Department of Botany

Internal examination – I Question bank

Semester II

Paper: Gymnosperm, Anatomy and Embryology of Angiosperms

I.Multiple choice questions

1. Gymnosperms are characterized by

A. Seeds enclosed in fruits

B. Naked seeds

C. Absence of vascular tissue

D. Double fertilization

Answer: B

2. Which of the following is a living fossil?

A. Pinus

B. Cycas

C. Gnetum

D. Ephedra

Answer: C

3. The vascular tissue in gymnosperms lacks

A. Tracheids

B. Xylem parenchyma

C. Vessels

D. Phloem

Answer: C

4. Pollination in gymnosperms is mainly by

A. Water

B. Insects

C. Wind

D. Birds

Answer: C

5. Which gymnosperm shows vessels in xylem?

A. Cycas

B. Pinus

C. Gnetum

D. Cedrus

Answer: C

6. The female cone of Pinus is called

A. Strobilus

B. Sporophyll

C. Ovuliferous cone

D. Microsporangium

Answer: C

7. The endosperm in gymnosperms is

A. Triploid

B. Diploid

C. Haploid

D. Tetraploid

Answer: C

8. The dominant phase in the life cycle of gymnosperms is

A. Gametophyte

B. Sporophyte

C. Protonema

D. Thallus

Answer: B

9. Archegonia are absent in

A. Cycas

B. Pinus

C. Gnetum

D. All gymnosperms

Answer: C

10. Male cones of Pinus bear

A. Ovules

B. Megasporangia

C. Microsporangia

D. Archegonia

Answer: C

11. Study of fossils is known as

A. Taxonomy

B. Palaeobotany

C. Embryology

D. Ecology

Answer: B

12. Which is a type of fossilization?

A. Carbonization

B. Germination

C. Fertilization

D. Pollination

Answer: A

13. Fossils help in understanding

A. Plant physiology only

B. Evolution of plants

C. Mineral nutrition

D. Plant diseases

Answer: B

14. Meristem responsible for increase in length is

A. Lateral meristem

B. Intercalary meristem

C. Apical meristem

D. Secondary meristem

Answer: C

15. Vascular cambium is an example of

A. Apical meristem

B. Primary meristem

C. Lateral meristem

D. Intercalary meristem

Answer: C

16. Xylem transports

A. Food

B. Water and minerals

C. Hormones

D. Oxygen

Answer: B

17. Phloem tissue mainly consists of

A. Tracheids

B. Vessels

C. Sieve tubes

D. Fibres only

Answer: C

18. The simple permanent tissue among the following is

A. Xylem

B. Phloem

C. Parenchyma

D. Vascular bundle

Answer: C

19. Stomata are mainly involved in

A. Absorption

B. Respiration and transpiration

C. Conduction

D. Protection

Answer: B

20. Bulliform cells are present in

A. Dicot leaf

B. Monocot leaf

C. Stem

D. Root

Answer: B

II. Fill in the Blanks with Answers

1. Gymnosperms are plants with ____ seeds.

Answer: naked

2. The classification of Gymnosperms proposed in 1965 was given by ____.

Answer: Sporne

3. The most widely distributed gymnosperm genus is ____.

Answer: Pinus

4. ____ is commonly known as the living fossil.

Answer: Gnetum

5. The reproductive structures of gymnosperms are called ____.

Answer: cones

6. Gymnosperms lack ____ and fruits.

Answer: flowers

7. Palaeobotany deals with the study of ____.

Answer: fossils

8. Fossilization is the process of preservation of ____.

Answer: plant remains

9. Meristems are tissues responsible for ____ growth.

Answer: active

10. Apical meristems are found at the tips of ____ and roots.

Answer: shoots

11. Simple tissues consist of ____ type of cells.

Answer: one

12. Complex tissues include xylem and ____.

Answer: phloem

13. Epidermal outgrowths are also known as ____.

Answer: trichomes

14. Stomata are mainly involved in ____ exchange.

Answer: gaseous

15. Dicots usually show ____ venation in leaves.

Answer: reticulate

16. Monocot leaves show ____ venation.

Answer: parallel

17. Xylem is mainly responsible for conduction of ____.

Answer: water

18. Phloem transports prepared ____ in plants.

Answer: food

19. Internal structure of leaf is studied under ____.

Answer: anatomy

20. Gymnosperms show ____ fertilization.

Answer: siphonogamous

III. Descriptive questions

1.a. Explain about the pinus needle?

(Or)

b. Explain about Gnetum stem anatomy?

2.a. Explain about meristem types and functions?

(Or)

b. Write about simple tissues?