



# UNIVERSITY OF THE PUNJAB

Second Prof. A/2015

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No. ....

Subject: Pharmacognosy-I

PAPER: 3

TIME ALLOWED: 3 hrs.

MAX. MARKS: 100

*Note: Attempt any FIVE questions. All questions carry equal marks.*

- Q No. 1. (a) Describe the scope of Pharmacognosy. (10)  
(b) Discuss cultivation and collation of crude drugs. (10)
- Q No. 2. (a) What are the methods of evaluation of crude drugs? Discuss organolaptic and chemical evaluation methods in detail. (20)
- Q No. 3. (a) What are enzymes? Classify them. (10)  
(b) Discuss enzymes of Animal origin. (10)
- Q No. 4. (a) What are Insecticides? Discuss different types of insecticides. (10)  
(b) Write down different methods of adulteration. (10)
- Q No. 5. (a) Discuss Gibberellins in detail. (10)  
(b) Give Biological source of Ginger, Thyme and Senna. (10)
- Q No. 6. Classify the allergens. Discuss injectant and infestant allergens in detail. (20)
- Q No. 7. (a) Write down the chemical classification of crude drugs. (10)  
(b) Describe the History of medicine. (10)
- Q No. 8. Write detail of three drugs belonging Labiatae family. (20)



# UNIVERSITY OF THE PUNJAB

Second Prof. A/2016  
Examination: Doctor of Pharmacy (Pharm.D.)

Roll No. ....

Subject: Pharmacognosy-I  
PAPER: 3 (Old & New Course)

TIME ALLOWED: 3 hrs.  
MAX. MARKS: 100

**NOTE: Attempt any FIVE questions. All questions carry equal marks.**

- Q-No.1. What are different steps involved in the preparation of crude drugs? 20
- Q-No.2. (a) Define allergen and give classification of allergens. 10+10  
(b) Discuss in detail cell mediated allergy with examples.
- Q-No.3. (a) What are enzymes? Discuss enzymes having thrombolytic activity. 10+10  
(b) Write a note on Bromelain.
- Q-No.4. (a) Discuss organophosphate poisoning. 10+10  
(b) What are the herbicide and fungicide? Give examples.
- Q-No.5. Explain chemical evaluation of crude drugs with examples. 20
- Q-No.6. Explain the drugs of Apocynaceae and Liliaceae family. 20
- Q-No.7. Write a note on plant growth promoters. 20



# UNIVERSITY OF THE PUNJAB

Second Prof. 2<sup>nd</sup> A/2016

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No. ....

**Subject: Pharmacognosy-I**  
**PAPER: 3 (Old & New Course)**

**TIME ALLOWED: 3 hrs.**  
**MAX. MARKS: 100**

***NOTE: Attempt any FIVE questions. All questions carry equal marks.***

- Q-No.1.** (a) What are the different factors causing deterioration of crude drugs? 10+10  
(b) What are different measures taken for the preservation of crude drugs?
- Q-No.2.** (a) Define Allergy and allergens. Discuss in detail contactant allergens. 10+10  
(b) Discuss mechanism of immediate type of allergy.
- Q-No.3.** (a) What are Proteolytic enzymes? Discuss in detail pepsin and also give its method of preparation. 10+10  
(b) Given salient features of enzyme classification Commission on enzymes.
- Q-No.4.** (a) What are pesticides? Classify pesticides. 10+10  
(b) Write a short note on plant growth inhibitors.
- Q-No.5.** (a) Describe the mechanical methods of pest control. 10+10  
(b) Describe Pharmacognostic features of Catharanthus and Opium.
- Q-No.6.** Describe in details the crude drugs belong to Umbelliferae family. 20
- Q-No.7.** Explain with examples physical and chemical evaluation of crude drugs. 20



# UNIVERSITY OF THE PUNJAB

Second Prof: A/2017

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No. ....

Subject: Pharmacognosy-I  
PAPER: 3 (Old & New Course)

TIME ALLOWED: 3 hrs.  
MAX. MARKS: 100

**NOTE: Attempt any FIVE questions. All questions carry equal marks.**

Q-No.1.

(A) Define the following terms

i) Iodine value

ii) Infestant allergen

iii) Biologics

iv) Substitution

(B) What are enzymes? Write their properties and discuss lock and key model? (10+10)

Q-No.2

(A) Define Allergy and allergens? Discuss in detail inhalant allergens? (10+10)

(B) Discuss the Unani and Homeopathic system of medicine?

Q-No.3

(A) Write down a brief note on ethylene?

(10 +10)

(B) Discuss in detail the preservation of crude drugs against deterioration?

Q-No.4

(A) What are Proteolytic enzymes? Discuss in detail pepsin also give method of preparation?

(B) Write down a brief note on Gibberellins?

(10+10)

Q-No.5

(A) Define and classify pesticides?

(04+16)

(B) What you know about honey, gelatin, spermaceti and cod liver oil?

Q-No.6.

Describe in details about the crude drugs belong to Ranunculaceae and papaveraceae family?

(20)

Q-No.7.

Explain the organoleptic evaluation with reference to the characteristic of leaf? (20)



# UNIVERSITY OF THE PUNJAB

Second Prof: 2<sup>nd</sup> Annual - 2017

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No. ....

Subject: Pharmacognosy-I  
PAPER: 3 (Old & New Course)

TIME ALLOWED: 3 hrs.  
MAX. MARKS: 100

**NOTE: Attempt any FIVE questions. All questions carry equal marks.**

Q-No.1.

What are different steps involved in the preparation of crude drugs for commercial market 20

Q-No.2.

Explain the drugs of Leguminosae and compositae? 20

Q-No.3.

(A) Write the source, preparation method and uses of bromelain, rennin and papain? 15+05

(B) What you know about Ash value?

Q-No.4.

(A) Discuss mechanism of immediate type of allergy? 10+10

(B) What are the natural herbicide and briefly discuss fungicide? Give examples

Q-No.5.

Explain microscopic evaluation with examples? 20

Q-No.6.

(A) Write down treatment and diagnosis of allergy?

(B) Write down brief note on growth regulators with example? 10+10

Q-No.7.

(A) Discuss in detail the preservation of crude drugs against deterioration?

(B) Define the following terms? 10+10

1) Composition of papain enzyme

3) CAM

2) Hay fever

4) surgical dressing



# UNIVERSITY OF THE PUNJAB

Second Prof: Annual – 2018

Examination: Doctor of Pharmacy (Pharm.D.)

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Roll No. ....

**Subject: Pharmacognosy-I (Basic) (New Course)**

**PAPER: 3 (Part – II)**

**TIME ALLOWED: 2 Hrs. & 30 min.**

**MAX. MARKS: 80**

*Attempt this Paper on Separate Answer Sheet provided.*

**Attempt any Four questions. Each question carry equal marks.**

- Q-No.2 Discuss the following
- (a) Morphological classification 10
  - (b) Cantharides 5
  - (C) Shellac 5
- Q-No.3 (a) Define allergens? Discuss various types of allergens? 10
- (b) Describe the chemical test used for the evaluation of fibers in surgical dressings 10
- Q-No.4 (a) Define and classify the vaccines? Gives the details Yellow fever 10
- (b) Differentiate endotoxin and exotoxins? Describe Diphtheria antitoxin? 10
- Q-No.5 Define and classify the enzymes on the bases of source? Discuss papain in detail. 20
- Q-No.6. Describe in details about the crude drugs belongs Solanaceae family? 20
- Q-No.7. Explain the microscopic evaluation with examples? 20



# UNIVERSITY OF THE PUNJAB

Second Prof: Annual – 2018

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No. ....

Subject: Pharmacognosy-I (Basic) (New Course)

TIME ALLOWED: 30 min.

PAPER: 3 Part – I (Compulsory)

MAX. MARKS: 20

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.

1. Proteolytic enzymes are.....

- a) S-containing protein digesting
- b) C-containing protein digesting
- c) H-containing protein digesting
- d) All of them

2. Pepsin is reversibly deactivated at pH

- a) 7
- b) 5
- c) 6
- d) None

3. Artificial silk is -----

- a) Synthetic fiber
- b) Regenerated fiber
- c) Regenerated fiber from carbohydrates
- d) Regenerated fiber from lipids

4. When rayon is wetted it loses its-----

- a) Shape
- b) flexibility
- c) hardness
- d) tensile strength

5. Lac contains resins-----

- a) 60-80%
- b) 50-70%
- c) 70-80%
- d) 90%

6. Amberen is-----

- a) Triterpene alcohol
- b) Triterpene ketone
- c) Triterpene ester
- d) None

7. Cod liver oil is a-----oil.

- a) Thin
- b) Thick
- c) Transparent
- d) 1 and 3

8. Spermaceti is -----substance

- a) Oily
- b) Waxy
- c) Fatty
- d) Both 1 and 2

(P.T.O.)



9. Adhesive tapes are-----

- a) Rubber based      b) Acrylated based      c) Plastic based      d) 1 and 2

10. Maceration of wound is minimized by

- a) Primary dressing      b) Secondary dressing      c) Both 1 and 2      d) None

11. Silk sutures are ----- strand.

- a) Single      b) Double      c) Triple      d) Twisted

12. Protectives are used to cover---

- a) Wound      b) Wet dressing      c) Both 1 and 2      d) None

13. Cellulose fibers under LM are-----

- a) unicellular and non-glandular      b) Multicellular      c) Unicellular and glandular      d) None

14. All of the following are given as S/C injections except

- a) Botulism antitoxins      b) Pneumococcal vaccine      c) Rabies vaccine      d) Yellow fever vaccine

15. Replacement of fructose with glucose is which type of adulteration.

- a) Admixture      b) Deterioration      c) Substitution      d) Sophistication

16. Morphine is converted to heroin upon

- a) Hydroxylation      b) Acetylation      c) Alkylation      d) Reduction

17. Which of the following is selective herbicide?

- a) 2,4 dichloro phenoxy acetic acid      c) Potassium cyanide  
b) Copper sulphate      d) Diethyl toluamide

18. Auxins are involved in

- a) Thigmotropism      b) Phototropism      c) Apical dominance      d) All of the above

19. The major volatile oil in caraway fruit is

- a) Carveol      b) Carvone      c) Carvacrol      d) Limonene

20. Aromatic odour and pungency of ginger is due to the presence of

- a) Volatile oils      b) Oleoresins      c) Carbohydrates      d) Mucilage





# UNIVERSITY OF THE PUNJAB

Second Prof: 2<sup>nd</sup> Annual – 2018

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No. ....

Subject: Pharmacognosy-I (Basic) (New Course)

PAPER: 3 Part – II

MAX. TIME: 2 Hrs. 30 Min.

MAX. MARKS: 80

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

**NOTE: ATTEMPT ANY FOUR QUESTIONS. EACH QUESTION CARRIES EQUAL MARKS.**

Q-No.2 Discuss the following

- |                               |    |
|-------------------------------|----|
| (a) Collection of crude drugs | 10 |
| (b) Cod liver oil             | 5  |
| (c) Musk                      | 5  |

Q-No.3 (a) Define hypersensitivity? Discuss type-III hypersensitivity? 10

(b) Describe catgut and cellulose? 10

Q-No.4 Write note on the following 10+10

- (a) Snake venom (b) Auxin

Q-No.5 Explain the organoleptic evaluation with examples? 20

Q-No.6. Describe in details about the following crude drugs 20

- (a) Pepermint  
(b) Catharanthus  
(c) Artemisia  
(d) Calotropis gigantean

Q-No.7. Discuss the properties of enzymes and explain the pepsin in detail enzymes? 20



# UNIVERSITY OF THE PUNJAB

Second Prof: 2<sup>nd</sup> Annual – 2018

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No. in Fig. ....

Roll No. in Words. ....

Subject: Pharmacognosy-I (Basic) (New Course)

MAX. TIME: 30 Min.

PAPER: 3 Part – I (Compulsory)

MAX. MARKS: 20

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. (20x1=20)**

1. Action of the enzymes is effected by

- a) pH of the medium
- b) Presence of other substances
- c) light UV, X-ray and light
- d) All of the above

2. Each class of enzyme has.....sub classes

- a) 5-13
- b) 5-12
- c) 4-13
- d) 2-14

3. For the treatment of infants celiac pancreatin is given in -----from

- a) Tablet
- b) Syrup
- c) Granules
- d) Enteric coated granules

4. keratin is .....

- a) S-containing protein
- b) C-containing protein
- c) H-containing
- d) All above

5. Ginning process is used in the preparation of pure cotton for----

- a) Removal of fats
- b) Dirt removal
- c) Seeds removal
- d) All of the above

6. Ambergris is a -----product

- a) Pathological
- b) Physiological
- c) Natural
- d) None of above

7. Civetol is converted into civetone by---

- a) Redox reaction
- b) Neutralization
- c) Rearrangement
- d) Oxidation

8. Cantharidin is a -----

- a) Alkaloid
- b) Glycoside
- c) Fat
- d) Ketone

9. -----is one of the important example of absorbable sutures.

- a) Catgut
- b) Ligature
- c) Suture
- d) All

P.T.O.

10. Contact dermatitis is an example of which type of hypersensitivity reaction

- a) Type I                      b) Type II                      c) Type III                      d) Type IV

11. Papain contain N-----and S-----

- a) 15% and 1%              b) 15.5% and 1.2%              c) 16% and 3%                      d) None

12. Viscose rayon ash contain-----

- a) N                              b) S                              c)  $Mg^{++}$                       d) None

13. Drugs containing volatile oils can be dried at temperature

- a) 40-65 °C                      b) Less than 35 °C                      c) More than 35 °C                      d) None of the above

14. Reagent used for the microscopic identification of starch

- a) Phloroglucinol              b) Ferric chloride                      c) Sudan III                      d) Iodine

15. Which of the following belongs to contact poison insecticides

- a) Thallium sulphate                      b) Calcium arsenate                      c) Rotenone                      d) Citronella oil

16. Which of the following is used after the attack of fungus

- a) Copper carbonate                      b) Mercury compounds                      c) Copper sulphate                      d) Chlorophenol

17. Plant hormone which inhibits growth is

- a) Absciscic acid                      b) Ethylene                      c) Auxins                      d) Gibberellins

18. Antidote to strychnine is

- a) Asafoetida                      b) Stramonium                      c) Veratrum                      d) Conium

19. Which of the following antibody is involved in type I hypersensitivity reaction

- a) Ig M                              b) Ig G                              c) Ig E                              d) All of the above

20. All of the following crude drugs contains alkaloids except

- a) Stramonium                      b) Belladonna                      c) Cassia                      d) Aconitum



# UNIVERSITY OF THE PUNJAB

Second Prof: 2<sup>nd</sup> Annual – 2018

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No. ....

Subject: Pharmacognosy-I (Old Course)

PAPER: 3

MAX. TIME: 3 Hrs.

MAX. MARKS: 100

*Attempt this Paper on Separate Answer Sheet provided.*

**Attempt any Five questions. Each question carry equal marks.**

- Q-No.1 Discuss the steps involved in the preparation of crude drugs? 20
- Q-No.2 (a) Give the mechanisms involved in various types of allergy ? 10  
(b) Discuss in detail about Inhalant allergy? 10
- Q-No.3 Define Pesticides, Fungicides and herbicides? Write in detail Tobacco and pyrethrum? 20
- Q-No.4 Give classification of enzymes? Discuss in detail about the proteolytic enzymes of animal origin? 20
- Q-No.5 Define and classify pesticides? 20
- Q-No.6 Describe in details about the crude drugs belonging to Umbelliferae family? 20
- Q-No.7 Explain the chemical evaluation of crude drugs? 20



# UNIVERSITY OF THE PUNJAB

Doctor of Pharmacy (Pharm.D.) Second Prof: Annual-2019

Subject: Pharmacognosy-I (Basic) (New Course)

Paper: 3 Part - I (Compulsory)

Time: 30 Min. Marks: 20

Roll No. in Fig. ....

Roll No. in Words. ....

Signature of Supdt.: .....

**ATTEMPT THIS PAPER ON THIS QUESTION SHEET ONLY.**

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 option.**

**(20x1=20)**

1. Crude Drug is under the class of organized drug
  - a. Leaves
  - b. Exudates
  - c. Mucilage
  - d. Gums
2. Drug which belongs to fruit class
  - a. Opium
  - b. Fennel
  - c. Ginger
  - d. Turmeric
3. Type of Poppy fruit is
  - a. Drupes
  - b. Berry
  - c. Capsule
  - d. Schizocarps
4. Hepatoprotective effect of *Silybum marianum* is due to
  - a. Dimer flavan-3,4-diol
  - b. Monomer flavon-3-ol
  - c. Flavanolignan
  - d. Simple flavanone-glycoside
5. Fresh Vanilla is dried by the method of
  - a. Shade drying
  - b. Sun drying
  - c. Artificial drying
  - d. Curing
6. Cinchona is used as
  - a. Antifungal
  - b. Antibacterial
  - c. Antimalarial
  - d. Antiviral
7. Poliomyelitis vaccine is
  - a. Monovalent
  - b. Divalent
  - c. Trivalent
  - d. Tetravalent
8. Gibberellic acid is obtained from the following source
  - a. Animals
  - b. Plants
  - c. Fungi
  - d. Bacteria
9. Pepsin is effective in media of pH
  - a. Acidic
  - b. Basic
  - c. Neutral
  - d. All of the above
10. Papain enzyme is obtained from
  - a. Unripe fruit
  - b. Ripe fruit
  - c. Stem
  - d. All of the above

P.T.O.

11. Crude drug used therapeutically for gout
- Cholchicum
  - Ergot
  - Fennel
  - Poppy flower
12. Digitalis is source of
- Cardioactive glycosides
  - Anthraquinone glycosides
  - Saponin glycosides
  - Lactone glycosides
13. Glycyrrhiza is used as
- Expectorant drug
  - Anthelmintic drug
  - Carminative drug
  - Hepatoprotective drug
14. Toxins are
- Viral waste products
  - Bacterial waste products
  - Fungal waste products
  - All of the above
15. Contactant allergen in lipstick is
- Mono-bromofluorescein
  - Di-bromofluorescein
  - Tri-bromofluorescein
  - Tetra-bromofluorescein
16. Erythema smaller than 20mm in diameter is clinically represented by the sign of
- $\pm$
  - +
  - ++
  - +++
17. Infestant allergy is caused by
- Parasites
  - Bacterial waste
  - Fungus
  - Virus
18. Histological studies of crude drugs are
- Physical Evaluation
  - Chemical Evaluation
  - Microscopic Evaluation
  - Organoleptic Evaluation
19. Qualitative analysis of crude drugs include EXCEPT
- Stomatal index
  - Vein termination number
  - Assay
  - Optical Index
20. Cell Enlargement is regulated by
- Ethylene
  - Gibberellins
  - Cytokinins
  - Abscisic acid





# UNIVERSITY OF THE PUNJAB

Doctor of Pharmacy (Pharm.D.) Second Prof: Annual-2019

Roll No. ....

Subject: Pharmacognosy-I (Basic) (New Course)

Paper: 3 Part - II

Time: 2 Hrs. 30 Min. Marks: 80

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

**Note: Attempt any *FOUR* questions. Each question carries equal marks.**

- Q. No. 2: Describe the medicinal significance of following crude drugs. 5×4=20**
- a) Senna
  - b) Aloe
  - c) Silybum
  - d) Asafoetida
- Q. No. 3: a) Explain Physical evaluation of crude drugs with examples. 10**  
**b) Describe the Homeopathic system of medicines. 10**
- Q. No. 4: a) Discuss various types of crude drugs with examples. 10**  
**b) Describe the collection and drying processes in the preparation of crude drugs. 10**
- Q. No. 5: Describe the toxicology of following poisonous plants. 4×5=20**
- a) *Datura stramonium*
  - b) *Gelsemium sempervirens*
  - c) *Lobelia inflata*
  - d) *Euphorbia milii*
  - e) *Conium maculatum*
- Q. No. 6: a) Describe Agricultural and Chemical methods for control of pests. 10**  
**b) Describe the role of Auxins for the growth of plants secondary metabolites. 10**
- Q. No. 7: Write note on any TWO of followings 10×2=20**
- a) Renin
  - b) Cantharides
  - c) Yellow Fever vaccine
  - d) Inhalant Allergens



# UNIVERSITY OF THE PUNJAB

Doctor of Pharmacy (Pharm.D.) 2<sup>nd</sup> Prof: Annual-2021

Roll No. ....

Subject: Pharmacognosy-I (Basic) (New Course)

Paper: 3

Part – II

Time: 2 Hrs. 30 Min. Marks: 80

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

**Note: Attempt any *FOUR* questions. Each question carries equal marks.**

2. What are pesticides. Explain the mechanical and biological methods used for the pest control. 20
3. Define allergy. Explain Ingestant and Contactant allergens in detail. 20
4. Write pharmacognostic notes on the following  
a) Digitalis    b) Belladonna    c) Cantharoids 20
5. Discuss any two medicinal plants belongs to family Leguminosae. 10+10
6. What are Phytoenzymes. Describe Malt extract and Renine in detail. 20
7. Write notes on  
a) Ethylene    b) Organoleptic Evaluation of crude drugs 10+10



# UNIVERSITY OF THE PUNJAB

Doctor of Pharmacy (Pharm.D.) 2<sup>nd</sup> Prof: Annual-2021

Subject: Pharmacognosy-I (Basic) (New Course)

Paper: 3

Part - I (Compulsory)

Time: 30 Min. Marks: 20

Roll No. in Fig. ....

Roll No. in Words. ....

Signature of Supdt.: .....

Attempt this Paper on this Question Sheet only.

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. (20x1=20)**

1. Catharanthus contains \_\_\_\_\_

a. Glycosides

c. Alkaloids

b. Tannins

d. Carbohydrates

2. Rauwolfia contains ajmalanine which is \_\_\_\_\_

a. Glycosides

c. Alkaloids

b. Tannins

d. Carbohydrates

3. Lyases catalyse removal of groups from substrate by \_\_\_\_\_

a. Oxidation

c. hydrogenation

b. Hydrolysis

d. Sublimation

4. Renin is present in the \_\_\_\_\_ of mammals

a. Skin

c. Mucous membranes

b. Intestine

d. Hairs

5. \_\_\_\_\_ is a mucolytic enzyme

a. Trypsin

c. Hyaluronidase

b. Bromelains

d. Papain

6. Senna contains

a. Glycosides

c. Alkaloids

b. Volatile oil

d. Resins

7. Which one is the volatile oil containing family

a. Labiateae

c. Solanaceae

b. Asteraceae

d. Liliaceae

8. Fruit is a cremocarp in

a. Solanaceae

c. Ranunculaceae

b. Umbellifereae

d. Zingiberaceae

9. The other name for rennin is

a. Pepsin

c. Pancrealipase

b. Chymosin

d. Bromelain

10. Bromelain is obtained from

a. Carica papaya

c. Hordeum vulgate

b. Ananascomosus

d. Bostaurus

11. Which one is not the use of bromelain

a. Natural blood thinner

b. Accelerate tissue repair

c. Reduces inflammation & Edema

d. Digests

12. Warfarine toxic dose is \_\_\_\_\_

a. 1mg/kg of the body weight

b. 50mg/kg of the body weight

c. 0.5mg/kg of the bodyweight

d. .005mg/kg of the body weight

13. Synthetic contact insecticides are \_\_\_\_\_

a. Inorganophosphorousderrivatives

b. Non-chlorinated hydrocarbon

c. Inorganic sulpher compounds

d. Organic sulpher compounds

14. Citronilla oil is used as \_\_\_\_\_

a. Repellent

b. CNS stimulant

c. Cardioactive agent

d. neurotoxic

15. Interfering with the life cycle and food supply of the pest is the

\_\_\_\_\_ method of pest control

a. Mechanical

b. Chemical

c. Agricultural

d. Environmental

16. Agricultural method of pest control include \_\_\_\_\_

a. Crop rotation

b. Development of new crop

c. Chemical sprays

d. Hand picking

17. Allergy was defined by Von Pirquet in \_\_\_\_\_

a. 1900

b. 1906

c. 1952

d. 1960

18. Allergens is also called as \_\_\_\_\_

a. Foreign agent

b. Immunogen

c. Antibody

d. Toxin

19. Allergen cannot be \_\_\_\_\_ in nature.

a. Bioloigic

b. Chemical

c. synthetic

d. Atomic

20. Fennel belongs to family \_\_\_\_\_

a. Umbelliferae

b. Asclepiadaceae

c. Solanaceae

d. Labiatae