First Semester 2018
Examination: B.S. 4 Years Programme

PAPER: Computer-I
Course Code: COMP-101

TIME ALLOWED: 30 mins:

Roll No.

MAX. MARKS: 10

Attempt this Paper on this Question Sheet only.

Choose correct option.

1. C	entral Processing	Unit	(CPU) consists of				······································
A.	control unit	B.	arithmetic and logic unit	C.	main store	D.	all of above
2. ľi	put and Output	devic	es such as monitor	rs and	l keyboards are c	lassii	fied as
A.	arithmetic units	B.	control unit devices	C.	peripheral devices	D.	main store devices
3. V	Vhich one of the f	ollow	ing is a non-impac	t prin	ter?	<u> </u>	
Α.	Active matrix Printer	B.	Line Printer	C.	Dot-Matrix	D.	Laser Printer
4 of v	compu	iters i	represent data as	varia	ble points along a	cont	inuous spectrum
A.	Analog	B.	Digital	C.	Precise	D.	Mainframe
5. T	he termre	ers to	the sharpness or	clari	ty of an image.	J	
Α.	Width	B.	Resolution	C,	Dot pitch	D.	Depth
6. T	heis	the e	lectronic pathway	betw	een components i	in the	e computer.
Α.	CPU	B.	Bus	C.	RAM	D.	Register
7. S	econdary storage	mem	ory is basically	<u> </u>	L	J	<u> </u>
A.	volatile memory	B.	non volatile memory	C.	backup memory	D.	impact memory
8. H	igh resolution me	ans		·			
A.	Greater number of pixels	B.	Larger pixel size	C.	Accurate voice recognition	D.	Bigger picture
9. N	licrosoft Excel is	a		•		•	
A.	Word Processing	В.	Database Management System	C.	Spread Sheet Software	D.	None of above
10.F	Both station can t	ransn	nit and receive da	ta sim	ultaneously in		
A.	simplex mode	В.	Half duplex mode	C.	Full duplex mode	D.	None of Above



First Semester 2018 Examination: B.S. 4 Years Programme Roll No.

PAPER: Computer-I Course Code: COMP-101 TIME ALLOWED: 2 hrs. & 30 mins.

MAX. MARKS: 50

Attempt this Paper on Separate Answer Sheet provided.

Answer the following short questions. Each question carries equal marks. (2 x 10) 20

- 1. What are Super Computers?
- 2. Differentiate between software and hardware?
- 3. What are Reports in Access?
- 4. What does mean by Device Driver Software?
- 5. Differentiate between Data and Information.
- 6. Differentiate between Excel Work Book and Work Sheet.
- 7. What is Solid State Memory?
- 8. What is Slide Animation in MS Power Point?
- 9. What is the function of Drop Cap in MS Word?
- 10. What are Ink Jet Printers?

 $(10 \times 3) 30$ Answer following Long Questions.

- 1. What is Memory? Describe ROM with its types.
- 2. Define output devices, explaining all major types of input devices?
- 3. Describe and explain IF- ELSE formula in MS Excel with example. Also Write any two features of MS Power point with their uses and applications?



D. Custom

First Semester 2018 Examination: B.S. 4 Years Programme

PAPER: Computer (Introduction and Applications)
Course Code: COMP-111/CMP-11019

TIME ALLOWED: 30 mins.

Roll No.

MAX. MARKS: 10

Attempt this Paper on this Question Sheet only.

Section I: Objective

Q	i. C	hose at lea	st one	correct	answe	r						Mark	s: 10
1.	The	brain of the	e compu	iter. This	part do	oes the c	alculatio	n, mov	ing and pr	ocessi	ng of inf	ormation	
		CPU	В.	RAM	C.		rboard		Hard Dr		,		
2.	Part	t of a compu	uter that	t allows a	a user t	o put inf	ormatio	n into tl	he com <mark>p</mark> u	ter			
		Output Dev		B.	Softwa		C.		ting Syste		D.	Input Devi	c e
3.	The	difference	betweei	n memoi	ry and s	y and storage is that memory is and storage is							
	A.	Temporary,	, permai	nent	B. Pe	rmanent	, tempo	, temporary		C. Slo	w, fast	D. All of a	bove
4.	A w	orldwide ne	etwork o	of compu	iters								
		СРИ	B.	Interne		C.	RAM	D.	Networ	k			
5.	The	technology	used to	read pe	encil or	pen mar	ks on a r	nultiple	choice ar	iswer s	heet is		
		OCR	B.		C.	POS	D.	ORM					
6.	A Si	imulated ex	perience	e genera	ted by	compute	r, like vi	siting th	ne surface	of the	sun is c	alled	
A. Artificial Solar visitation C. Extended experience													
		Virtual real				arious ac							
7.	Ар	art of the co	omputer	that all	other p	arts are	connect	ed to. I	t allows al	I of the	parts t	o communic	ite so
		y work toge											
	A.	Operating	System	·B.	Disk D	Prive	C.	Moth	erboard	D.	Outp	ut Device	
8.	The	e output qua	ality of a	printer	is meas	sured by							
	A.	Dot per sq	. inch		C.	Dot pe	er inch						
	В.	Dots printe	ed per u	nit time	D.	All of	the abov	/e					
9.	Wł	nich is valid	stateme	nt									
	A.	1 KB = 102	4 Bytes										
	В.	1 MB = 10	24 Bytes	5									
	C.	1 KB = 100	0 Bytes										
	D.	1 MB = 10	00 Bytes	5									
10)	software	perfor	ms funct	tions sp	pecific to	a busir	less or	industry.				
	A.	Retail											
	B.	Open sou	rce										
	C	Sharewar	·e										



First Semester 2018
Examination: B.S. 4 Years Programme

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•	Roll No

PAPER: Computer (Introduction and Applications)

Course Code: COMP-111/ CMP-11019

TIME ALLOWED: 2 hrs. & 30 mins.

MAX. MARKS: 50

Attempt this Paper on Separate Answer Sheet provided.

Section II: Subjective

Q2. Give brief answers to the following questions (Short Questions).

Marks: (10*2=20)

- 1. Differentiate between SSD and HDD.
- 2. Define data and information.
- 3. Define Internet. How does the Internet work?
- 4. What are the major components of a computer networks?
- 5. Define network and protocol.
- 6. Differentiate between intranet and internet.
- 7. Define web Brower with two examples.
- 8. What do you mean by multitasking?
- 9. What are the advantages of using database?
- 10. Differentiate between Volatile and non-volatile memory.

Q3. Give detail answers to the following questions (Long Questions)

Marks: 30

- 1. What are the main types of computers? Describe in detail with their usage in real life.
- 2. Define malware and its type in detail?
- 3. How to safeguard your personal information?
- 4. Write down the procedure to create the following Table also write to change the table background color, border color, border style columns height and rows width.

U	NIVERSITY O	F THE PUNJA	AB
UNIVERSITY MS WORD THEORY PRACTICAL 77 79	VORD	MS E	XCEL
THEORY	PRACTICAL	THEORY	PRACTICAL
77	79	98	33



First Semester - 2017

Examination: B.S. 4 Years Programme (Special Examination)

PAPER: Computer (Introduction and Applications)
Course Code: COMP-111/CMP-11106 / 11019

TIME ALLOWED: 30 mins.

Roll No.

MAX. MARKS: 10

Attempt this Paper on this Question Sheet only.

Choose correct option. Marks: 10

1.A graphic tablet is	s commonly activated	by	
A.Finger	B.Joystick	C.Stylus	D.Trackball
2.Laser printer is an	example of		
A.Non impact	B.Impact	C.Inkjet	D.Dot matrix
3. The top most layer	r of OSI model is		
A.Network	B.Session	C.Transport	D.Presentation
4.which of the follow	wing is NOT a categor	y of network	
A.LAN	B.MAN	C.WAN	D.NAN
5.Analog signal is m	neasured in		
A.Volt	B.Hertz	C.WATTS	D.Digits
6.Each location in pr	rimary storage is assig	ned a unique	
A.Data	B.Field	C.Name	D.Address
7.All are types of Mo	emory EXCEPT.		
A.DRAM	B.SRAM	C.FRAM	D.ROM
8. Which one is faste	r		
A.RAM	B.Cache	C.Register	D.Hard Disk
9.Another word for p	pointer		
A.Cursor	B.Pixel	C.Mouse	D.None
10.The brain of any o	computer system is		
A.ALU	B.Memory	C.CPU	D.Control Unit

First Semester 2017

Examination: B.S. 4 Years Programme
(Special Examination)

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PAPER: Computer (Introduction and Applications) TIME ALLOWED: 2 hrs. & 30 mins. Course Code: COMP-111/ CMP-11106 / 11019 MAX. MARKS: 50

Attempt this Paper on Separate Answer Sheet provided.

Answer the following short questions. Each question carries equal marks. (2 x 10)20

- 1. Describe the function of Arithmetic and Logic Unit.
- 2. RAM is called volatile memory. Justify.
- 3. State the use of Copy Paste Function in MS Word.
- **4.** What is EEPROM?
- 5. What is Modem also name its types?
- **6.** What are super computers?
- 7. Differentiate between system software and application software?
- **8.** Explain Modes of Data Transmission?
- 9. What are Nested Functions in Excel?
- 10. Differentiate between Analog and Digital Computers?

Answer following Long Questions. (10 x 3) 30

- 1. Explain different types of Non-Impact Printers.
- 2. Define Storage devices, explaining all major types of storage devices?
- 3. Explain how you create and manipulate charts in MS Excel. Also Explain Slide

Animations and Animation Effects of MS Power point?

First Semester 2018

Examination: B.S. 4 Years Programme

Roll No. .

PAPER: Computer Applications in Business Course Code: COMP-121 / CMP-11019

TIME ALLOWED: 2 hrs. & 30 mins.

MAX. MARKS: 50

Attempt this Paper on Separate Answer Sheet provided.

SUBJECTIVE TYPE

Q.2 Answer the following short questions.

(20)

- I. Define RAM. What are different types of RAM?
- II. Define mechanical and electronic data processing.
- III. What is the difference between procedural and non-procedural programming languages?
- IV. What are the uses of super computer?
- V. Define control unit. What is the importance of control unit in data processing?
- VI. What is slide transition?
- VII. What so you mean by slide design?
- VIII. Write down syntax of average formula.
 - IX. Define network topology.
 - X. Define computer program.

Give answers of the following questions:

(30)

- Q.3 Explain different types of digital computer in detail.
- Q.4 Write down steps to insert charts in MS-Excel.
- Q.5 Define software. What are the different types of System Software and Application Software? Explain with examples.

First Semester

2018

Examination: B.S. 4 Years Programme

PAPER: Computer Applications in Business Course Code: COMP-121 / CMP-11019 TIME ALLOWED: 30 mins.

MAX. MARKS: 10

Attempt this Paper on this Question Sheet only.

icircle	(OBJECTIVE) · ele the appropriate answer from the options given against each question.	(10)
1.	MS-Excel is an example of:	٠
	a. Application Software	
	b. Presentation Software	
	c. Operating System	
	d. Utility Program	
2.	Which of the following is a type of impact printer?	
	a. Inkjet printer	
	b. Laser printer	
	c. Photo printer	
	d. Dot matrix printer	
3.	converts analog signals into digital signals and digital signals into an	ialog signals.
	a. Router	
	b. MODEM	
	c. Hub	
	d. Switches	
4.	is sequential access device	
	a. Tape storage	•
	b. CD	
	c. RAM d. DVD	
5.	The IC (integrated circuit) was used ingeneration of computers	for the first
э.	time.	101 the mist
	a. Ist	
	b. 2nd	
	c. 3rd	
	d. 4th	
6.	A is a computer that controls a computer network.	
	a. Laptop	
	b. Desktop	
	c. Server	
	d. Client	
7.	Which of the following is a mechanical machine?	
	a. Desktop Computer	
	b. Photocopy Machine	
	c. Laptop Computer	
	d. Mainframe	
8.	is the process of obtaining data from input device during a machine cycle	·•
	a. Fetch	
	b. Decode	
	c. Execute	
	d. Store	
9.	is not a communication device.	
	a. NIC	
	b. Modem	
	c. Cable Modem	
	d. Coaxial cable	
10.		
	a. Split	
	b. Freeze panes	
	c. Arrange all d. None of the above is true	
	d None of the above is true	

Second Semester - 2018
Examination: B.S. 4 Years Programme

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PAPER: Computer -II

Course Code: COMP-103 Part - II

TIME ALLOWED: 2 Hrs. & 45 Mints. MAX. MARKS: 50

Attempt this Paper on Separate Answer Sheet provided.

Q2. Give Short answer of the following questions.

Marks (2*10=20)

- 1. Define super key?
- 2. What is Database Management System?
- 3. How many components of the DBMS?
- 4. Define Weak Entities and Strong Entities?
- 5. Define the term entity?
- 6. Difference between Generalization and Specialization?
- 7. Explain the term of Data integrity?
- 8. Difference between secondary Key and alternate Key?
- 9. Difference between file processing system and database system?
- 10. Difference between data and information?

Subjective Type

Marks(3*10=30)

- Q3.What is Relationship Cardinality? Discuss different cardinalities in detail? Give example for each?
 - Q4.Discuss Normalization and its steps in detail?
 - Q5.Define an attribute? Discuss different types of attributes indetail?

Second Semester - 2018
Examination: B.S. 4 Years Programme

PAPER: Computer -II

Course Code: COMP-103 Part - I (Compulsory)

TIME ALLOWED: 15 Mints.

MAX. MARKS: 10

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Each MCQ carries 1 Mark. This Paper will be collected back after expiry of time limit mentioned above.

Q1: Choose the best answer	(10*1=10)
i) All records in a file have the same:	
a) contents	b) structure
c) both a and b	d) none
ii)SQL stands for:	,
a) short-query-list	b) seek-qualify-label
c)structure-query-language	d) none
iii)which of three schemas used in three-sc	
database:	or a second of the second seco
a) external	b) internal
c) implementation	d) conceptual
iv) which of the following is not a major ar	ea for the database administrator?
a) planning	b)programming
c) implementation	d) security
v) A person name, birthday, and social sec	
a) attributes	b) entities
c)relationships	d) descriptors
vi) A relationship is an association betwee	
a) objects	b) entities
c) databases	d) fields
vii)Every relation must have:	<i>a)</i> 1101 <i>a</i> 5
a)primary key	b)candidate key
c)secondary key	d)b and c
viii) In 3NF, a non-key attribute must not depen	
a) non-key attribute	b) key attribute
c)composite key	d)short key
ix) A relation is considered a:	,
a)column	b)one-dimensional table
c)two-dimensional table	d)three-dimensional table
x) DB Stands for:	h) Dodar-tion Boso
a) Decision Base c) Data Base	b) Declaration Base d) Both a & C
V) Daw Duby	u) 20m u 00 0



Second Semester - 2018
Examination: B.S. 4 Years

PAPER: Computer (Introduction and Applications)
Course Code: COMP-111 Part – I (Compulsory)

TIME ALLOWED: 15 Min.

MAX. MARKS: 10

Attempt this Paper on this Question Sheet only.

<u>Please encircle the correct option. Each MCO carries 1 Mark. This Paper will be collected back after expiry of time limit mentioned above.</u>

Q. 1		(1	10x1=10)
1.An example of op	tical read/write mediu	ın is	
A.CD-RW	B.Zip disk	C.Hard disk	D.Floppy disk
2. Which one of the	following is a non-im	pact printer?	
A, Line Printer	B. Ink-jet Printer	C. Dot-matrix	D. Active matrix Printer
3.The top most laye	er of OSI model is		
A.Network	B.Session	C.Transport	D.Presentation
4. which of the follo	owing is NOT a catego	ny of network	
A.LAN	B.MAN	C.WAN	D.NAN
5.Analog signal is	neasured in		
A.Volt	B.Hertz	C.WATTS	D.Digits
6.Each location in p	primary storage is assi	gned a unique	
A.Data	B.Field	C.Name	D.Address
7.All are types of M	demory EXCEPT.		
A.DRAM	B.SRAM	C.FRAM	D.ROM
8.The smallest add	ressable unit of storag	e on a disk is called a	
A.Cluster	B.Sector	C.Cylindec	D.Track
9.Another word fo	r pointer		
A.Cursor	B.Pixel	C.Mouse	D.None
10. Which of the fe	llowing is not a comm	nunication media.	
A.UTP	B. Twisted Pair C.	able C.Micros	vave D,Modem

Second Semester - 2018
Examination: B.S. 4 Years

PAPER:	Computer	(Introduction	and Ap	plications)

Course Code: COMP-111 Part - II

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••	• •	• •	• •	• •	•	•	•	•	•	•	•	•	•	•	•	•	•	•

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

Attempt this Paper on Separate Answer Sheet provided.

Q. 2

Answer the following short questions. Each question carries equal marks. (2 x 10)20

- 1. Define Operating system?
- 2. What does mean by Device Driver Software?
- 3. What is Data communication?
- 4. What are super computers?
- 5. Differentiate between Analog and Digital Computers?
- 6. Describe the function of Arithmetic and Logic Unit.
- 7. RAM is called volatile memory. Justify.
- 8. State the use of Copy Paste Function in MS Word.?
- 9. Explain DBMS?
- 10. What are Nested Functions in Excel?

Q. 3

Answer following Long Questions. (10 x 3) 30

- 1. Explain different types of Non Impact Printers.
- 2. Define Input devices, explaining all major types of Input devices?
- 3. Explain how you create slides in MS Power Point. Also Write any two features of MS Power point with their uses and applications

Second Semester - 2018

<u>Examination: B.S. 4 Years Programme</u>

PAPER: Introduction to Computers (Revised)
Course Code: COMP-121 Part - I (Compulsory)

TIME ALLOWED: 15 Mints.

MAX. MARKS: 10

Attempt this Paper on this Question Sheet only.

<u>Please encircle the correct option.</u> Each MCQ carries 1 Mark. This Paper will be collected back after expiry of time limit mentioned above.

Q.	1			(10x1=10)
	1 Which of the followi	ng is not inside the system	m unit	
	A.RAM	B. Monitors	C. Hard Disk	D. Adapter Cards
	2. High resolution mear	าร		
	A. Greater number of pixels	B. Larger pixel size	C. Accurate voice recognition	
	3. Which one of the foll	lowing is a non-impact pr	inter?	
	A. Line Printer			D. Active matrix Printer
	4 compute	ers represent data as var	iable points along a con	tinuous spectrum
	of values			
	A. Analog	B. Digital	C. Precise	D. Mainframe
	5. A type of storage tha	it does not accept new in	formation?	
	A. Hard Drive		C.Random Access Memory	D. Read Only Memory
	6. A is an e	example of a solid-state n	nemory device.	
	A. flash memory drive		C. floppy disk	D. hard disk
	7. The is th	ne electronic pathway be	tween components in t	he computer.
	A. CPU	B.bus	C. RAM	D. register
	8 is a collection of	unprocessed items, whic	h can include text, num	bers, images, audio and video.
	A. Data	B. Computer	C. Information	D. Instruction
	9. The termrefe	rs to the sharpness or cla	rity of an image.	
	A. Width	B. Resolution	C. Dot pitch	D. Depth
	10. GB is approximately	· Y		
	a. 1,000KB	b.1,024MB	c. 100TB	d. B & C



Second Semester - 2018

<u>Examination: B.S. 4 Years Programme</u>

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PAPER: Introduction to Computers (Revised)
Course Code: COMP-121 Part - II

TIME ALLOWED: 2 Hrs. & 45 Mints. MAX. MARKS: 50

Attempt this Paper on Separate Answer Sheet provided.

Q. 2 Answer the following short questions. Each question carries equal marks. $(2 \times 10)20$

- 1. What are plotters?
- 2. What is Modem also name its types?
- 3. Differentiate between low level language and high level language?
- 4. What does mean by Device Driver Software?
- 5. Differentiate between Memory and Storage?
- 6. What is computer Bus?
- 7. Differentiate between system software and application software?
- 8. Differentiate between Analog and Digital Computers?
- 9. What are the features of Windows XP?
- 10. What is Use of Computers in Business/Commerce?

Q. 3 Answer following Long Questions. (10 x 3) 30

- 1. What is Computer Memory Explain types of RAM?
- 2. Define output devices, explaining all major types of input devices?
- 3. Describe and explain IF- ELSE formula in MS Excel with example. Also Write any two features of MS Power point with their uses and applications?

Third Semester 2018

Examination: B.S. 4 Years Programme

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•	•	•	•	•	•	•	•	•	•	٠	•	٠	•	٠	•	

PAPER: Computer-III

Course Code: COMP-201/CMP-21316

TIME ALLOWED: 2 hrs. & 30 mins.

MAX. MARKS: 50

Attempt this Paper on Separate Answer Sheet provided.

SUBJECTIVE

ANSWER THE FOLLOWING SHORT QUESTIONS

[5 * 4 Marks]

- 2) What is the difference between use of a <div> and a <frame> tag in the HTML?
- 3) Do all HTML elements need both opening and closing tags? Give suitable examples.
- 4) What are CSS preprocessors and why do we use them?
- 5) What are three benefits which exceptions bring to Object-Oriented Programming?
- 6) Describe difference between features Abstraction and Encapsulation as per Java Language.

ANSWER THE FOLLOWING LONG QUESTIONS

[10 * 3 Marks]

- 7) Write a method in Java, called mySubString that takes 2 strings as arguments and returns a boolean value: true, only if one of the strings in a substring of the other. Do NOT use any manipulation methods of the String class other than length().
- 8) Explain the difference between how method parameters are passed for variables that contain object references and variables that contain primitive data types.
- 9) What is JDBC Connection? Explain steps to get Database connection in a simple java program and also write the java code as example.



Third Semester 2018
Examination: B.S. 4 Years Programme

PAPER: Computer-III

Course Code: COMP-201/CMP-21316

TIME ALLOWED: 30 mins

MAX. MARKS: 10

Attempt this Paper on this Question Sheet only.

OBJECTIVE

VER

[2 * 5 Marks]

Roll No. ...

- a) Which component is responsible for converting byte code into machine specific code?
 - a. a) JVM
- b) JDK
- c) JIT
- d) JRE
- b) 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
- c) Which of these interfaces is implemented by Thread class?
 - a. a) Runnable
- b) Connections
- c) Set
- d) MapConnections
- d) 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
- e) What is it called where child object gets killed if parent object is killed?
 - a. a) Aggregation
- b) Composition
- b. c) Encapsulation
- d) Association



Third Semester 2018

Examination: B.S. 4 Years Programme

Roll No	•
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PAPER: Computer Science-I Course Code: COMP-211/IT-21335 TIME ALLOWED: 2 hrs. & 30 mins.

MAX. MARKS: 50

Attempt this Paper on Separate Answer Sheet provided. SUBJECTIVE

Q.2.	Write short answers of the following Questions:	20= 4x5
	What is the difference between input and output devices? Write an algorithm to calculate cube of a number (e.g., $y = x^3$)	20 423
	2 Give decimal equivalent of binary number: 11001010.	
	Differentiate between computer Printer and Display unit. Write examples for each.	
,	What is difference between a LAPTOP and Desktop computer?	
	5 Comment on the following in C++: while and for.	
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 square of a number (i.e., $\mathbf{c} = (\mathbf{a}^2 + \mathbf{b}^2)$. Write \mathbf{C}^{++} program to print the series and also display corresponding average and sum of even numbers in the range from 2 to 88. 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: $y1 = \sin(e^{\sqrt{2t^3}})$, $y2 = e^{\frac{2t-4}{4}}$ and $y3 = \cos(\sin e^t)$.	10
Q.5.	 a) For an object thrown at an angle "Θ" and initial velocity "u", the horizontal range "R" is given by: R = (u² sin(2θ))/g, where g=9.8 m/s² and u= 120m/s. Write a program to print out R against angle Θ values. Take angle varies from 30° to 60° in step size of 3°. b) Comment on the following: int, main() and getch(), 	10



Third Semester 2018 Examination: B.S. 4 Years Programme

PAPER: Computer Science-I
Course Code: COMP-211/IT-21335

TIME ALLOWED: 30 mins.

MAX. MARKS: 10

Attempt this Paper on this Question Sheet only.

OBJECTIVE

Q1: Each question has FOUR possible answers. Select the correct answer and encircle it.

1x 10 = 10

- i. Which one of the following is not an output device?
 - (a) Monitor (b) Web-cam (c) Digital projector (d) Printer
- ii. Decimal number 48 has its equivalent binary that is equal to:
 - (a) 110000 (b) 110100 (c) 011000 (d) 0111010
- iii. For int a, A; which of the following is true in C++:
 - (a) Your variable: A (b) Your variable: a (c) Your variable: a and A (d) false
- iv. Which of the following is true for choosing variable name in C++ program:
 - (a) numeric (b) alphabet (c) alphanumeric (d) both b and c
- v. The graphical representation of arranged numbers of steps written to solve for a particular problem is called:
 - (a) solution (b) pseudo code (c) algorithm (d) flow chart
- vi. The file extension of C++ program is:
 - (a) .cpp (b) .c++ (c) c program (d) .doc
- vii. In case of for loop, it is:
 - (a) fixed iterations loop (b) condition control loop (c) easy loop (d) incremental
- viii. In case of while loop it is:
 - a) fixed iterations loop (b) condition control loop (c) easy loop (d) incremental
- ix. C++ is run under:
 - (a) interpreter (b) compiler (c) translator (d) both a and b
- x. The series of input, process and storage of data in a computer process is:
 - (a) Presentation program (b) information cycle (c) application program (d) All

Fourth Semester - 2018

`\ Roll	No.	•••	••	••	••	••	•	 •	•	•	•

Examination: B.S. 4 Years Programme

PAPER: Computer -IV

TIME ALLOWED: 15 Mints.

Course Code: COMP-203 / CMP-22316 Part - I (Compulsory) MAX. MARKS: 10

Attempt this Paper on this Question Sheet only.

Please encircle the correct option, Each MCQ carries 1 Mark. This Paper will be collected back after expiry of time limit mentioned above.

ı	Questi	on #: 1							(1x10=10)
1.	Visua	al Basic w	as devel	oped to sur	port	GUI baed _	 -	driven	applications.
	a.	Event	b.	Machine	c.	Algorithm	d.	control	
2.	Obje	cts contain	s data a	nd		<u> </u>			
		Events				Control	d.	Structure	
3.	In Vi	sual Basic	a form i	s another n	ame	for a(n).			
	a.	Object	b.	Window		c. Label	d.	Property	
4.	Form	s and cont	rols are	collectively	reco	gnized as		<u> </u>	
	a.	Properties	s b.	Methods	c.	Objects	d.	Events	÷
5.	Whiel form	h form eve	nt is use	d to assign	the o	default value	s to f	orm and co	ntrols on the
	а.	Load	b.	Unload	c.	Activate	d.	Terminate	
6.	Which	a form pro	perty wi	ill put text i	in th	e title bar of	the fo	orm?	
	a.	Title	b.Bord	erText	c	. Header	d. Ca	aption	
7.V	Vhich d	lata type is	s used to	handle a Y	es o	r No respons	se?		
	a.]	Boolean	b. Integ	ger c. Sl	hort	d. Date	;		
8.	Relatio	onal Opera	itor are	used to		num	here		÷
		compare				ly d. divid			
a n	abud s	indomin 4	l						
7.19		* *		as'					
						ure d. code			
10.		box p	rovides	a set of cho	ices	to the user.			•
	a.co	ommand		b. list c. co	mbo	d. text			



Fourth Semester - 2018

<u>Examination: B.S. 4 Years Programme</u>

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PAPER: Computer -IV Course Code: COMP-203 / CMP-22316 Part - II TIME ALLOWED: 2 Hrs. & 45 Mints. MAX. MARKS: 50

Attempt this Paper on Separate Answer Sheet provided.

Question #: 2 short questions.

 $(2 \times 10)20$

- 1. Differentiate between Procedural and Non Procedural languages.
- 2. What is Properties Window?
- 3. What is the use of KeyDown and KeyUp events?
- 4. Explain Multidimensional Arrays?
- 5. Differentiate between Properties and Methods.
- 6. What is the purpose of Val function?
- 7. What are Control Structures?
- 8. What is the use of AND operator?
- 9. When should you use Do..Until Loop?
- **10.** What is control Array?

Question #: 3 LongQuestions.

 $(10 \times 3) 30$

- 1. Explain the various control tools in the toolbox.
- 2. Write a program to display first 5 numbers with their squares and cubes.
- 3 Write a program that get ten numbers from user in an array and display maximum number.

Fourth Semester - 2018
Examination: B.S. 4 Years Programme

TIME ALLOWED: 15 Mints.

Roll No.

MAX. MARKS: 10

PAPER: Computer Science-II

Course Code: COMP-212 / IT-22335 Part - I (Compulsory)

Attempt this Paper on this Question Sheet only.

<u>Please encircle the correct option. Each MCO carries 1 Mark. This Paper will be collected back after expiry of time limit mentioned above.</u>

(1x10=10)Q. 1 i. To pick the odd out in C++ in the following: (a) array type (b) character type (c) boolean type (d) integer type Which of the following is used to data print of 5th row 4th column in a matrix a? (a) cout << a[5,4] (b) cout << a[4][3] (c) cout << a[4,5] (d) cout << a(4)(3)iii. Which data type is used to represent the absence of parameters in C++?: (a) int (b) float (c) void (d) double iv. What is output for the statements: for (int i = 0; i <= 3; i = i+1) cout<<(i-1)<<" "; (a) 0 1 2 3 (b) -1 0 1 2 3 (c) 1 2 3 (d) -2 -1 0 1 2 3 v. What does an escape code \a represent? (a) alert (b) backslash (c) tab (d) form feed vi. If x = 2 and y = -2, then for statement "z = -2*x - 5*y" which result is true (a) 6 (b) -4 (c) -6 (d) none vii. Which type is best suited to represent the logical values? (a) integer (b) boolean (c) character (d) all of the mentioned A function named S with void return and argument type, the following call to the function is correct: (a) k1 = S(k2); (b) S(k1); (c) S(); (d) k1 = S(); ix. if a = 13 and b = 26 then for " $b \le 2$ *a the following is correct for: (a) 13 (b) 0 (c) false (d) true x. Pick the odd one out in C++:

(a) integer, character, Boolean, floating (b) for, while (c) if, while (d) All



Fourth Semester - 2018

<u>Examination: B.S. 4 Years Programme</u>

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PAPER: Computer Science-II
Course Code: COMP-212 / IT-22335 Part – II

TIME ALLOWED: 2 Hrs. & 45 Mints. MAX. MARKS: 50

Attempt this Paper on Separate Answer Sheet provided.

Q.2. i.	Write short answers of the following Questions: Discuss with example the following terms in C++: a) If-else (b) do-while (c) sqrt()	6
ii.	Write C ⁺⁺ program which reads in a number from the user and calculates its factorial.	4
iii.	Write C++ program code segment for the following: (a) To sort the data in the array in descending order. (b) To read 10 numbers from user and print them. (c) To read and print cube values of a linear array elements. (d) To read and print a matrix A with 2 rows and 3 columns (e) To determine and print the values for transpose of a matrix	10
Q.3.	Write syntax for a user defined function in C++? What is advantage of a user define function?	2+8
	Write program to implement $f(x) = 7x^3 - 42x^2 + 99x + 90$ for [-6 6] using arrays and function, the interval is given by: h= 0.01. Also, print values of x and $f(x)$, find out sum, minimum and average of $f(x)$ values.	
Q.4.	Suppose A, B, C, D and E are matrices (3x3). Write C ⁺⁺ program which reads in entries of A and B and prints out the entries of: i) $C = 4A + \frac{1}{4}B \text{ and (ii) } D = A - B \text{. (iii) } E = \frac{A + 18C'}{2} \text{. (where } C' \text{ is transpose of C).}$	10
Q.5.	Write syntax of for loop in C++? What is advantage of for loop?	2+8
	For an object thrown at an angle " Θ " and initial velocity " \mathbf{u} ", the horizontal range " \mathbf{R} " is given by: $R = \frac{u^2 \sin(2\theta)}{g}, \text{ where g=9.8 m/s}^2 \text{ and}$ $\mathbf{u} = [120\ 160\] \text{ m/s}, \text{ with h=10}.$ Write a program to print out R against angle Θ values using arrays. Take angle varies from 30^0 to 60^0 in step size of 3^0 . Also calculate maximum value of R at the given data set.	