

300/FST

22-23 / 23511

## B.Sc. Semester-II Examination, 2022-23

### FORESTRY [Honours]

Course ID : 23511

Course Code : SH/FST/FB 1202

Course Title : Plant Physiology

Time : 2 Hours

Full Marks : 50

*The figures in the right-hand margin indicate marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

I. Write a definition or one sentence answer any **ten** of the following: 1×10=10

1. Green islands
2. Mention c3 and c4 compound.
3. What is red enhance effect?
4. Difference between cyclic and non-cyclic photo phosphorylation
5. What is NPP?
6. Mention two physiological roles of cytokinin.
7. Define nitrification.
8. What is Kranz anatomy?
9. Write a short note on frost injury in plants.
10. Role of Mg and Ca as a macro-element.

[Turn Over]

11. What is secondary growth in plant?
12. Name two drought avoidance plant.
13. What is capillary water?
14. Full form of 2, 4, 5, T.
15. What is the Major function of GPP?

II. Write short note/define any **ten** of the following:

2×10=20

1. What is the full form of RUBISCO? Mention its function.
2. Name two examples of c4 and CAM plant.
3. Name three photorespiration occurring cell organelles in plant.
4. What is the chemical name of cytokinin?
5. Write down the names of two CAM plant.
6. What type of mineral deficiency occur chlorosis in plat leaf?
7. Write a short note on salinity tolerance and salinity resistance.
8. What is synthetic auxin?
9. Name a weedicide hormone.
10. What is the real name of natural auxins higher plant is \_\_\_\_\_.

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11. Name one Phyto-hormone was discovered first.
12. How much ATP form 1 mol glucose?
13. Mention the main function of guard cell in stomata.
14. Name a mobile nutrient in plant.
15. What is ROS?

III. Write down in brief any **four** of the following:

$5 \times 4 = 20$

1. Difference between cyclic and noncyclic photo phosphorylation.
  2. Describe the path of c4 cycle.
  3. What is hydroponics?
  4. Briefly explain the role of gibberellins in plants.
  5. Role of  $K^+$  and malate in stomata opening.
  6. Glycolysis pathway.
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