Progressive Education Society's

Modern College of Arts, Science & Commerce Ganeshkhind, Pune – 16, NEP 2020 (Autonomous)

End Semester Examination: OCT / NOV 2024

***Total No. of Questions**: 4/18* ***Total No. of Pages**: 02*

SECOND YEAR (Blended)
BIO 301: Functional Biology of Organisms
(Semester III)

Program: B.Sc. Blended **Credits:** 2
Program Specific: B. Sc. Blended (Chemistry) **Time:** 2 Hours
Course Type: Minor **Max. Marks:** 30
Paper: I **SET: A**

Instructions to the candidate:

1) *All questions are compulsory.*
2) *Figures to the right indicate full marks.*
3) *Draw a well labelled diagram wherever necessary.*

SECTION: A

Q1) Answer the following **[5 X 1= 5]**

1. Define tissue.
2. What do you mean by the term inspiration?
3. Mention the role of salivary amylase.
4. Differentiate between plant and animal growth
5. Define photosynthesis.

SECTION: B

Q2) Answer the following (Attempt any 5/7) **[5 X 2 =10]**

1. What is ingestion and egestion?
2. What are endocrine glands?
3. Mention the parts of central nervous system.
4. What is guttation?
5. Explain the structure of various cells in xylem structure.
6. Explain the various factors affecting rate of transpiration.
7. What are florigens?

P.T.O.

SECTION: C

Q3) Answer the following/Write short notes on following (Attempt any 2/4) [2 X 5 = 10]

1. With the help of well labelled diagram describe the working of heart.
2. Explain the structure and function of kidney.
3. What is mineral nutrition and why it is essential for plant growth and development?
4. Explain John priestley's experiment.

SECTION: D

Q4) Answer the following (Attempt any 1/2) [5 X 1 = 5]

1. Describe spermatogenesis.
2. What are secondary metabolites? Explain the various biochemical defense mechanisms present in plant.

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