

This Question Paper contains 3 printed pages.

20E (A)

## GENERAL SCIENCE, Paper-II

(Biological Sciences)

(English Version)

Parts A and B

Time : 2½ Hours

Maximum Marks : 50

### Instructions :

1. Answer the questions under **Part 'A'** on a separate answer book.
  2. Write the answers to the questions under **Part 'B'** on the question paper itself and attach it to the answer book of **Part 'A'**.
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### Part A

Time : 2 Hours

Marks : 35

### SECTION I

4 x 1 = 4

- Note :**
1. Answer **any four** questions from the following.
  2. Each question carries **one** mark.

1. What is cutaneous respiration?
2. What is a hormone?
3. How can you distinguish a male frog from a female frog?
4. What is malnutrition?
5. What are the sources of thiamine?
6. Write the functions of pericardial fluid.

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**SECTION II**

5 x 2 = 10

- Note :** 1. Answer **any five** questions, choosing at least **two** from each group **A** and **B**.  
2. Each question carries **two** marks.

**Group - A**

7. What is epiglottis?
8. Where do we see respiration in the absence of oxygen?
9. Write the different parts of a neuron.
10. What are the organs that give rise to peripheral nerves?

**Group - B**

11. What is fertilization?
12. Write the uses of grafting.
13. Why do sports persons take glucose?
14. What is pollution? How many types of pollution are there?

**SECTION III**

4 x 4 = 16

- Note :** 1. Answer **any four** questions from the following, choosing at least **two** from each group **A** and **B**.  
2. Each question carries **four** marks.

**Group - A**

15. What are the differences between the right ventricle and the left ventricle?
16. What happens if the pulmonary vein of a frog is blocked by tying it with a thread?
17. How is the brain in the human beings protected from injury?
18. How do you prove that  $CO_2$  is essential for photosynthesis?

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**Group - B**

19. What are the differences between a spermatozoon and an ovum?
20. Expand AIDS. Write the modes of HIV transmission. What are the preventional methods of HIV?
21. Describe the changes in the life cycle of a malarial parasite that occur in a mosquito.
22. Mention the functions and diseases caused by the deficiency of cyanocobalamin.

**SECTION IV**

**1 x 5 = 5**

**Note :** 1. Answer **any one** question.

2. This question carries **five** marks.

23. Draw a neat diagram of the internal structure of the human heart.
24. Draw a diagram of the reproductive system of an earthworm.

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