

**PARUL UNIVERSITY**  
**PARUL INSTITUTE OF APPLIED SCIENCES**  
**MID SEMESTER INTERNAL EXAMINATION, APRIL 2017**  
**B. Sc. Semester II**  
**Chemistry/Physics**

**Paper Code: 11100155**

**Paper Name: Foundation of Biology**

**Date: 17 /04/2017**

**Time: 12.30 p.m. to 02.00 p.m.**

**Maximum Marks: 40**

**Instructions:**

- 1. All questions are compulsory and options are given in first and second question only.**
  - 2. Numbers to the right of question indicate the marks of respective question.**
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**Q. 1** Attempt any one question of the following. **(08)**

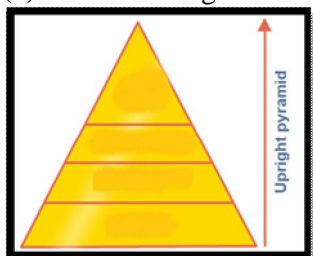
- (i) What is biodiversity? Explain its conservation.
- (ii) Describe malaria life cycle.

**Q. 2** Attempt any three questions of the following. **(12)**

- (i) Write note: Green house effect
- (ii) What are causes and symptoms of dengue?
- (iii) Explain types and advantages of Biofertilizer.
- (iv) What do you mean by Immunity? Narrate its types.
- (v) Describe: "Productivity"

**Q. 3** Do as directed. Attempt all five questions. **(05)**

- (i) Name two hot spots of India
- (ii) Give full form: SCID
- (iii) \_\_\_\_\_ is a sequence of who eats whom in the biological community
- (iv) Define: Detritus
- (v) Label the diagram:



**Q. 4** Write correct option in your answer sheet for following 15 multiple choice questions. **(15)**

MCQ 1 Which are phosphate solubilizing bacteria (PSB)?

- |                 |                      |
|-----------------|----------------------|
| (A) Rhizobium   | (B) Blue green algae |
| (C) Azotobacter | (D) Both A & B       |

MCQ 2 "Where are you from? = habitat, what do you do? = niche" This sentence is true or false?

- |                        |                         |
|------------------------|-------------------------|
| (A) Only first is true | (B) Only second is true |
| (C) Both are true      | (D) None are true       |

MCQ 3 Matting between genetically related parents is called\_\_\_\_\_

- |                |                 |
|----------------|-----------------|
| (A) Inbreeding | (B) Outbreeding |
| (C) Heterosis  | (D) Dominance   |

- MCQ 4 Which is considered as endangered species of India?
- (A) Peacock (B) Bengal tiger  
(C) Black cobra (D) White monkey
- MCQ 5 From following which is NOT an example of biofortification?
- (A) Golden rice (B) Zinc rice  
(C) Brown rice (D) Iron rice
- MCQ 6 A heterotroph\_\_\_\_\_
- (A) Is an autotroph (B) Eats other organism  
(C) A & B both (D) None of these
- MCQ 7 From following which is broad spectrum antibiotic?
- (A) Penicillin (B) Vancomycin  
(C) Erythromycin (D) Rifampin
- MCQ 8 Explants' sterilization can be done by treatment with?
- (A)  $MgCl_2$  (B)  $CaCl_2$   
(C)  $H_2O$  (D)  $HgCl_2$
- MCQ 9 Net productivity=
- (A) Gross productivity-  
respiration rate (B) Gross productivity + respiration  
rate  
(C) Gross productivity /  
respiration rate (D) None of these
- MCQ 10 Excessive load of nutrients in water is called\_\_\_\_\_
- (A) Eutrophication (B) Fortification  
(C) Toxicity (D) Degradation
- MCQ 11 For Which disease there is vaccine available?
- (A) Malaria (B) Hepatitis  
(C) Polio (D) Both B & C
- MCQ 12 Malaria causing parasites are\_\_\_\_\_
- (A) Plasmodium falciperum (B) Plasmodium vivax  
(C) Plasmodium knowlesi (D) All of these
- MCQ 13 What is the most serious threat to biodiversity?
- (A) Scientists collecting  
specimens (B) Habitat loss  
(C) Tourists (D) Pollution
- MCQ 14 Tertiary consumers eat\_\_\_\_\_
- (A) Primary producers (B) Secondary consumers  
(C) Primary consumers (D) Quaternary consumers
- MCQ 15 From following which substance is NOT causing air pollution?
- (A)  $CO_2$  (B)  $N_2O$   
(C)  $CO$  (D) Lead

-- End of Paper--