

## CHAPTER – 3

### Plant Kingdom

1. Bryophytes are commonly known as:
  - a) Algae
  - b) Mosses and liverworts
  - c) Ferns
  - d) Gymnosperms
2. Which of the following is not a characteristic of angiosperms?
  - a) Presence of flowers
  - b) Production of fruits
  - c) Naked seeds
  - d) Double fertilization
3. Which group of plants is known as vascular cryptogams?
  - a) Algae
  - b) Bryophytes
  - c) Pteridophytes
  - d) Gymnosperms
4. Which of the following is a distinguishing feature of gymnosperms?
  - a) They produce fruits
  - b) They produce naked seeds
  - c) They have a dominant gametophyte phase
  - d) They have flowers
5. The dominant generation in the life cycle of bryophytes is the:
  - a) Sporophyte
  - b) Gametophyte
  - c) Embryophyte
  - d) None of the above
6. Which of the following plants have a dominant sporophyte phase?

- a) Mosses
- b) Ferns
- c) Liverworts
- d) Hornworts

7. The study of algae is called:

- a) Mycology
- b) Phycology
- c) Bryology
- d) Dendrology

8. Which of the following plants produce spores instead of seeds?

- a) Angiosperms
- b) Gymnosperms
- c) Pteridophytes
- d) All of the above

9. In pteridophytes, the plant body is differentiated into:

- a) Root, stem, and leaves
- b) Only stem and leaves
- c) Only root and stem
- d) None of the above

10. Which of the following is a characteristic of dicots?

- a) Parallel venation
- b) Fibrous root system
- c) Two cotyledons
- d) Scattered vascular bundles

11. The reproductive structures in gymnosperms are called:

- a) Flowers

- b) Cones
- c) Spores
- d) Antheridia

12. In algae, sexual reproduction involves the fusion of:

- a) Gametes
- b) Spores
- c) Antheridia
- d) Ovules

13. Which of the following is a true statement about ferns?

- a) They have seeds
- b) They have a dominant gametophyte
- c) They reproduce via spores
- d) They produce flowers

14. Which type of algae is considered the ancestor of land plants?

- a) Brown algae
- b) Red algae
- c) Green algae
- d) Blue-green algae

15. Which of the following is an example of gymnosperms?

- a) Pine
- b) Oak
- c) Fern
- d) Moss

16. Angiosperms are characterized by the presence of:

- a) Naked seeds
- b) Vascular tissue

- c) Flowers and fruits
- d) Rhizoids

17. The dominant generation in the life cycle of pteridophytes is the:

- a) Gametophyte
- b) Sporophyte
- c) Embryophyte
- d) None of the above

18. The term 'gymnosperm' means:

- a) Flowering plant
- b) Naked seeds
- c) Fruit-bearing plant
- d) Spore-producing plant

19. Which of the following are non-vascular plants?

- a) Ferns
- b) Gymnosperms
- c) Bryophytes
- d) Angiosperms

20. Which of the following is an example of a monocot?

- a) Rose
- b) Wheat
- c) Mango
- d) Oak

21. Pteridophytes reproduce through:

- a) Spores
- b) Seeds
- c) Cones

d) Fruits

22. The main pigment responsible for photosynthesis in algae is:

a) Chlorophyll a

b) Phycoerythrin

c) Xanthophyll

d) Carotene

23. Which of the following structures is absent in bryophytes?

a) Chloroplast

b) Vascular tissue

c) Nucleus

d) Spores

24. The process of fertilization in gymnosperms is referred to as:

a) Single fertilization

b) Double fertilization

c) Conjugation

d) Zygotic meiosis

25. Which of the following is an example of a dicot plant?

a) Grass

b) Maize

c) Sunflower

d) Palm

26. Which of the following algae is used as a food supplement due to its high protein content?

a) Chlorella

b) Fucus

c) Laminaria

d) Porphyra

27. Which of the following groups belong to seedless vascular plants?

a) Gymnosperms

b) Pteridophytes

c) Bryophytes

d) Angiosperms

28. Liverworts belong to which group of plants?

a) Algae

b) Bryophytes

c) Pteridophytes

d) Gymnosperms

29. Which of the following is an aquatic plant that is classified as a bryophyte?

a) Chara

b) Riccia

c) Spirogyra

d) Nitella

30. In gymnosperms, pollination occurs through:

a) Water

b) Insects

c) Wind

d) Birds

31. Which of the following is an example of red algae?

a) Ulva

b) Polysiphonia

c) Chlamydomonas

d) Fucus

32. The group of plants known for their ability to fix nitrogen through symbiosis are:

- a) Angiosperms
- b) Gymnosperms
- c) Bryophytes
- d) Algae

33. Which of the following is NOT a feature of monocots?

- a) Parallel venation
- b) Fibrous root system
- c) Single cotyledon
- d) Presence of vascular cambium

34. The fertilization process in flowering plants leads to the formation of:

- a) Seeds
- b) Spores
- c) Rhizoids
- d) Cones

35. Which of the following is classified as brown algae?

- a) Chlamydomonas
- b) Sargassum
- c) Volvox
- d) Spirogyra

36. Which of the following plants reproduce by means of rhizoids?

- a) Algae
- b) Bryophytes
- c) Gymnosperms
- d) Angiosperms

37. Which of the following is an example of green algae?

- a) Fucus
- b) Laminaria
- c) Ulva
- d) Sargassum

38. The haploid gametophyte in mosses produces:

- a) Seeds
- b) Spores
- c) Gametes
- d) Cones

39. In ferns, spore-producing structures are known as:

- a) Sori
- b) Antheridia
- c) Rhizoids
- d) Gametangia

40. Which of the following is classified as an angiosperm?

- a) Pine
- b) Fir
- c) Rose
- d) Cycad

41. The dominant phase in the life cycle of angiosperms is the:

- a) Sporophyte
- b) Gametophyte
- c) Embryophyte
- d) None of the above

42. Which of the following is a characteristic of gymnosperms?

- a) Presence of seeds enclosed in fruits



- b) Presence of cones
- c) Presence of flowers
- d) Double fertilization

43. Which of the following is an example of an epiphyte?

- a) Oak tree
- b) Fern
- c) Orchid
- d) Moss

44. In gymnosperms, fertilization leads to the formation of:

- a) Fruits
- b) Flowers
- c) Naked seeds
- d) Rhizoids

45. Algae differ from plants because they:

- a) Do not contain chlorophyll
- b) Lack vascular tissues
- c) Do not undergo photosynthesis
- d) Do not produce spores

46. Which of the following is an example of brown algae?

- a) Chlamydomonas
- b) Spirogyra
  
- c) Laminaria
- d) Ulva

47. In ferns, the gametophyte is also known as the:

- a) Rhizome
- b) Prothallus
- c) Sporophyll
- d) Sorus

48. Which of the following is the reproductive organ of flowering plants?

- a) Root
- b) Stem
- c) Flower
- d) Leaf

49. Which of the following is an example of a non-vascular plant?

- a) Pine
- b) Rose
- c) Liverwort
- d) Fern

50. Which of the following plants exhibits alternation of generations?

- a) Fern
- b) Moss
- c) Pine
- d) All of the above

**Answer Key for Chapter 3 (Plant Kingdom)**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>B</b>	<b>C</b>	<b>C</b>	<b>B</b>	<b>B</b>
<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
<b>B</b>	<b>B</b>	<b>C</b>	<b>A</b>	<b>C</b>
<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>
<b>B</b>	<b>A</b>	<b>C</b>	<b>C</b>	<b>A</b>
<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
<b>C</b>	<b>B</b>	<b>B</b>	<b>C</b>	<b>B</b>
<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>
<b>A</b>	<b>A</b>	<b>B</b>	<b>A</b>	<b>C</b>
<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>
<b>A</b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>C</b>
<b>31</b>	<b>32</b>	<b>33</b>	<b>34</b>	<b>35</b>
<b>B</b>	<b>D</b>	<b>D</b>	<b>A</b>	<b>B</b>
<b>36</b>	<b>37</b>	<b>38</b>	<b>39</b>	<b>40</b>
<b>B</b>	<b>C</b>	<b>C</b>	<b>A</b>	<b>C</b>
<b>41</b>	<b>42</b>	<b>43</b>	<b>44</b>	<b>45</b>
<b>A</b>	<b>B</b>	<b>C</b>	<b>C</b>	<b>B</b>
<b>46</b>	<b>47</b>	<b>48</b>	<b>49</b>	<b>50</b>
<b>C</b>	<b>B</b>	<b>C</b>	<b>C</b>	<b>D</b>