

SUBJECT CODE NO:- Y-2032

FACULTY OF SCIENCE

B.Sc. F.Y (Sem-II) Examination March/April 2017

Botany Paper-V / (VI 2009 Pattern)

Histology Anatomy and Embryology

[Time: 1:30 Hours]

[Max.Marks:50]

N.B

Please check whether you have got the right question paper.

i) Attempt all questions.

ii) Draw neat and well-labeled diagrams wherever necessary.

Q.1 Describe in details the simple permanent tissues in plants.

20

OR

Explain in details the primary structure of monocot root.

Q.2 Explain the development of embryo in dicot plants.

20

OR

Write short notes on: (any one)

- Xylem cells
- Tunica corpus theory of apical cellular organization.
- Structure of pteriderm
- Dorsiventral and isobilateral leaves.
- L.S. of anatropous ovule
- Structure of dicot and monocot seeds.

Q.3 Multiple choice questions

10

- The only types of tissue in which cell are capable of dividing is.....
 - Epidermal
 - Meristem
 - Xylem
 - Phloem
-type of living tissue has thin walled, food storing cells.
 - Parenchyma
 - Collenchymas
 - Sclerenchyma
 - Aerenchyma
- CO₂ and O₂ are exchanged in plants mainly through the.....on leaves.
 - Trichomes
 - Spines
 - Stomata
 - Oil glands
- Function of conduction in plants is assigned to.....
 - Vascular tissues
 - Epidermal tissues
 - Secretory tissues
 - Meristematic tissues
- The compactly arranged, columnar and chloroplast containing cells of leaf mesophyll are called as.....
 - Spongy parenchyma
 - Palisade
 - Guard cells
 - Medullary rays

6. Phelloderm is a part of.....
 - a) Corter
 - b) Epidermins
 - c) Mesophyll
 - d) Periderm
7. Egg apparatus of embryo sac is the association of.....
 - a) Egg cell and nucleus
 - b) Egg cell and antipodals
 - c) Egg cell & polar nuclei
 - d) Egg cell and synergids
8. Integuments are.....in functions.
 - a)Protective
 - b)Nutritive
 - c) Decorative
 - d) Reproductive
9. Pollen grain are produced in.....
 - a) Pollen sac
 - b) Ovule
 - c) Embryo sac
 - d) Tapetum
10. In..... ovules, micropyle, embryo sac and chanlaga are inverted in position.
 - a) Orthotropous
 - b) Anatropous
 - c) Campylotropous
 - d) Atropous

SUBJECT CODE NO:- Y-2031

FACULTY OF SCIENCE

B.Sc. F.Y (Sem-II) Examination March/April 2017

Botany Paper- IV / (V 2009 Pattern)

Diversity of Cryptogams-II

[Time: 1:30 Hours]

[Max.Marks:50]

Please check whether you have got the right question paper.

N.B

- i) Attempt all questions .
- ii) Illustrate your answer with suitable labeled diagrams

Q.1 Describe the structure of sporophyte of Marchantia 20
OR
With the help of suitable diagrams describe the structure of the gametophyte of funaria .

Q.2 Describe the vegetative structure of sporophyte of psilotum 20

OR

Write short note on (Any four)

- A)General characters of Bryophytes
- B)Apophysis
- C)Prothallus of Equisetum
- D)External morphology of Marsilea
- E)Prothallus of Lycopodium
- F)Sporophyte of selaginella

Q.3 Multiple choice questions 10

- 1)Bryophytes grows in habitats that are _____
 - a) Marshy
 - b)Dry
 - c)salty
 - d)moist
- 2)The most advanced sporophyte in bryophyte is _____
 - a)Funaria
 - b)Marsilea
 - c)Marchantia
 - d)Lycopodium
- 3)In Funaria the reduction division takes place in the _____
 - a)Anthridium
 - b)Arch gonium
 - c)Capsule
 - d)Zygote
- 4)Scales bearing bryophyter is _____
 - a)Polytricum
 - b)Anthoceros
 - c)Funaria
 - d)Marchantia
- 5)In bryophytes spores are _____
 - a)Multi flagellate
 - b)Non-flagellate

c)Biflagellate

d)None of these

6)Club moss is the common name of _____

a)selaginella

b)psilotum

c)Equisetum

d)Lycopodium

7)Ligule and cone are found in _____

a)Selaginella

b)Lycopodium

c)Psilotum

d)Marsilea

8) _____ plant is commonly known as water fern

a)Marsilea

b)Selaginella

c)Lycopodium

d)Psilotum

9)Ridges and Grooves is a feature of stem of _____

a)Marsilea

b)Equisetum

c)Psilotum

d)Lycopodium

10)Endophytic mycorrhiza is a feature of rhizome of _____

a)Marsilea

b)Equisetum

c)Psilotum

d)Lycopodium

SUBJECT CODE NO:- Y-2189
FACULTY OF SCIENCE
B.Sc. F.Y (Sem- I) Examination March/April 2017
Botany Paper-I
Diversity of Cryptogams-I

[Time: 1:30 Hours]

[Max.Marks:50]

Please check whether you have got the right question paper.

N.B

- i) Attempt all questions.
- ii) Illustrate your answer with suitable labelled diagram.

Q.1 Explain in detail general characters nature of association and forms of thalli in Lichens. 20

OR

Explain systematic position, thallus structure and sexual reproduction in chara.

Q.2 Describe systematic position, and reproduction in Agaricus. 20

OR

Write short note on (any four)

- a) General characters of mycoplasma.
- b) Reproduction in Usnea
- c) Vegetative reproduction in Nostoc.
- d) General characters of algae.
- e) General characters of fungi.
- f) A sexual reproduction in mucor.

Q.3 Multiple choice questions. 10

- 1) Free living bacterium capable of fixing atmospheric nitrogen is _____.
 - a) Stephalococcus.
 - b) Streptococcus.
 - c) Azotobactor.
 - d) None of these.
- 2) Cyphellae in lichen are analogous to _____ of higher plants.
 - a) Stomata
 - b) Palisade tissue
 - c) Mesophyll
 - d) Bundle sheath
- 3) Bacteriophages consist of _____.
 - a) Carbon & nitrogen
 - b) DNA
 - c) Protein
 - d) Carbohydrates

- 4) Viruses first discovered by _____
- K. M. Smith
 - E. C. Stakman
 - W. M. Stanley
 - D. Iwanowski
- 5) Female sex organ of *Batrachospermum* is _____.
- Oogonium
 - Sporogonium
 - Archegonium
 - Carpogonium
- 6) Very elaborated post fertilization changes are seen in _____
- Chara
 - Sargassum
 - Botrydium
 - Nostoe
- 7) Member of cyanophyceae are commonly called as _____
- Blue green algae
 - Red algae
 - Brown algae
 - Green algae
- 8) White rust of crucifers is caused by _____
- Albugo candida*
 - Pythium debaryonum*
 - Cercospora personata*
 - Phyllactenia*
- 9) Tikka disease of groundnut is caused by _____
- Perenospora*
 - Cercospora*
 - Albugo*
 - Pythium*
- 10) Fungi differ from algae in being _____
- Heterotrophic
 - Autotrophic
 - Parasitic
 - Epiphytic

SUBJECT CODE NO:- Y-2190
FACULTY OF SCIENCE
B.Sc. F.Y (Sem- I) Examination March/April 2017
Botany Paper-II
Morphology of Angiosperms

[Time: 1:30 Hours]

[Max.Marks:50]

Please check whether you have got the right question paper.

N.B

- i) Attempt all Questions
 ii) Illustrate your answer with suitable labeled diagram.

- Q.1 Describe regions of Root, modification of root for mechanical support and vital functions. 20
 OR
 Describe functions of stem and under ground modification of stem.
- Q.2 What is fruit and Describe various types of fruits. 20
 OR
 Write short Notes on (any four)
 a) Runner
 b) Pitcher
 c) umbel inflorescence
 d) cohesion of stamens
 e) Sorosis fruit
 f) Dispersal of seeds & fruits by water.
- Q.3 Multiple choice Question. 10
- 1) The tap root system is commonly Found in _____
 a) Dicotyledons b) Monocotyledons c) Bryophyta d) None of these
 - 2) Phylloclade is a modification of _____
 a) stem b) Root c) leaf d) Petiole
 - 3) When the apex of leaf is round, is called as _____
 a) Acute b) Obtuse c) Acuminate d) Cuspidate
 - 4) Fusiform Root is Found in _____
 a) Radish b) Turnip c) Carrot d) Wheat
 - 5) Stalk of leaf is called as _____
 a) Peduncle b) Petiole c) Pedicel d) None of these
 - 6) The main axis is elongated in _____
 a) Raceme b) Spike c) Catkin d) All the above
 - 7) The elongated internode between corolla & Androecium is known as _____
 a) Androphore b) Gynophore c) Gynandrophore d) None of these.
 - 8) A stamen consist of filament and _____
 a) Carpet b) Anther c) both of these d) None of these .
 - 9) Custard – apple is An entomophilous fruit
 a) Follicles b) achenes c) Drupe d) Berries.
 - 10) The dispersal of seeds of chinchona and orchids takes place by _____
 a) Wind b) Water c) Bats d) Birds.

2017