

MCQs on Plant Physiology

Plant Physiology is a sub-type of botany, which deals with internal activities of plants. It includes chemical and physical processes that occur within various species of plants. Biology section of NEET 2024 contains the most marks and preparing Plant Physiology MCQs can help students score higher marks.

Moreover, NEET 2024 is near, and students are going through their final revisions. Therefore, having a set of MCQs on the fundamentals of crop Physiology can boost their last-minute preparation.

In this article, students can find a set of selected MCQ questions on Plant Physiology from various sections of the chapter.

Multiple Choice Questions (MCQs) along with the Answer Key

1. Who Articulated the 'Law of Limiting Factor' in Photosynthesis?

- A. Blackman.
- B. Calvin.
- C. Ruben.
- D. Emerson.

2. Who is Regarded as the Father of Plant Physiology?

- A. Stephen Hales.
- B. Funk.
- C. Fisher.
- D. W. Kurtis.

3. Who Discovered the Process of Photophosphorylation?

- A. Warburg.
- B. Arnon.
- C. Calvin.
- D. Priestley.

4. What is the End Product of the Calvin Cycle?

- A. PGA.
- B. ADP+NADP.
- C. RuBP.
- D. PGAL.

5. Which Metabolic Pathway Produces Carbohydrate?

- A. Glycolysis.
- B. Krebs cycle.
- C. Cyclic electron pathway.
- D. Calvin cycle.

6. _____ have no Role in Photosynthesis.

- A. Anthocyanin
- B. Xanthophyll
- C. Phycoerythrin
- D. Phycocyanin

7. What is the Reason Behind a Plant Bending Towards the Light as it Grows?

- A. Since green plants are phototrophic.
- B. Because auxin gathered on the shaded side stimulates higher cell elongation.
- C. Since plants need light for photosynthesis.
- D. Light stimulates cells on that side to grow faster.

8. What is the Reason Behind Cell Elongation in Intermodal Regions of Plants?

- A. Indole acetic acid.
- B. Cytokinins.
- C. Gibberellins.
- D. Ethylene.

9. What is the Purpose of Trichomes on Leaves?

- A. Prevents guttation.
- B. Aids in the rapid exchange of gas.
- C. Increases transpiration.
- D. Reduces transpiration.

10. Rubisco Content in Chloroplast is _____

- A. 16%.
- B. 2%.
- C. 25%.
- D. 11%.

11. Among the Following, Indole-3 acetic Acid is Similar to Which Amino Acid?

- A. Methionine.
- B. Tryptophan.
- C. Proline.
- D. Phenylalanine.

12. Which of the Following is Known as a Hatch-slack Pathway?

- A. C₂.
- B. C₃.
- C. C₄.
- D. C₅.

13. Among the Following, Which is a C₄ Plant?

- A. Pineapple.
- B. Soybean.
- C. Corn.
- D. All of the above.

14. Reverse Krebs Cycle can be Found in _____

- A. Bacteria.
- B. Fungus.
- C. Higher plants.
- D. None of these.

15. _____ is a Cruciferous Type Stomata.

- A. Diacytic
- B. Anisocytic
- C. Anomocytic
- D. Actinocytic

16. Who Gave the Theory of 'Osmotic Water Absorption'?

- A. Calvin.
- B. Emerson.
- C. Atkins and Priestley.
- D. Thimann and Kramer.

17. Among the Following, Which is a CAM Plant?

- A. Mango.
- B. Coconut.
- C. Kiwifruit.
- D. Pineapple.

18. _____ Cycle is Used by 'Inducible CAM Plants'

- A. C4.
- B. C3.
- C. CAM.
- D. All of them.

19. Which Type of Plants Store Malic Acid in Vacuoles?

- A. CAM.
- B. C3.
- C. C4.
- D. C2.

20. Among the Following, Which is an Example of 'Upright Growth of Stems'?

- A. Phototropism.
- B. Positive geotropism.
- C. Negative geotropism.
- D. Auxin tropism.

21. Who Gave the 'Root Pressure' Theory?

- A. J.C. Bose.
- B. Godlewski.
- C. Stephan Hales.
- D. Boehm.

22. What is the Rate of Photosynthesis in C4 Plants?

- A. Higher.
- B. Moderate.
- C. Low.
- D. Very low.

23. What is the R.Q Value of Succulents?

- A. 1.
- B. 0.5.
- C. 1.5.
- D. 0.

24. Seeds are Treated with _____ for Stratification.

- A. Moist seed in low temperature
- B. Just low temperature
- C. Warm and moist temperature
- D. Normal seeds in low temperature

25. Among the Following: Find the Physiological Disorder.

- A. Greening of potato tubers.
- B. Gall midge rice.
- C. Curling of papaya leaves.
- D. None of these.

26. The Hill Reaction Takes Place in _____.

- A. Stroma.
- B. Grana of chloroplast.
- C. Both a & b.
- D. Only grana.

27. A Dark Reaction Takes Place in _____ .

- A. Grana.
- B. Stroma.
- C. The stroma of chloroplast.
- D. Mitochondria.

28. _____ is the Form of Carbohydrate Transported through a Sieve Tube after Synthesizing in the Leaves.

- A. Triose sugar
- B. Glucose
- C. Starch
- D. Sucrose

29. What is the Function of Phenylmercuric Acetate?

- A. It reduces the transpiration rate.
- B. It can kill a plant.
- C. It decreases respiration.
- D. None of the above.

30. The Amount of Water Retained by Soil after Drainage is Known as –

- A. Soil water.
- B. Field capacity.
- C. Mineral water.
- D. Gravitational capacity.

31. Water Available for Plants within the Soil is Known as –

- A. Mineral water.
- B. Hygroscopic water.
- C. Capillary water.
- D. Chemically bound water.

32. What is the Name of the Process By Which Turgidity of a Cell is Maintained?

- A. Wall pressure.
- B. Osmotic pressure.
- C. Diffusion pressure.
- D. Turgor pressure.

33. Wilting of a Plant is a Result of Excessive –

- A. Transpiration.
- B. Absorption.
- C. Photosynthesis.
- D. Respiration.

34. What is the Working Principle of a Photometer?

- A. Root pressure.
- B. Amount of water absorbed is the same as the amount of water transpired.
- C. Osmotic pressure.
- D. None of the above.

35. _____ is an Example of Synthetic Auxin.

- A. IAA
- B. GAA
- C. IBA
- D. CA

36. What is the Reason for Seed Dormancy?

- A. Starch.
- B. Glucose.
- C. Ethylene.
- D. Abscisic acid.

37. Due to the Uneven Distribution of _____ Phototropic Curvature Occurs.

- A. Auxin
- B. Cytokinins
- C. Phytochrome
- D. Gibberellin

38. Coiling of Garden Pea Around any Structure is an Example of –

- A. Thermotaxis.
- B. Thigmotropism.
- C. Thigmonasty.
- D. Thigmotaxis.

39. Which of the Following is an Example of Gaseous Plant Hormone?

- A. IAA.
- B. Gibberellin.
- C. Ethylene.
- D. Abscisic acid.

40. Among the Following, Which Acid is a Derivative of Carotenoids?

- A. Gibberellic acid.
- B. Indole butyric acid.
- C. Indole-3-acetic acid.
- D. Abscisic acid.

These are some important and popular NEET biology MCQs on Plant Physiology. The answer key is given below for reference.

Answer Key

1 – a	2- a	3- b	4- c	5- d	6- a	7- b	8- c	9- d	10- a
11- b	12- c	13- d	14- a	15- b	16- c	17- d	18- d	19- a	20- b
21- c	22- a	23- d	24- a	25- d	26- b	27- c	28- d	29- a	30- b
31- c	32- d	33- a	34- b	35- c	36- d	37- a	38- b	39- c	40- d

Step-Up Your Revision as NEET 2024 is Around the Corner

There is not much time left in NEET 2024, and this is the time you should step up your preparation. Along with other chapters of biology, the Plant Physiology exam is a vital section. Moreover, you should prepare this chapter thoroughly as it is an easy scoring one.

Furthermore, besides your last-minute preparation, it is imperative to take care of your health. Any health issues during this period can hamper your studies, which is not a good thing. Moreover, you should prepare a routine for your studies during this period. You must include a session for practicing Plant Physiology MCQs along with MCQs of other subjects.

Strategies for studying Plant Physiology in Class 11

Are you struggling to study Plant Physiology for NEET? Do you need a little help making sure that you have everything down pat before the big test? Do you have problem-solving NEET MCQs on Plant Physiology? There are many different ways that students can go about studying for this Class, but it is important to find what works best for your needs. Learn more in this blog post!

Take a look at the following strategies for studying Plant Physiology Class 11 so that you can get an idea of what might work best for your own studying needs:

- Take notes as the Class goes along. This is a great way to learn new information and also makes it easier to review the material later on when exam time comes around. Make sure that you are writing down everything from lectures, reading over your notes after each lecture or session has passed by, and stay organized! Using bullet points in these notes will help keep things nice and neat without making them too messy looking either. This allows more space for adding important details. It is helpful to make flashcards out of keywords instead of whole pages since cards allow both sides while pages do not.
- Create a study guide or review sheet. This is a great way to consolidate all of the important information that you need to know for the test and can be very helpful in making sure that you don't forget anything come exam time. You can either make this yourself or find one online from a reliable source.
- Take practice quizzes and exams. Many teachers create practice exams which can be extremely helpful when it comes to studying for the real thing! Taking these quizzes will help you get used to the types of questions that might be asked as well as give you an idea of how much material you have actually learned.
- Get organized! As with any Class, being organized is a great way to stay on top of things. It can be hard for some students to juggle everything, but it is possible if you get creative! Using a planner or calendar helps keep your schedule in check which makes staying organized much easier. Find what works best for you and stick with it so that you don't miss out on important events such as lectures or quizzes.
- Study at the right time of day. Everyone has their own unique studying style when it comes down to learning new information which means that not everyone will study at the same time during the day. Some people work better in the early morning while others do not function very well until later in the evening hours when they are tired from getting ready for bed earlier than usual. Find out what time of day works best for you to study and try not to stray from this schedule.