



CodeNumber:

A**Aakash****Medical | IIT-JEE | Foundations**

Corp.Office: Aakash Educational Services Limited, 3rdFloor, Incuspaze Campus-2, Plot No.13,
Sector- 18, Udyog Vihar, Gurugram, Haryana - 122015

Time:3 hrs.

Mock Test Paper for Class-XII

Max.Marks:60

BOTANY

Roll No.

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GENERAL INSTRUCTIONS

Read the following instructions carefully and follow them:

1. The Question paper consists of section **A**, **B**, and **C**
2. Answer all the questions of **Section A**. Answer ANY **SIX** questions out of **eight** in **Section B** and answer **ANY TWO** questions out of **three** "in **Section C**.
3. In **Section A**, questions from Sl. Nos. **1** to **10** are of '**very short answer type**'. Each question carries **TWO** marks. Every answer may be limited to **5** lines. Answer all the questions at one place in the same order.
4. In **Section B**, questions from Sl. Nos. **11** to **18** are of '**short answer type**'. Each question carries **FOUR** marks. Every answer may be limited to **20** lines. Answer any **SIX** questions out of **8** questions.
5. In **Section C**, questions from Sl. Nos. **19** to **21** are of '**long answer type**'. Each question carries **EIGHT** marks. Every answer may be limited to **60** lines. Answer any **TWO** questions out of 3 questions.
6. Draw labelled diagrams, wherever necessary for questions in **Sections B** and **C**.

SECTION-A

I. Answer all the following questions

10 x 2 = 20

1. Define water potential. What is the value of water potential of pure water
2. Which element is regarded as the 17th essential element? Name a disease caused by its deficiency
3. What is the primary acceptor of CO₂ in C₃ plants? What is the first formed compound in C₃ pathway?
4. What is pleomorphic bacteria? Give an example.
5. Who proposed chromosomal theory of inheritance?
6. What is meant by capping and tailing?
7. Name any two artificially restricted plasmids
8. Name the nematode that infects the roots of tobacco plants. Name the strategy adopted to prevent this infestation.
9. Name two semi dwarf varieties of rice developed in India
10. Name a microbe used for statin production. How do statins lower blood cholesterol level?

SECTION-B

II. Answer any six of the following questions

6 x 4 = 24

11. How does Ascent of sap occur in tall trees.
12. Write in brief how plants synthesize amino acids.
13. Write briefly about enzyme inhibitor
14. Write a note on agricultural/ horticultural applications of auxins
15. Explain the structure of T – even bacteriophage
16. Explain the law of dominance using monohybrid cross.
17. What are the differences between DNA and RNA
18. What are some bio – safety issues concerned with genetically modified crops?

SECTION-C

III. Answer any two of the following questions

2 x 8 = 16

19. Explain the reactions of Krebs's cycle
20. Explain briefly the various processes of recombinant DNA technology
21. You are a Botanist working in the area of plant breeding. Describe the various steps that you will undertake to release a new variety.

