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GS-342

VI Semester B.Sc. Examination, May/June - 2019

BOTANY - VIII

Plant-Physiology - II

(CBCS) (F+R) (2016-17 & onwards)

Time : 3 Hours Max. Marks : 70

Instructions : 1. *Answer* ***all*** *parts.*

2. *Draw diagrams wherever necessary.*

PART - A

A. Explain/Define **any ten** of the following in **two** or **three** sentences : **10x2=20**

1. What are enzyme inhibitors ? Mention the types.

2. What is an amino acid ? Give an example.

3. Mention any two non symbiotic nitrogen fixing organisms.

4. Expand : ATP
PGA

5. Draw a neat labelled diagram of Mitochondrion.

6. What is Kranz anatomy ?

7. Mention any two methods of breaking seed dormancy.

8. State Blackman's law of limiting factors.

9. What are isomerases ? Give one example.

10. Mention any two roles of Auxins in plants.

11. What is vernalization ?

12. What are short day plants ? Give an example.

PART - B

B. Explain critical notes on **any four** of the following : **4x5=20**

13. Factors affecting enzyme action.

14. Non cyclic photophosphorylation.

15. Role of Rhizobium in legumes.

16. Law of limiting factors with a suitable example.

17. Nitrification and Denitrification.

18. Factors affecting Growth.

PART - C

C. Give a comprehensive account of **any three** of the following : **3x10=30**

19. Explain C_4 cycle. Add a note on it's significance.

20. What is EMP pathway ? Explain the steps involved in it.

21. Explain the properties of enzyme. Add a note on lock and key mechanism.

22. What are phytohormones ? Explain the effects of Gibberellins on plants.

23. Explain :

(a) Phototropism

(b) Secondary metabolites

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