

Model Question Paper
Botany-Plant physiology - Part III

12th Standard

Biology

Reg.No. :

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I. Answer all the questions.

II. Use blue pen only.

III. Question number 19 is compulsory.

Time : 01:00:00 Hrs

Total Marks : 85

Part-A

5 x 1 = 5

- 1) Which of the following is a 5C compound ?
(a) Glucose (b) Fructose (c) phosphoglyceric acid (d) RuBP
- 2) In C_3 plants light reactions and dark reactions occur in
(a) bundle sheath cells (b) mesophyll cells (c) epidermal cells (d) vascular cells
- 3) In C_3 pathway acceptor molecule of CO_2 is
(a) phosphoenol pyruvate (b) RuBP (c) PGA (d) DHAP
- 4) Which of the following is not a C_4 plant?
(a) Maize (b) Tribulus (c) Amaranthus (d) Wheat
- 5) Vanda plant is a/an
(a) total parasite (b) partial parasite (c) epiphyte (d) saprophyte

Part-B

5 x 3 = 15

- 6) Define chemosynthesis
- 7) Define respiration.
- 8) What the overall reaction of glycolysis.
- 9) Write is the function of aldolase in the process of glycolysis?
- 10) What is krebs cycle?

Part-C

5 x 5 = 25

- 11) Write Ganong's respiroscope experiment with diagram.
- 12) Write the significance of pentose phosphate pathway.
- 13) Write short notes on anaerobic respiration
- 14) Explain respiratory quotient for carbohydrate, organic acid and fatty acid.
- 15) What is fermentation? Explain?

Part-D

4 x 10 = 40

- 16) Describe the sequences of reactions of krebs cycle.
- 17) Explain pentose phosphate pathway.
- 18) Write an essay on auxins and gibberellins with their physiological effects.
- 19) a) Write an account on cytokinin, ethylene and abscisic acid with their physiological effects.

(OR)

- b) Write an account on photoperiodism and vernalization.
