

MS JUNIOR COLLEGE
Hyderabad

GUESS PAPER - 2
INTERMEDIATE IInd YEAR
BOTANY - II

Time: 3 hours

Max.Marks:60

INSTRUCTIONS:

1. Q.Nos: 1 - 10 are Very Short Answer Type. Answer them in about 30 words each. Each question carries 2 marks.
2. Q. Nos: 11 - 18 are Short Answer Type. Answer them in 75 - 100 words each. Each question carries 4 marks.
3. Q.Nos: 19 - 21 are Long Answer Type. Answer them in about 300 words each. Each question carries 8 marks.

I. Very Short Type Questions: Answer ALL.

[10 x 2 = 20]

1. How does guttation differ from transpiration?
2. Compare imbibing capacities of pea and wheat seeds.
3. Give different types of Cry genes, which are controlled by the proteins encoded by them.
4. What is the full form of PCR? How is it useful in biotechnology?
5. What are the components of nucleotides?
6. What is meant by bolting? Which hormone causes bolting?
7. What is plasmid? What is its significance?
8. Define stop codon? Write the codons.
9. Give two example of wheat varieties introduced in India, which are high yielding and disease resistant.
10. Name a microbe used for statin production. How do statins lower blood cholesterol level?

II. Short Type Questions: Answer any SIX.

[6 x 4 = 24]

11. How does ascent of sap occur in tall trees?
12. Explain the steps involved in the formation of root nodule.
13. Why is the respiratory pathway referred to as and amphibolic pathway? Explain.
14. Write a note on agriculture/ horticulture application of auxins.
15. Explain the conjugation in bacteria.
16. Explain the Law of Dominance using a monohybrid cross.
17. Write about the important features of Genetic code?
18. What are some biosafety issues concerned with genetically modified crops?

III. Essay Type Questions. Answer any Two:

[2 x 8 = 16]

19. Give an account of glycolysis. Where does it occur? What are the end products? Trace the fate of this product in both aerobic and anaerobic respiration.
20. You are Botanist working in the area of plant breeding. Describe the various steps that you will undertake to release a new variety.
21. Give a brief account of the tools of recombinant DNA technology.