

Yakeen NEET 2.0 2026

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DPP: 3

Plant Kingdom

- Q1** Which of the following statements is **incorrect**?
- (A) Mosses along with lichens are the first organisms to colonise rocks.
- (B) *Sphagnum* is used as packing material for transportation of living material.
- (C) In liverworts, spores are produced after meiosis within the capsule.
- (D) *Funaria* possesses unicellular unbranched rhizoids.
- Q2** In a moss, the sporophyte:
- (A) manufactures food for itself, as well as for the gametophyte
- (B) is partially parasitic on the gametophyte
- (C) produces gametes that give rise to the gametophyte
- (D) arises from a spore produced from the gametophyte
- Q3** Mosses
- (A) Have less developed sporophyte than liverworts
- (B) Exhibit creeping, green and branched filamentous stage called protonema, which is their juvenile phase
- (C) Show a diplontic life cycle
- (D) May asexually reproduce by gemmae
- Q4** The life cycle of *Ectocarpus* and *Polysiphonia* is:
- (A) Haplo-diplontic
- (B) Haplontic
- (C) Diplontic
- (D) Both haplontic and diplontic
- Q5** If the number of chromosomes in the spore mother cell of a bryophyte is 12, the number of

chromosomes in its protonema, rhizoid and foot of sporophyte respectively would be:

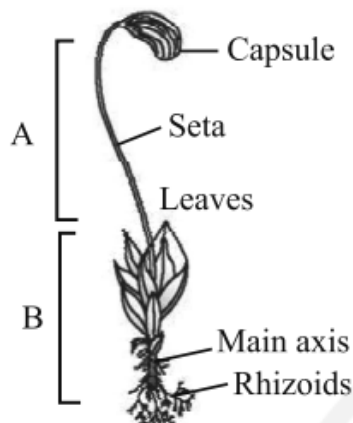
- (A) 6, 12, 12 (B) 6, 6, 12
(C) 12, 12, 6 (D) 6, 12, 6

- Q6** Zygote does not undergo reduction division immediately in
- (A) All algae and mosses
- (B) *Chlamydomonas* and *Polytrichum*
- (C) *Polytrichum* and *Sphagnum*
- (D) All algae and bryophytes
- Q7** In bryophytes, zygote undergoes A and develops into B
- (A) A = Meiosis, B = Haploid sporophyte
- (B) A = Meiosis, B = Diploid sporophyte
- (C) A = Mitosis, B = Haploid embryo
- (D) A = Mitosis, B = Diploid embryo
- Q8** Consider the following statements about the gametophytic stage
- I. Generation that produces the gametes.
- II. Generation that produces the spores.
- III. Generation that produces vascular tissue.
- IV. The diploid generation.
- Choose the correct statements given above.
- (A) Only I
- (B) I and II
- (C) II and III
- (D) I, II, III and IV
- Q9** Read the given statements and select the correct option.
- Statement-A: Each sperm of moss has two flagella.
- Statement-B: Water is essential for fertilization in mosses.

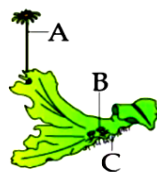


- (A) Both statements A and B are correct
 (B) Statement A is correct but statement B is incorrect
 (C) Statement A is incorrect but statement B is correct
 (D) Both statements A and B are incorrect.

Q10 Choose the correct statement:



- (A) A is sporophyte and is independent
 (B) A is sporophyte and is dependent on B, which is gametophyte
 (C) B is sporophyte and is independent
 (D) B is sporophyte and is dependent on A for food, which is gametophyte
- Q11** Select the option that correctly identifies A, B and C in the given figure of female thallus of *Marchantia*.



- (A) A-Antheridiophore, B-Gemma cup, C-Rhizoids
 (B) A-Antheridiophore, B-Rhizoids, C-Gemma cup
 (C) A-Archegoniophore, B-Gemma Cup, C-Rhizoids
 (D) A-Archegoniophore, B-Rhizoids, C-Gemma Cup
- Q12** Gemmae are asexual reproductive bodies of
 (A) Brown algae (B) Mosses
 (C) Liverworts (D) Red algae

Q13

Gemmae are the specialized structures produced in liverworts. These are

- (A) Non-green, multicellular, asexual buds which develop in gemma cups
 (B) Green, multicellular, asexual buds which develop in gemma cups
 (C) Non-green, multicellular, diploid, sexual spores
 (D) Green, unicellular, diploid, sexual spores.

Q14 In liverworts, how many rows of leaf-like appendages are present on the stem-like structure?

- (A) 1 (B) 2
 (C) 3 (D) 4

Q15 Consider the following statements

- I. The liverworts grow usually in moist, shady habitats such as banks of streams, marshy ground, damp soil, bark of trees and deep in the woods
 II. The leafy members of liverwort have tiny leaflike appendages in two rows on the stem-like structures

Choose the correct option

- (A) I is true, II is false
 (B) I is false, II is true
 (C) I and II are true
 (D) I and II are false

Q16 Assertion (A): The first stage of gametophyte in the life cycle of moss is protonema stage.

Reason (R): Protonema develops directly from spores produced in capsule.

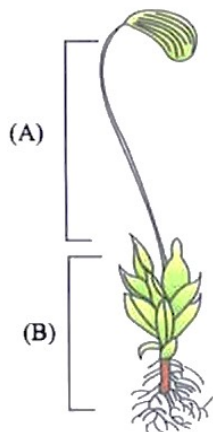
In the light of the above statements, choose the most appropriate answer from the options given below:

- (A) Both Assertion (A) and Reason (R) are correct but (R) is not the correct explanation of Assertion (A).
 (B) Assertion (A) is correct but Reason (R) is not correct.
 (C) Assertion (A) is not correct but Reason (R) is correct.
 (D)

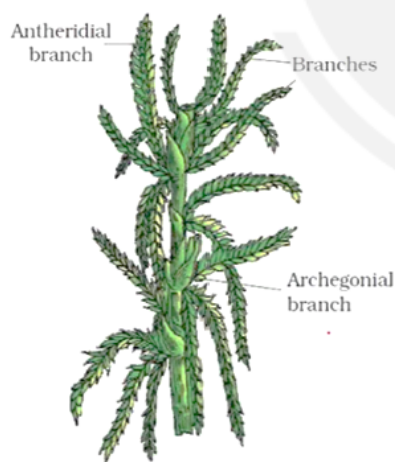


Both Assertion (A) and Reason (R) are correct and Reason (R) is the correct explanation of Assertion (A).

- Q17** Select the option that correctly identifies A and B in the given figure.



- (A) A- Sporophyte, B- Gametophyte
 (B) A- Gametophyte, B- Sporophyte
 (C) A- Male shoot, B- Female shoot
 (D) A- Female shoot, B- Male shoot
- Q18** Which of the following options correctly identifies the plant shown in figure and the group it belongs to?



- (A) *Marchantia* - Liverwort
 (B) *Sphagnum* - Moss
 (C) *Sphagnum* - Liverwort
 (D) *Funaria* - Moss

- Q19** Which of the following has protonema?
 (A) *Marchantia* (B) *Sphagnum*
 (C) Ferns (D) *Porella*
- Q20** Study the statements (a-c) given below and select the correct one w.r.t. mosses.
 (a) The sporophyte in mosses is less elaborate than that in liverworts
 (b) Spores are formed before meiosis
 (c) Vegetative reproduction in mosses is by fragmentation and budding in the secondary protonema
 (A) Only a and c (B) Only a
 (C) Only a and b (D) Only c
- Q21** If there are eleven chromosomes present in the cells of leafy stage of a moss, then find out the number of chromosomes in the cells of its capsule
 (A) 44 (B) 33
 (C) 22 (D) 11
- Q22** Leafy stage develops from the secondary protonema as a:
 (A) Apical bud
 (B) Terminal bud
 (C) Lateral bud
 (D) Meristem
- Q23** Rhizoids of *Funaria* are:
 (A) unicellular and branched
 (B) unicellular and unbranched
 (C) multicellular and branched
 (D) multicellular and unbranched

Answer Key

Q1 (D)
Q2 (B)
Q3 (B)
Q4 (A)
Q5 (B)
Q6 (C)
Q7 (D)
Q8 (A)
Q9 (A)
Q10 (B)
Q11 (C)
Q12 (C)

Q13 (B)
Q14 (B)
Q15 (C)
Q16 (D)
Q17 (A)
Q18 (B)
Q19 (B)
Q20 (D)
Q21 (C)
Q22 (C)
Q23 (C)



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