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A-28 ]

SARDAR PATEL UNIVERSITY  
B.Sc. (II- SEM.) (CBCS) EXAMINATION  
Tuesday, 5<sup>th</sup> April, 2016.  
10:30 A.M. TO 12:30 P.M.  
US02EBIO01: BIOLOGY

No. of printed pages :2

Total marks:- 70

**Note:- Draw neat and labeled diagram wherever necessary.**

**Q-1 Multiple choice questions (Compulsory)**

(10)

- (1) According to ethologist behavior is programmed by \_\_\_\_\_.  
(a) Natural selection (b) Mutation (c) Instincts (d) None of these
- (2) A Lizard flicks out its long tongue at the sight of an insect, is an example of \_\_\_\_\_.  
(a) Learning (b) Fixed action pattern (c) Reflexes (d) Sign stimulus
- (3) The lower chamber of human heart is called \_\_\_\_\_.  
(a) Aorta (b) S.A. Node (c) Ventricle (d) Pace maker
- (4) Closed circulatory system is found in \_\_\_\_\_.  
(a) Molluscans. (b) Protozoan (c) Arthropods (d) Vertebrates
- (5) The organisms which are capable to synthesize the organic compound and prepare food are called \_\_\_\_\_.  
(a) Autotrophs (b) Osmotrophs (c) Heterotrophs (d) All of these
- (6) During monsoon ground becomes slippery because of ,  
(a) Blue-green algae (b) Liverworts (c) Mosses (d) None of these
- (7) Which of the following is a living fossil?  
(a) Moss (b) Cycas (c) Spirogyra (d) None of these
- (8) Reticulate venation of leaves is a characteristic feature of \_\_\_\_\_ plant.  
(a) Monocot (b) Dicot (c) Both a & b (d) None of these
- (9) The leaves are much reduced and sometimes modified into spines in \_\_\_\_\_.  
(a) Xerophytes (b) Hydrophytes (c) Both a & b (c) None of these
- (10) The relationship where one partner is benefited but the other is not harmed is called \_\_\_\_\_.  
(a) Mutualism (b) Antibiosis (c) Commensalism (d) None of these

**Q-2 Answer the following (Any Ten)**

(20)

- (1) What is Innate behavior?
- (2) Name the different types of Learnt behavior.

- (3) Define the term habituation.
- (4) Define the word digestion and name its types.
- (5) What is open circulatory system?
- (6) Write the function of Bicuspid and Tricuspid valve.
- (7) Write the function of Rhizoids.
- (8) Sketch and label Mushroom.
- (9) Name any four viral diseases.
- (10) What is parasite? Name any four types.
- (11) What is xerophytes? Give any two examples.
- (12) Define free floating hydrophytes by giving examples.

**Q-3 Write short notes on:**

- (a) Trial and error learning (05)
- (b) Insight learning (05)

**OR**

**Q-3 Describe the following:**

- (a) Reflexes (05)
- (b) Taxis behavior. (05)

**Q-4 Describe the following:**

- (a) Types of Heterotrophic nutrition (04)
- (b) Types of Digestion (06)

**OR**

Q-4 Describe the structure and mechanism of human heart with suitable diagram. (10)

**Q-5 Write notes on:**

- (a) Morphological characters of cycas (06)
- (b) Difference between Bryophyte and Pteridophyte plant. (04)

**OR**

**Q-5 Do as directed:**

- (a) Describe Angiosperms (05)
- (b) Explain the characters of Algae (05)

Q-6 Define the word mutualism. Discuss the various types with suitable examples. (10)

**OR**

Q-6 What is hydrophyte? Describe the morphological adaptation in hydrophytes. (10)

**ALL THE BEST**