

20E(A)

GENERAL SCIENCE, Paper - II

(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**.

Part - A

Time : 2 Hours

Marks : 35

SECTION - I

4×1=4

NOTE :

1. Answer **ANY FOUR** questions from the following.
 2. Each question carries **ONE** mark.
1. Write the names of any two excretory organs in human beings.
 2. Write the names of producers and consumers in the food chain, you have observed.
 3. Which blood vessels carry blood from heart to body parts ?
 4. Which plants in your surroundings are useful for the production of medicines ?
 5. How did you get the characters from your parents and grand-parents ?
 6. Write the functions of Spinal-cord from the information collected from your school library and from internet.

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SECTION - II

5×2=10

- NOTE :**
1. Answer **ANY FIVE** questions, choosing atleast **TWO** from each Group **A** and **B**.
 2. Each question carries **TWO** marks.

GROUP - A

7. Explain the structure of a Chloroplast with the help of a rough diagram.
8. Which characters in the Pea plant are selected by Mendel, for his experiments ?
9. What are the control measures for the eradication of mosquito population ?
10. What will happen if a plant is placed near the window of your classroom ? What is this process called as ?

GROUP - B

11. What questions do you ask a doctor to know about different birth control methods ?
12. How did you prepare a match-stick Stethoscope in your school ?
13. Draw the diagram of villi in small intestine and label its parts.
14. How do you appreciate the role of Spinal-cord in reflex actions ?

SECTION - III

4×4=16

NOTE :

1. Answer **ANY FOUR** questions from the following, choosing atleast **TWO** from each group **A** and **B**.
2. Each question carries **FOUR** marks.

GROUP - A

15. What is the role of Epiglottis and Diaphragm in respiration ?
16. What is root pressure ? How is it useful to plants ?

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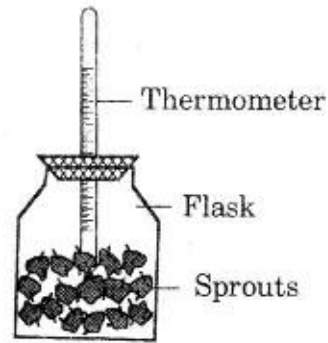
17. Write the experiment of bell jar and pudina plant, performed by Priestley to prove that air plays key role in Photosynthesis.

18. (a) What is the aim of this experiment?

(b) What change do you observe in thermometer reading?

(c) In your opinion, where did this heat come from?

(d) What precaution should we take, while doing this experiment?



GROUP - B

19. What is Mastication? Explain about the teeth used in mastication.

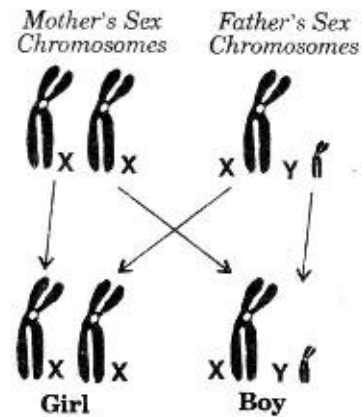
20. Write about the 4 'R's needed for the protection and conservation of environment.

21. (a) If a sperm with 'X' chromosome fertilizes with an ovum with 'X' chromosome, what will be the gender of the baby?

(b) Who determines the sex/gender of the baby, mother or father?

(c) Is it correct to blame the mother for giving birth to a baby girl?

(d) Are all our characters resembles our parents?



22. What steps you would like to follow on your part to conserve bio-diversity?

SECTION - IV

5×1=5

- NOTE :**
1. Answer **ANY ONE** question from the following.
 2. This question carries **FIVE** marks.

23. Draw a neat labelled diagram of excretory system in human beings.
24. Draw the diagram of human sperm and label its parts. Write few lines about it.



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GENERAL SCIENCE, Paper-II

(English version)

Parts A and B

Time : 2½ Hours

Maximum Marks : 50

Instructions : Write the answers to the questions in this **Part-B** on the Question paper itself and attach it to the answer book of **Part-A**.

Part - B

Time : 30 minutes

Marks : 15

- Note :**
1. Answer **all** the questions.
 2. Each question carries ½ mark.
 3. Answers are to be written in the question paper only.
 4. Marks will **not** be awarded in case of any over-writing, re-writing or erased answers.

- I. Write the **CAPITAL LETTER** showing the correct answer for the following questions in the brackets provided against them. $20 \times \frac{1}{2} = 10$
1. Which one is the parasite among the following ? []
(A) Yeast (B) Mushroom
(C) Cuscuta (D) Leech
 2. Who invented Stethoscope ? []
(A) Rene Lennec (B) William Harwey
(C) Malphigi (D) Fabrici
 3. The largest part of the brain is []
(A) Fore brain (B) Mid brain
(C) Hind brain (D) Cranium
 4. Which of the following show effect on the foetus ? []
(A) Chemicals in cigarette smoke. (B) Alcohol
(C) Medicines (D) All the above.

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5. Tongue is a taste receptor. Which nerve helps to identify the taste ? []
(A) 6th cranial nerve. (B) 5th cranial nerve.
(C) 10th cranial nerve. (D) Optic nerve.
6. Example for renewable resource. []
(A) Natural gas (B) Petrol
(C) Solar energy (D) Fodder
7. What symptoms do you observe in the disease caused due to the deficiency of vitamin-A ? []
(A) No vision in dim light. (B) Lack of hungriness.
(C) Can't see bright light. (D) Loose motions.
8. A plant that can survive in Sunlight is kept in shade, then the plant []
(A) dies. (B) grows well.
(C) becomes short. (D) None of the above.
9. What happens, if green plants are not there on earth ? []
(A) Living organisms will not get O_2 .
(B) Living organisms will not get CO_2 .
(C) Living organisms will not get N_2 .
(D) All the above.
10. The blood pressure during walking and running is []
(A) Normal (B) Less than the normal.
(C) More than the normal. (D) None of the above.
11. How can you identify the waste materials in blood ? []
(A) through scanning. (B) through urine test.
(C) using thermometer. (D) through blood test.
12. When food is present in mouth, the quantity of saliva []
(A) doesn't change. (B) decreases.
(C) increases. (D) None of the above.

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13. To increase ground-water levels, we should []
(A) dig wells. (B) dig canals.
(C) dig roads. (D) dig percolation pits.
14. The primary consumer is []
(A) Rabbit (B) Tiger
(C) Frog (D) Snake
15. Ban all pesticides. This means that []
(A) Control on usage of pesticides.
(B) Prevention of pesticides.
(C) Promote eco-friendly agricultural practices.
(D) Stop bio-chemical factories.
16. Disease caused due to the deficiency of proteins is []
(A) Kwashiorkor (B) Marasmus
(C) Obesity (D) Anaemia
17. The gestation period in man is []
(A) 330 days (B) 20 days
(C) 280 months (D) 280 days
18. Which of the following is called 'second brain' ? []
(A) Brain in cranium. (B) Enteric Nervous system.
(C) Central Nervous system. (D) Endocrine system.
19. Scientist who discovered the structure of DNA is []
(A) Watson (B) Crick
(C) Both (D) None of them.
20. Which among the following is Soil conservation method ? []
(A) Contour trenches. (B) Growing grass plants.
(C) Crop-rotation system. (D) All the above.

II. Fill in the blanks with the correct answers.
Each question carries $\frac{1}{2}$ mark.

$5 \times \frac{1}{2} = 2\frac{1}{2}$

21. The pH condition of Saliva is
22. Name the gland.



Ans.

23. Cultivation of paddy is suitable for areas.
24. Identify the logo and write its name



25. A small farmer can avoid scarcity of water by

III. Match the following by writing the letter of the correct answer
in the brackets, choosing from the *Group - B*.

$5 \times \frac{1}{2} = 2\frac{1}{2}$

Group - A

Group - B

- | | | |
|---------------------|-------|------------------|
| 26. Pituitary gland | [] | (A) Progesterone |
| 27. Thyroid | [] | (B) Adrenaline |
| 28. Ovaries | [] | (C) FSH |
| 29. Testis | [] | (D) Thyroxin |
| 30. Adrenal gland | [] | (E) Testosterone |
| | | (F) Insulin |