

**Avinashilingam Institute for Home Science and Higher education for Women
(Deemed to be University) Coimbatore-43.**

**Master's Degree Examination –November 2018
Semester-III**

**Class-II PG
Major-Botany**

**Time-3hrs.
Max.Marks-60**

**17MBOC14 Plant Physiology
Part –A**

Choose the correct answer

10X1/2=5

- Closure of stomata is brought about by
a) Abscisic acid b) Kinetin c) Gibberellic acid d) IBA/Auxin
- An instrument used for measuring transpiration is
a) Potometer b) Auxanometer c) Manometer d) Porometer
- Maximum Photosynthetic activity take place in
a) Red light b) Orange light c) Green light d) Yellow light
- Number of carboxylation occur in Calvin cycle is
a) 0 b) 1 c) 2 d) 3
- Cytochromes are
a) Lipids b) Glycoproteins c) Metalloporphyrins d) Fe containing porphyrin pigments
- Each molecule of NADP releases how many number of ATP molecule?
a) 2 b) 1 c) 4 d) 3
- Which of the following phytohormone does not occur naturally in plants ?
a) 2, 4-D b) Gibberellic acid c) 6-furfuryl amino pirine d) IAA
- Flowering in short day plants is favoured by
a) Ethylene b) Gibberellin c) Cytokinin d) Auxin
- The bud dormancy in woody plants is caused by
a) ABA b) CCC c) Vitamins d) Ethylene
- The dormancy is not shown by
a) Rhizomes b) Tubers c) Buds d) Roots

Part -B

Answer the following

5X4=20

Answer should not exceed 200 words or one page

11. a) Give a brief account on Kinds of transpiration

Or

b) Give an account on significance of transpiration

12. a) Differentiate between Quantum yield from Quantum requirement

Or

b) Explain the structure of chloroplast

13. a) Write notes on Glycolysis

Or

b) Write notes on fermentation

14. a) Write short notes on the physiological effect of auxin

Or

b) Give a small account on Vernalization

15. a) Write short notes on factors causing seed dormancy

Or

b) Give an account on physiology of seed germination

Part - C

Answer the following

5X7=35

Answer should not Exceed 600 words or three pages

16. a) Give a small account on mechanism of translocation

Or

b) Explain the Mechanism of stomatal movement

17. a) Describe CAM pathway

Or

b) Explain Calvin cycle

18. a) Describe the Krebs's cycle

Or

b) Write an essay on Electron transport system

19. a) What is gibberellin? Explain their role in the life of plants.

Or

b) Write an essay on Photoperiodism

20. a) Describe the methods of breaking seed dormancy

Or

b) Give a brief account on the seed dormancy and seed viability