doubt full agreement.
  - b) Void agreement.
  - c) Accepted by law.
  - d) None of these.
9. Which of the following statement is true?
- a) Sale of Goods Act applies to the whole of Punjab.
  - b) Sale of Goods Act applies to the whole of Sindh.
  - c) Sale of Goods Act applies to the whole of Baluchistan.
  - d) None of these.
10. Contingent goods are:
- a) Available at the time of contract.
  - b) Future goods.
  - c) None of these.
  - d) Existing goods.



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Business & Industrial Law**

**Course Code: COMM-202/COM-21357 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q2. ANSWER THE SHORT QUESTIONS:**

**(2 X 10 = 20 MARKS)**

- i. Explain void agreement with an illustration.
- ii. Clarify the contingent contract with illustration.
- iii. Define performance of contract.
- iv. Explain adequacy of consideration.
- v. Elaborate undue influence with example.
- vi. Explain the position of acceptor if letter of acceptance is lost.
- vii. Explain coercion.
- viii. Explain counter offer with example.
- ix. Explain invitation to offer.
- x. Briefly explain implied contract.

**Q3. ANSWER THE FOLLOWING LONG QUESTIONS:**

**(3 X 10 = 30 MARKS)**

1. Differentiate between contracts of indemnity and guarantee.
2. Describe the essentials of bailment with help of illustrations where necessary.
3. Explain the following essentials of contract with an example.
  - i. Possibility of performance.
  - ii. Not expressly declared void.
  - iii. Capacity of parties.







# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Income Tax Law

MAX. TIME: 15 Min.

Course Code: COMM-203/COM-21358 Part-I(Compulsory)

MAX. MARKS: 10

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- i. On 14<sup>th</sup> August, Pakistan Government adopted the Income Tax Act
  - a) 1918
  - b) 1921
  - c) 1922
  - d) 1944
- ii. Which one of the following includes Agricultural Income.
  - a) Income from fisheries
  - b) Land revenue assigned to jagirdar
  - c) Income from flour mill
  - d) Income from markets
- iii. Personal insurance premium expenses incurred by taxpayer are entitled for
  - a) Rebate at an average rate of tax
  - b) Deduction from tax
  - c) Deduction from total income
  - d) None of the above
- iv. Property income includes
  - a) Profit on sale of property
  - b) Rent chargeable to tax of property let out
  - c) Annual letting value of property self-occupied
  - d) None of the above
- v. Return of income u/s 114 shall be furnished by companies with tax year ending on or between 1<sup>st</sup> day of January and 30<sup>th</sup> day of June by
  - a) 30<sup>th</sup> June
  - b) 30<sup>th</sup> September
  - c) 31<sup>st</sup> August
  - d) 31<sup>st</sup> December
- vi. The following percentage of total income of individual is allowed as donations to approved charitable institutions u/s 61.
  - a. 20%
  - b. 30%
  - c. 40%
- vii. Personal legal expenses incurred by individual taxpayer, are entitled for:
  - a. Rebate at an average rate of tax
  - b. Deduction from tax
  - c. None of the above
- viii. Advance rent un-adjustable is included in Rental Value of Property upto:
  - a. 1/4<sup>th</sup>
  - b. 1/5<sup>th</sup>
  - c. 1/10<sup>th</sup>
- ix. A person is known as salary person when his/her income
  - a. Less than 50% from taxable income
  - b. Equal to 50% from taxable income
  - c. More than 50% from taxable income
- x. Narrate the following abbreviations
  - a. FBR \_\_\_\_\_
  - b. NTN \_\_\_\_\_
  - c. MTS \_\_\_\_\_
  - d. CNIC \_\_\_\_\_





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Income Tax Law

Course Code: COMM-203/COM-21358 Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Questions with short answers.**

(5 x 4 = 20)

- a) Define the term "Taxpayer" with reference to Income Tax Ordinance 2001
- b) Explain the legal provisions regarding exemption of "Profit on Debt" under Income Tax Ordinance 2001.
- c) Briefly elaborate the feature of appeal to Appellate Tribunal
- d) Explain the conditions and rates regarding "initial depreciation"

**Q.3. Questions with brief answers.**

(2 x 15 = 30)

*Q. No. 03:* From the following data, calculate the tax payable by Mr. Gulraiz for the year ended 30<sup>th</sup> June 2018

- a. Basic Salary Rs. 42,000 p.m.
- b. Bonus for the year Rs. 5000.
- c. Conveyance allowance Rs. 4,000.
- d. Income from fish catching business Rs. 20,000
- e. Special allowance Rs. 12,000.
- f. Cost of motor vehicle Rs. 500,000. Vehicle provided by employer for both purposes.
- g. Accommodation provided in big city by the employer. Rent entitlement Rs 220,000.
- h. Contribution to recognized provident fund by employee Rs. 35,000
- i. Contribution to recognized provident fund by employer Rs. 35,000
- j. Interest received on accumulate balance @ 20% Rs. 20,000.
- k. Zakat paid under Zakat Ordinance during the year Rs. 20,000.
- l. Agricultural income Rs. 80,000
- m. Qualification allowance Rs. 15,000
- n. Tax deducted at source from salary Rs. 20,000.
- o. Donation to University of Sahiwal amounted to Rs. 25,000.
- p. Property income Rs. 320,000
- q. Prize on prize bond Rs. 50,000

**Extract of Rates of Tax for salaried persons for Tax Year 2018**

1.	Upto Rs. 400,000	Nil
2.	Rs. 400,001 to Rs. 500,000	2% of the amount exceeding Rs. 400,000
3.	Rs. 500,001 to 750,000	Rs. 2,000 + 5 % of the amount exceeding Rs. 500,000
4.	Rs. 750,001 to 1400,000	Rs. 14,500 + 10 % of the amount exceeding Rs. 750,000

**Extract of income tax rates for separate block of property income for tax year 2018**

1.	Upto Rs. 200,000	Nil
2.	Rs. 200,001 to Rs. 600,000	5% of the amount exceeding Rs. 200,000

*Q.No. 04:* Why is the distinction between capital and revenue important from income tax viewpoint? Briefly explain six tests for differentiating capital and revenue receipts.





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Money Banking & Finance**

**MAX. TIME: 15 Min.**

**Course Code: COMM-204/COM-21359 Part-I (Compulsory)**

**MAX. MARKS: 10**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- i. The primary functions of a commercial bank are
  - a. Receiving utility bills
  - b. Accepting deposits and advances loans
  - c. Issuance of ATM and Credit cards
  - d. Receiving Hajj applications
- ii. Generally, the regulatory body for banking system in a country is
  - a. Central bank
  - b. Commercial bank
  - c. Investment bank
  - d. Agricultural bank
- iii. IMF stand for
  - a. International Monetary Finance
  - b. International Monetary Fund
  - c. International Material Fund
  - d. Immediate Monetary Feedback
- iv. The money in document form with value stated on them but having no value in them
  - a. Metallic Money
  - b. Commodity Money
  - c. Paper Money
  - d. All of above
- v. The method of not issue in which a fixed limit is not backed by any reserve and beyond that limit notes issuance is backed by 100% gold/reserves
  - a. Fixed Fiduciary System
  - b. Proportional Reserve System
  - c. Maximum Reserve System
  - d. None of these
- vi. "Lender of last resort" in banking sector is referred to
  - a. Central Bank
  - b. Islamic Development Bank
  - c. Asian Development Bank
  - d. IMF
- vii. Deposit which can be withdrawn by the depositor at any time by cheques
  - a. Current deposit
  - b. Fixed deposit
  - c. Term deposit
  - d. None of the above
- viii. Fiat money is
  - a. Backed by gold
  - b. Includes currency and gold stored in bank
  - c. A type of money that has no intrinsic value
  - d. None of these
- ix. Inflation is a situation in which
  - a. Decrease in purchasing power
  - b. Decrease in price level
  - c. A given quantity of money purchases a large quantity of goods
  - d. None of the above
- x. Supply of country's products to the foreign countries
  - a. Exports
  - b. Imports
  - c. Retail trade
  - d. Home trade





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Money Banking & Finance**

**Course Code: COMM-204/COM-21359 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

*Q. 2. Provide short answers to the following questions. (10 × 2 = 20)*

- i. Briefly explain principles of note issue
- ii. What is intrinsic value
- iii. Differentiate three points between money and currency
- iv. List down the causes of inflation
- v. What is meant by index numbers
- vi. Elaborate recession
- vii. List down sources of debt financing
- viii. Differentiate between pledge and mortgage
- ix. Define commodity money
- x. List down quantitative tools of monetary policy by central bank

Questions with brief answers (3x10=30 marks)

*Q. 3. Provide brief answers to the following questions.*

- i. How the value of money is determined under demand and supply mechanism? Explain.
- ii. Differentiate between interest based and interest free banking systems
- iii. Briefly explain types of deposits being offered by commercial banks.







# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Computer-III**

**MAX. TIME: 15 Min.**

**Course Code: COMP-201/CMP-21316 Part-I (Compulsory)**

**MAX. MARKS: 10**

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1. Which component is responsible for converting byte code into machine specific code?  
a. a) JVM                      b) JDK                      c) JIT                      d) JRE
2. Which of the below is not a memory leak solution?  
a. a) Code changes                      b) JVM parameter tuning  
b. c) Process restart                      d) GC parameter tuning
3. Which of these interfaces is implemented by Thread class?  
a. a) Runnable                      b) Connections                      c) Set                      d) MapConnections
4. Which tag should be used to pass information from JSP to included JSP?  
a. a) Using <%jsp:page> tag                      b) Using <%jsp:param> tag  
b. c) Using <%jsp:import> tag                      d) Using <%jsp:useBean> tag
5. What is it called where child object gets killed if parent object is killed?  
a. a) Aggregation                      b) Composition  
b. c) Encapsulation                      d) Association
6. Statements of JavaScript function are enclosed in.  
a) { & }                      b) [ & ]                      c) ( & )                      d) None of these
7. Which of the following is server side programming languages?  
a) VbScript                      b) JavaScript                      c) JSP                      d) HTML
8. What kind of programming language is Java?  
a) Object-oriented programming language                      b) Relational programming language  
c) Sixth-generation programming language                      d) Database management language
9. The Extension with which web documents are saved is \_\_\_\_\_  
a) .class                      b) .c                      c) .html                      d) .css
10. The <br> tag is used to add \_\_\_\_\_  
a) Long break                      b) Line break                      c) Braces                      d) All of these





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Computer-III

Course Code: **COMP-201/CMP-21316** Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Answer the following short questions.**

**(5x4=20)**

- i. How do you create links to sections within the same web page?
- ii. Write an HTML table tag sequence that outputs the following:  
150 pcs 1100 1500  
110 pcs 15 150
- iii. How do you create a link that will connect to another web page when clicked?
- iv. What are two types of Web Storage in HTML5?
- v. What is the difference between final, finalize and finally as per JAVA?

**Q.3. Answer the following Long questions.**

**(3x10=30)**

- i. An anagram is a word or a phrase made by transposing the letters of another word or phrase; for example, "parliament" is an anagram of "partial men," and "software" is an anagram of "swear oft." Write a JAVA program that figures out whether one string is an anagram of another string. The program should ignore white space and punctuation
- ii. For each of the following pairs of concepts that are used in Java explain similarities and differences and discuss when you would use one rather than the other. If there are important syntactic differences, method names, degrees of generalization possible or the like, then any code fragments you give in illustration should be as short as possible to make the desired point.
  - (a) JApplet and simple Java applications.
  - (b) Vector<String> and arrays of strings (String []).
  - (c) class, abstract class and interface.
- iii. What is JDBC Connection? Explain steps to get Database connection in a simple java program and also write the java code as example.



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Computer Science-I**

**MAX. TIME: 15 Min.**

**Course Code: COMP-211/IT-21335 Part-I (Compulsory)**

**MAX. MARKS: 10**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- i. Which one of the following is not used for sending an online message?  
(a) facebook (b) skype (c) gmail (d) google
- ii. Decimal number 74 has its equivalent binary that is equal to:  
(a) 111111 (b) 1010101 (c) 1000101 (d) none
- iii. For  $A = \pi r^*$ ; which of the following is true in C++:  
(a) Your variable: A (b) Your variables: A, r (c) Your variables: A, r, pi (d) your variables: true
- iv. Which of the following is true for a variable name to calculate sum of two numbers  
(a) sum (b) sum(a, b) (c) sum = a + b (d) both b and c
- v. If  $a = 4$ ; and  $b = 5$ ; then which of the following is true for  $a++$ ; and  $++b$  ;  
(a) a is 4, b is 5 (b) a is 5, b is 5 (c) a is 4, b is 6 (d) a is 5, b is 6
- vi. The file extension of a presentation program is:  
(a) .ppt (b) .txt (c) .pdf (d) .doc
- vii. In case of while loop, it is:  
(a) fixed iterations loop (b) condition control loop (c) easy loop (d) incremental
- viii. if  $k=9$ , then  $k++$  will give:  
(a) 9 (b) 10 (c) 11 (d) 12
- ix. you can run C++ in :  
(a) mobile (b) computer (c) laptop (d) both b and c
- x. for  $\text{int } a = 2.9$ ;  $\text{cout} \ll a$ ; will give you:  
(a) 2 (b) 2.9 (c) 3.0 (d) All



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Computer Science-I**

**Course Code: COMP-211/IT-21335 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

Q.2.	Write short answers of the following Questions:  1 What is the difference between input device and tactile input devices? Write an algorithm to calculate y such that ( e.g., $y = 4x^2$ )  2 Give decimal equivalent of binary number: 11000111.  3 Differentiate between int and float in C++computer and write examples for each.  4 Write program to print out product of first five integers.  5 Comment on the following in C++: selection and repetition (loop).	20= 4x5
Q.3.	How the steps input, process and output are graphically shown in a flow chart? Differentiate between an algorithm and a flow chart? Write an algorithm to calculate and print c such that $c = (a + b)(a-b)$ .  Write C++ program to print a number, its square and cube such that the numbers are from 1 to 500. How you can print only odd numbers in the above series?	10
Q.4.	Write program to read from the user a value of t and prints out y1, y2 and y3 in C++ such that: $y1 = \sin(2t)$ , $y2 = \cos(4t)$ and $y3 = y1 + y2$  Write C++ program to print the table of number 5.	10
Q.5.	Write program to read from the user a value of a resistance R and current I and prints out values of voltage V and power P such that $V = IR$ and $P = VI$ .  Comment on the following: float, main() and pow().	10



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Intermediate Micro Economics

MAX. TIME: 15 Min.

Course Code: ECON-201/ECO-21318 Part-I (Compulsory)

MAX. MARKS: 10

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1. If marginal cost equals average total cost, average total cost will:
  - a. Be maximized
  - b. Decrease
  - c. Increase
  - d. Be minimized
2. A firm will shut down in the short-run if
  - a. It is suffering a loss
  - b. Fixed costs exceed revenues
  - c. Variable costs exceed revenues
  - d. Total costs exceed revenues
3. Which of the following is not characteristic of perfect competition?
  - a) Large number of sellers
  - b) Differentiated product
  - c) Easy entry
  - d) No advertising
4. For a monopolist to sell more units of output:
  - a) The price of the output must be increased
  - b) The price of the output must be decreased
  - c) Demand must become more elastic
  - d) The other competing firms must sell fewer units
5. When the decrease in the price of one good causes the demand for another good to decrease, the goods are:
  - a) Normal
  - b) Inferior
  - c) Substitutes
  - d) Complements
6. Which of the following is NOT a characteristic of monopolistic competition?
  - a) Large number of firms
  - b) Product differentiation
  - c) Mutual interdependence
  - d) No barriers to entry

P.T.O.



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

(Clash)

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Development Economics**

**MAX. TIME: 15 Min.**

**Course Code: ECON-202/ECO-21324 Part-I (Compulsory)**

**MAX. MARKS: 10**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- I. Pakistan started its 5<sup>th</sup> five-year plan in:  
(a) 1949 (b) 1955 (c) 1970 (d) 1978
- II. Agriculture accounts for:  
(a) 28% of GDP (b) 20% of GDP (c) 30% of GDP (d) 15% of GDP
- III. Contribution of services sector in the economy of Pakistan is:  
(a) 30% (b) 40% (c) 48% (d) 58%
- IV. Percentage of employment of labor force in agriculture sector is :  
(a) 50% (b) 55% (c) 43% (d) 27%
- V. Pakistan is considered as :  
(a) Backward country (b) Developing (c) Developed (d) a and b
- VI. The latest population census in Pakistan was held in:  
(a) 2013 (b) 2014 (c) 2017 (d) 2018
- VII. Most of the exports of Pakistan consist of:  
(a) Industrial Products (b) Sports Goods (c) Cotton Products  
(d) a and b
- VIII. The largest item of our imports is:  
(a) Petroleum (b) Computers (c) Cotton Cloth (d) a and b
- IX. The cost of the China-Pakistan Economic Corridor in 2017 was \$:  
(a) 50 billion (b) 55 billion (c) 58 billion (d) 62 billion
- X. The shortcomings which obstruct free system of prices are called:  
(a) Market imperfections (b) Market perfections  
(c) Business rivalries (d) a and c



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

(Clash)

Roll No. ....

**PAPER: Development Economics**

**Course Code: ECON-202/ECO-21324 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

Q.#2: Write a short answer to the following.

(5x4=20)

- I. Poverty of Opportunity Index (POPI)
- II. Debt Overhang Theory
- III. Quality of Life Index
- IV. Debt Buyback
- V. Externalities

Q.#3: How Rostow explains various stages of Economic Growth.

(10)

Q.#4: How trade is different from aid to boost the economic health of a country.

(10)

Q.#5: According to balance growth theory how a country can become a developed country?

(10)





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Development Economics**

**MAX. TIME: 15 Min.**

**Course Code: ECON-202/ECO-21324 Part-I (Compulsory)**

**MAX. MARKS: 10**

.....  
**Signature of Supdt.:**

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- I. Pakistan started its 5<sup>th</sup> five-year plan in:  
(a) 1949 (b) 1955 (c) 1970 (d) 1978
- II. Agriculture accounts for:  
(a) 28% of GDP (b) 20% of GDP (c) 30% of GDP (d) 15% of GDP
- III. Contribution of services sector in the economy of Pakistan is:  
(a) 30% (b) 40% (c) 48% (d) 58%
- IV. Percentage of employment of labor force in agriculture sector is :  
(a) 50% (b) 55% (c) 43% (d) 27%
- V. Pakistan is considered as :  
(a) Backward country (b) Developing (c) Developed (d) a and b
- VI. The latest population census in Pakistan was held in:  
(a) 2013 (b) 2014 (c) 2017 (d) 2018
- VII. Most of the exports of Pakistan consist of:  
(a) Industrial Products (b) Sports Goods (c) Cotton Products  
(d) a and b
- VIII. The largest item of our imports is:  
(a) Petroleum (b) Computers (c) Cotton Cloth (d) a and b
- IX. The cost of the China-Pakistan Economic Corridor in 2017 was \$:  
(a) 50 billion (b) 55 billion (c) 58 billion (d) 62 billion
- X. The shortcomings which obstruct free system of prices are called:  
(a) Market imperfections (b) Market perfections  
(c) Business rivalries (d) a and c



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Development Economics**

**Course Code: ECON-202/ECO-21324 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.#2: Write a short answer to the following. (5x4=20)**

- I. Poverty of Opportunity Index (POPI)
- II. Debt Overhang Theory
- III. Quality of Life Index
- IV. Debt Buyback
- V. Externalities

**Q.#3: How Rostow explains various stages of Economic Growth. (10)**

**Q.#4: How trade is different from aid to boost the economic health of a country. (10)**

**Q.#5: According to balance growth theory how a country can become a developed country? (10)**



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Basic Economics-III**

**Course Code: ECON-221/ECO-21449 Part-I (Compulsory)**

**MAX. TIME: 15 Min.**

**MAX. MARKS: 10**

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- i. To determine the correct level of GNP, it is necessary to:
  - a) Add up all savings
  - b) To count all imports
  - c) To add up the value of semi finished goods
  - d) To add up the values of goods and services during one year
- ii. If government increases taxes, private savings.
  - a) Decreases
  - b) Do not change
  - c) Increases
  - d) A and C
- iii. The fiscal policy is concerned with:
  - a) Commercial Banks
  - b) Central Bank
  - c) Government
  - d) All of the above
- iv. The theory of comparative cost was presented by:
  - a) Marshall
  - b) Ricardo
  - c) Keynes
  - d) Hicks
- v. Says law in money market is:
  - a) Not applicable
  - b) Applicable
  - c) None of the both
  - d) A and B
- vi. The consumption expenditures which are not influenced by income are:
  - a) Autonomous consumption
  - b) Induced consumption
  - c) Durable consumption
  - d) None of the above
- vii. The steps taken by central bank to central money supply are:
  - a) Commercial policy
  - b) Monetary policy
  - c) Fiscal policy
  - d) A and C
- viii. During deflation Central Bank will:
  - a) Purchase securities
  - b) Sell securities
  - c) Waste securities
  - d) None of the above
- ix. If government wants to reduce the use of petrol, it will:
  - a) Tax on petrol be decreased
  - b) Tax on petrol be increased
  - c) Subsidies on petrol be given
  - d) B and C
- x. If government wants to remove deficit on BOP, it should follow:
  - a) Neutral Fiscal Policy
  - b) Easy Fiscal Policy
  - c) Strict Fiscal Policy
  - d) None of the above



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Economics (Macro) for Commerce**

**MAX. TIME: 15 Min.**

**Course Code: ECON-231/ECO-21320 Part-I (Compulsory)**

**MAX. MARKS: 10**

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- i) The two main entities in the circular flow of income model are:
- |                              |                              |
|------------------------------|------------------------------|
| a. People and foreigners     | b. Households and Businesses |
| c. Businesses and foreigners | d. Households and Government |
- ii) Problems in measuring National Income may included
- |                      |                      |
|----------------------|----------------------|
| a. measuring exports | b. measuring imports |
| c. double counting   | d. Tax evasion       |
- iii) IMF is
- |                                    |                                  |
|------------------------------------|----------------------------------|
| a. a local government organization | b. an international organization |
| c. organization of the USA         | d. organization of Switzerland   |
- iv) Rules of international trade may be negotiated in
- |                   |        |
|-------------------|--------|
| a. the world bank | b. WTO |
| c. IMF            | d. UNO |
- v) Fundamental Psychological Law of Keynes is related to
- |                |               |
|----------------|---------------|
| a. Consumption | b. Investment |
| c. Inflation   | d. Supply     |
- vi) Deflation is
- |  |  |
|--|--|
| a. Increase in the overall level of economic activity. | b. An increase in the overall price level. |
| c. Decrease in the overall level of economic activity. | d. A decrease in the overall price level.  |
- vii) Trade may not take place between countries A and B if
- |  |  |
|--|--|
| a. country A has absolute advantage in both products | b. prices of products are the same in both countries |
| c. taxes are imposed                                 | d. IMF does not provide loan                         |
- viii) Production within the country is measure by
- |        |                                |
|--------|--------------------------------|
| a. GNP | b. GNI                         |
| c. GDP | d. All of the previous options |
- ix) Pakistan borrows form
- |                     |                        |
|---------------------|------------------------|
| a. The World Bank   | b. IMF                 |
| c. both 'a' and 'b' | d. none of 'a' and 'b' |
- x) If tax rate increases with levels of income, this is called
- |                   |                    |
|-------------------|--------------------|
| a. Regressive tax | b. Direct tax      |
| c. Indirect taxes | d. Progressive tax |



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Economics (Macro) for Commerce**

**Course Code: ECON-231/ECO-21320 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Give short answers of following:**

**(10 x 2 = 20)**

- i. What is meant by Personal Income?
- ii. What is value added with reference to National Income Accounting?
- iii. What is meant by Average Propensity to Consume?
- iv. How can the problem of a deflationary gap be solved?
- v. According to Keynes, what are the determinants of investment?
- vi. Which one of direct or indirect tax is better? Why?
- vii. State the theory of comparative advantages of international trade.
- viii. Can a country have Absolute advantage in both commodities under consideration? Why or Why not?
- ix. What is the main objective of WTO?
- x. What does the Keynesian Theory of Income and Employment teach us?

**Q.3. Give detailed answers:**

**(3 x 10 = 30)**

- i) Discuss the concept and measurement of National Income.
- ii) Consumption is a direct function of income according to Keynes. Comment.
- iii) Explain the Heckscher-Ohlin theory of International Trade.



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Education in Pakistan**  
**Course Code: ED-303 Part-I (Compulsory)**

**MAX. TIME: 15 Min.**

**MAX. MARKS: 10**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.I. Select the best answer from given option.**

**(1x10=10)**

- 1- The targets set in the five year plans differ to a great extent from the targets set in the:  
A) Development plans  
B) National policies  
C) Educational plans  
D) Research plans
- 2- In which year, six - year development program of Pakistan started?  
A) 1947  
B) 1954  
C) 1950  
D) 1956
- 3- The first five year plan started in:  
A) 1955  
B) 1954  
C) 1953  
D) 1956
- 4- Educational conference 1951 was prepared by the \_\_\_\_\_ of the Central government in collaboration with provincial and state governments  
A) Education Division  
B) Planning board  
C) Educational Council  
D) Implementation Bureau
- 5- The second five-year (1960-65) plan was developed by that  
A) Planning commission  
B) Planning board  
C) Planning Bureau  
D) Planning Authority
- 6- Who will appointed in girls school if qualified female teachers are not available? in due course, all primary school will have only female teachers  
A) Retired personnel  
B) Subject specialist  
C) Headmasters  
D) senior most teachers

**P.T.O.**



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Education in Pakistan

Course Code: ED-303 Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

## ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Q. II Short Answer questions (Attempt All Questions) (5×4 = 20)

1. Write down the Salient features of education policy 1978?

1978 کی تعلیمی پالیسی کے اہم نکات کیا ہیں؟

2. What are the policy provisions for Secondary education of education policy 1998?

1998 کی تعلیمی پالیسی میں سیکنڈری ایجوکیشن کے بارے میں کیا کیا گیا ہے؟

3. What are the targets of second five year plan 1960-65?

دوسرے پانچ سالہ 1960-65 کے منصوبے کے اہداف کیا تھے؟

4. What are the major issues of education at primary level write only two issues?

پرائمری سطح پر تعلیم کے کیا مسائل ہیں؟ کوئی سے دو پر نوٹ لکھیں۔

5. What are the issues of curriculum development write only two issues?

نصاب سازی کے اہم مسائل کیا ہیں؟ کوئی سے دو پر نوٹ لکھیں۔

### Section III

Q. III Attempt All Questions

(10×3 = 30)

1. Write down the main features of Alighrah movement?

علی گڑھ تحریک کے اہم نکات لکھیں۔

2. Write down the Islamic concept of Education?

اسلامی نظریہ تعلیم کیا ہے؟

3. What are the salient features of Hamood-ur-Rehman Commission 1964?

حمود الرحمن کمیشن 1964 کے اہم نکات کیا ہیں؟



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Psychology of Learning**  
**Course Code: ED-312 Part-I (Compulsory)**

**MAX. TIME: 15 Min.**  
**MAX. MARKS: 10**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Select the best answer from given option.**

**(1x10=10)**

1. Cognitive development deals with
  - a) Society
  - b) Body
  - c) Mind
  - d) Emotion
2. The word Psychology is derived from:-
  - a) Greek
  - b) Latin
  - c) English
  - d) Italian
3. Learning means:-
  - a) Change in environment
  - b) Change in culture
  - c) Change in behavior
  - d) Change in society
4. Moral development involves.
  - a) What is right and wrong
  - b) Behaving of accordanc
  - c) Feelings of guilt & pride
  - d) Specialization
5. Punishment is an example of which of the following:-
  - a) Learning
  - b) Motivation
  - c) Intelligence
  - d) Personality
- 6-The learner & learning theories are studied in:-
  - a) Philosophy
  - b) Sociology
  - c) Ontology
  - d) Psychology
- 7-Motivation associated with activated that are their own rewards is
  - a) Intrinsic motivation
  - b) Extrinsic motivator
  - c) Both a &b
  - d) None of a & b
- 8-Learning by insight theory in also called as:-
  - a) Classical conditioning
  - b) Operant conditioning
  - c) Both a & b
  - d) No of a & b
- 9- Hierarchy of needs was presented by:-
  - a) Gardener
  - b) Maslow
  - c) Piaget
  - d) Skinner
- 10- Growth is cellular whereas development is:-
  - a) Institutional
  - b) unicellular
  - c) Organizational
  - d) Psychological





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Psychology of Learning**

**Course Code: ED-312 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

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**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q2. Write short answers of the following. Each carries 4 marks. (4x5=20)**

- 1) Write down 2 definitions of Educational psychology with reference.
- 2) Write down the 4 principles of Growth and development.
- 3) What is learning? Briefly explain.
- 4) What is difference between intrinsic & extrinsic motivation?
- 5) Write down 4 classroom management techniques.

**Q3. Write detailed answers of following questions. Each carries 15 marks. (15x2=30)**

- 1) Discuss in detail the scope of Educational psychology in detail. Also give its educational implications.
- 2) Explain different instructional strategies which may be used to enhance learning and teaching.





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: English Language-III**

**Course Code: EDE-105 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Answer FIVE of the following short questions: (5x4=20 Marks)**

- i. What is the logic of the old man going so far out in the sea?
- ii. How does Santiago succeed in killing the marlin?
- iii. Is Santiago a loser or winner in your opinion?
- iv. Describe the depth of the relationship of Santiago and Manolin.
- v. Discuss sea as a character in the novel 'The Old Man and The Sea.'

**Q.3. Write a letter to the editor of newspaper about the sale of sub-standard helmets in the market. OR**

Write a letter to the editor of newspaper about the undue increase in the tuition-fee and other funds in private schools. (15 Marks)

**Q.4. Write an application with resume to the District Education Officer for the post of Elementary Teacher. OR**

Write an application with resume to the Deputy Commissioner for the post of Data Entry Operator. (15 Marks)



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: General Mathematics**  
**Course Code: EDE-109 Part-I (Compulsory)**

**MAX. TIME: 30 Min.**  
**MAX. MARKS: 10**

.....  
Signature of Supdt.:

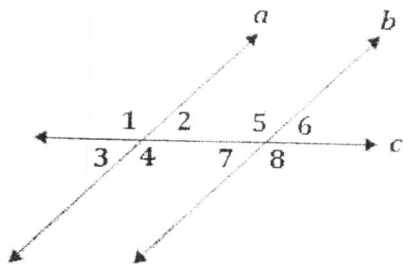
**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1. What is the measure for a one dimensional figure?
  - a. Area
  - b. Length
  - c. Surface Area
  - d. Volume
2. Which of these is not an 'equation'?
  - a.  $3x = 7$
  - b.  $4x^2 - 6 = 28$
  - c.  $4x + 5y + 6z$
  - d.  $5x = 6y$
3.  $a^2 + b^2 = 25$ . If  $a = 3$  then what is the value of  $b$ ?
  - a. 4
  - b. 5
  - c. 6
  - d. 7
4. What is a 'variable'?
  - a. A division sign
  - b. A letter or symbol representing a varying quantity
  - c. A multiplication sign
  - d. An equals sign
5. Use the figure below to answer the question.



Lines  $a$  and  $b$  are parallel. Line  $c$  is a transversal. Which statement is true?

- a.  $m\angle 1 = m\angle 4$ , because they are opposite angles
- b.  $m\angle 1 = m\angle 6$ , because they are supplementary angles
- c.  $m\angle 1 = m\angle 8$ , because they are adjacent angles

**P.T.O.**



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: General Mathematics**

**Course Code: EDE-109 Part – II**

**MAX. TIME: 2 Hrs. 30 Min.**

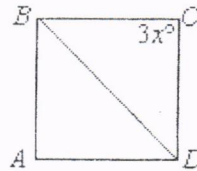
**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

## Q.2. Short answers questions.

(5x4=20)

1. Jamal started a business in which he earned Re 1 on the first day Rs 4 on the second day, Rs 7 on the third day, Rs 10 on the fourth day, and so on. What is his earning in day 1001?
2. A right triangle has a hypotenuse of length  $2x$ , a leg of length  $x$ , and a leg of length  $y$ . Write an expression that shows the value of  $y$  in terms of  $x$ .
3. If  $ABCD$  is a square, find the value of  $x$ .



4. Expand and simplify the following

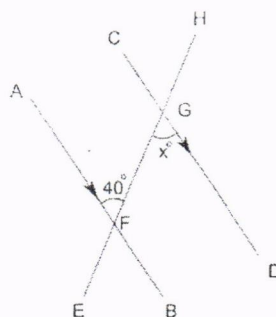
$$\frac{1}{2}(4x+4) + \frac{1}{3}(6x+12)$$

5. Find the unknown value in the proportion:  $2 : x = 3 : 9$ .

## Q.3. Brief answers questions.

(3x10=30)

1. Bilal works 8 hours per day, 5 days per week and his weekly pay is Rs. 1200. His employer increases his weekly wage by Rs. 400. Bilal does not need more money per week than his current weekly wage. He decides to decrease the number of hours he works every week. How many hours per week can he work now and keep the same income?
2. At stock exchange the share price a company is valued at Rs. 40 per share. The value increase by 25% and then decreases by 20%. What is the final value of share of that company?
3. In the following figure AB and CD are parallel lines and EH is a transversal. The size of angle AFG is  $40^\circ$  and the size of angle FGD is  $x^\circ$ . What is the value of  $x$ ?





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Content Elective A-II (History)  
Course Code: EDE-160 Part-I (Compulsory)

MAX. TIME: 15 Min.  
MAX. MARKS: 10

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

اس پرچے کے سوالات کو اسی شیٹ پر حل کریں۔

Q.1. Fill in the blanks, cutting and overwriting is not allowed. (1x10=10)

سوال نمبر 1: خالی جگہ پر کیجئے۔ کاٹ کر دوبارہ لکھا گیا غلط شمار ہو گا۔

- i. What is the new name of Jabul-ul-Tariq \_\_\_\_\_?  
جبل الطارق کا موجودہ نام کیا ہے؟
- ii. Who rebuilt the Masjid-e-Nabwi ﷺ in Umayyad Period \_\_\_\_\_?  
دور اموی میں مسجد نبوی ﷺ کی کس نے تعمیر نو کی؟
- iii. Who stopped the "Tabirah" on Hazrat Ali (R.A) \_\_\_\_\_?  
حضرت علی کرم اللہ وجہہ پر تبری کی بندش کس حکمران نے کی؟
- iv. Who get back the income of Fidaq Garden from Umayyad's \_\_\_\_\_?  
بنو امیہ سے باغ فدک کی آمدنی کس خلیفہ نے واپس لی؟
- v. In which Hijri the event of Shob occurred \_\_\_\_\_?  
واقعہ شوب کس سن ہجری میں پیش آیا؟
- vi. What was the name of person from Umayyad who establish kingship in Undlas \_\_\_\_\_?  
بنو امیہ کا وہ کون سا شخص تھا جس نے اندلس میں اموی حکومت قائم کی؟
- vii. Who was the writer of Muqadama-i-Abn-e-Khuldoon \_\_\_\_\_?  
مقدمہ ابن خلدون کا مصنف کون تھا؟
- viii. What was the official language of Umayyad \_\_\_\_\_?  
بنو امیہ کی سرکاری دفتری زبان کون سی تھی؟
- ix. Who killed the Shemer \_\_\_\_\_?  
شمر کو کس نے جہنم واصل کیا؟
- x. The Abbasid movement started in \_\_\_\_\_ Hijri.  
عباسی تحریک \_\_\_\_\_ ہجری میں شروع ہو گئی تھی۔



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Content Elective A-II (History)

Course Code: EDE-160 Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

اس پرچے میں شامل سوالات کے جوابات اپنی امتحانی کاپی میں درج کریں۔

**Q.2. Write short answers, not more than four or five lines. (10x2=20)**

(2x10=20)

سوال نمبر 2: مختصر جوابات تحریر کیجئے۔ جوابات چار یا پانچ سطروں سے زیادہ نہ ہوں۔

- i. What are the special features of the Umayyad Period?  
i. اموی دور حکومت کی نمایاں خصوصیات کیا تھیں؟
- ii. Hazrat Muawiya (R.A.) as a best king of Arab.  
ii. حضرت معاویہ رضی اللہ عنہ عرب کے بہترین حکمران تھے۔
- iii. Character of Hajjaj bin Yousaf.  
iii. حجاج بن یوسف کا کردار
- iv. Walid I  
iv. ولید اول
- v. Musa bin Nasir  
v. موسیٰ بن نصیر
- vi. Marwan II : He was responsible for the fall of Umayyada's Dynasty.  
vi. مروان دوم۔ بنو امیہ کے زوال کا ذمہ دار تھا۔
- vii. Revenue system of Umayyad Dynasty.  
vii. بنو امیہ کے ذرائع آمدنی۔
- viii. Suliman's Character  
viii. خلیفہ سلیمان کا کردار۔
- ix. Event of Miraj-e-Rahit.  
ix. مرج راہط کا واقعہ
- x. Central Asia's policy of umayyad.  
x. بنو امیہ کی وسط ایشیا پالیسی

**Q.3. Write brief answer the following:**

(3x10=30)

سوال نمبر 3: تفصیلی جوابات تحریر کیجئے۔

- i. Give an account of the reforms of the Hazrat Ummer bin Abdul Aziz (R.A.)  
i. حضرت عمر بن عبدالعزیز رضی اللہ عنہ کی اصلاحات بیان کیجئے۔
- ii. Account for the decline and downfall of the Umayyads.  
ii. بنو امیہ کے زوال اور تنزلی کے اسباب اور وجوہات تحریر کیجئے۔
- iii. Write in detail the administration of Umayyad.  
iii. بنو امیہ کی اصلاحات و نظم و نسق تحریر کیجئے۔



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

**Examination: B.S. 4 Years Program**

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Content Elective-A (Sociology-II)**  
**Course Code: EDE-168 Part-I (Compulsory)**

**MAX. TIME: 15 Min.**  
**MAX. MARKS: 10**

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Select the best answer from given option.**

**(5x2=10)**

1. Example of Material culture

- a. Pen
- b. Building
- c. Book
- d. All of the above

2. \_\_\_\_\_ is the smallest part of the culture

- a. Ethos
- b. Complexes
- c. Trait
- d. Patterns

3. \_\_\_\_\_ is the process of learning the culture of a society.

- a. Role
- b. Status
- c. Socialization
- d. Mobility

4. Caste is an \_\_\_\_\_ status

- a. Achieved
- b. Ascribed
- c. High
- d. Low

5. Culture is always

- a. Permanent
- b. Constant
- c. Static
- d. None of the above

**P.T.O. For Urdu Version**





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Content Optional-B (Arabic)  
Course Code: EDE-251 Part-I (Compulsory)

MAX. TIME: 15 Min.  
MAX. MARKS: 10

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

(1x10=10)

## حصه اول

اجعل علامة (✓) على الجواب الصحيح

- (1) أين نشأ الجاحظ؟  
1- بالقاهرة 2- بالبصرة 3- بالكوفة
- (2) أين وُلِدَ الأستاذ توفيق الحكيم؟  
1- الأسكندرية 2- اليمن 3- القاهرة
- (3) من قال هذا الشعر في مدح الرسول ﷺ؟ واحسن منك لم تر قط عيني وأجمل منك لم تلد النساء  
1- الامام الشافعي 2- خنساء 3- حسان بن ثابت رضي الله عنه
- (4) من المراد من "ذى الوجهين"؟  
1- المنافق 2- الكافر 3- المشرك
- (5) من هو الأكرم عند الله؟  
1- الذي يصلي 2- الذي يتقى 3- الذي يصدق
- (6) لمن دعا رسول الله ﷺ أن يعز الإسلام به؟  
1- عثمان بن عفان رضي الله عنه 2- علي المرتضى رضي الله عنه 3- عمر بن الخطاب رضي الله عنه
- (7) على أي عنوان كتب الدكتور طه حسين؟  
1- حديقة جميلة 2- تضحية وإيمان 3- الكتاب
- (8) في أي سنة من الهجرة خرج النبي ﷺ لحجة الوداع؟  
1- السنة العاشرة 2- السنة التاسعة 3- السنة السابعة
- (9) متى تُوفِّي الجاحظ؟  
1- سنة 210 هجرية 2- سنة 255 هجرية 3- سنة 185 هجرية
- (10) قتل ابولؤلؤة المهجوسي عمر بن الخطاب رضي الله عنه وهو يصلي  
1- العصر 2- العشاء 3- الفجر



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Content Optional-B (Arabic)

Course Code: EDE-251 Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

## حصہ دوم

5

**السؤال الأول:** ترجم العبارة الآتية بالأردنية أو الإنجليزية

”قد قيل: إن الكتاب هو المجلس الذي لا يتناقض ولا يمل ولا يُعاتبك إذا جفوتة ولا يُفشي سرك“

5

**السؤال الثاني:** ترجم الحديث بالأردنية أو الإنجليزية-

”إتق الله حيثما كنت واتبع السيئة الحسنة تمحها وخالق الناس بخُلُقٍ حَسَنٍ“

5

**السؤال الثالث:** أُوخِرْ بالعربية من هو الجاحظ وماذا تعرف عنه-

5

**السؤال الرابع:** ترجم وشرح الحديث بالأردنية أو الإنجليزية-

”خير الأمور أوسطها“

## حصہ سوم

10

**السؤال الأول:** ترجم الآيات الآتية بالأردنية أو الإنجليزية-

﴿وَعِبَادُ الرَّحْمَنِ الَّذِينَ يَمْشُونَ عَلَى الْأَرْضِ هَوْنًا وَإِذَا خَاطَبَهُمُ الْجَاهِلُونَ قَالُوا سَلَامًا ۗ وَالَّذِينَ يَدِينُونَ لِرَبِّهِمْ سُجَّدًا وَقِيَامًا ۗ وَالَّذِينَ يَقُولُونَ رَبَّنَا اصْرِفْ عَنَّا عَذَابَ جَهَنَّمَ ۗ إِنَّ عَذَابَهَا كَانَ غَرَامًا ۗ إِنَّهَا سَاءَتْ مُسْتَقَرًّا وَمُقَامًا ۗ وَالَّذِينَ إِذَا أَنْفَقُوا لَمْ يُسْرِفُوا وَلَمْ يَقْتُرُوا وَكَانَ بَيْنَ ذَلِكَ قَوَامًا ۗ﴾

10

**السؤال الثاني:** ترجم الأبيات التالية وشرحها بالأردنية أو الإنجليزية

- 1\_ ومن هاب أسباب المنيا يثلثه
- 2\_ ومهما تكن عند امرئ من خليقة
- 3\_ وكائن تزي من صامت لك مُعجب
- 4\_ لسان الفتى نصف ونصف فواده
- ولو رام أسباب السماء بسلم
- وإن تحالها تخفى على الناس تعلم
- زيادته أو نقصه في التكلم
- فلم يبق إلا صورة اللحم والدم

10

**السؤال الثالث:** ترجم الجمل الآتية بالعربية

- 1\_ مجھے جامع کلمات عطا کیے گئے ہیں۔
- 2\_ ظلم قیامت کے دن اندھیرے ہوں گے۔
- 3\_ راستوں میں بیٹھنے سے بچو۔
- 4\_ بے شک مؤمن بھائی بھائی ہیں۔
- 5\_ بے شک اللہ نے ماؤں کی نافرمانی کو حرام کر دیا ہے۔



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: English-III (Advance Communication Skills)**  
**Course Code: ENG-201/21103 Part-I (Compulsory)**

**MAX. TIME: 15 Min.**  
**MAX. MARKS: 10**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q 1 (a) Mark the following statements as True or False. (5)**

- (i) The first impression of an interviewer is based on what the interviewee is wearing, so the interviewee should dress-up professionally even if the work environment is casual. \_\_\_\_\_
- (ii) Present irrelevant and detailed information about yourself and your family in your CV. \_\_\_\_\_
- (iii) It is important to do full rehearsal before finalizing your presentation. \_\_\_\_\_
- (iv) Using too many gestures in a presentation can be distracting. \_\_\_\_\_
- (v) A formal letter is a letter to a friend asking about her well-being. \_\_\_\_\_

**Q 1 (b) Define the following: (5)**

- (i) Resume' \_\_\_\_\_  
\_\_\_\_\_
- (ii) Posture (with reference to presentation) \_\_\_\_\_  
\_\_\_\_\_
- (iii) Short Report \_\_\_\_\_  
\_\_\_\_\_
- (iv) Cover Letter \_\_\_\_\_  
\_\_\_\_\_
- (v) Speaking effectively \_\_\_\_\_  
\_\_\_\_\_



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: English-III (Advance Communication Skills)

Course Code: ENG-201/21103 Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

Q2 Write short answers to the following questions: (20)

- (i) How will you engage your audience in an Oral Presentation?
- (ii) What should an interviewee avoid while appearing for an interview?
- (iii) What strategies one can use to make presentation more interesting?
- (iv) How will you justify that you deserve a scholarship to an interviewer?

Q3 Write a short report on any one of the following topic : (10)

- (i) Electricity crisis in Pakistan
- (ii) The consequences of rapid population growth in Pakistan.

Q4 Write a letter to the Editor of a Newspaper discussing the contemporary issues of Pakistan. (10)

Q5 Prepare a CV for the following: (10)

**SALES MANAGER REQUIRED**

Candidate who has done BS with at least 5-8 years of experience preferably in food industry. The candidate should possess:

- Excellent sales and negotiation skills.
- Good business sense.
- The ability to motivate and lead a team.
- Initiative and enthusiasm.
- Excellent communication.
- Good planning and organizational skills.
- The ability to work calmly under pressure.



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Introduction to Literature-III (Fiction and Non-Fiction) MAX. TIME: 15 Min.

Course Code: ENG-202/21336 Part-I (Compulsory) MAX. MARKS: 10

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (10x1=10)**

- i. Thomas Hardy was:  
(a) An Optimist (b) A Pessimist  
(c) A Satirist (d) A Humorist
- ii. Earnest Hemingway is a:  
(a) Novelist (b) Essayist  
(c) Short Story Writer (d) Both A and C
- iii. Jonathan Swift is from:  
(a) 17<sup>th</sup> Century (b) 16<sup>th</sup> Century  
(c) 19<sup>th</sup> Century (d) 18<sup>th</sup> Century
- iv. "The Rose and the nightingale" presents:  
(a) Sacrifice (b) Love  
(c) Both Love and Sacrifice (d) None of all
- v. Bacon was a:  
(a) Poet (b) Novelist  
(c) Essayist (d) Short Story Writer
- vi. Of youth and age is a essay by:  
(a) Francis Bacon (b) Jonathan Swift  
(c) Oscar Wilde (d) Levis
- vii. Araby was written by:  
(a) D.H. Lawarance (b) James Joyce  
(c) Oscar Wilde (d) Kake Chopin
- viii. The most famous writing of Jonathan Swift was:  
(a) Ode to Gracian Urn (b) Gullivers Travels  
(c) Hard Times (d) A Tale of two cities
- ix. Nadine Gordimer was born in:  
(a) South Africa (b) Paris  
(c) England (d) Norway
- x. Rudyard Kipling is the writer of the sotry:  
(a) Araby (b) The Fox  
(c) The String (d) The man who would be a king



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Introduction to Linguistics-III  
(Phonetics and English Phonology)**

**MAX. TIME: 15 Min.**

**MAX. MARKS: 10**

**Course Code: ENG-203/21337 Part-I (Compulsory)**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- 1) Consonants uttered through a narrow place causing friction is
  - a) Affricates b) fricatives c) nasal d) plosives
- 2) bat and mat are examples of
  - a) allophones b) morphology c) phoneme d) minimal pairs
- 3) two important parts of syllable are
  - a) stress and intonation b) coda and onset c) pitch and tone d) phone and phoneme
- 4) Vowels usually are
  - A) Frictionless b) voiced c) uttered with friction d) uttered with obstruction
- 5) Diphthongs and triphthongs belongs to
  - a) Stress b) intonation c) vowels d) consonents
- 6) Biliabial sounds are produced by
  - a) Opening up two lips
  - b) By joining two lips
  - c) Through lips and nose
  - d) Through nose only
- 7) Nasalized sounds are produced
  - a) Through nose and mouth
  - b) Through mouth
  - c) Through nose only
  - d) Through tongue and teeth
- 8) The phonatary system is made up of
  - a) Lungs
  - b) Larynx
  - c) Wind pipe
  - d) Mouth
- 9) The physical aspect of sound is called
  - a) Phonetics b) phonology c) auditiory phonetics d) physical sound system
- 10) There is one sound which is semi vowel that is
  - a) /D/ b) /V/ c) /Y/ d) /W/



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Introduction to Linguistics-III  
(Phonetics and English Phonology)**

**MAX. TIME: 2 Hrs. 45 Min.  
MAX. MARKS: 50**

**Course Code: ENG-203/21337 Part – II**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Give short answers of following:**

**(4 x 5 = 20)**

- 1) What are the pulmonic sounds (5)
- 2) What is phone and phoneme (5)
- 3) Write down the places of articulation (5)
- 4) What is stress and intonation (5)

**Q.3. Give detailed answers:**

**(3 x 10 = 30)**

- 1) Write a note on manners of articulation 10
- 2) What do you know about phonology? 10
- 3) What is phonetics and what is its importance? 10



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: English-III (Communication Skills)

MAX. TIME: 15 Min.

Course Code: ENG-211/21104

Part-I (Compulsory)

MAX. MARKS: 10

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

Q.1:- (a) Choose the word most similar in meaning to the capitalized ones. (5)

(i) DIGRESS:

(a) regress (b) devitae (c) excess (d) unpredictable

(ii) TRANSLUCENT:

(a) milky (b) opaque (c) clear (d) glowing

(iii) FALLACIOUS:

(a) inhumane (b) false (c) truthful (d) vicious

(iv) BOUNTY:

(a) adorn (b) beautify (c) sugary (d) reward

(v) OBDURATE:

(a) stubborn (b) flexible (c) truthful (d) delicate

(b) Fill in the blanks with appropriate prepositions given at the end of every sentence. (5)

(i) The atmosphere in this office is not congenial \_\_\_\_\_ me.

(a) for (b) to (c) with (d) upon

(ii) I am sending you the money you have asked \_\_\_\_\_.

(a) in (b) for (c) out (d) up

(iii) The milk quickly turned \_\_\_\_\_ butter.

(a) in (b) over (c) to (d) into

(iv) They will be back \_\_\_\_\_ November.

(a) till (b) until (c) by (d) while

(v) He was by no means ignorant \_\_\_\_\_ this.

(a) with (b) of (c) to (d) about





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: English-III (Communication Skills)**

**Course Code: ENG-211/21104 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

## QUESTIONS WITH SHORT ANSWERS

**Q.2.** Read the following passage carefully and answer the questions given at the end. (20)

To be a good teacher, you need some of the gifts of a good actor. You must be able to hold the attention and interest of your audience; you must be a clear speaker with a good pleasing voice and you must be able to act when you are teaching in order to make its meanings clear. Watch a good teacher, you will see he does not sit motionless before his class; he stands the whole time he is teaching; and he walks about using his arms, hands and fingers to help him in his explanation and his face to express his feelings. Listen to him and you will hear the loudness, the quality and the musical note of his voice always changing according to what he is teaching. But the fact that a good teacher has some of the gifts of a good actor does not mean that he will indeed be able to act on the-stage, for there are very important differences between the teachers' work and actors' work. The actor has to speak words which he has learnt by heart, he has to repeat certain dialogues which he has learnt earliest. Even his movements and the ways in which he uses his voice are usually fixed- before. The good teacher works in a different way because his audiences take an active part in his play. They ask questions, and if they do not understand something, they will say so. So the teacher has to suit his act to the need of his audience that is his class. I know many teachers who were fine actors in the class but were unable to take part in a stage play because their brains would not keep strictly to what another had written.

Questions:

- 1- Suggest a suitable title for the passage. [2]
- 2- What is the difference between a good teacher and a good actor? [4]
- 3- What is the role of teacher in nation building? [3]
- 4- How can a good teacher be compared to a good actor? [3]
- 5- Who, according to you, is a good teacher? [3]
- 6- Make a precis of the above passage. [5]

## QUESTIONS WITH BRIEF ANSWERS

**Q.3.** Write three connected paragraphs on women empowerment. (10)

**Q.4** Write a letter to the District Health Officer about the lack of medical facilities in Government Hospital/Dispensaries of your district. (10)

**Q.5** Write down steps for preparing an effective Oral presentation and strategies for effective nonverbal delivery. (6 + 4)



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: English-III (Business Communication-I)**

**MAX. TIME: 15 Min.**

**Course Code: ENG-221/21105 Part-I (Compulsory)**

**MAX. MARKS: 10**

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1) Poverty

a) lavish      b) beggary      c) abundance      d) wealth

2) appendix

a) appendage      b) principal      c) contents      d) tables

3) compensate

a) deprive      b) damage      c) to beg      d) reimburse

4) Magnificent

a) beautiful in a grand way      b) magnify      c) clumsy      d) bad

5) Malign

a) to speak good about someone      b) to speak bad about someone      c) freedom      d) plain

6) placid

a) mixed      b) peaceful      c) caution      d) carelessness

7) Immortal

a) everlasting      b) subject to death      c) death      e) decay

8) innovation

a) something new      b) loss      c) steal      d) resolution

9) pacifier

a) agitator      b) mediator      c) diplomat      d) conquerer

10) interruption

a) hindrance      b) smooth      c) commencement      d) beginning



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: English-III (Business Communication-I)**

**Course Code: ENG-221/21105 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Give short answers of the following:**

**(4 x 5 = 20)**

- What is the difference between intrapersonal and interpersonal communication?(5)
- Explain the difference between heading and letter head?(5)
- Explain briefly the types of communication that take place within an organization?(5)
- What are the barriers that cause hindrance in listening? (5)

**Q.3. Give brief answers.**

**(3 x 10 = 30)**

- Discuss in detail the parts of a business letter? (10 marks)
- Define listening and what are the ways to improve it? (10 marks)
- Explain in detail the strategies to convey good and bad messages? (10 marks)



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Communication Skills (IT)

MAX. TIME: 15 Min.

Course Code: ENG-231/21452 Part-I (Compulsory)

MAX. MARKS: 10

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

Q. 1. (A) Encircle the correct answer.

i. Eliminating wordy expressions in communication is known as \_\_\_\_\_.

- a. completeness
- b. consideration
- c. conciseness
- d. concreteness

ii. Vertical communication takes place between \_\_\_\_\_.

- a. Superior to subordinate
- b. Subordinate to superior
- c. Employees with same status
- d. None of these

iii. Including 'heading-letter head' a business letter has \_\_\_\_\_ parts.

- a. 6
- b. 8
- c. 10
- d. 7

iv. Some messages are written on dark or bright colored papers because \_\_\_\_\_.

- a. of informal nature of the message
- b. the message is as important as the substance
- c. of formal nature of the message
- d. none of these

v. \_\_\_\_\_ is the most common form of communication between people or departments within an organization.

- a. Formal letter
- b. E-mails
- c. Applications
- d. Memorandum

**P.T.O.**



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Communication Skills (IT)**

**Course Code: ENG-231/21452 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Write short answers to the following questions.**

**(5x4=20)**

- i. Explain the organization plan for a successful presentation.
- ii. What is the structure of a memorandum?
- iii. Explain the procedure of taking minutes of a meeting?
- iv. What do you mean by non-verbal communication?
- v. What is the use of audio-visual aids in business communication?

**Q.3. Write brief answers to the following questions.**

**(3x10=30)**

- i. What are the principles of communication? How do you prove that they overlap with one another?
- ii. What are latest/modern channels of communication? Explain them in detail.
- iii. Create a resume based on the following information.

Name: : Muhammad Athar

Qualification: : BS (IT)

Experience: : 5 Years as IT Assistant Manager in ABC Company



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Content Optional B (History)  
Course Code: EDE-253 Part-I (Compulsory)

MAX. TIME: 15 Min.  
MAX. MARKS: 10

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

(1x10=10)

نوٹ: ہر سوال کے چار ممکنہ جوابات میں سے درست جواب (✓) کا نشان لگائیں۔

۱۔ حجاج بن یوسف کون تھا۔

(ا) شاعر (ب) گورنر (ج) خلیفہ (د) ان میں سے کوئی نہیں

۲۔ کس عباسی خلیفہ نے سیاہ کے بجائے سبز رنگ اختیار کیا۔

(ا) مامون (ب) منصور (ج) متوکل (د) ہارون

۳۔ حضرت عمر بن عبدالعزیز خلیفہ کہلاتے ہیں۔

(ا) تیسرے (ب) دوسرے (ج) پانچویں (د) چوتھے

۴۔ امین الرشید کا وزیر کون تھا۔

(ا) فضل بن ربیع (ب) فضل بن سہل (ج) نصر بن سيار (د) افشین حیدر

۵۔ حضرت علیؑ اور حضرت عائشہؓ کے مابین لڑی جانے والی جنگ کہلاتی ہے۔

(ا) جنگ موتہ (ب) جنگ جمل (ج) جنگ صفین (د) جنگ یرموک

۶۔ حضرت عمرؓ کا عرصہ خلافت کتنا ہے۔

(ا) ۱۰ (ب) ۱۲ (ج) ۱۳ (د) ۱۹

۷۔ بغداد کس دریا کے کنارے واقع ہے۔

(ا) نیل (ب) دجلہ (ج) فرات (د) سندھ

۸۔ بنو عباس کا اصل بانی کیسے کہا جاتا ہے۔

(ا) السفاح (ب) منصور (ج) مہدی (د) ہادی

۹۔ صلح حدیبیہ طے پایا۔

(ا) ۶ ہجری (ب) ۷ ہجری (ج) ۸ ہجری (د) ۵ ہجری

۱۰۔ ابومسلم خراسانی کا اصل نام کیا تھا؟

(ا) عبداللہ (ب) عبدالرحمن (ج) محمد بن علی (د) ابراہیم بن عثمان



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Content Optional B (History)

Course Code: EDE-253 Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

درج ذیل سوالات کے جوابات اپنی کاپی پر تحریر کریں۔

(۵×۴= ۲۰)

سوال نمبر ۲۔ مختصر جواب دیں۔

۱۔ سراقہ بن جعشم کے بارے میں تین سطور لکھیں۔

۲۔ بنو آرمیہ کی ناکامی کے چار اسباب لکھیں۔

۳۔ یثاق مدینہ کی چار شرائط لکھیں۔

۴۔ ابراہیم کون تھا۔ اس کے ساتھ کیسا سلوک کیا گیا؟

۵۔ معتزلہ کا عقیدہ کیا تھا؟

۳۰

سوال نمبر ۳۔ درج ذیل سوالات کے تفصیلی جوابات تحریر کریں۔

۱۰ ۱۔ ماموں الرشید کے عہد خلافت کو سنہری زمانہ کیوں کہا جاتا ہے؟

۱۰ ۲۔ خطبہ حجۃ الوداع پر تفصیلی نوٹ لکھیں۔

۱۰ ۳۔ حضرت ابو بکر صدیقؓ کو بطور خلیفہ کن مشکلات کا سامنا کرنا پڑا؟



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Introduction to Geography

MAX. TIME: 15 Min.

Course Code: GEOG-211/GEN-21115 Part-I (Compulsory)

MAX. MARKS: 10

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1. The average distance between sun and earth is \_\_\_\_\_ million km.

- a) 145                      b) 150                      c) 155                      d) 160

2. The ozone layer shields the earth surface from \_\_\_\_\_.

- a) Smoke                      b) Dust                      c) Ultra violet rays                      d) None of these

3. Which of the following is considered the largest Planet in Solar System?

- a) Earth                      b) Mars                      c) Jupiter                      d) Neptune

4. \_\_\_\_\_ is a field of geography that deals with map making.

- a) Cartography                      b) Climatology                      c) Surveying                      d) None of these

5. \_\_\_\_\_ tides occur during when Moon is either full or new.

- a) Neap tides                      b) Spring tides                      c) ebb tide                      d) None of these

6. \_\_\_\_\_ is considered the earliest geological era.

- a) Proterozoic                      b) Paleozoic                      c) Mesozoic                      d) Cenozoic

7. The atmospheric humidity is measured by \_\_\_\_\_.

- a) Anemometer                      b) Barometer                      c) Hygrometer                      d) Thermometer

8. Which of the following is considered the smallest ocean in the world?

- a) Pacific                      b) Atlantic                      c) Indian                      d) Arctic

9. Which of the following is a Trace Gas found in the Atmosphere?

- a) Nitrogen                      b) Carbon Dioxide                      c) Oxygen                      d) Argon

10. The fastest thing in the universe is:

- a) Sound                      b) light                      c) water                      d) None of these





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Introduction to Geography**

**Course Code: GEOG-211/GEN-21115 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q2. Give short answers to the following questions: (02 marks each)**

**(2x10=20)**

1. What are the main themes of Geography?
2. Enlist types of igneous rocks.
3. What is International Date Line?
4. Differentiate between Solar and Lunar Eclipses.
5. What is Geological Time Scale?
6. Differentiate between rotation and revolution of Earth.
7. Briefly tell the composition of Atmosphere.
8. What is meant by an earthquake?
9. What is continental shield?
10. Name the continents of the world.

**Q3. Attempt all questions (10 marks each)**

**(3x10=30)**

1. Define Geography. Also briefly discuss the main branches of Human Geography.
2. Write a detailed note on the internal structure of the Earth.
3. Write a comprehensive note on the ocean currents of Atlantic Ocean.





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Marriage and Family Laws in Pakistan

Course Code: GS-201 Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

## Q.2. Questions with short answers.

(4x5=20)

مختصر سوالات

- 1) Explain the laws of child custody in Pakistan. (1)  
بچوں کی حضانت کے قوانین بیان کریں۔
- 2) Highlight the Importance of "Dissolution of Muslim Marriages Act." (2)  
مسلمانوں کی شادی کے خاتمے کے قانون کی اہمیت پر روشنی ڈالیں۔
- 3) Explain the Inheritance laws for woman in Pakistan. (3)  
پاکستان میں خواتین کی وراثت کے قوانین کی اہمیت کی وضاحت کریں۔
- 4) Define child Marriage. Highlight the legal protection against Child marriage in Pakistan. (4)  
بچوں کی شادی سے کیا مراد ہے؟ پاکستان میں بچوں کی شادی سے تحفظ کے قوانین بیان کریں۔

## Q.3. Questions with brief answers.

(3x10=30)

- i. Define Polygamy. Explain the social and legal situation of polygamy in Pakistan. (10)  
کثرت الازواج سے کیا مراد ہے؟ پاکستان میں کثرت الازواج کی قانونی اور معاشرت صورت حال کا جائزہ پیش کریں۔ .i
- ii. Write a detailed note on the importance of Muslim Family Law Ordinance in Pakistan. (10)  
پاکستان میں مسلم فیملی لاء آرڈیننس کی اہمیت اور افادیت پر تفصیلی نوٹ لکھیں۔ .ii
- iii. Discuss the issue of dowry in Pakistan and also describe the critical analysis of its legal prohibition in Pakistan. (10)  
پاکستان میں جہیز کے نظام سے متعلق مسائل پر روشنی ڈالیں۔ نیز اس کے حوالے سے موجود قوانین کا تنقیدی جائزہ پیش کریں۔ .iii



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Feminist Theories**  
**Course Code: GS-202 Part-I (Compulsory)**

**MAX. TIME: 15 Min.**  
**MAX. MARKS: 10**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1. 'Patriarchy as a political institution' the idea was given by Kate Millet in her book:
  - a) Feminine Mystique
  - b) Sexual Politics
  - c) Vindication of the rights of women
  - d) All of the above
  
2. "The Vindication of the Rights of Women" (1792) written by:
  - a) Virginia Woolf
  - b) Betty Frieden
  - c) Marry Wollstonecraft
  - d) Simone De Beauvoir
  
3. Which country first gave the right to vote to women in 1893:
  - a) New Zealand
  - b) Australia
  - c) Canada
  - d) None of them
  
4. Marxist feminism claim that:
  - a) Ignore race and class in feminism
  - b) Don't ignore race and class in feminism
  - c) Ignore patriarchy
  - d) All of the above
  
5. Gender division of labour and private sphere of women should be valued:
  - a) Socialist feminism
  - b) Liberal Feminism
  - c) Radical Feminism
  - d) Marxist Feminism

**P.T.O.**



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Feminist Theories

Course Code: GS-202 Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Short answers questions.**

**(4x5=20)**

1. Write features of Socialist feminism.
2. Explain the feminist movement in Pakistan.
3. Explain the emerging issues highlighted by Postmodern Feminism.
4. Describe Eco-feminism?

**Q.3. Detailed answers questions.**

**(3x10=30)**

1. Write in detail about the main features of Liberal Feminism.
2. Define Islamic Feminism. Explain how Islamic feminists have advocated gender equality in the light of Quran and Sunnah.
3. Write note about any two Pakistani feminists from whom you are inspired.



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Women and Economic Empowerment**  
**Course Code: GS-203 Part-I (Compulsory)**

**MAX. TIME: 15 Min.**  
**MAX. MARKS: 10**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1. Power \_\_\_\_\_ involves socially sanctioned threats of violence and intimidation.
  - a) With
  - b) Within
  - c) To
  - d) Over
2. \_\_\_\_\_ power means one group's increase in power necessarily involves another's loss of power.
  - a) Distributive
  - b) Zero-sum
  - c) Finite
  - d) Infinite
3. Development must be by people, not only for them is the concept presented in Human Development Report that stresses on peoples' \_\_\_\_\_.
  - a) Participation
  - b) Equality
  - c) Integration
  - d) Justice
4. Empowerment involves challenging the forms of \_\_\_\_\_ which compel people to play a part in their society on terms which are inequitable, or in ways which deny their human rights according to Oxfam.
  - a) Inequality
  - b) Oppression
  - c) Discrimination
  - d) Injustice
5. Jo Rowland points out that empowerment is a \_\_\_\_\_ process.
  - a) bottom-up
  - b) top-down
  - c) lengthy
  - d) ground
6. According to feminist perspective, women's empowerment is the liberation of men from false value systems and ideologies of oppression and construction of a \_\_\_\_\_ society for all.
  - a) Just
  - b) Desired
  - c) Wise
  - d) Humane

**P.T.O.**



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Women and Economic Empowerment**  
**Course Code: GS-203 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**  
**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Give short answers of following:**

**(5 x 4 = 20)**

1. Power over
2. Power to
3. Power with
4. Power within
5. Inadequate processes

**Q.3. Give detailed answers:**

**(3 x 10 = 30)**

- i. What are gender-specific constraints creating gender inequalities in the labour market?
- ii. What is entrepreneurship? Discuss entrepreneurship development with reference to microfinancing in Pakistan.
- iii. What is multidimensional poverty? How does it keep women out of the mainstream development, Explain?



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Gender and Religion**  
**Course Code: GS-204 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**  
**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Give short answers.**

**(5 x 4 = 20)**

- (i) Write a brief note on Semitic (سیمی) and non-Semitic (غیر سیمی) religions.
- (ii) Give a short note on equality between men and women in Islam.
- (iii) Write short note on Gender Harassment.
- (iv) Give a precise definition explaining women empowerment.
- (v) What is the status of women in Bhuddhism?

**Q.3. Give Brief Answer**

**(3 x 10 = 30)**

- (i) Write a comprehensive note on Nikkah and Divorce in Islam.
- (ii) The status of women in the different societies of the world.
- (iii) Describe the role of religion in human society.





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Gender and Psychology**  
**Course Code: GS-205 Part-I (Compulsory)**

**MAX. TIME: 15 Min.**  
**MAX. MARKS: 10**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- i. Development psychologists believe that two factors that influence human development are:  
(a) Motivation and emotion (b) Self and others  
(c) Genetic make up and experience (d) Rewards and Punishments
- ii. Motor skills are largely a result of:  
(a) Leaning (b) Maturation process  
(c) Practice (d) Observing others
- iii. The concept of intelligence is closely related to:  
(a) Motivation (b) Learning  
(c) Perception (d) Cognition
- iv. Smoking during pregnancy is associated with:  
(a) High intelligence in fetus (b) Low birth Weight  
(c) High mortality (d) Both C & D
- v. Androgyny is having:  
(a) Male characteristics (b) Masculine characteristics  
(c) Both masculine and feminine Characteristics  
(d) None of above
- vi. Male chromosomes are:  
(a) XX (b) XY  
(c) XZ (d) YX
- vii. Gender as an area of research teaching and action has emerged only after:  
(a) 1860 (b) 1910  
(c) 1947 (d) 1975
- viii. Androgynous person show \_\_\_\_\_ traits.  
(a) Positive masculine and feminine (b) Negative masculine  
(c) Positive masculine (d) Positive feminine
- ix. Feminist research is:  
(a) Interdisciplinary (b) Multi disciplinary  
(c) Cross disciplinary (d) All of the above
- x. Feminist research aims at:  
(a) addressing women's issues with women's perspective  
(b) To study women as an object  
(c) Promotion of women research scholars  
(d) Study of women's education



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Object Oriented Programming**  
**Course Code: IT-201/21400 Part-I (Compulsory)**

**MAX. TIME: 15 Min.**  
**MAX. MARKS: 10**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1. A class must have a constructor.
  - a) True
  - b) False
2. Class level variable can be accessed without class object.
  - a) True
  - b) False
3. If *ptr* is a pointer than `cout << ptr` will display the address of *ptr*.
  - a) True
  - b) False
4. We can store a double pointer address in a double pointer.
  - a) True
  - b) False
5. An entire structure may not be passed to a function as an argument.
  - a) True
  - b) False
6. A class object consist of
  - a) Private/public members
  - b) Attributes and functions
  - c) Either a or b
  - d) one of them
7. Encapsulation refers to the combining of data and code into a
  - a) Class
  - b) Program
  - c) Object
  - d) None of them
8. If class has only parametrize constructor. Then what will be its default constructor?
  - a) Same parametrize constructor
  - b) A constructor which takes no parameter
  - c) No default constructor.
  - d) None of them.
9. It is good to make getter function
  - a) Const
  - b) Public
  - c) public and const
  - d) None of these
10. We can have multiple
  - a) Default constructor
  - b) Parameterized constructor
  - c) Destructor
  - d) None of these



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Object Oriented Programming**

**Course Code: IT-201/21400 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Write short answers to the following questions.**

**(5x4=20)**

I. Write down the output of the following code.

```
#include<iostream>
using namespace std;
class A{
    int i_A;
public:
    A(int x){ i_A = x; }
};

int main(){
    A a;
    cout<<"Hello"<<endl;
    return 0;
}
```

II. What is difference between a Class and Object?

III. Why Operator overloading is used?

IV. Write the output of the following code

```
#include<iostream>
using namespace std;
class A{
public:
    A(){
        cout << "A" << endl;
    }
    ~A(){
        cout << "~A" << endl;
    }
};
class B : A{
public:
    B(){
        cout << "B" << endl;
    }
    ~B(){
        cout << "~B" << endl;
    }
};
int main(){
    B b;
    return 0;
}
```

**P.T.O.**

**Q.3. Long questions.**

**(7+7+7+9=30)**

We are going to create class of Matrix. You have to write the definition of the following function given below in the Matrix class.

```
class Matrix{
private:
    int noOfRows; //Total number of rows
    int noOfColumns //Total number of columns
    int ** data; //Matrix data
public:
    Matrix(int noOfRows, int noOfColumns); // If noOfRows > 0 and noOfColumns
    then assign it and allocate the rows in the heap. Otherwise assign 0 to all.

    void displayData(); // Display all records present in data.

    ~Matrix(); // Deallocate the memory allocated by Matrix.

    Matrix(const Matrix & ref) // copy constructor
};
```

You have to write down the definition of following functions.

1. **Matrix(int noOfRows, int noOfColumns)**
2. **void displayData();** // Display all records present in data.
3. **~Matrix();** // Deallocate the memory allocated by Matrix.
4. **Matrix(const Matrix & ref)** // copy constructor



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Computer Organization and Assembly Language MAX. TIME: 15 Min.

Course Code: IT-203/21402 Part-I (Compulsory) MAX. MARKS: 10

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- I. Assume AL=C5;BL=48 what will be status of sign flag and carry flag after the execution of instruction SUB AL,BL?
- Sign flag reset ,Carry flag reset
  - Sign flag reset ,Carry flag set
  - Sign flag set ,Carry flag reset
  - Sign flag set ,Carry flag set
- II. How many times the loop will executed in the following code?
- ```
AA:    MOV CH,0
      MOV DL,'A'
      MOV AH,02
      INT 21H
      INC CH
      JNZ AA
```
- Zero time
  - One time
  - 255 time
  - 256 time
- III. SP register is associated with \_\_\_\_\_ by default:
- DS
  - CS
  - ES
  - SS
- IV. Which instruction will invert bit#3,4,and 5 of Register DL keeping the remain bits unchanged.
- NOT DL,26h
  - XOR DL ,13h
  - AND DL,13h
  - None of above
- V. The input character getting from console is placed in \_\_\_\_\_ register.
- AX
  - AH
  - AL
  - DL
- VI. For display a character on screen which number is placed in ah register.
- 01h
  - 02h
  - 09h
  - None of these
- VII. Assume the following data is loaded at offset 01A0h:
- ```
V1 DB 41h
V2 DW 5678h
V3 DB 'PU Lahore'
```
- Give the offset address assigned to variable C.
- 01A3
  - 01A8
  - 01A2
  - None of above
- VIII. Assume SI=0100,DI=0200 Assume Direction Flag is reset. What would be the contents of SI and DI after execution of instruction of LOADSB twice?
- SI=0102 DI=0200
  - SI=0104 DI=0200
  - SI=0100 DI=0202
  - SI=0100 DI=0204
- IX. Assume SP=0048. What would be the value of SP register after execution of PUSH BX instruction twice?
- SP=0044
  - SP=0046
  - SP=0050
  - SP=0052
- X. If the decimal number 20 is shifted left by 2 bits the new value will be \_\_\_\_\_?
- 10
  - 20
  - 80
  - 160



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Computer Organization and Assembly Language**  
**Course Code: IT-203/21402 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**  
**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Write short answers to the following questions.**

**(4x5=20)**

- I. Assume DL contains the ASCII code of Lower case letter. Write instructions to convert it to upper case and print it.(use some logic instruction for conversion)
- II. Assume the following data is loaded starting at offset 0300h:  
A DB 41h  
B DW 5678h  
B1 DD 1234h  
C DB 'HELLO'  
Give the offset address assigned to variable C.
- III. A memory location has physical address 93FC4h that corresponds to offset address 1FC4h. Calculate the segment address and the maximum possible physical address in this segment.
- IV. Assume SI=0100, DI=0200;CX=0005. Assume Direction flag is set. What would be the contents of SI, DI and CX after the execution of instruction CMPSW twice?

**Q.3. Long questions.**

**(2x15=30)**

- I. Write an Assembly Language Program that prompts the user to enter two string, than it will find that the second string is the substring of first or not.

**Sample execution:**

i)

Enter first string: **Hello World**

Enter second string: **ello**

Yes it is Substring

ii)

Enter first string: **Hello World**

Enter second string: **elloabc**

Not a substring

- II. a) Write down the note on all string instructions and also explain them with help of examples.  
b) Write down the name of different registers, also explain the purpose of all register that are used?



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Human Resource Management**  
**Course Code: HR-211/GEN-21142 Part-I (Compulsory)**

**MAX. TIME: 15 Min.**

**MAX. MARKS: 10**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1. The purpose of a strategic plan is to identify ways to create or maintain a (n) \_\_\_\_\_.
  - a. Differential advantage
  - b. Competitive advantage
  - c. Instrumental advantage
  - d. Success factor
2. A \_\_\_\_\_ aims to measure an array of possible predictors for job performance.
  - a. Test validity
  - b. Test criterion
  - c. Test battery
  - d. Job analysis
3. The expertise of human resource departments became indispensable with the \_\_\_\_\_.
  - a. Passing of equal employment legislation
  - b. Increase of women in the workforce
  - c. Movement of jobs to countries with cheaper labor costs
  - d. Both a and b
4. Most people who are classified as nontraditional workers are \_\_\_\_\_.
  - a. Contingent workers
  - b. Independent contractors
  - c. Job sharing
  - d. Working multiple jobs
5. Participatively set goals result in higher performance than assigned goals when \_\_\_\_\_.
  - a. Participatively set goals are more difficult
  - b. Assigned goals are more difficult
  - c. The rewards are also higher
  - d. Participatively set goals are used consistently
6. Herzberg's Hygiene-Motivator theory of motivation suggests that intrinsic factors like \_\_\_\_\_ cause satisfaction.
  - a. Working conditions
  - b. Pay
  - c. Achievement
  - d. Incentive pay

**P.T.O.**



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Human Resource Management**

**Course Code: HR-211/GEN-21142 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Questions with short answers.**

**(5 x 4 = 20)**

1. What are the three forms of sexual harassment? Describe each form.
2. What are the steps involved in conducting a job analysis. Describe each step.
3. Write down guidelines for managing a testing program.
4. What are the advantages and disadvantages of using an employee referral campaign for recruitment purposes?
5. What are the key steps for launching a successful EAP program?

**Q.3. Questions with brief answers.**

**(3 x 10 = 30)**

1. What is strategic management? Briefly describe the six steps in the strategic management process. 10
2. What are advantages of on-the-job training? Describe the four steps in job instruction. 10
3. What are the four decisions that affect a firm's promotion process? Explain the effect each decision could have on promotional decisions. 10





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Human Resource Development

MAX. TIME: 15 Min.

Course Code: HR-212/GEN-21112 Part-I (Compulsory)

MAX. MARKS: 10

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- i. \_\_\_\_\_ refers to the learning opportunities designed to help employees grow.
  - (a) Training
  - (b) Development
  - (c) Education
  - (d) All of the above
- ii. Which of the following is a benefit of employee training?
  - (a) Improves morale
  - (b) Helps people identify with organizational goals
  - (c) Provides a good climate for learning, growth and co – ordination
  - (d) None of the above
- iii. According to social learning theory, self-efficacy is defined as a person's beliefs.
  - (a) About their ability to successfully perform a particular task or activity
  - (b) About their overall worth or sense of value
  - (c) That performing a particular task will lead to a given outcomes
  - (d) That the cause of their behavior is something external to themselves
- iv. Organization culture is:
  - (a) Illegal to talk about
  - (b) Of no interest to training and development
  - (c) A set of beliefs and behaviors that are shared by members of the organization
  - (d) A factor only for management level employees.
- v. Maslow's need theory of motivation:
  - (a) Contains 2 factors
  - (b) Contains 5 categories of needs
  - (c) Focuses on existence, relatedness and growth
  - (d) None of these are true
- vi. Rearrange the steps in training programme.
  - (a) What should be the level of training?
  - (b) What principles of learning?
  - (c) Who are the trainees?
  - (d) What methods and techniques?
  - (e) Where to conduct the programme?
  - (f) Who are the trainers?
- vii. Human Resource Development is best defined as:
  - (a) A set of systematic and planned activities designed by an organization to provide its members with the necessary skills to meet current and future job demands.
  - (b) A set of systematic and planned activities designed by an organization to provide its members with the necessary skills to meet past job demands.
  - (c) A fancy name for being a Personnel Manager
  - (d) Just another form of apprenticeship training.
- viii. A main distinction between training and development is that developmental activities are generally:
  - (a) More focused on specific job skills
  - (b) Less expensive than training activities
  - (c) Becoming less common as organizations deal with their changing business environment
  - (d) More focused on long-term or future responsibilities.
- ix. A challenge currently facing the HRD field is:
  - (a) Increasing workforce diversity
  - (b) Competing in a global economy
  - (c) Eliminating the skills gap
  - (d) All of these are challenges HRD faces
- x. Which of these is an off – the – job training method?
  - (a) Television
  - (b) Job Rotation
  - (c) Orientation Training
  - (d) Coaching



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Contemporary Muslim World**  
**Course Code: ISE-201 Part-I (Compulsory)**

**MAX. TIME: 15 Min.**

**MAX. MARKS: 10**

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- i. Second session of OIC held in Pakistan in:  
(a) 1969 (b) 1989 (c) 1974  
او آئی سی کا دوسرا اجلاس پاکستان میں کب ہوا؟  
(الف) 1969 (ب) 1989 (ج) 1974 .i
- ii. Floja is city of:  
(a) Iraq (b) Afghanistan (c) Egypt  
فلوجہ کس ملک کا شہر ہے؟  
(الف) عراق (ب) افغانستان (ج) مصر .ii
- iii. The author of "Brief History of Muslim Ummah" is:  
(a) Ghulam Jilani Baraq (b) Sarwat Saulat (c) Mahatir Mohammad  
"ملت اسلامیہ کی مختصر تاریخ" کے مصنف کا نام ہے:  
(الف) غلام جیلانی برق (ب) ثروت صولت (ج) مہاتیر محمد .iii
- iv. Write down the capital of Qatar:  
(a) Doha (b) Oman (c) Mashhad  
قطر کے دارالحکومت کا نام ہے؟  
(الف) دوحہ (ب) اومان (ج) مشہد .iv
- v. Which is the largest country of Muslim world?  
(a) Uzbekistan (b) Kazakhstan (c) Kyrgyzstan  
رقبہ کے لحاظ سے سب سے بڑا اسلامی ملک کون سا ہے؟  
(الف) ازبکستان (ب) قازقستان (ج) کرغزستان .v
- vi. Which country's old name is Mesopotamia?  
(a) Morocco (b) Iran (c) Iraq  
میسوپوٹیمیا کس ملک کا پرانا نام ہے؟  
(الف) مراکش (ب) ایران (ج) عراق .vi
- vii. Where Caspian Sea is located?  
(a) Middle East (b) Central Asia (c) North Africa  
بحیرہ کیسپین کس خطہ میں واقع ہے؟  
(الف) مشرق وسطیٰ (ب) وسط ایشیا (ج) شمالی افریقہ .vii
- viii. Which country is famous for natural rubber production?  
(a) Malaysia (b) Brunei Darussalam (c) Mali  
ربر کی پیداوار کے لئے کونسا ملک زیادہ مشہور ہے؟  
(الف) ملائیشیا (ب) برونائی دارالسلام (ج) مالی .viii
- ix. Indonesia is located:  
(a) Middle East (b) Central Asia (c) Far East  
انڈونیشیا کس خطے میں واقع ہے؟  
(الف) مشرق وسطیٰ (ب) وسط ایشیا (ج) مشرق بعید .ix
- x. "MOSAAD" belong to:  
(a) Israel (b) India (c) China  
"MOSAAD" کس ملک کی خفیہ تنظیم ہے؟  
(الف) اسرائیل (ب) بھارت (ج) چین .x



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Contemporary Muslim World

Course Code: ISE-201 Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

Q.2. Write short answers to the following questions.

(5x4=20)

سوال نمبر 2: درج ذیل سوالات کے مختصر جوابات دیں۔

- i. Highlight two economic issues faced by Muslim Ummah.  
i. مسلم اُمتہ کو درپیش کوئی سے دو معاشی مسائل مختصر آبیان کریں۔
- ii. Describe the objects of Motamar Al-Alam Al-Islami.  
ii. مؤتمر عالم اسلامی کے قیام کے مقاصد بیان کریں۔
- iii. Describe the current situation of Yemen.  
iii. یمن کی موجودہ صورت حال پر روشنی ڈالیں۔
- iv. Highlight two impacts of sectarianism on Muslim Ummah.  
iv. مسلمانوں پر فرقہ واریت کے دو اثرات کا جائزہ لیجئے۔
- v. Through light on agricultural sources of Muslim Ummah.  
v. عالم اسلام کے زرعی وسائل مختصر آبیان کریں۔

Q.3. Detailed answers are required to the following questions.

(3x10=30)

سوال نمبر 3: درج ذیل سوالات کے تفصیلی جوابات مطلوب ہیں۔

- i. Give comprehensive suggestions for the unity of Muslim Ummah.  
i. امت مسلمہ کے اتحاد کے لئے تجاویز دیں۔
- ii. Explain “Afghanistan Discord” briefly and describe the role of Pakistan.  
ii. مسئلہ افغانستان کا جائزہ لیتے ہوئے پاکستان کے کردار پر روشنی ڈالیں۔
- iii. Describe the Mineral sources of Muslim world and suggest the solution of its problems.  
iii. عالم اسلام کے معدنی وسائل کا جائزہ لیں۔ نیز اس شعبہ کو درپیش مسائل کے حل کے لئے تجاویز پیش کریں۔



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Fiqh-I

Course Code: ISE-202 Part-I (Compulsory)

MAX. TIME: 15 Min.

MAX. MARKS: 10

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

اس پرچے کے سوالات کو اسی شیٹ (Sheet) پر حل کریں۔

10	سوال نمبر: 1- درست جواب پر نشان لگائیں۔
(ج) چار دن چار رات	1- مسافر موزوں پر مسح کر سکتا ہے؟
(ب) تین دن تین رات	(ا) ایک دن ایک رات
(ج) 12	2- نماز ظہر کی کل رکعتیں ہیں؟
(ب) 10	(ا) 8
(ج) چلنا	3- روزے کے لغوی معنی ہیں؟
(ب) ٹھہرنا	(ا) رک جانا
(ج) نفلی ہے	4- جمعہ کی نماز کا کیا حکم ہے؟
(ب) سنت ہے	(ا) فرض عین ہے
(ج) مال دار	5- صدقہ فطر کا مستحق کون ہے؟
(ب) صاحب نصاب	(ا) فقیر و مسکین
(ج) یوم عرفہ	6- حج کا کون سا دن ہے؟
(ب) یوم عاشورہ	(ا) یوم النحر
(ج) زندگی میں دو بار	7- حج فرض ہے۔
(ب) زندگی میں ایک بار	(ا) سال میں بار
(ج) 3	8- قصر الصلوٰۃ کتنے دن کی جاسکتی ہے؟
(ب) 4	(ا) 5
(ج) قرض دار	9- غارم سے کون مراد ہے؟
(ب) مسافر	(ا) مال دار
(ج) 7	10- نماز کے ممنوع اوقات ہیں؟
(ب) 5	(ا) 3



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

PAPER: Fiqh-I

Course Code: ISE-202 Part – II

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

اس پرچے میں شامل سوالات کے جوابات اپنی امتحانی کاپی میں درج کریں۔

20

سوال نمبر 2: درج ذیل کے مختصر جوابات دیں۔

1- نجاست کی اقسام بیان کریں۔

2- تیمم کی تعریف لکھیں۔

3- کن اوقات میں نماز پڑھنا جائز نہیں؟

4- روزے کے تین فوائد ذکر کریں۔

5- زکوٰۃ کا نصاب بیان کریں۔

6- زکوٰۃ کے مصارف ذکر کریں۔

7- شیخ فانی سے کیا مراد ہے؟

8- اعتکاف کی شرائط بیان کریں۔

9- حج کی اقسام بیان کریں۔

10- فرضیت و وضو سے متعلق آیت مبارکہ بمعہ متن تحریر کیجئے۔

10+10+10=30

حصہ انشائیہ

سوال نمبر 3: طہارت کے معنی و اہمیت اور نجاست کی اقسام تفصیلاً بیان کریں۔

سوال نمبر 4: درج ذیل پر مختصر اور جامع نوٹ لکھیں۔

3- سنن وضو

2- حج و عمرہ کی تعریف بیان کریں۔

1- شرائط نماز کتنی ہیں؟

سوال نمبر 5: صدقہ فطر پر تفصیلی نوٹ لکھیں۔



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Islamic History-I

Course Code: ISE-203 Part-I (Compulsory)

MAX. TIME: 15 Min.

MAX. MARKS: 10

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

Q.1. Fill in the blanks.

(1x10=10)

سوال نمبر 1: خالی جگہ پُر کریں۔

- \_\_\_\_\_ consider as the founder of Motazilah sect.
- Yazid bin Muaviya reign remained for \_\_\_\_\_ year.
- Basra city was established by \_\_\_\_\_.
- Battle of Jamal was fought in \_\_\_\_\_.
- \_\_\_\_\_ was the last ruler of Ummiyads Dynasty.
- Hazrat Umar (R.A) period of Caliphate remained \_\_\_\_\_ years.
- Hazrat Umar Bin Abdul Aziz was Governor of \_\_\_\_\_ before caliph.
- Hazrat Usman (R.A.) was martyared in \_\_\_\_\_ year.
- The period of Hazrat Abu Bakar remained for \_\_\_\_\_ year.
- Tragedy of Karbala occoured in \_\_\_\_\_ Hijri.

- |   |   |
|---|---|
| ب۔ یزید بن معاویہ کا دور حکومت _____ رہا۔       | ا۔ _____ کو معتزلہ فرقہ کا بانی سمجھا جاتا ہے۔                  |
| د۔ جنگ جمل _____ میں لڑی گئی۔                   | ج۔ بصرہ شہر کو _____ نے آباد کیا۔                               |
| ڑ۔ حضرت عمر کا دور خلافت _____ سال رہا۔         | ر۔ اموی خاندان کا آخری حکمران _____ تھا۔                        |
| ژ۔ حضرت عثمان کو کس سال _____ میں شہید کیا گیا۔ | ز۔ حضرت عمر بن عبدالعزیز خلیفہ بننے سے پہلے _____ کے گورنر تھے۔ |
| ش۔ واقعہ کربلا _____ ہجری میں ہوا۔              | س۔ حضرت ابو بکر کا دور حکومت _____ سال رہا۔                     |



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Elementary Mathematics-I**  
**Course Code: MATH-111 Part-I (Compulsory)**

**MAX. TIME: 30 Min.**  
**MAX. MARKS: 10**

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- (i) The value of  $(-2i)^3 =$  ----  
 (a)  $8i$  (b)  $-8i$  (c)  $8$  (d) None of these
- (ii) The value of determinant  $\begin{vmatrix} 1 & -2 & 3 \\ -2 & 3 & 1 \\ 4 & -3 & 2 \end{vmatrix} =$  is ----  
 (a)  $-25$  (b)  $-20$  (c)  $7$  (d) None of these
- (iii) A matrix  $A$  is called skew hermitian if ----  
 (a)  $(\bar{A})^t - A = 0$  (b)  $(\bar{A})^t = 2A$  (c)  $(\bar{A})^t + A = 0$  (d) None of these
- (iv) If  $\omega$  is a cube roots of unity then the value of  $(1 - \omega + \omega^2)^3$  is ----  
 (a)  $8$  (b)  $-8$  (c)  $0$  (d) None of these
- (v) If  $a_{n-2} = 3n - 11$ , then 5th term of the sequence is ----  
 (a)  $8$  (b)  $9$  (c)  $10$  (d) None of these
- (vi) If  $a = 3$ ,  $r = 2$ , then the  $n$ th term of the G.P. is ----  
 (a)  $2 \cdot 3^{n-1}$  (b)  $3 \cdot 2^n$  (c)  $3 \cdot 2^{n+1}$  (d) None of these
- (vii) The number of terms in the expansion of  $(2a + b)^{10}$  is ----  
 (a)  $10$  (b)  $11$  (c)  $12$  (d) None of these
- (viii) The  $(r + 1)$ th term in the expansion of  $(a + x)^n$  is ----  
 (a)  $\binom{n}{r} a^{n-r} x^r$  (b)  $\binom{n}{r+1} a^{n-r-1} x^r$  (c)  $\binom{n}{r+1} a^{n-r} x^r$  (d) None of these
- (ix) If  $\tan \theta = \frac{8}{15}$  and terminal arm of the angle is in IIIrd quadrant then value of  $\sec \theta =$  ----  
 (a)  $\frac{-17}{15}$  (b)  $\frac{17}{15}$  (c)  $\pm \frac{17}{15}$  (d) None of these
- (x) The value of  $\sqrt{2} \sin 45^\circ + \frac{1}{\sqrt{2}} \cos 45^\circ =$  ----  
 (a)  $\frac{3}{2}$  (b)  $\frac{3}{\sqrt{2}}$  (c)  $\frac{\sqrt{3}}{2}$  (d) None of these



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Elementary Mathematics-I**  
**Course Code: MATH-111 Part – II**

**MAX. TIME: 2 Hrs. 30 Min.**  
**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2** Solve the following Short Questions: (2 × 10 = 20)

- (i) Simplify and express  $(5, -4) \div (-3, -8)$  in the form  $a + bi$ .
- (ii) Find the value of  $x, y$  if  $\begin{bmatrix} x+3 & 1 \\ -3 & 3y-4 \end{bmatrix} = \begin{bmatrix} y & 1 \\ -3 & 2x \end{bmatrix}$ .
- (iii) Evaluate  $\left(\frac{-1+\sqrt{-3}}{2}\right)^3 + \left(\frac{-1-\sqrt{-3}}{2}\right)^3$
- (iv) Show that the roots of equation  $x^2 + (mx+c)^2 = a^2$  will be equal if  $c^2 = a^2(1+m^2)$ .
- (v) Find the sum of arithmetic series  $-3 + (-1) + 1 + 3 + 5 + \dots + a_{10}$ .
- (vi) Find the term involving  $x^5$  in the expansion of  $\left(\frac{3}{2}x - \frac{1}{3x}\right)^{11}$ .
- (vii) Find the 10th term of the H.P.  $\frac{1}{3}, \frac{1}{8}, \frac{1}{13}, \dots$
- (viii) Find  $r$  when  $\theta = \frac{\pi}{7}$  radians,  $l = 1$  cm
- (ix) Find the values of trigonometric functions of the angle  $1530^\circ$
- (x) Expand  $(1-2x)^{1/3}$  up to the first four terms and use it to evaluate  $(0.8)^{1/3}$ .

**SECTION III**

(5 marks each long question)

(6 × 5 = 30)

**Q.3** Show that  $\begin{vmatrix} b+c & a & a^2 \\ c+a & b & b^2 \\ a+b & c & c^2 \end{vmatrix} = (a+b+c)(a-b)(b-c)(c-a)$ .

**Q.4** Solve the equation  $x^4 - 3x^3 + 4x^2 - 3x + 1 = 0$ .

**Q.5** If the roots of  $px^2 + qx + q = 0$  are  $\alpha, \beta$  then prove that  $\sqrt{\frac{\alpha}{\beta}} + \sqrt{\frac{\beta}{\alpha}} + \sqrt{\frac{q}{p}} = 0$ .

**Q.6** Find the term independent of  $x$  in the expansion of  $\left(\frac{x}{2} + \frac{2}{x^2}\right)^{12}$ .

**Q.7** Prove the identity  $\frac{1 + \cos \theta}{1 - \cos \theta} = (\operatorname{cosec} \theta + \cot \theta)^2$ .

**Q.8** Prove that  $\frac{\tan \theta + \sec \theta - 1}{\tan \theta - \sec \theta + 1} = \tan \theta + \sec \theta$ .





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Mathematics A-III**

**MAX. TIME: 30 Min.**

**Course Code: MATH-201/MTH-21309 Part-I(Compulsory)**

**MAX. MARKS: 10**

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

(i)	If $(\bar{A})' = -A$ then A is called (a) Symmetric matrix (b) Skew symmetric matrix (c) Hermitian matrix (d) Skew Hermitian matrix
(ii)	If W is a linear subspace of V then (a) $\dim(W) \leq \dim(V)$ (b) $\dim(W) \geq \dim(V)$ (c) $\dim(W) = \dim(V)$ (d) None of these
(iii)	A set of linear equations is represented by the matrix equation $Ax = b$ . The necessary condition for the existence of a solution for this system is (a) A must be invertible (b) b must be linearly depended on the columns of A (c) b must be linearly independent on the columns of A (d) none of these
(iv)	A unit vector orthogonal to both $(1, 1, 2)$ and $(0, 1, 3)$ in $R^3$ is ----- (a) $\left(\frac{1}{\sqrt{11}}, \frac{-3}{\sqrt{11}}, \frac{1}{\sqrt{11}}\right)$ (b) $\left(\frac{-1}{\sqrt{11}}, \frac{3}{\sqrt{11}}, \frac{1}{\sqrt{11}}\right)$ (c) $\left(\frac{2}{\sqrt{11}}, \frac{-3}{\sqrt{11}}, \frac{-1}{\sqrt{11}}\right)$ (d) $\left(\frac{-1}{\sqrt{11}}, \frac{-3}{\sqrt{11}}, \frac{1}{\sqrt{11}}\right)$
(v)	The characteristic polynomial of the matrix $\begin{pmatrix} 2 & 0 \\ 0 & 0 \end{pmatrix}$ is..... (a) $\dim(W) = \dim(V)$ (b) $p(\lambda) = (2 - \lambda)(3 - \lambda)$ (c) $p(\lambda) = 0$ (d) None of these
(vi)	The property $\forall a, b \in R$ then $a + b = b + a = b \in R$ then a is called (a) Identity (b) Inverse (c) Conjugate (d) None of these
(vii)	The subspace of $R^3$ spanned by the vector $(a, b, c)$ is ----- (a) $x = t, y = bt, z = ct$ (b) $x = -at, y = -bt, z = -ct$ (c) $x = at, y = bt, z = ct$ (d) None of these
(viii)	Let $R^3$ be the vector space of all ordered triples of real numbers. Then the transformation $T : R^3 \rightarrow R^3$ defined by $T(x, y, z) = (x, y, z)$ is (a) Identity (b) Not Linear (c) Rational (d) None of these
(ix)	A linear transformation T that is both one-one and onto is has $\text{Ker}(T)$ (a) 0 (b) 1 (c) 2 (d) None of these
(x)	Let V be vector space of finite dimension n. Then any n+1 or more vectors in V is ----- (a) linearly dependent (b) linearly independent (c) both (a) and (b) (d) none of these.



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Mathematics A-III

Course Code: MATH-201/MTH-21309 Part – II

MAX. TIME: 2 Hrs. 30 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Questions with Short Answers.**

**(5x4=20)**

(i)	Decide yes or no about the following statement, if no justify by counter example. If $A$ is $2 \times 2$ matrix such that $A^2 = \mathbf{0}$ Then $A$ must be a null matrix-	(4)
(ii)	If possible express $\vec{v} = (2, -5, 3)$ in $R^3$ as a linear combination of the vectors $\vec{u}_1 = (1, -3, 2), \vec{u}_2 = (2, -4, -1), \vec{u}_3 = (1, -5, 7)$ .	(4)
(iii)	Check whether $W$ is a subspace of $V$ or not. $V = \{f : f : R \rightarrow R\}, W = \{f \in V : f(1) = 0\}$ .	(4)
(iv)	Show that $\det \begin{bmatrix} a & 1 & 1 & 1 \\ 1 & a & 1 & 1 \\ 1 & 1 & a & 1 \\ 1 & 1 & 1 & a \end{bmatrix} = (a - 1)^3 (a + 3)$	(4)
(v)	If $A$ and $B$ are invertible matrices of same order and $AB$ is invertible then show that $(AB)^{-1} = B^{-1}A^{-1}$ .	(4)

**P.T.O.**

**LONG QUESTIONS (5x6=30)**

<b>Q.3</b>	<p>Solve the following system of linear equations by using an appropriate method.</p> $x_1 - 2x_2 + 3x_3 = 3$ $2x_1 + x_2 - x_3 = 9$ $-3x_1 - 4x_2 + 5x_3 = -15.$	(6)
<b>Q.4</b>	<p>Define <math>T : R^3 \rightarrow R^3</math> by <math>T(x_1, x_2, x_3) = (-x_3, x_1, x_1 + x_3)</math>. Find <math>N(T)</math>. Is <math>T</math> one-to-one?</p>	(6)
<b>Q.5</b>	<p>If <math>A = \begin{bmatrix} 1 &amp; 2 &amp; 1 \\ 2 &amp; 1 &amp; 2 \\ 2 &amp; 2 &amp; 1 \end{bmatrix}</math> determine the value of <math>A^2 - 4A - 5I</math>.</p>	(6)
<b>Q.6</b>	<p>Find the real orthogonal matrix <math>P</math> for which <math>P^{-1}AP</math> is orthogonal where</p> $A = \begin{bmatrix} 1 & 2 \\ 2 & 1 \end{bmatrix}$	(6)
<b>Q.7</b>	<p>Express matrix <math>M</math> as a linear combination of the matrices <math>A</math>, <math>B</math> and <math>C</math></p> <p>where</p> $M = \begin{bmatrix} 4 & 7 \\ 7 & 9 \end{bmatrix}, A = \begin{bmatrix} 1 & 1 \\ 1 & 1 \end{bmatrix}, B = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}, C = \begin{bmatrix} 1 & 1 \\ 4 & 5 \end{bmatrix}.$	(6)



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

(Clash)

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Mathematics A-III

MAX. TIME: 30 Min.

Course Code: MATH-201/MTH-21309 Part-I(Compulsory)

MAX. MARKS: 10

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

(i)	Rank of $A$ is ----- Rank of $A^T$ (a) equal (b) greater than (c) less than (d) None of these
(ii)	If $A$ and $B$ are <i>symmetric</i> matrices. Then $AB$ is also (a) symmetric (b) skew-symmetric (c) Hermitian (d) None of these
(iii)	If $A$ is a matrix of order $3 \times 3$ and $\det(A) = -1$ , then the value of $\det(2A)$ is ----- (a) -8 (b) -6 (c) 8 (d) 18
(iv)	The dimension of $\text{Ker}T$ is called ..... (a) Rank (b) Nullity (c) basis (d) none of these
(v)	The characteristic polynomial of the matrix $\begin{pmatrix} 5 & 0 \\ 0 & 1 \end{pmatrix}$ is..... (a) $p(\lambda) = (1-\lambda)^2$ (b) $p(\lambda) = (5-\lambda)(1-\lambda)$ (c) $p(\lambda) = 0$ (d) None of these
(vi)	If $(\bar{A})' = -A$ then $A$ is called.....matrix (a) Symmetric (b) Skew symmetric (c) Hermitian (d) Skew Hermitian
(vii)	The property $\forall a, b \in R$ then $(a+b) = (b+a)$ is called (a) Closure property (b) Transitive property (c) Commutative property (d) Associative property
(viii)	A linear transformation $T: U \rightarrow V$ is one-to-one if and only if ----- (a) $N(T) = \{0\}$ (b) $N(T) \neq \{0\}$ (c) $N(T) = \{1\}$ (d) $N(T) = \{-1\}$
(ix)	Let $R^3$ be the vector space of all ordered triples of real numbers. Then the transformation $T: R^3 \rightarrow R^3$ defined by $T(x, y, z) = (x, y, 0)$ is (a) Linear (b) Not Linear (c) Rational (d) None of these
(x)	A symmetric matrix of order $n$ has ----- eigen values. (a) $n-1$ (b) $n+1$ (c) $n$ (d) 0



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

(Clash)

Roll No. ....

PAPER: Mathematics A-III

Course Code: MATH-201/MTH-21309 Part – II

MAX. TIME: 2 Hrs. 30 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

Q. 2	SHORT QUESTIONS	
(i)	Show that the functions $f(t) = \cos t$ , $g(t) = \sin t$ , $h(t) = t$ from $R$ to $R$ are linearly independent.	(4)
(ii)	Without evaluating, verify that $\det \begin{bmatrix} b+c & b & c \\ c & c+a & a \\ b & a & a+b \end{bmatrix} = 2a(b^2 + c^2).$	(4)
(iii)	Show that the matrix $\begin{bmatrix} 0 & 1 & -1 \\ 4 & -3 & 4 \\ 3 & -3 & 4 \end{bmatrix}$ is involutory.	(4)
(iv)	Check whether $W$ is a subspace of $V$ or not. $V = R^2$ and $W$ is the set of first quadrant vectors of $R^2$ .	(4)
(v)	For the given matrix find the basis of Column space. $\begin{bmatrix} 1 & 2 & 2 & -1 \\ 3 & 6 & 5 & 0 \\ 1 & 2 & 1 & 0 \end{bmatrix}$	(4)

P.T.O.

**LONG QUESTIONS**

<b>Q.3</b>	<p>Solve the system of linear equations by Gaussian elimination method</p> $x + y + 2z = 9, \quad 2x + 4y - 3z = 1, \quad 3x + 6y - 5z = 0$	(6)
<b>Q.4</b>	<p>If possible, find the inverse of the matrix</p> $\begin{bmatrix} 1 & 2 & -3 \\ 0 & -2 & 0 \\ -2 & -2 & 2 \end{bmatrix}$	(6)
<b>Q.5</b>	<p>For a real number <math>k</math>, consider the following system. For what value <math>k</math> does the system have a solution.</p> $\begin{aligned} x_1 + x_2 + kx_3 + x_4 &= k \\ -x_2 + x_3 + 2x_4 &= 0 \\ x_1 + 2x_2 + x_3 - x_4 &= -k. \end{aligned}$	(6)
<b>Q.6</b>	<p>Determine whether the vectors are linearly independent or not? <math>v_1 = (1, -2, 3), v_2 = (5, 6, -1), v_3 = (3, 2, 1)</math>.</p>	(6)
<b>Q.7</b>	<p>If possible find a matrix P that diagonalize the following matrix.</p> $A = \begin{bmatrix} 1 & 1 & 0 \\ 0 & 1 & 1 \\ 0 & 0 & 1 \end{bmatrix}$	(6)



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Mathematics B-III [Calculus (II)]  
Course Code: MATH-202/MTH-21310 Part-I (Compulsory)

MAX. TIME: 30 Min.  
MAX. MARKS: 10

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1. If  $\lim_{n \rightarrow \infty} a_n = L = \lim_{n \rightarrow \infty} c_n$ , then by Sandwich theorem  $\lim_{n \rightarrow \infty} b_n = L$  only if .....

- (a)  $a_n < b_n < c_n$
- (b)  $a_n \geq b_n \geq c_n$
- (c)  $a_n \leq b_n < c_n$
- (d)  $a_n \leq b_n \leq c_n$

2.  $\lim_{n \rightarrow \infty} \left( \frac{\ln(n)}{n} \right) = \dots\dots\dots$

- (a)  $\infty$
- (b)  $n$
- (c) 0
- (d) 1

3. If sequence  $\{S_n\}$  diverges, then series  $\sum_1^{\infty} a_n$  is .....

- (a) geometric
- (b) convergent
- (c) divergent
- (d) harmonic

4. If  $f(x, y) = \sqrt{x^2 + y^2}$  then  $f_x = \dots\dots\dots$ , where  $f_x$  indicates the derivative w.r.t.  $x$ .

- (a)  $\frac{x}{\sqrt{x^2 + y^2}}$
- (b)  $\frac{2y}{\sqrt{x^2 + y^2}}$
- (c)  $\frac{2x}{\sqrt{x^2 + y^2}}$
- (d) none of the above

5. If an arc  $s$ ; a portion of a plane curve, is rotated about a straight line, then the arc generates a surface called a .....

- (a) surface of revolution
- (b) parabola
- (c) ellipse
- (d) hyperbola

**P.T.O.**



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Mathematics B-III [Calculus (II)]

Course Code: MATH-202/MTH-21310 Part – II

MAX. TIME: 2 Hrs. 30 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

### Q.2. Questions with short answers.

1. Define triple integral with an example. (2 marks)
2. Define Alternating series test and give an example. (2 marks)
3. Find equation of tangent plane at any point  $P(x_1, y_1, z_1)$  of elliptic parabola  $z = x^2 + 4y^2$ . (2 marks)
4. Work out the critical points of  $f(x, y) = 2x^2 - 4x + xy^2 - 1$ . (2 marks)
5. Investigate the behavior of the series (4 marks)

$$\sum_1^{\infty} a_n = \sum_1^{\infty} \frac{(n!)^2}{(n^2)!}$$

6. Use double integral to find the area enclosed by cardioid  $r = a(1 - \cos \theta)$ . (4 marks)
7. If  $z = \frac{\cos y}{x}$ ,  $x = u^2 - v$ ,  $y = e^v$ , then find  $\frac{\partial z}{\partial u}$ . (4 marks)

### Q.3. Questions with brief answers.

1. Test the following series for convergence or divergence (5 marks)

$$\sum_1^{\infty} \frac{n^{p-1}}{n^p + 1}$$

2. Find the extrema of  $f(x, y, z) = xy + z$  subject to  $x^2 + y^2 + z^2 = 1$ . (5 marks)
3. If  $U = f(x, y)$  is homogeneous function of degree  $n$  then prove that (5 marks)

$$x^2 f_{xx} + 2xy f_{xy} + y^2 f_{yy} = n(n-1)f$$

4. Using the power series expansion of  $\ln(1+x)$  and  $\left(\frac{1}{1+x^2}\right)$ , find power series of  $\frac{\ln(1+x)}{1+x^2}$ . (7 marks)

5. Evaluate  $I = \int_{-1}^1 \int_{-\sqrt{1-x^2}}^{\sqrt{1-x^2}} \int_{x^2+y^2}^1 z(x^2 + y^2) dz dy dx$  by changing to cylindrical coordinates. (8 marks)





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Graph Theory

MAX. TIME: 30 Min.

Course Code: MATH-205/MTH-21312 Part-I (Compulsory)

MAX. MARKS: 10

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

Q.1. MCQ

(1 x 10 = 10)

- i) A simple connected graph containing no cycle is  
a) forest (b) bipartite (c) tree (d) regular
- ii) A closed walk in which no vertex is repeated except initial and final vertex is called  
(a) Trail (b) path (c) cycle (d) none
- iii) A complete bipartite graph  $K_{n,m}$  contains \_\_\_\_\_ edges  
(a)  $n + m$  (b)  $nm$  (c)  $\max(n,m)$  (d)  $n-m$
- iv) For a graph  $G$  with  $n$  vertices and  $m$  edges, the graph  $G \setminus e$  (where  $e$  is an edge) contains \_\_\_\_\_ vertices  
(a)  $n$  (b)  $n-1$  (c)  $n+1$  (d)  $n+2$
- v) If degree of every vertex of a graph  $G$  is same then  $G$  is called  
(a) complete (b) regular (c) connected (d) none
- vi) If vertex set of a subgraph is equal to vertex set of graph then subgraph is called  
(a) spanning subgraph (b) vertex-induced subgraph (c) edge-induced subgraph
- vii) The sum of degrees of the vertices of a non-trivial simple graph is \_\_\_\_\_  
(a) always even (b) always odd (c) may be even or odd (d) zero
- viii) The number of edges of  $C_n$  is  
(a)  $n-1$  (b)  $n$  (c)  $n+1$  (d) none
- ix) A cycle that traverse every vertex of graph is called \_\_\_\_\_ cycle.  
(a) eulerian (b) semi-eulerian (C) closed (D) Hamiltonian
- x) A tree must contain \_\_\_\_\_ vertex  
(a) pendant (b) isolated (c) degree two (d) none



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Graph Theory

Course Code: MATH-205/MTH-21312 Part – II

MAX. TIME: 2 Hrs. 30 Min.

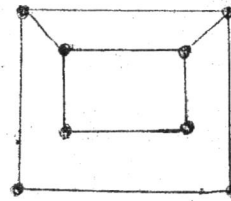
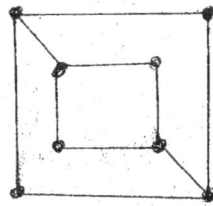
MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED.**

Q#2: Solve the following Short Questions.

(2×10=20)

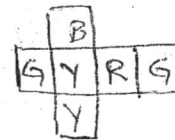
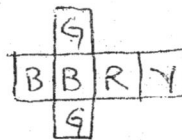
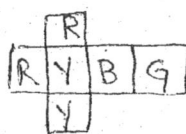
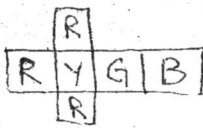
- i) For which values of  $n$ ,  $K_n$  are Hamiltonian and Eulerian?
- ii) Define Complete bipartite graphs and give example.
- iii) Define vertex connectivity  $\kappa(G)$  and give example of graph with  $\kappa(G)=2$ .
- iv) Draw a non-simple graph with no multiple edges with five vertices and eight edges.
- v) Write incidence matrix of  $K_4$ .
- vi) What is difference between cubic graphs and cubes?
- vii) Prove that every tree is bipartite.
- viii) Which complete bipartite graphs are Eulerian?
- ix) Find the cycle and cutset rank of Petersen graph.
- x) Determine whether the following graphs are isomorphic or not?



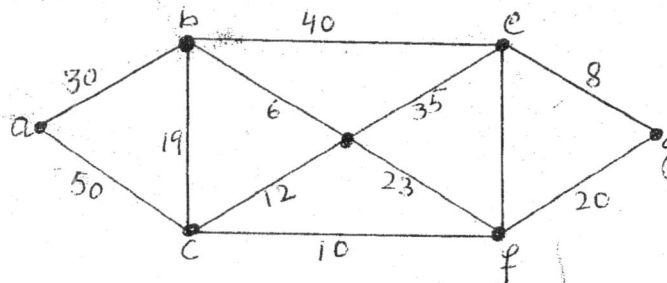
Q# 3: Solve the following Long Questions.

(5×6=30)

- i) Define spanning tree and draw all spanning trees of wheel graph  $W_4$ .
- ii) Prove that a simple graph and its complement cannot both be disconnected.
- iii) Is it possible to draw a simple graph on six vertices with degree sequence  $\{3,3,5,5,5,5\}$  or not? Justify your answer.
- iv) Find the solution of four cubes given as



v) Find the shortest path between vertices  $a$  and  $b$  in the following graph.





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Elementary Mathematics-II (Calculus)

MAX. TIME: 30 Min.

Course Code: MATH-211/MTH-21107 Part-I (Compulsory)

MAX. MARKS: 10

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- 1) If  $f(x) = \cos \sqrt{x}$  then the natural domain of  $f$  is
  - a)  $(-\infty, +\infty)$
  - b)  $[1, +\infty)$
  - c)  $(0, +\infty)$
  - d) none of these
- 2) The solution of the inequality  $-4 < Y - 3 < 4$ 
  - a)  $(1, 7)$
  - b)  $(-1, 7)$
  - c)  $(-1, -7)$
  - d) none of these
- 3)  $\lim_{x \rightarrow \infty} (1+x)^{1/x}$ 
  - a)  $e$
  - b)  $-e$
  - c)  $0$
  - d)  $\infty$
- 4)  $d \ln |ex| / dx =$ 
  - a)  $1/(x \ln e)$
  - b)  $1/(x \ln a)$
  - c)  $\pm x$
  - d) none above
- 5)  $1/x^2 + 1$  is the derivative of
  - a)  $\sin^{-1}x$
  - b)  $\cos^{-1}x$
  - c)  $\tan^{-1}x$
  - d)  $\cot^{-1}x$
- 6)  $\int \left(\frac{1}{x+1}\right) dx$ 
  - a)  $\ln(x+1)$
  - b)  $1/x \ln a$
  - c)  $-1/x^2$
  - d) none of these
- 7)  $\int \ln \cos x \, dx$ 
  - a)  $\sin x + c$
  - b)  $\ln \cos x + c$
  - c)  $\ln \sin x + c$
  - d) none of these
- 8)  $\int \left(\frac{1}{\sqrt{1-x^2}}\right) dx$ 
  - a)  $\sin^{-1}x$
  - b)  $\cos^{-1}x$
  - c)  $\tan^{-1}x$
  - d)  $\cot^{-1}x$
- 9)  $\int_0^1 1/\sqrt{1-x^2}$ 
  - a)  $0$
  - b)  $30$
  - c)  $60$
  - d)  $90$
- 10)  $\int \ln \sec x \, dx$ 
  - a)  $-\csc x + c$
  - b)  $\sec x + c$
  - c)  $\cot x + c$
  - d) none of these



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Elementary Mathematics-II (Calculus)**

**Course Code: MATH-211/MTH-21107 Part – II**

**MAX. TIME: 2 Hrs. 30 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q2: write the answers of the following questions (5 x 4 = 20 Marks)**

i) Define continuity and Solve  $4+7x \leq 2x-10$

ii) Evaluate  $\lim_{x \rightarrow 0} \frac{\ln(\tan x)^2}{\ln x}$

iii) Find  $dy/dx$  if  $y=a^x$

iv) Evaluate  $\int x e^x dx$

v) Evaluate  $\int_2^1 \frac{dx}{(2-x)^{\frac{1}{3}}}$

Long Questions

**(3x10=30)**

**Q3**

a) Solve  $\frac{2x-5}{x-2} < 1$

b) Discuss the continuity of function  $f(x)=x \sin(1/x)$  at  $x=0$

**Q4**

Differentiate w.r.t x

a)  $\sin(\sqrt{1+\cos x})$

b)  $y= x \ln x \cos^2 \pi x$

**Q5**

Evaluate

a)  $\int \frac{\sin \sqrt{x}}{\sqrt{x}} dx$

b)  $\int_0^2 \frac{x}{\sqrt{1+x^3}} dx$



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Differential Equations-I

Course Code: MATH-221/MTH-21334 Part – II

MAX. TIME: 2 Hrs. 30 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Give short answers of following:**

**(5 x 4 = 20)**

1. Solve the initial-value problem

$$\frac{dy}{dx} = -\frac{x}{y}, \quad y(4) = -3.$$

2. Solve

$$\frac{dy}{dx} = e^{-x^2}, \quad y(3) = 5.$$

3. Solve

$$(x+1) \frac{dy}{dx} + y = \ln x, \quad y(1) = 10.$$

4. Solve

$$x \frac{dy}{dx} - 4y = x^6 e^x.$$

5. Solve

$$x^3 \frac{d^3y}{dx^3} + 5x^2 \frac{d^2y}{dx^2} + 7x \frac{dy}{dx} + 8y = 0.$$

**Q.3. Give detailed answers:**

**(5 x 6 = 30)**

1. Solve the differential equation by using undetermined coefficients

$$\frac{d^2y(x)}{dx^2} + 25y(x) = 6 \sin(x).$$

2. Solve the given differential equation

$$\frac{dy}{dx} = 1 + e^{y-x+5}.$$

3. Solve

$$\left(\frac{3y^2 - t^2}{y^5}\right) \frac{dy}{dt} + \frac{t}{2y^4} = 0, \quad y(1) = 1.$$

4. Solve the system of linear differential equations

$$\begin{aligned} (D^2 + 5)x(t) - 2y(t) &= 0, \\ -2x(t) + (D^2 + 2)y(t) &= 0, \end{aligned}$$

where  $D = \frac{d}{dt}$ ,  $D^2 = \frac{d^2}{dt^2}$ .

5. Solve

$$x^2 \frac{d^2y}{dx^2} + x \frac{dy}{dx} \left(x^2 - \frac{1}{4}\right) y = x^{3/2},$$

by using variation of parameters (Note: The linearly independent solutions of the associated homogeneous differential equations are  $y_1(x) = x^{-1/2} \cos x$ ,  $y_2(x) = x^{-1/2} \sin x$ ).



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Differential Equations-I**

**MAX. TIME: 30 Min.**

**Course Code: MATH-221/MTH-21334 Part-I (Compulsory)**

**MAX. MARKS: 10**

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Mark True / False and Fill in the blanks.**

**(1x10=10)**

1. The first order differential equation  $\frac{dr}{d\theta} = r\theta + r + \theta + 1$  is not separable. (True/False)
2. Every autonomous differential equation  $\frac{dy}{dx} = f(y)$  is separable. (True/False)
3.  $y = -1 + x$  is a solution of  $\frac{dy}{dx} - y = x$ . (True/False)
4.  $y = \pm a$  are two constant solutions of  $\frac{dy}{dx} = y^2 + a^2$ . (True/False)
5. The set of functions  $f_1(x) = \cos ax, f_2(x) = \sin ax$  is linearly dependent on interval  $(-\infty, \infty)$ . (True/False)
6.  $(\frac{d}{dx} + \alpha^2)(e^{\alpha x} \sin(\beta x)) = 0$ . (True/False)
7.  $(\frac{d}{dx} + \alpha)(xe^{\alpha x}) = \dots$
8.  $W(\cos 3x, \sin 3x, \cos 6x) = \dots$
9. If  $y_1 = e^x$  and  $y_2 = e^{-x}$  are solutions of homogeneous second order linear ordinary differential equation, then necessarily  $y = -5e^{-x} + 10e^x$  is also a solution of the same differential equation. (True/False)
10.  $y_p = Ax^2$  is a particular solution of  $\frac{d^3y}{dx^3} + \frac{d^2y}{dx^2} = 1$  for  $A = \dots$



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Pure Mathematics**

**MAX. TIME: 30 Min.**

**Course Code: MATH-222/MTH-21119 Part-I (Compulsory) MAX. MARKS: 10**

Signature of Supdt.: .....

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- i)  $A \cap A^c =$
- a)  $A$                       b)  $A^c$                       c)  $\phi$                       d)  $0$
- ii) A set consists of those elements which belong to  $A$  or  $B$  but not to both is denoted by
- a)  $A \oplus B$                       b)  $A \cap B$                       c)  $A \cup B$                       d)  $A/B$
- iii) A subset of a metric space is said to be closed if it contains all of its
- a) Unions                      b) Intersections                      c) products                      d) limit points
- iv) A function  $f: N \rightarrow N$  defined by  $f(n) = 2n$  is
- a) one-to-one                      b) onto                      c) neither 1-1 nor onto                      d) none of these
- v) Which of the following is proposition?
- a) Do not smoke                      b) Lahore is capital of Punjab                      c)  $x + y = z$                       d) walk along the road
- vi) The A.M between  $3\sqrt{5}$  and  $5\sqrt{5}$  is
- a)  $\sqrt{5}$                       b)  $2\sqrt{5}$                       c)  $3\sqrt{5}$                       d)  $4\sqrt{5}$
- vii) The converse of  $p \rightarrow q$  is
- a)  $q \rightarrow p$                       b)  $\sim p \rightarrow \sim q$                       c)  $\sim q \rightarrow \sim p$                       d)  $p \leftrightarrow q$
- viii) The 13<sup>th</sup> term of the sequence  $x, 1, 2 - x, \dots$  is
- a)  $10 - 9x$                       b)  $11 - 10x$                       c)  $12 - 11x$
- ix) For two sets  $A$  and  $B$ ,  $A - B =$
- a)  $A \cup B^c$                       b)  $A^c \cup B$                       c)  $A \cap B^c$                       d)  $A^c \cap B$
- x) If  $Q(x, y): y = x^2 + 2$ , then which is true
- a)  $Q(1, 2)$                       b)  $Q(2, 1)$                       c)  $Q(1, 3)$                       d)  $Q(3, 1)$



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Pure Mathematics

Course Code: MATH-222/MTH-21119 Part – II

MAX. TIME: 2 Hrs. 30 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Answer the following short questions.**

**(10 x 2 = 20)**

- i. Find the unit open ball in  $R^2$ .
- ii. If  $A$  and  $B$  are subsets of a universal set  $U$ , then show that  $A \subseteq B$  iff  $B^c \subseteq A^c$ .
- iii. Determine whether the function  $f(x) = 7 - 3x^2$  is bijective from  $R$  to  $R$ .
- iv. Find the closures of  $Q$  and  $Q^c$  in  $R$ .
- v. Define absurdity with suitable example.
- vi. Find  $g \circ f$ , where  $f(x) = x^2 + 1$  and  $g(x) = x - 1$ .
- vii. Find the first three terms of a sequence if  $a_n - a_{n-1} = n + 1$  and  $a_4 = 14$ .
- viii. List the ordered pairs in the relation on  $\{1, 2, 3\}$  corresponding to the matrix  $\begin{bmatrix} 1 & 0 & 1 \\ 0 & 1 & 0 \\ 1 & 0 & 1 \end{bmatrix}$ .
- ix. Find the domain and sketch the function  $f(x) = \frac{x-1}{x^2}$ .
- x. Which term of A.P. 5, 2, -1, ... is -85?

**Answer the following long questions.**

**(5 x 6 = 30)**

- Q. 3 Illustrate the distributive law  $A \cap (B \cup C) = (A \cap B) \cup (A \cap C)$  with Venn diagrams. [6]
- Q. 4 Prove that  $n(A \cup B) = n(A) + n(B) - n(A \cap B)$ , when  $A, B, A \cup B$  and  $A \cap B$  are finite sets. [6]
- Q. 5 Show that the function  $d: R \times R \rightarrow R$  defined by  $d(x, y) = \sqrt{|x - y|}$ ,  $\forall x, y \in R$  is a metric on  $R$ . [6]
- Q. 6 Determine the validity of the argument:  $p \rightarrow \sim q, r \rightarrow q, r \vdash \sim p$ . [6]
- Q. 7 Show that  $1^2 + 2^2 + 3^2 + \dots + n^2 = \frac{n(n+1)(2n+1)}{6}$  for all positive integers  $n$ . [6]





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Discrete Mathematics (IT)**

**MAX. TIME: 30 Min.**

**Course Code: MATH-231/IT-21404 Part-I (Compulsory)**

**MAX. MARKS: 10**

Signature of Supdt.: .....

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1. The negation of the conditional statement  $p \rightarrow q$  is  
a.  $\neg p \rightarrow q$     b.  $p \wedge \neg q$     c.  $q \rightarrow p$     d.  $\neg q \rightarrow \neg p$
2. If  $A = \{1, 2, 3\}$ , then the number of elements in  $P(A) = \dots$   
a.  $2^4$     b.  $2^3$     c.  $2^6$     d.  $2^7$
3. Consider the relation  $\{(1,3), (1,4), (2,3), (2,4), (3,1), (3,4)\}$  on set  $A = \{1, 2, 3, 4\}$  is a. . a. Symmetric    b. Reflexive    c. Transitive    d. Irreflexive
4. The 8th term of the following geometric sequence  
4, 12, 36, 108, ...  
a. 8748    b. 8768    c. 12    d. 8766
5. 1, 10,  $10^2$ ,  $10^3$ ,  $10^4$ ,  $10^5$ , ... is  
a. Arithmetic series    b. Geometric series    c. Arithmetic sequence  
d. Geometric sequence
6. The total number of one-to-one functions, from a set with three elements to a set with four elements is.....  
a. 24    b. 16    c. 12    d. 9
7. If  $f(x) = 2x + 1$  then its inverse = .....  
a.  $x - 1$     b.  $\frac{x-1}{2}$     c.  $1 + x$     d. None of these
8. Compute the summation  $\sum_{i=1}^3 (2i - 1)$   
a. 8    b. 3    c. 9    d. 10
9. The number of distinct permutations that can be formed using the letters of the word "BENZENE" is  
a. 120    b. 420    c. 240    d. None of the above
10. Which term of the sequence 4, 1, -2, ... is -77  
a. 26    b. 27    c. 28    d. None of these



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Discrete Mathematics (IT)

Course Code: MATH-231/IT-21404 Part – II

MAX. TIME: 2 Hrs. 30 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Solve the following short questions.**

**(10 x 2 = 20)**

1. How many integers from 1 through 1000 are multiples of 3 or multiples of 5?
2. Use truth table to show that  $(p \wedge \sim q) \wedge (\sim p \vee q)$  is a contradiction.
3. For all subsets A and B of a universal set U, prove that  $(A - B) \cup (A \cap B) = A$
4. Suppose R and S are binary relations on a set A. If R and S are reflexive, is  $R \cap S$  reflexive?
5. Define symmetric relation.
6. How many functions are there from a set with three elements to a set with four elements?
7. Define  $g : Z \rightarrow Z$  by the rule  $g(n) = n^2$  for all  $n \in Z$ . Is g one-to-one? Prove or give a counter example.
8. How many 2-permutation are there of  $\{W, X, Y, Z\}$ ? Write them all.
9. Define Recursion.
10. Draw the graph of the binary relation C from R to R defined as follows: for all  $(x, y) \in R \times R$ ,  $(x, y) \in C \Leftrightarrow x^2 + y^2 = 1$ .

**Q.3. Solve the following long questions.**

**(5 x 6 = 30)**

1. Define a relation R on the set of all integers Z as follows: for all integers m and n,  $m R n \Leftrightarrow m \equiv n \pmod{3}$ . Prove that R is an equivalence relation.
2. State and prove the DeMorgan's Law.
3. Prove that if n is an odd integer, then  $n^3 + n$  is even.
4. Use mathematical induction to prove that  $1 + 3 + 5 + \dots + (2n - 1) = n^2$  for all integers  $n \geq 1$ .
5. Let  $f: R \rightarrow R$  and  $g: R \rightarrow R$  be defined by  $f(x) = 3x + 2$  for all  $x \in R$  and  $g(x) = \frac{x-2}{3}$  for all  $x \in R$ . Show that f and g are inverse of each other.



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Introduction to Philosophy**

**Course Code: PHIL-211/PHL-21123 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2 ANSWER IN SHORT.**

**(02X10=20)**

1. Write any two implausible aspects of Kantian's ethics?
2. Write an example showing the notion of positive freedom?
3. What is the difference between categorical duty and hypothetical duty?
4. What is artefact?
5. What is meant by representative Democracy.
6. Name the famous article of Isaiah Berlin.
7. What is meant by intentional fallacy.
8. Which theory of art distinguishes art from craft.
9. Why some theorists influenced by Karl Marx regard democracy as an illusion?
10. What is meant by 'Hedonism'.

**Q.3 ANSWER IN DETAIL.**

**(03x10=30)**

1. Elaborate the proofs about the existence of God.
2. Critically explain the theories of punishment.
3. Critically explicate the representative realism.



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Introduction to Philosophy

MAX. TIME: 15 Min.

Course Code: PHIL-211/PHL-21123 Part-I (Compulsory)

MAX. MARKS: 10

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1. The gambler's argument is propounded by":  
1. William Paley      2. St. Anselm      3. Aristotle      4. Blaise Pascal
2. Who introduced 'Felicific Calculus' for calculating the degree of pleasure:  
1. Jeremy Bentham      2. John Stuart Mill      3. Immanuel Kant      4. G.E. Moore
3. Which theory states that physical events cause mental events but mental events never cause physical ones:  
1. Interaction      2. Parallelism      3. Occasionalism      4. Epiphenomenalism
4. Which theory states that link between mind and body is provided by the intervention of God:  
1. Interaction      2. Parallelism      3. Occasionalism      4. Epiphenomenalism
5. Which one is not a meta-ethical theory:  
1. Hedonism      2. Emotivism      3. Naturalism      4. Moral relativism
6. The 'Chinese room experiment' is a thought experiment peculiar to:  
1. Thomas Kuhn      2. N.R. Hanson      3. John Searle      4. Bertrand Russell
7. Who used the metaphorical term, "death of the author" to explain that once a literary work is made public, its author has no privilege to interpret it.  
1. William Wimsatt      2. Monroe Beardsley      3. Ludwig Wittgenstein      4. Roland Barthes
8. Egalitarian doctrine that holds, "all people are equal and deserve equal rights" is a:  
1. Moral doctrine      2. Religious doctrine      3. Economical doctrine      4. Political doctrine
9. Who introduced the concept of 'Grue' in order to highlight the problem of induction:  
1. Thomas Kuhn      2. John Searle      3. N.R. Hanson      4. Nelson Goodman
10. Which theory of art holds that the genuine work of art is non-physical:  
1. Significant-form theory      2. Idealist theory      3. Institutional theory      4. None of any theory



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Introduction to Philosophy (Rev)

MAX. TIME: 2 Hrs. 45 Min.

Course Code: PHIL-211-A /PHL-21123 Part – II

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

## Q.2 ANSWER IN SHORT.

(مختصر جواب لکھیں۔) (10 × 02 = 20)

1. What is the etymology of word 'Philosophy'?  
لفظ "فلسفہ" کا مادہ اشتقاق کیا ہے؟
2. What is meant by embedded beliefs?  
سرایتی عقیدے سے کیا مراد ہے؟
3. Define metaphysics.  
مابعد الطبیعیات کی تعریف لکھیں۔
4. What is meant by a priori knowledge?  
ماقبل تجربی علم سے کیا مراد ہے؟
5. What is the Ockham's razor?  
آکم ریزر کیا ہے؟
6. Define inductive reasoning.  
استقرائی استدلال کی تعریف لکھیں۔
7. Differentiate between hypothetical and categorical moral duties?  
مشروط اور غیر مشروط اخلاقی فرائض کے مابین فرق اُجاگر کریں۔
8. What is the notion of moral relativism?  
اخلاقی اضافیت کا کیا تصور ہے؟
9. Why some Marxists have regarded 'Democracy', an illusion?  
بعض مارکسی حضرات نے 'جمہوریت' کو ایک دھوکہ کیوں خیال کیا ہے؟
10. What is the concept of artefact?  
صناعی نمونہ کا نظریہ کیا ہے؟

## Q.3 ANSWER IN DETAIL.

(مفصل جواب لکھیں۔) (10 × 03 = 30)

1. Describe the epistemological school of Empiricism.  
تجربیت کے علماتی کتب فکر کو بیان کریں۔
2. Write down the moral theme of utilitarianism.  
افادیت پسندی کے اخلاقی نقطہ خیال کو احاطہ تحریر میں لائیں۔
3. Write concise note on:  
جامع ترین نوٹ لکھیں:
  - Negative Freedom
  - Criticism on the Ideal theory of art
  - سلمی آزادی
  - آرٹ کے مثالی نظریہ پر تنقید



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

**Examination: B.S. 4 Years Program**

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Introduction to Philosophy (Rev)**

**MAX. TIME: 15 Min.**

**Course Code: PHIL-211-A /PHL-21123 Part-I (Compulsory)**

**MAX. MARKS: 10**

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

• درست جواب کو نشان زد (✓) کریں۔ کاٹ یا مٹا کر نشان زد کیا گیا جواب غلط تصور ہوگا۔

1. In ancient Greece, 'The Academy' was the 1<sup>st</sup> education institution of:

قدیم یونان میں پہلا تعلیمی ادارہ 'آکیڈمی' کس کا تھا:

- a. Zeno (زینو) c. Plato (افلاطون)  
b. Socrates (سقراط) d. Aristotle (ارسطو)

2. Who does not belong to existentialism:

کون وجودیت سے متعلق نہیں:

- a. Soren Kierkegaard (سورن کرکیگارڈ) c. Martin Heidegger (مارٹن ہائیڈیگر)  
b. Jean Paul Sartre (ژان پال سارتر) d. Ludwig Wittgenstein (لڈوگ وٹگن سٹائن)

3. For Kant, a moral action must be performed with:

کانٹ کے نزدیک، ایک اخلاقی فعل کو ادا کرنے کے لئے بہت ضروری ہے:

- a. deep feelings (شدت جذبات) c. sense of duty (احساس فرض)  
b. desiring popularity (خواہش شہرت) d. reward from Almighty (اجر ربانی)

4. "Anarchy, State and Utopia" is the treatise of:

"انارکی، اسٹیٹ اور یوٹوپیا" کس کی تصنیف ہے:

- a. Lohn Staurt Mill (جان اسٹورٹ مل) c. Isaiah Berlin (ایزہ بے برلن)  
b. Jeremy Bentham (جیری بنتھم) d. Robert Nozick (رابرٹ نوزک)

5. Which one is a meta-ethical theory:

ان میں سے کون سا نظریہ ما بعد الاخلاقی ہے:

- a. Kantian Ethics (کانتین اخلاقیات) c. Moral relativism (اخلاقی اضافیت)  
b. Utilitarianism (انفارمیت پسندی) d. None of any (کسی سے نہیں)

6. "All people are equal and deserve equal rights." This Egalitarians doctrine is:

"تمام لوگ برابر ہیں اور مساوی حقوق کے سزاوار ہیں" مساوات پسندوں کا یہ اصول ہے:

- a. moral doctrine (اخلاقی اصول) c. political doctrine (سیاسی اصول)  
b. religious doctrine (مذہبی اصول) d. economical doctrine (معاشی اصول)

7. Isaiah Berlin wrote:

ایزہ بے برلن نے رقم کیا:

- a. Art (آرٹ) c. Two Concepts of Liberty (آزادی کے دو نظریے)  
b. Principles of Art (آرٹ کے اصول) d. On Liberty (آزادی کے بارے میں)

P.T.O



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Concepts of Modern Physics**  
**Course Code: PHY-201/21330 Part-I (Compulsory)**

**MAX. TIME: 15 Min.**  
**MAX. MARKS: 10**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- A) The maximum kinetic energy of photo electrons depends upon  
i) Intensity      ii) Frequency      (iii) Temperature      iv) All these
- B) The spectrum of black body radiation is  
i) Line Spectrum      ii) Continuous spectrum      iii) Band spectrum      iv) Discrete
- C) If the particles listed all have the same KE, which has the longest wavelength  
i) Neutron      ii) Electron      iii) Proton      iii) Alpha particle
- D) Rayleigh-Jean's law holds good for which of the following?  
i) Short wavelength      ii) Intermediate wavelength  
iii) Both for short & long wavelength      iv) Long wavelength
- E) What is the minimum possible momentum of a particle, trapped in an infinite one dimensional potential well of width L  
i) 0      ii)  $h^2/2L$       iii)  $h^2/2L^2$       iv)  $h/2L$
- F) According to Moseley' the square root of the frequencies of lines in x-ray spectra depends linearly on  
i) Mass number      ii) Atomic number      iii) Quantum number      iv) None of these
- G) The current due to motion of majority charge carrier is called  
i) Diffusion current      ii) Conventional current  
iii) Leakage current      iv) Drift Current
- H) At critical temperature, the resistivity of the superconductors fall to zero  
i) Gradually      ii) Exponentially      iii) Suddenly      iv) None of above
- D) In Beta decay, the kinetic energy spectrum of the emitted electrons is.  
i) Discrete      ii) Continuous  
iii) Band spectrum      iv) line spectrum
- J) The unit of activity of a radioactive source is  
i) rad      ii) Curie      iii) Sievert      iv) Roentgen



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Concepts of Modern Physics**  
**Course Code: PHY-201/21330 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**  
**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

- Q.2** Give the short answer of each question. (2 x 10 = 20)
- i. Explain, why an evacuated tube is used to examine photoelectric emission
  - ii. Briefly describe Einstein's Photo electric equation.
  - iii. Briefly comment on energy- time uncertainty relationship.
  - iv. Why is the Heisenberg uncertainty principle not more radially apparent in our daily observations?
  - v. Explain briefly the difference between conduction band and valance band.
  - vi. What is difference between spontaneous emission and stimulated emission?
  - vii. State Bohr's postulates of the hydrogen atom.
  - viii. Explain the difference between donor and acceptor impurities?
  - ix. What is metastable state? what roll such a state play in laser operation?
  - x. What is doping. How N type semiconductor is formed by doping.
- Q.3** Define Compton effect. In a single photon-electron collision, show that Compton shift depends on scattering angle of photon. (1, 9)
- Q.4** (a) Derive the expression for the energy of an electron, trapped inside an infinitely deep potential well of width L. (7)
- (b) When an electron is confined to an infinite deep potential well of width 100 pm, What will be the energy of its lowest allowed state? (3)
- Q.5** (a) Explain the Rutherford's gold foil experiment for discovering the atomic nucleus. (7)
- (b) Calculate the binding energy of deuteron. The needed atomic masses are  $m_n = 1.008665$ ,  $m(^1\text{H}) = 1.007825$  u,  $m(^2\text{H}) = 2.014102$  u. (3)





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

(Clash)

Roll No. ....

PAPER: Physics-III (Electricity & Magnetism)

Course Code: PHY-211/21307 Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

Q.2. Write short answers of the following questions:

(2×10 = 20)

- i. What is meant by an electric field of continuous charge distribution?
- ii. In the median plane of an electric dipole, is the electric field parallel or antiparallel to the electric dipole moment  $\vec{p}$ ?
- iii. State Gauss law for electrostatics.
- iv. Show that the capacitance with dielectric is given by  $C' = K_e C$
- v. What do you mean by motional EMF?
- vi. State Faraday's law for magnetism and write down its integral form.
- vii. What is meant by the terms Bohr magneton and *magnetization*.
- viii. Write down mathematical forms of any two Maxwell's equations.
- ix. How do you relate  $\epsilon_0$  and  $\mu_0$  with velocity of electromagnetic waves in free space?
- x. Why a *pn* junction is sometimes called a nonlinear circuit element?

Q. 3: (a) Consider a parallel plate capacitor filled with a material of dielectric constant. Apply

Gauss' law on it to show that  $q' = q \left( 1 - \frac{1}{K_e} \right)$

(b) Discuss the growth of charge in an RC series circuit due to a DC potential difference applied and find an expression for the current during its growth.

(5, 5)

Q.4: (a) What is current density? Derive microscopic form of Ohm's law.

(b) By using Biot-Savart's law to derive an expression for the magnetic field at the center of a current carrying circular loop of radius  $R$ .

(5, 5)

Q. 5: (a) Show that the energy stored in the magnetic field is given by  $u_B = \frac{1}{2\mu_0} B^2$ .

(b) Describe briefly the process of generating an electromagnetic wave

(7, 3)



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

(Clash)

PAPER: Physics-III (Electricity & Magnetism)

Course Code: PHY-211/21307 Part-I (Compulsory)

MAX. TIME: 15 Min.

MAX. MARKS: 10

Roll No. in Fig. ....

Roll No. in Words. ....

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- (i) Electric field inside a uniform shell of charge is  
(a) infinity (b) negative (c) positive (d) zero
- (ii) If both the plate area and the plate separation of a parallel-plate capacitor are doubled, the capacitance is  
(a) unchanged (b) doubled (c) halved (d) tripled
- (iii) The statement that magnetic field lines form closed loops is a direct consequence of  
(a) Gauss' law for electricity (b) Gauss' law for magnetism  
(c) Faraday's law (d) Ampere's law
- (iv) Applications of Gauss' law are typically used to calculate  
(a) charge (b) current (c) potential (d) electric field
- (v) Lenz's law deals with the  
(a) Magnetic field of EMF (b) direction of EMF  
(c) Both the direction and magnitude of EMF (d) direction of induced current
- (vi) A current carrying loop lying in a magnetic field behaves like a  
(a) magnetic dipole (b) magnetic pole  
(c) magnetic material (d) non-magnetic material
- (vii) Which of the following laws was modified by Maxwell?  
(a) Gauss's law (b) Biot-Savart's law (c) Faraday's law (d) Ampere's law
- (viii) Electromagnetic waves are produced by  
(a) an accelerating charge (b) a stationary charge  
(c) chargeless particles (d) a moving charge
- (ix) Displacement current exists wherever there is  
(a) a magnetic field (b) moving charge  
(c) a changing magnetic field (d) a changing electric field
- (x) Mathematical expression for energy density  $u_E$  is  
(a)  $\frac{1}{2}\epsilon_0 C^2$  (b)  $\frac{1}{2}E\epsilon_0^2$  (c)  $\frac{1}{2}C(\Delta V)^2$  (d) none as above



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Physics-III (Electricity & Magnetism)

MAX. TIME: 15 Min.

Course Code: PHY-211/21307 Part-I (Compulsory)

MAX. MARKS: 10

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- (i) Which of the following is a vector quantity
- (a) electric charge (b) electric potential  
(c) electric flux (d) current density
- (ii) Mathematical expression for energy density  $u_e$  is
- (a)  $\frac{1}{2} \epsilon_0 C^2$  (b)  $\frac{1}{2} E \epsilon_0^2$  (c)  $\frac{1}{2} C (\Delta V)^2$  (d) none as above
- (iii) A conductor of resistivity  $\rho$  has current density  $\vec{J}$ . If  $\vec{E}$  is the electric field intensity applied inside then its value is equal to
- (a)  $\frac{\rho}{J}$  (b)  $\frac{\rho}{\epsilon_0}$  (c)  $\rho \vec{J}$  (d) none as above
- (iv) The unit of  $\sqrt{LC}$  is
- (a) Henry (b) Farad (c) Ampere (d) Second
- (v) The integral involved in the expression of Ampere's law is of the form of
- (a) volume integral (b) surface integral (c) double integral (d) none as above
- (vi) Where does the negative sign in  $\oint \vec{E} \cdot d\vec{s} = -\frac{d\phi_B}{dt}$  come from?
- (a) Lenz's law (b) Faraday's law (c) Gauss's law (d) Ampere's law
- (vii) Gauss' law for magnetism is
- (a)  $\oint \vec{E} \cdot d\vec{A} = \frac{q}{\epsilon_0}$  (b)  $\oint \vec{B} \cdot d\vec{A} = 0$  (c)  $\oint \vec{B} \cdot d\vec{S} = \mu_0 i$  (d)  $\oint \vec{E} \cdot d\vec{S} = -\frac{d\phi_B}{dt}$
- (viii) Which of the following quantities increases with increasing frequency?
- (a) R (b) L (c)  $X_C$  (d)  $X_L$
- (ix) The dimensions of  $RC$  matches with
- (a) LR (b)  $\frac{L}{R}$  (c)  $\frac{R}{L}$  (d)  $\frac{L^2}{R}$
- (x) The process of conversion of AC to DC is known as
- (a) oscillation (b) amplification  
(c) magnetization (d) rectification



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Physics-III (Electricity & Magnetism)

Course Code: PHY-211/21307 Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

Q.2. Write short answers of the following questions:

(2×10 = 20)

- i. State shell theorems for electric field.
- ii. Differentiate between electric and magnetic dipoles.
- iii. What is meant by equipotential surfaces?
- iv. Define the term *superconductor*.
- v. What do you know about *current density* and microscopic form of Ohm's law?
- vi. State Gauss law for dielectrics.
- vii. State Ampere's law and give its integral form.
- viii. What is the origin of atomic magnetization?
- ix. Define Poynting vector and also write its mathematical form.
- x. What do you mean by Barrier Potential in a PN junction diode?

Q.3: (a) Use Gauss' law of electrostatics to find out electric field at a distance  $r$  due to an infinite line of charge.

(b) Show that the expression for the electric field of a circular disk of radius  $R$ , carrying a uniform surface charge density, is given by

$$E_z = \frac{\sigma}{2\epsilon_0} \left( 1 - \frac{z}{\sqrt{z^2 + R^2}} \right)$$

(5, 5)

Q.4: (a) Discuss the growth of current in an  $LR$  series circuit.

(b) Let  $R = 160\Omega$ ,  $C = 15\mu F$ ,  $L = 230mH$ ,  $f = 60Hz$ , and  $\epsilon_m = 36V$  for a series RLC circuit. Find; (i) the impedance  $Z$  for the circuit, and (ii) the current amplitude  $i_m$

(6, 4)

Q.5: (a) In an external magnetic field  $\vec{B}$ , a magnetic dipole moment  $\vec{\mu}$  experience a torque  $\vec{\tau}$  that rotates it in alignment with  $\vec{B}$ . Prove that  $\vec{\tau} = \vec{\mu} \times \vec{B}$ .

(b) Write down mathematical forms of Maxwell's equations.

(6, 4)



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Political Science-I (MAS)**  
**Course Code: POL-221 Part-I (Compulsory)**

**MAX. TIME: 15 Min.**  
**MAX. MARKS: 10**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Fill in the Blanks.**

**(1 x 5 = 5)**

1. .... Said that man by nature is a social & political animal.
2. .... is a social science which deals with systems of governance, and the analysis of political activities, political thoughts and political behavior.
3. Tenure of Pakistan Senate is .....
4. Executive, ..... and judiciary are the important pillars of government.
5. Article 58-2(b) was invoked in Pakistan for ..... Times to dissolve national assembly.

**Q.2. Write True and False.**

**(1 x 5 = 5)**

1. A constitution is a set of fundamental principles or established precedents according to which a state or other organization is governed.....
2. The author of book "the Prince" is Nicolo Machiavelli .....
3. Bicameral legislature is most suited for colonial monarchy state.....
4. Dejouro sovereignty means a government that comes into existence as a result of law and has the support of the public.....
5. Liberal democracy means limited majority.....



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Political Science-I (MAS)

Course Code: POL-221 Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.3. Give short answers of following:**

**(4 x 5 = 20)**

1. Give Islamic concept of democracy.
2. Differentiate between adult and limited franchise by explaining what they mean with examples.
3. Briefly explain the relation of political science with
  - (a) Psychology
  - (b) anthropology
4. Differentiate between defacto & dejouro sovereignty.

**Q.4. Give detailed answers:**

**(3 x 10 = 30)**

1. Explain powers and functions of judiciary branch of government.
2. What are the agents of political socialization?
3. Give a comparative analysis of dictatorship and democracy.



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words, .....

**PAPER: Rules & Techniques of Swimming & Gymnastics** **MAX. TIME: 15 Min.**  
**Course Code: PE-201 Part-I (Compulsory)** **MAX. MARKS: 10**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

Q. 1. Tick the correct answer

10

- i. Pommel horse is used in Gymnastics for  
a. Men                      b. Women                      c. Both a and b
- ii. The chin positioning in forward roll is  
a. Up ward                      b. touch with chest                      c. None of these
- iii. How many events of gymnastics for women  
a. 4                      b. 6                      c. 8
- iv. A Side way rotatory movement of the body is called  
a. Forward roll                      b. backward roll                      c. Cart Wheel
- v. According to FINA how many lanes are in a swimming pool  
a. 8                      b. 6                      c. 10
- vi. Gymnastics is a sport that includes exercise  
a. Flexibility                      b. Balance                      c. Both A & B
- vii. How many swimmers take part in Medley relay in one team  
a. 1                      b. 4                      c. 8
- viii. First thing a swimmer do  
a. Warmup                      b. Cool down                      c. Dive
- ix. Which swimming style is easiest  
a. Free Style                      b. Back Stroke                      c. Butterfly                      d. Breast Stroke
- x. Swimmer finish the breast stroke lap  
a. One hand                      b. Two hand                      c. Back



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Rules & Techniques of Swimming & Gymnastics**  
**Course Code: PE-201 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**  
**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Give the short answer of the following questions. 10 x 2**

- i. Write the technique of arms and leg action in butterfly
- ii. Describe the head and arm position in head stand
- iii. Describe the role of center of gravity in backward roll.
- iv. What does D and E score means in Gymnastics
- v. Name the different types of starts in swimming
- vi. How many players take part in team Medley
- vii. Write the sequence of strokes in IM (Individual Medley)
- viii. Write the names of women events in Gymnastics
- ix. Write the names of men events in Gymnastics
- x. Describe the role of the center of gravity and Buoyancy force to determine in the floating of swimmer.

**Q.3. How a swimmer handle the wave resistance. 5+5**

- i. Swimmer generated waves
- ii. External waves hit the swimmer

**Q.4. Explain the following in Gymnastics 5+5**

- i. Rules of women events
- ii. Rules of men events

**Q.5. Explain the techniques of the following 5+5**

- a. Breast Stroke
- b. Butterfly





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Basics of Human Anatomy**  
**Course Code: PE-203 Part-I (Compulsory)**

**MAX. TIME: 15 Min.**  
**MAX. MARKS: 10**

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer cutting and overwriting is not allowed. (1x10=10)**

1. The Branch of Science which deals with the study of structure of tissues of Human Body with naked eye is called  
A. Histology      B. Physiology      C. Gross Anatomy      D. Mycology
2. The Pulmonary artery which carries \_\_\_\_\_ from heart to lungs.  
A. Oxygenated Blood      B. Red Blood      C. Deoxygenated Blood      D. WBC
3. The fracture is parallel to the long axis of the bone  
A. Transverse Fracture      B. Incomplete Fracture      C. Linear Fracture      D. Compound Fracture
4. The cartilage which is found on top of the epiphysis of bone is called  
A. Fibro Cartilage      B. Elastic Cartilage      C. Articular Cartilage      D. Hyaline Cartilage
5. The plate which separates bone ends from shaft of the bone is called  
A. Prophyysis Plate      B. Diaphysis Plate      C. Epiphyseal Plate      D. Fibrous Plate
6. Bone forming cells are called  
A. Osteoclasts      B. Osteoids      C. Osteoblasts      D. Osteocytes
7. Specialized membrane that covers the muscle fiber in human body is called  
A. Transverse Membrane      B. Plasma Membrane      C. Sarcolemma      D. Cell Membrane
8. The inner most membrane that lines the GI tract from mouth to anus from inside is called  
A. Sub-mucosa      B. Muscularis Externa      C. Serosa      D. Mucosa
9. The normal length of jejunum of small intestine in human body is  
A. 3.0m      B. 1.2m      C. 2.5m      D. 1.5m
10. The part of nervous system (N.S.) which is not under the control human intentions is called  
A. Central N.S.      B. Peripheral N.S.      C. Autonomic N.S.      D. Somatic N.S.



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Basics of Human Anatomy**  
**Course Code: PE-203 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**  
**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Give short answers.**

**(10x2=20)**

- |   |                                   |
|---|-----------------------------------|
| i. Limbic System of Human Brain           | ii. Oblique Plane                 |
| iii. Post-Natal Life                      | iv. SA and AV Nodes               |
| v. Semilunar Valves                       | vi. Myofilaments                  |
| vii. Vertebral Columnar Division in Human | viii. Coronary Arteries and Veins |
| ix. Agonists and Antagonists              | x. Cerebrum                       |

**Q.3. Answer the following questions in detail.**

**(3x10=30)**

- i. Draw and label the diagram of Human Heart? Also write a detailed note on different valves of human cardiovascular system? (5+5)
- ii. Explain through diagram, the microscopic anatomy of Human skeletal muscle? Also describe Nerve Stimulus pattern of Human Skeletal Muscle (6+4)
- iii. Draw and label the structure of a typical Neuron? Also describe different types of Neurons according to their shape in Human Body? (6+4)



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Pakistani Society and Culture**  
**Course Code: SOC-201/21432 Part-I (Compulsory)**

**MAX. TIME: 15 Min.**

**MAX. MARKS: 10**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1. Culture Complex means

- a) A cluster of related culture traits
- b) Artifacts used by primitive people
- c) Originally an approach to culture
- d) None of these

2. Social Mobility Means:

- a) Traveling of groups from one place to another.
- b) Participation in the cultural activities of modern age.
- c) Migration from rural to urban areas.
- d) Movement of people between positions on different levels.

3. What is the definition of a literate person:

- a) A person who can read
- b) A person who can only literate
- c) A person who can read and write
- d) None of these

4. Cultural Lag refers to:

- a) A situation where, the Pace' of change between symbolic and material culture is uneven.
- b) The state when symbolic culture does not change at all.
- c) When people actively resist change.
- d) None of above.

5. A Social Problem is:

- a) Difficulty faced by people.
- b) Difficulty faced and realized by people.
- c) An issue that the' experts realize to be discussed and resolved.
- d) None of these.

**P.T.O.**



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

**PAPER: Pakistani Society and Culture**  
**Course Code: SOC-201/21432 Part – II**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Questions with short answers.**

**(4 x 5 = 20)**

- i. Family and Religion
- ii. Universal primary Education
- iii. Rural and Urban society
- iv. Society and Social Institution
- v. Characteristics of Pakistani Society

**Q.3. Questions with brief answers.**

**(3 x 10 = 30)**

- i. Briefly explain the major social problems in the context of Pakistani Society.
- ii. What are Minority and Their Belief? Briefly explain it.
- iii. Explain the historical perspective of Pakistani culture in the context of Baluchistan culture.



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Classical Sociological Theory

MAX. TIME: 15 Min.

Course Code: SOC-202/21433 Part-I (Compulsory)

MAX. MARKS: 10

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1. \_\_\_\_\_ is the study of mutual interaction between individuals
  - a) Psychology
  - b) Sociology
  - c) Anthropology
  - d) International relations
  
2. \_\_\_\_\_ is known as the father of “classical sociology”
  - a) Emile Durkheim
  - b) Ibn-e- Khuldoon
  - c) August Comte
  - d) Max Weber
  
3. The Enlightenment was a development period of
  - a) Intellect
  - b) Philosophical thought
  - c) Sociology
  - d) All of these
  
4. Which of the following social law/s was shared by August Comte?
  - a) Social dynamics
  - b) Social statistics
  - c) None of these
  - d) Both a & b
  
5. The conflict theory was the chief work of
  - a) Emile Durkheim
  - b) Karl Marx
  - c) Max Weber
  - d) Herbert Spencer
  
6. Karl Marx gave his concept of
  - a) Alienation of workers
  - b) Social solidarity
  - c) Positivism
  - d) Laissez-faire
  - e) All of these

**P.T.O.**



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Organizational Behavior and HRD**  
**Course Code: SOC-203/21434 Part-I (Compulsory)**

**MAX. TIME: 15 Min.**  
**MAX. MARKS: 10**

.....  
Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1. Individuals who gets things done by others?
  1. Leaders
  2. Psychologists
  3. Organizations
  4. Managers
2. Successful managers and entrepreneurs recognize that:
  1. Technical knowledge is all that is needed for success.
  2. Interpersonal skills are not important.
  3. Technical skills are necessary, but insufficient, for succeeding in management.
  4. An understanding of human behavior does not impact effectiveness
3. Behavior is generally \_\_\_\_\_ and the \_\_\_\_\_ of behavior is a means to making reasonably accurate predictions.
  1. Predetermined; observation
  2. Predictable; systematic study
  3. Controllable; theoretical application
4. Which one of the following statements about Maslow's hierarchy of needs theory is not true?
  1. The five levels of needs are arranged in hierarchical order.
  2. Physiological needs are the lowest level.
  3. The lower order need must be fully satisfied before the next higher need becomes potent.
  4. The need hierarchy concept has not been well supported by research.
5. An individual's belief that he or she is capable of performing a task.
  1. Self-efficacy
  2. Encouragement
  3. Overt behavior
6. One of the shortcuts used to judge others involves evaluating a person based on how he/she compares to other individuals on the same characteristic. This shortcut is known as:
  1. Selective perception
  2. Contrast effects
  3. Halo effect
  4. Prejudice
7. Field of study that investigates the impact that individuals, groups, and structure have on behavior within organizations.
  1. Organizational behavior
  2. Psychology
  3. Sociology
8. Which of the following best reflects the "melting pot" assumption?
  1. Managers should be active
  2. Diversity should be embraced
  3. Diversity will contribute positively
9. What does OB stand for?
  1. Organizational behavior
  2. Organizing behavior
  3. Organized business
10. What is the core underlying discipline that forms organizational behavior?
  1. Psychology
  2. Organizational Behavior
  3. Sociology



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Statistics-III

Course Code: STAT-201/STT-21314 Part-I(Compulsory)

MAX. TIME: 15 Min.

MAX. MARKS: 10

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- i) A Sampling Frame should  
A) be non-overlapping. B) large enough.  
C) non exhaustive. D) B&C
- ii) A random sample is worst when population is  
A) homogenous B) heterogeneous  
C) infinite D) A&C
- iii) A Systematic sampling is preferred in  
A) industrial surveys. B) Laboratory surveys.  
C) household surveys. D) A&C
- iv) Two sided test is concerned with only  
A) composite hypothesis B) simple hypothesis  
C) bi-directional hypothesis D) A&C
- v) Inference consists of two parts(testing and estimation)  
A) first we test then estimate B) first we estimate then test  
C) testing & estimation are done simultaneously D) only estimation is done
- vi) A selection committee of a college selects an incompetent teacher, so it is a  
A) Type-I error B) Type-II error  
C) valid decision D) non of the above.
- vii) Null hypothesis is designed for possible-----  
A) acceptance B) rejection  
C) both A&B D) none of the above
- viii) Paired t-test is applicable when  
A) sample size is small B) population variance is unknown  
C) observations are in the form of pairs. D) all of A,B& C
- ix) Parameter of chi-square distribution is  
A) mean B) variance  
C) p D) n
- x) Chi- square statistics is used for  
A) best fit B) correlation  
C) association D) A&C



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Statistics-III

Course Code: STAT-201/STT-21314 Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

- Q.2) Write short answers to each of the followings. (Marks)
- i) What are the advantages and disadvantages of using this sampling technique? (04)
  - ii) Differentiate between probability sampling and non-probability sampling. What are their relative advantages and disadvantages? (04)
  - iii) Differentiate between Multistage and Multiphase Sampling. (03)
  - iv) What is a sampling distribution? Describe the properties of the sampling distribution of the means. (05)
  - v) Under what conditions, the paired t-test is used? (02)
  - vi) What do you mean by p-value? (02)

Q.3. Using a random number table, select 30 samples of size 3 each with replacement from the following population distribution of heights. Find the mean of sample means. (06)

Height (inches)	No. of students
60 – 62	5
63 – 65	18
66 – 68	42
69 – 71	27
72 – 74	8

Q.4. A sample of 40 observations from a population with unknown mean  $\mu$  and unknown variance  $\sigma^2$  gave  $\sum X = 800$  and  $\sum X^2 = 16052$  and a second sample taken from the same population gave

x	18	19	20	21	22	23
f	12	23	10	7	5	3

Using the data given by the two samples, find unbiased estimates of  $\mu$  and  $\sigma^2$ .

Q.5. A firm wishes to test the hypothesis that the average monthly wage of its shop employees is Rs.180 with a standard deviation of Rs.4.50. They wish to run a risk of only 0.05 of rejecting the null hypothesis when it is true, and a risk of only 0.05 of accepting the null hypothesis if the average is as high as Rs. 182 or as low as Rs. 178. How large a sample should be taken? (06)

Q.6. A random sample of size 40 from non-normal population yielded the  $\bar{X}_1 = 70.4$ ,  $S_1^2 = 31.40$  another random sample of size 50 from second non normal population yielded  $\bar{X}_2 = 65.3$ ,  $S_2^2 = 44.82$ , test the hypothesis that the difference between two means is equal to 2. (06)

Q.7. A random sample of 250 men and 250 women were polled as to their desire concerning the ownership of television sets. The following data resulted: (06)

Classification	Men	Women	Total
Want television	80	120	200
Don't want television	170	130	300
Total	250	250	500

Test the hypothesis that desire to own a television set is independent of sex at the 0.01 level of significance.





# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Elementary Statistics

Course Code: STAT-211/GEN-21129 Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Questions with short answers.**

**(4x5=20)**

- i) Differentiate between Population and Sample.
- ii) Differentiate between Parameter and Statistic.
- iii) Define Dispersion.
- iv) Define Classification.
- v) Define Positive and Negative Correlation.
- vi) Define Null Hypothesis.
- vii) Write down two properties of Arithmetic Mean.
- viii) What do you mean by Probability?
- ix) Describe Regression.
- x) Define Sampling Without Replacement.

### QUESTIONS WITH BRIEF ANSWERS

**(3x10=30)**

**Q. No.3:** A population consists of values 3, 5, 7, 9. Take all possible samples of size 2 with replacement from this population. Find the mean for each sample. Make a sampling distribution of mean and verify that:

- (a) Mean of Sample Means = Population Mean
- (b) Variance of Sample Means = Population Variance/n (10 Marks)

**Q. No.4:** The following frequency distribution gives the ages of 100 college Students:

Ages	14-15	16-17	18-19	20-21	22-23	24-25	Total
Number of students	6	16	20	31	15	12	100

Compute Mean and Standard Deviation. (10 Marks)

**Q. No.5:** The data of heights and weights is given below:

Height (X)	72	54	73	63	66	65	60	70	71	69
Weight (Y)	67	57	68	64	68	72	67	73	69	72

Find Regression Line of X on Y and Correlation Coefficient between X

and Y. (10 Marks)



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Elementary Statistics

MAX. TIME: 15 Min.

Course Code: STAT-211/GEN-21129 Part-I (Compulsory)

MAX. MARKS: 10

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- (i) Number of students in a College is an example of:  
(a) discrete variable (b) qualitative variable  
(c) Attribute (d) continuous variable
- (ii) The median of the following data 8,5,8,7,3,5,8 is:  
(a) 8 (b) 4 (c) 7 (d) 3
- (iii) A numerical quantity calculated from population data is called:  
(a) Statistic (b) parameter  
(c) Constant (d) None of above
- (iv) A branch of statistics by which obtained data is organized and summarized in order to describe its nature is called as:  
(a) Explanatory statistics (b) descriptive statistics  
(c) Inferential statistics (d) none of these
- (v) Sampling error can be decreased by:  
(a) Increasing sample size (b) decreasing sample size  
(c) Fixing the size (d) none
- (vi) For a Negatively Skewed distribution:  
(a) Mean, mode, median are equal (b) Mean, mode, median are not equal  
(c) Mean is greater than mode (d) Mean is less than mode
- (vii) Observed data organized into rows and columns is called:  
(a) Classification (b) Tabulation  
(c) Array (d) Frequency Distribution
- (viii) Mean and variance of 7, 7, 7, 7, 7 is:  
(a) -7, 7 (b) 0, -7 (c) 7, 0 (d) 7, 7
- (ix) The range of Correlation Coefficient is:  
(a) 0 to  $\infty$  (b)  $-\infty$  to 0  
(c)  $-\infty$  to  $\infty$  (d) -1 to 1
- (x) A non-deserving player is selected in a team is an example of:  
(a) Correct decision (b) type -II error  
(c) Type -I error (d) level of significance



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Shairi Isnaaf-Taruf o Tafheem-II  
Course Code: URDU-201 Part-I (Compulsory)

MAX. TIME: 15 Min.  
MAX. MARKS: 10

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

اس پرچے کے سوالات کو اسی شیٹ (Sheet) پر حل کریں۔

(1x10=10)

سوال نمبر: نوٹ: کسی ایک جواب پر (✓) کا نشان لگائیں۔

- (i) کلاسیکیت کے رد عمل میں کون سی تحریک پیدا ہوتی ہے؟  
(ا) کلاسیکیت کی (ب) جدیدیت کی  
(ج) مابعد جدیدیت کی (د) مارکسی کی
- (ii) داخلیت کا تعلق ہے؟  
(ا) فرد کے باطن سے (ب) فطرت سے  
(ج) سماج سے (د) معاشرت سے
- (iii) نظم ”روٹیاں“ کی ہیئت ہے؟  
(ا) مسدس (ب) مخمس  
(ج) رباعی (د) مربع
- (iv) راشد کے دوسرے مجموعے کا نام ہے:  
(ا) مادرا (ب) ایران میں اجنبی  
(ج) لامسادی انسان (د) گماں کا ممکن
- (v) شامل نصاب راشد کی نظم کا عنوان ہے:  
(ا) وزیر چینی (ب) آٹوگراف  
(ج) نیا سال (د) خود کلامی
- (vi) ”آٹوگراف“ کے شاعر کا نام ہے:  
(ا) میراجی (ب) فیض  
(ج) اقبال (د) مجید امجد
- (vii) ”اردو میں نظم معرعی اور آزاد نظم“ کے مصنف ہیں:  
(ا) ڈاکٹر علی محمد خان (ب) ڈاکٹر حنیف کیفی  
(ج) ڈاکٹر وزیر آغا (د) ڈاکٹر خواجہ محمد زکریا
- (viii) کشورناہید کی شامل نصاب نظم کا عنوان ہے:  
(ا) خود ستائی (ب) شعاع امید  
(ج) نیا سال (د) خود کلامی
- (ix) مسدس کے ہر بند میں مصرعوں کی تعداد ہے:  
(ا) چھ (ب) آٹھ  
(ج) چار (د) پانچ
- (x) ”الفت کا اظہار“ کی صنف ہے:  
(ا) نظم (ب) گیت  
(ج) مثنوی (د) افسانہ



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

PAPER: Shairi Isnaaf-Taruf o Tafheem-II

Course Code: URDU-201 Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

اس پرچے میں شامل سوالات کے جوابات اپنی امتحانی کاپی میں درج کریں۔

درج ذیل سوالات کے جوابات تحریر کریں۔

۱۰ = ۲+۸

سوال نمبر ۲۔ درج ذیل میں سے کسی ایک جزو کی تشریح کریں اور شاعر کا نام بھی لکھیں۔

(۱) اُن گنت صدیوں کے تاریک بہیمانہ طلسم  
ریشم و اطلس و کمناب میں بُوائے ہوئے  
جا بجا پکتے ہوئے کوچہ و بازار میں جسم  
خاک میں لتھڑے ہوئے خون میں نہلائے ہوئے

(ب) کسی عظیم شخصیت کی تمکنت

حنائی انگلیوں میں کانپتے ورق پہ جھک گئی

توزرنگار پہلوؤں سے جھانکتی کلائیوں کی تیز نبض رگ گئی

۲۰ = ۵ × ۴

سوال نمبر ۳۔ درج ذیل سوالات کے مختصر جوابات تحریر کریں۔

(i) ”وزیر چنیں“ کا مرکزی خیال تحریر کریں۔

(ii) شعاع امید کا مرکزی خیال تحریر کریں۔

(iii) ن۔م۔راشد کے چار شعری مجموعوں کے نام تحریر کریں۔

(iv) آزاد نظم کے چار اہم شاعروں کے نام تحریر کریں۔

(v) منیر نیازی کے چار شعری مجموعوں کے نام تحریر کریں۔

۱۰ = ۵ + ۵

سوال نمبر ۴۔ درج ذیل نظموں کا خلاصہ تحریر کریں۔

(۱) روٹیاں (ب) نیا سال

۱۰

سوال نمبر ۵۔ درج ذیل میں سے کسی ایک پر تفصیلی اظہار خیال کریں۔

(۱) قطعہ نگاری (ب) راشد کی آزاد نظم نگاری



# UNIVERSITY OF THE PUNJAB

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Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Adabi Istalahaat

Course Code: URDU-202 Part-I (Compulsory)

MAX. TIME: 15 Min.

MAX. MARKS: 10

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

اس پرچے کے سوالات کو اسی شیٹ (Sheet) پر حل کریں۔

معروضی حصہ

سوال نمبر: کسی ایک درست جواب پر (✓) کا نشان لگائیں۔

- (i) تشابہت کو کہا جاتا ہے:
- (ا) فلسفہ اشکال (ب) فلسفہ امثال (ج) فلسفہ تصورات
- (ii) خارجیت کا ایک عنصر ہے:
- (ا) پیکر محبوب کی تعریف (ب) رقابت کا جذبہ (ج) حسن تغلیل
- (iii) ہر زمانے اور عہد کی اپنی روح ہوتی ہے جسے کہا جاتا ہے:
- (ا) روح زمن (ب) روح بدن (ج) روح عصر
- (iv) سہل متنوع کا تعلق ہے:
- (ا) سلاست سے (ب) فصاحت سے (ج) بلاغت سے
- (v) لفظ سے مخصوص معنی کے بجائے کوئی دوسرے معانی مراد لیے جانا کہلاتا ہے:
- (ا) متانت (ب) علامت (ج) سلامت
- (vi) الفاظ کا بر محل استعمال خصوصیت ہے:
- (ا) کلاسیکیت کی (ب) علامت کی (ج) فصاحت کی
- (vii) مثالیت خاصا ہے:
- (ا) رومانویت کا (ب) صارفیت کا (ج) تصوف کا
- (viii) فن کی عام ڈگر سے ہٹ کر نئی راہ تلاش کرنا کہلاتا ہے:
- (ا) جدیدیت (ب) آفاقیت (ج) کلاسیکیت
- (ix) علم نفسیات کی بھی اصطلاح ہے:
- (ا) سطحیت (ب) داخلیت (ج) تصویریت
- (x) خود پسندی، انانیت اور تعلق مظاهر ہیں:
- (ا) علامتیت کے (ب) نرگسیت کے (ج) عینیت کے



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

PAPER: Adabi Istalahaat

Course Code: URDU-202 Part – II

ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

اس پرچے میں شامل سوالات کے جوابات اپنی امتحانی کاپی میں درج کریں۔

حصہ انشائی

(۱۰=۲+۲+۲+۲+۲)

سوال نمبر ۲۔ درج ذیل اصطلاحات کی تعریف کیجیے۔

بلاغت ، رومانویت ، آورد ، سہل ممتنع ، اساطیر

(۲۰=۵+۵+۵+۵)

سوال نمبر ۳۔ درج ذیل ادبی اصطلاحات پر مختصر نوٹ لکھیے۔

حقیقت نگاری ، علامتیت ، مثالیت/عینیت ، آفاقیت

(۲۰=۱۰+۱۰)

سوال نمبر ۴۔ مندرجہ ذیل ادبی اصطلاحات کے بارے میں تفصیل سے لکھیے:

جدیدیت ، محاکات



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Nasri Isnaaf-Taruf o Tafheem-I  
Course Code: URDU-203 Part-I (Compulsory)

MAX. TIME: 15 Min.

MAX. MARKS: 10

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

اس پرچے کے سوالات کو اسی شیٹ (Sheet) پر حل کریں۔

۱۰

سوال نمبر ۱: نوٹ: کسی ایک جواب پر (✓) کا نشان لگائیں۔

- (i) ناول ”ابن الوقت“ کس کی تصنیف ہے؟  
(ا) نذیر احمد (ب) عبداللہ حسین  
(ج) عبدالعلیم شرر (د) انتظار حسین
- (ii) ”ڈراما نگاری کا فن“ کس کی تصنیف ہے؟  
(ا) ڈاکٹر گیان چند (ب) عشرت رحمانی  
(ج) ڈاکٹر احسن فاروقی (د) ڈاکٹر محمد اسلم قریشی
- (iii) افسانہ ”آندنی“ کس نے تحریر کیا؟  
(ا) غلام عباس (ب) انتظار حسین  
(ج) منٹو (د) پریم چند
- (iv) ”زندگی، نقاب چہرے“ کس کے افسانوں کی کلیات ہے؟  
(ا) انتظار حسین (ب) غلام عباس  
(ج) بیدی (د) منٹو
- (v) امراؤ جان ادا کس شہر کی تہذیبی زندگی پیش کی گئی ہے؟  
(ا) دہلی (ب) کول کتہ  
(ج) لکھنؤ (د) فیض آباد
- (vi) ”تعلیم بالغاں“ کس کا ڈراما ہے؟  
(ا) امتیاز علی تاج (ب) آغا حشر  
(ج) خواجہ معین الدین (د) امجد اسلام امجد
- (vii) انارکلی ڈراما ہے؟  
(ا) طربیہ (ب) المیہ  
(ج) سٹیج (د) مزاحیہ
- (viii) ”چاندنی بیگم“ کس کا ناول ہے؟  
(ا) عبداللہ حسین (ب) انتظار حسین  
(ج) قرۃ العین حیدر (د) مستنصر حسین تارڑ
- (ix) باغ و بہار کس ادارے کے تحت لکھی گئی؟  
(ا) فورٹ ولیم کالج (ب) دلی کالج  
(ج) علی گڑھ کالج (د) اورینٹل کالج
- (x) ”سوا سیر گیوں“ کا مرکزی موضوع کیا ہے؟  
(ا) سود (ب) تاریخ  
(ج) دیہات (د) عشق



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PAPER: Nasri Isnaaf-Taruf o Tafheem-I

Course Code: URDU-203 Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

اس پرچے میں شامل سوالات کے جوابات اپنی امتحانی کاپی میں درج کریں۔

سوال نمبر ۲۔ درج ذیل اقتباس کی حوالہ متن اور سیاق و سباق کے ساتھ تشریح کریں۔

$$۱۰ = ۱ + ۱ + ۳ + ۵$$

”میرے جہیز کے لیے اپنے گلے کا سب گھنا اتار کے ابا کے حوالے کیا کہ اس میں تھوڑی چاندی ملو کے پھر سے بنوادو۔ وہ ایک عدد جو نئے بنے ہوئے تھے، ان کو اجلوادو۔ گھر بھر کے برتنوں میں سے دو چار رکھ لیے، باقی نکال کے علیحدہ کر دیے کہ ان پر قلعی کروادو بلکہ ابا نے کہا بھی کہ اپنے آئندہ کا خیال رکھو۔ اماں نے کہا ”اوہ جی ہوگا۔ تمہاری بہن زمیندار کی بیوی ہے وہ بھی تو جانیں کہ بھائی نے لڑکے کو کچھ دیا۔“

$$۱۰ = ۵ \times ۲$$

سوال نمبر ۳۔ درج ذیل سوالات کے مختصر جوابات تحریر کریں۔

(i) پریم چند کے افسانے ”جگ اکبر“ کا پلاٹ مختصر بیان کریں۔

(ii) داستان ”باغ و بہار“ کے کرداروں پر روشنی ڈالیں۔

(iii) افسانے ”زردکتا“ کا مرکزی خیال بیان کریں۔

(iv) ناول امر او جان ادا کے کردار خانم کا تعارف پیش کیجیے۔

(v) ناول کی تعریف کریں۔

سوال نمبر ۴۔ ”انارکلی“ کس کردار کا المیہ ہے۔ بحث کریں۔

سوال نمبر ۵۔ ناول ”توبتہ النوح“ کا تنقیدی جائزہ پیش کریں۔

سوال نمبر ۶۔ درج ذیل میں سے کسی ایک افسانے پر مختصر نوٹ لکھیے۔

(۱) فینسی ہیئر کٹنگ سیلون (ب) نیا قانون





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Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Functional Urdu

Course Code: URDU-211/GEN-21416 Part-I (Compulsory)

MAX. TIME: 15 Min.

MAX. MARKS: 10

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

اس پرچے کے سوالات کو اسی شیٹ (Sheet) پر حل کریں۔

حصہ معروضی

(2x5=10)

مندرجہ ذیل سوالات میں نیچے دیے گئے جوابات میں سے درست کا انتخاب کریں۔

- سوال نمبر ۱
- ۱۔ متضاد الفاظ کا مطلب \_\_\_\_\_ ہے۔  
(الف) ہم قافیہ الفاظ (ب) ایک دوسرے کی ضد الفاظ (ج) ہم معنی الفاظ (د) ان میں سے کوئی نہیں
- ۲۔ غزل کے آخری دو شعر کو \_\_\_\_\_ کہتے ہیں۔  
(الف) مقطع (ب) تخلص (ج) مطلع (د) ان میں سے کوئی نہیں
- ۳۔ شاعر کا اختیار کردہ نام \_\_\_\_\_ کہلاتا ہے۔  
(الف) کنیت (ب) لقب (ج) تخلص (د) ان میں سے کوئی نہیں
- ۴۔ کسی بات کو بڑھا چڑھا کر بیان کرنا \_\_\_\_\_ کہلاتا ہے۔  
(الف) تکرار (ب) مبالغہ (ج) رپورٹ (د) تضاد
- ۵۔ مترادف الفاظ سے مراد \_\_\_\_\_ ہے۔  
(الف) ہم قافیہ الفاظ (ب) ہم ردیف الفاظ (ج) ہم معنی الفاظ (د) ان میں سے کوئی نہیں
- ۶۔ \_\_\_\_\_ کے تم ہی استاد نہیں ہو غالب  
(الف) اردو (ب) سنسکرت (ج) ریختہ (د) مذکورہ بالا تمام
- ۷۔ کسی غزل میں ایک سے زیادہ مطلع ہوں تو اضافی مطلع کو \_\_\_\_\_ کہتے ہیں۔  
(الف) مطلع ثانی (ب) حسن مطلع (ج) ریب مطلع (د) مندرجہ بالا تمام
- ۸۔ ردیف کا لفظی مفہوم \_\_\_\_\_ ہے۔  
(الف) گھوڑے پر آگے بیٹھنے والا (ب) گھوڑے کے آگے چلنے والا (ج) گھوڑے پر پیچھے بیٹھنے والا (د) گھوڑے کے پیچھے چلنے والا
- ۹۔ \_\_\_\_\_ بود و باش آج کل لاہور میں ہے۔  
(الف) ہمارا (ب) ہمارے (ج) ہماری (د) ہماریں
- ۱۰۔ لڑکیوں نے کہا اب ہم سوئیں \_\_\_\_\_  
(الف) گئیں (ب) گے (ج) گی (د) گا



# UNIVERSITY OF THE PUNJAB

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Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Zoology-III (Biochemistry)**

**MAX. TIME: 2 Hrs. 45 Min.**

**Course Code: ZOOL-201/ZOL-21302 Part – II**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2 Give short answer of the following**

**2x10=20**

- i. Differentiate between starch and glycogen.
- ii. How pH affect enzyme activity.
- iii. What is meant by micro-evolution? Give an example.
- iv. Write the differences between coenzyme and cofactor.
- v. What is meant by immunoglobulin and its types?
- vi. State 1<sup>st</sup> law of thermodynamics with an example.
- vii. Write major functions of lipids.
- viii. What is meant by energy flow? Briefly discuss
- ix. Explain crossbreeding with respect to evolution.
- x. Differentiate between ecosystem and biome.

**Q.3 Long questions.**

**3x10=30**

- I** Write a comprehensive note on phosphorus and carbon cycle.
- II** Explain different evidences of evolution in detail.
- III** What is meant by homo- and hetero- polysaccharides? Write in detail about peptidoglycans of bacterial cell wall.



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

PAPER: Zoology-III (Biochemistry)

MAX. TIME: 15 Min.

Course Code: ZOOL-201/ZOL-21302 Part-I (Compulsory)

MAX. MARKS: 10

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

1. Which of the following amino acid has amide group in its side chain  
A) Cysteine  
B) Lysine  
C) Glutamine  
D) Isoleucine  
E) None of these
2. The minimum number of carbon in a monosaccharides is  
A) 2  
B) 3  
C) 4  
D) 6  
E) None of these
3. Lipid are important constituents of  
A) Nucleus  
B) Ribosome  
C) Biological membranes  
D) All of these
4. Which of the following have no enzymes of their own?  
A) Bacteria  
B) Cynobacteria  
C) Viruses  
D) All of above
5. Carbohydrates occur naurally in  
A) D-form  
B) L-form  
C) Both A and B  
D) None of these
6. Lamarck theory of organic evolution is usually known as  
A) Inheritance of acquired characters  
B) Descent with change  
C) Continuity of fermplasm  
D) All of above  
E) None of these
7. In which condition gene ratio remains constant in a species?  
A) Gene flow  
B) Mutation  
C) Random mating  
D) Sexual selection  
E) None of these
8. Habitat destruction can result in a loss of  
A) Species  
B) Community  
C) Ecosystem  
D) None of these
9. The lowest tropic level of an ecosystem always includes  
A) Producers  
B) Consumers  
C) Herbivores  
D) Carnivores  
E) None of these
10. The community and its abiotic environment constitutes a  
A) Biosphere  
B) Habitat  
C) Ecosystem  
D) Food web  
E) None of these