SET-A

SECTION -A

1. Choose the correct answer from the brackets:
   1. Smallest living part of an organism
      (a) tissue  (c) cell
      (b) organ  (d) none of the above
   2. ___________ is the beginning of new individual
      (a) Embryo  (c) Foetus
      (b) Zygote  (d) None of the above
   3. Identify the pancreatic hormone
      (a) Thyroxin  (c) Adrenalin
      (b) Insulin  (d) Estrogen
   4. Metamorphosis in frog is controlled by ___________
      (a) Thyroxine  (c) Adrenalin
      (b) Insulin  (d) Estrogen
   5. Protruding voice box in boys
      (a) Buccal Cavity  (c) Pharynx
      (b) Adams apple  (d) None of the above
   6. Image formed by a plane mirror is
      (a) Smaller than the object  (c) Same size as the object
      (b) Bigger than the object  (d) None of the above
   7. The most comfortable distance for reading is ___________
      (a) 2.5 cm  (c) 250 cm
      (b) 25 m  (d) 25 cm
   8. All human beings have ___________ pairs of chromosomes in the nuclei of their cells.
      (a) 2  (c) 22
      (b) 20  (d) 23
9. If two plane mirrors are kept at right angle _______ images are formed
   (a) 2                               (c) 4
   (b) 3                               (d) 5

10. Cell in human body which can change its shape
    (a) Amoeba                          (c) Paramecia
    (b) White Blood Cells              (d) Yeast

11. Oviduct is also termed as ________
    (a) Sperm duct                     (c) Fallopian tube
    (b) Ovaries                        (d) Uterus

12. Which of the following is a luminous object?
    (a) Book                           (c) Electric Lamp
    (b) Moon                           (d) None Of the above

13. In a kaleidoscope, three plane mirrors are inclined at an angle of
    (a) 30°                            (c) 90°
    (b) 60°                            (d) 120°

14. Which of these is not a Eukaryotic cell?
    (a) Onion Cell                    (c) Bacterial Cell
    (b) Cheek cells                   (d) Neuron

15. The gland present right above our kidneys.
    (a) Pancreatic Gland               (c) Thyroid Gland
    (b) Adrenal Gland                 (d) Pituitary Gland

SECTION -B

Name the following: (1 x 3 = 3 Marks)

16. Male and female gamete in humans

17. Any 2 cell organelles

18. Other name of oil glands

Say True or False. Rewrite the false statements correctly (1 x 3 = 3 Marks)

19. Ribosomes are blank looking structures in the cytoplasm

20. Testosterone is responsible for female secondary sexual characters.

21. Fertilization occurs only in sexual reproduction
Define the following:
22. Blind spot.
23. Gene

Fill in the blanks
24. Transparent front part of the eye is ________________
25. ________________ are the structures that can be seen inside the nucleus only when the cell divides.

SECTION -C

27. What is pseudopodia? Write its function
28. Write any two functions of plasma membrane
29. Name the main parts of a male reproductive system in humans.
30. List down any 4 measures by which we can take care of our eyes.
31. Write any two differences between zygote and foetus.
32. List down the significance of reproduction in organisms.
33. Define adolescence and puberty
34. Why do teenagers get acne and pimples during adolescence?
35. Identify the glands in human body.
SECTION -D (3 x 10 =30 Marks)

36. List down ways by which **HIV Virus spreads from infected to healthy person.**

37. (a) What is **Cataract**?
   (b) How can it be cured?
      [OR]
      Write **one function** of **Optic Nerve, Ciliary Muscle** and **Cornea** in a human eye.

38. List down **three differences between plant and animal cell.**

39. List down the **changes** that take place during **puberty** (only 6 points)

40. Write a short note on **protoplasm**

41. (a) What is **cloning**?
    (b) Name the **scientist** who did the **cloning for the first time?**
    (c) Name the **first animal** to be cloned.

42. Distinguish between **external and internal fertilization** with **2 examples** for each.

43. Describe **different shapes** of cell with **an example for each.** (No drawing needed)

44. Write a short note on **sense of sight in night birds.**

45. Define **binary fission in Amoeba** with a neat labeled sketch

SECTION -E (5 x 3 =15 Marks)

46. (a) Represent the **sex determination of an unborn baby** in the form of a **flow chart** (No Explanation needed) (3M)
    (b) What are **hormones**? State their **function** (2M)

    [OR]
    (a) What are **sex hormones**? State their **function** (3M)
    (b) Define the **process of metamorphosis with an e.g** (2M)

47. (a) Write a short note on **test tube babies** (3M)
    (b) Why do **fish and frog lay eggs in hundreds?** (2M)

48. (a) Differentiate **reflected ray** and **angle of reflection?** (2M)
    (b) Write any **2 functions of iris.** (2M)
    (c) What is the **basic principle** behind the working of **periscope?** (1M)