

SC(MP)ACFTCE(09MY)

BOTANY

Time Allowed : 3 hours

Full Marks : 100

*The figures in the margin indicate
full marks for the questions.*

*Answer any 5 (five) questions
taking at least 2 (two) questions from each section.*

SECTION - A

1. Describe the symptoms and control measures of any one of the diseases caused by Fungi in potato plant. **(8+12=20)**
2. Write notes on any two of the following: **(2×10=20)**
 - (a) Mycoplasma
 - (b) Salient features of Magnoliaceae OR Asteraceae
 - (c) Salient features of Cycadales
 - (d) Sexual reproduction in Chlorohpyceae
 - (e) Application of palynology
3. Describe different types of endosperm development in plant. **(8+6+6=20)**

(Contd. 2)

4. Describe any two of the following: (2×10=20)
- (a) Anomalous secondary growth in monocot stem
 - (b) Apomixis
 - (c) True polyembryony
 - (d) Tissue culture
5. Write brief notes on any two of the following:(2×10=20)
- (a) Botanical Gardens of India
 - (b) Ethnobotany
 - (c) Method of plant tissue culture
 - (d) Describe *Tectona grandis* or *Hevea brasiliensis* with special reference to its ethnobotanical value.

SECTION - B

6. Describe the process of protein synthesis. (20)
7. What is photosynthesis? Describe the Light Dependent Process (Light reaction) of photosynthesis. (2+18=20)
8. What do you mean by global warming? Describe its causes and suggest its preventive measures. (4+10+6=20)

(Contd. 3)

9. Answer any two of the following: (2×10=20)

- (a) Differences between prokaryotic and eukaryotic cell
- (b) Structural variations in chromosomes and their significance
- (c) Genetic code
- (d) Evidence of organic evolution

10. Write notes on any four of the following: (4×5=20)

- (a) Probability
- (b) Chi-square test
- (c) Vernalization
- (d) Air pollutants
- (e) Intellectual Property Rights
- (f) Red Data Book
- (g) Biological diversity

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