

The Bodwad Sarvajanic Co- Op. Education Society Ltd., Bodwad

**Arts, Commerce and Science College, Bodwad.**

**Question Bank**

**Class :- F.Y. B.Sc.**

**Sem :- II**

**Subject:- Botany**

**Paper:- Diversity of Archegoniate**

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1. A characteristic feature of bryophytes is

- (a) a dominant and parasitic sporophyte
- (b) a dominant and spore-producing gametophyte
- (c) a small sporophyte phase, which is dependent on the gametophyte**
- (d) sporophytes stay for a longer duration

2. Gametophytic generation is dominant in

- a) Pteridophytes
- b) Bryophytes**
- c) Angiosperms
- d) Gymnosperms

3. The scales in Riccia are

- a) multicelled and appendiculate
- b) multicelled and ligulate**
- c) unicelled and appendiculate
- d) unicelled and ligulate

4. The air cavities in the capsule of moss are partitioned with delicate strands of cells. These are called

- a) septa
- b) trabeculae**

c) partitions

d) compartments

5. The unique feature of bryophytes is that

a) they produce spores

b) they lack vascular tissues

c) they lack roots

**d) they have sporophyte attached to the gametophyte**

6. From protonema, leafy gametophyte is formed in

**(a) Funaria**

(b) Riccia

(c) Marchantia

(d) Anthoceros

7. A common hornwort is

**(A) Anthoceros**

(B) Funaria

(C) Marchantia

(D) Riccia

8. Bryophytes are amphibians of the plant kingdom because

**(A) They require a layer of water for carrying out sexual reproduction**

(B) They occur in damp places

(C) They are mostly aquatic

(D) All the above

9. A fern differs from a moss in possessing

(A) Swimming / flagellate Antherozoids

(B) Flask – shaped archegonia

(C) **Independent sporophyte**

(D) Independent gametophyte

10. Heterospory and ligulate leaves occur in

(A) **Selaginella**

(B) Ferns

(C) Mosses

(D) Liverworts

11. Number of integuments present in the ovule of Pinus / Cycas is

(A) Two

(B) Three

(C) **One**

(D) Four

12. Gymnosperms do not have

(A) Xylem vessels and sieve tubes

(B) Trachieds and sieve tubes

(C) **Sieve tubes and companion cells**

(D) Trachieds and companion cells

13. Spermatozoid of Cycas is

(A) Biflagellate

(B) Nonflagellate

(C) Uniflagellate

(D) **Multiciliate**

14. The common term for class Musci is

a) **Mosses**

b) Sossess

- c) Horn worts
- d) Thorn worts

15. In Bryophytes essential factor for competition of life is

- a) Water**
- b) Soil
- c) Light
- d) Fertilizers

16. The protonema in Funaria is composed of

- a) Leaves and buds**
- b) Rhizoids and Stolons
- c) Rhizoidal and Aerial branches
- d) Seta and Capsule

17. Male sex gamete of Riccia is called

- a) Spermatia
- b) Conidia
- c) Sporotia
- d) Anthozoid**

18. Spores of Funaria germinate to produce.

- a) Buds
- b) Calyx
- c) Protonema**
- d) None

19. Anthridia bearing branch in Funaria is

- a) Antheridiochore
- b) Antheridiophore**

- c) Antheridiome
- d) None of these

20. Funaria peristome consist of following number of sets of peristome teeth

- a) Two**
- b) Three
- c) Four
- d) Eight

21. Capsule of Funaria consist of

- a) Foot, seta and operculum
- b) Foot seta and teeth
- c) Apophysis, theca and operculum**
- d) Foot seta and elaters

22. The presence of two types of leaves on plants is called

- a) Homophily
- b) Isophily
- c) Heterophily**
- d) None of these.

23. Production of two types of spore is referred as –

- a) Homospory
- b) Heterospory**
- c) Isospory
- d) Anisospory

24. Leaves of Adiantum are –

- a) Microphyllous
- b) Simple

c) Compound

**d) Pinnately compound**

25. Antherozoid of Adiantum is

a) Biflagellate

b) Triflagellate

c) Tetraflagellate

**d) Multiflagellate**

26. Phloem is without \_\_\_\_\_ in pteridophytes

(a) Bast fibres

**(b) Companion cells**

(c) Phloem parenchyma

(d) sieve cells

27. Gametophytic phase of Funaria consist of two stages viz

**a) Protenema and leafy gametophyte**

b) Megaspore and Meiospore

c) Apospory and Hydrospory

d) None of these

28. Funaria produce two types of sex organs for sexual reproduction are

a) Meiospore and Mitospore

b) Apospore and Gametes

**c) Antheridia and Archegonia**

d) Spermatia and Trichogyne

29. Sporophyte of Funaria consist of

a) Apophysis, theca and operculum

b) Foot, seta and elaters

**c) Foot, seta and capsule**

d) Body, stalk and teeth

30. Pteridophytes are called

a) Non-vascular cryptogams

b) Cellular cryptogams

**c) Vascular cryptogams**

d) Non-cellular cryptogams

31. Plants belonging to division psilophta

a) Heterosporous

**b) Homosporous**

c) Without sporous

d) Isosporous

32. Spore producing organ in *Adiantum* is –

a) Strobilus

b) Cone

**c) Sori**

d) Rhizome

33. One of the living genus of pteridophyte is –

a) *Elapteris*

b) *Adiantum*

c) *Calamostachys*

**d) *Selaginella*.**

34. This serves as a connecting link between the angiosperms and gymnosperms

**(a) Gnetales**

(b) Coniferales

(c) Ginkgoales

(d) Cycadales

35. In gymnosperms, the ovules typically are

(a) bitegmic and anatropous

(b) bitegmic and orthotropous

**(c) unitegmic and orthotropous**

(d) unitegmic and anatropous

36. Tallest known gymnosperm is

(a) Pinus

(b) Ginkgo

**(c) Sequoia**

(d) Ephedra

37. In *Cycas*, the fern characteristic is

(a) reticulate venation

**(b) circinate venation**

(c) taproot system

(d) coralloid roots

38. In *Cycas*, the spermatozoid is

**(a) Multiciliated**

(b) uniflagellate

(c) non flagellate

(d) biflagellate

39. In *Cycas*, the endosperm is a

(a) post fertilization product and diploid

(b) post fertilization product and haploid



(c) pre fertilization product and diploid

**(d) pre fertilization product and haploid**

40. This is considered to be a living fossil

(a) Podocarpus

(b) Zamia

**(c) Cycas**

(d) Pinus

41. The resin duct in Pinus stem represents a.....

a) large vacuole

b) intercellular space

c) lysigenous cavity

**d) schizogenous cavity.**

42. In Pinus, pollination takes place with the help of

A ) water

**B) wind**

C ) insects

D ) animals

43. In Cycas, archegonium has following number of neck canal cells:

A ) 4

B) 3

C) 2

**D) 0**

44. Each stamen in Cycas is a representation of

**A ) microsporophyll**

B) microsporangium

C ) megasporophyll

D) megasporangium

45. Winged seeds are found in

**A) Cycas species**

B) Pinus species

C) Papaver species

D) None of these

46. Cycas is said to be a living fossil because

A) it is found only in China

B) it looks like a fern tree

C ) it has ciliated sperms

D) it also occurs as a fossil

47. Monoxylic wood consists of

A) compact wood

B) soft-loose wood

C ) compact wood with abundant parenchyma

**D ) soft-loose wood with abundant parenchyma**

48. The wood of Cycas consists of

A) vessels only

**B) tracheitis only**

C) equal number of both

D ) more of tracheids and less of vessels

49. Coralloid roots are found in :

A) Dryopteris

B) Grtetum

C) Pinus

**D) Cycas**

50. The ovuliferous scales of pine cone are comparable to

A) scales

**B) pistils**

C) stamens

D) petals

51. Dwarf shoots of Pinus species have

A) 1-4 leaves

B) 2-5 leaves

C) 2-4 leaves

**D) 1-5 leaves**

52. The revoluta and circinalis are the species of

A) Pirtus

B) Selaginella

**C) Cycas**

D) Funaria

53. Which of the following statements is not true of Pinus ?

A) Presence of ovuliferous scale

**B) Embryo with two cotyledons**

C) Resin canals in needles

D) Tracheids with bordered pits

54. Female cone is absent in

**A) Cycas**

B) Pinus

- C) Taxus
- D) None of these

55. Dimorphic leaves are characteristic of

- A) Ephedra
- B) Cycas
- C) Pinus**
- D) Selaginella

56. Fertilization in gymnosperms is

- A) isogamous
- B) double
- C) oogamous
- D) siphonogamous**

57. 19. Pinus seed is

- (a) Non endospermic and monocotyledonous
- (b) Abaxial and rounded
- (c) Adaxial and endospermic**
- (d) Hypogeal and non endospermic

58. 17. Maiden hair tree is

- (a) Araucaria
- (b) Thuja
- (c) Ginkgo**
- (d) Pinus

59. The stele in fern is

- A) eustele
- B) siphostele

- C ) dictyostele
- D ) none of these

60. The number of megaspores in *Selaginella rupestris* is

- A) one**
- B) two
- C ) three
- D ) four

61. The following is the most primitive vascular plant:

- A ) Ferns
- B) Cycas
- C) Sphagnum
- D) Psilotum**

62. In *Pteris*, the petiole has a groove and its stele is

- A ) Horse shoe shaped**
- B) W-shaped
- C ) M-shaped
- D) Without any definite shape

63. *Selaginella* and fern share the following character:

- A ) Protostelic stele
- B) Leptosporangiate sporangium
- C) Heterospory
- D) Absence of ovules**

64. Leptosporangiate sporangium is

- A) single-celled
- B) multicelled and formed from many cells

C ) multicellular

**D ) multiceiled and formed from a single cell**

65. The stele of Lycopodium is

A) polystele

B) siphonostele

C ) haplostele

**D ) actinostele**

66. Microsporangia and macrosporangia are found in the same cone of

A) Dryopteris

**B) Selaginella**

C) Psilotum

D) Equisetum

67. Important well known ferns are Dryopteris, Pteris Pteridium and

a) equisetum adiantum

b) adiantum equisetum

c) equisetum

**d) adiantum**

68. Anthocerosida possesses stomata and chloroplasts in epidermis which helps it in preparing their own food by

a) mitosis

**b) photosynthesis**

c) meosis

d) calvin cyCLE

69. Archegonium is -----

**a) Flask Shaped**

- b) Cup shaped
- c) Rounded
- d) Star Shaped

70. G.M. Smith divided Bryophytes into -----classes

- a) One
- b) Two
- c) Three**
- d) Four

71. Spore producing structure in Marsilea is -----

- a) Strobilus
- b) Cone
- c) Sporocarp**
- d) None of these

72. Equisetum includes in division ----

- a) Psilophyta
- b) Filicinae
- c) Calamophyta**
- d) Pterophyta

73. Rhizophore of Selaginella is always ---

- a) Diastelic
- b) Monostelic**
- c) Multistelic
- d) None of these

74. Canada balsum is obtained from---

- a) Abies balsamea**

- b) Pinus
- c) Cedrus
- d) Taxus

75. Antheridia and archegonia are born on \_\_\_\_\_ in bryophytes.

A) Sporophyte

**B) Gametophyte**

C) Both of these

D) None of these

76. Antherozoids, the male gamete in bryophytes, are attracted to Archegonium i.e., female sex organ by:

A) Geotropic phenomenon

B) Chemotropic movement

C) Phototactic phenomenon

**D) Chemotactic phenomenon**

77. Mosses are included in which sub-division?

**A) Bryopsida**

B) Lycopsidea

C) Anthoceropsida

D) Hepaticopsida

78. Which of the following species propagates through leaf-tip?

A) Funaria

**B) Walking fern**

C) Moss

D) Marchantia

79. Which of the followings is haploid in Funaria?



A) Seta

**B) Protonema**

C) Columella

D) Capsule

80. Which one helps in spore dispersal in moss?

**A) Peristome teeth**

B) Operculum

C) Columella

D) None of these