

**SYLLABUS : FULL SYLLABUS****GENERAL INSTRUCTIONS : Draw Diagrams with Pencils.**

- All questions are compulsory. **Maximum Marks are 80.**
- The question paper consists of 28 Questions.
- **Section – A** : Question  $1 \times 9 = 9$ .
- **Section – B** : Question  $3 \times 12 = 36$ .
- **Section – C** : Question  $5 \times 7 = 35$ .

**SECTION A : (1 × 9 = 9)**

1. When the embryo can be identified with body parts, it is known as  
(a) zygote                      (b) foetus                      (c) infant                      (d) egg
2. Adam's apple is observed in  
(a) boys                      (b) girls                      (c) both boys and girls                      (d) none of these
3. Distilled water is a  
(a) conductor                      (b) insulator                      (c) semi-conductor                      (d) semi-insulator
4. Like charges when brought near each other then they  
(a) repel                      (b) attract  
(c) sometimes attract and sometimes repel                      (d) have no effect
5. A sudden shaking of the earth lasting for a very short time is known as  
(a) lightning                      (b) thunder                      (c) earthquake                      (d) Tsunami
6. The eye lens is  
(a) concave                      (b) convex                      (c) planoconcave                      (d) planoconvex
7. The largest planet in the solar system is  
(a) Neptune                      (b) Earth                      (c) Jupiter                      (d) Uranus
8. Which one of the following is better known as morning and evening star?  
(a) Neptune                      (b) Mercury                      (c) Proxima centauri                      (d) Venus
9. Ozone layer in the atmosphere depleted by  
(a) LPG                      (b) CFC                      (c) CNG                      (d) Acid rain

**SECTION B : (3 × 12 = 36)**

10. Draw a labelled diagram to show the male reproductive system in human beings.
11. Is it possible to find out whether the foetus is healthy or not?
12. (a) Why is menstruation also known as 'period'?  
(b) What is menarche?

- (c) What is menopause?
13. During electrolysis of water, why does hydrogen collect on cathode and oxygen collect on anode?
  14. Suggest three measures to protect ourselves from lightning.
  15. How is electric discharge fatal for human beings?
  16. (a) What is spectrum? (b) What is the meaning of VIBGYOR?
  17. What is constellation? Write two differences between a star and a constellation.
  18. What is a shooting star? Why does it burn completely before reaching the earth's surface?
  19. Why is greenhouse effect called so? How does it cause global warming?
  20. What is "Marble Cancer"?
  21. What is the Ganga Action Plan?

**SECTION C : (5 × 7 = 35)**

22. (a) What is meant by in vitro fertilisation?  
(b) How is it done?  
(c) What name is given to babies born through this technique?  
(d) What may be the possible reasons for adopting this technique?
23. Write notes on:  
(a) Adam's apple (b) Secondary sexual characters  
(c) Sex determination in the unborn baby.
24. Explain electrolysis of water by an activity.
25. What steps should be taken to protect yourself in case of an earthquake, if you are at home?
26. Draw a labelled sketch of human eye.
27. Draw a labelled diagram of solar system.
28. What is Van Mahotsav? When is it observed? What is the advantage of this project?