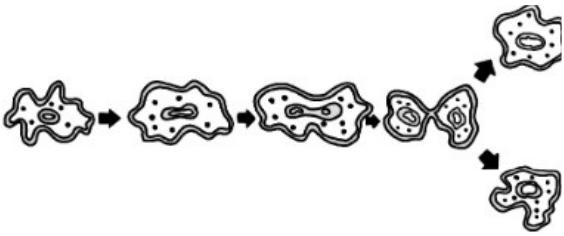
7. How do Organisms Reproduce? - Board Exam Questions (1 Mark)

Practice these questions online at pschool.in/science/ncert/g10/chap-7

1 Mark Questions (MCQ)

1) *Identify the type of reproduction shown in the diagram given below:*

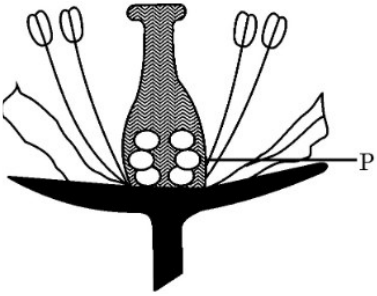


(a) Budding (b) Fragmentation (c) Spore Formation (d) Binary Fission

2) *Identify the correct statement for Spirogyra, Leishmania and Hydra:*
(a) they reproduce sexually (b) they are unicellular
(c) they are multicellular (d) they reproduce asexually

3) *Spirogyra, despite being a multi-cellular organism, still shows a simple reproductive method. Select the correct option with regard to reproduction in Spirogyra:*
(a) Asexual reproduction by division of cells into two cells
(b) Sexual reproduction by division of cells into many cells
(c) Asexual reproduction by breaking up of Spirogyra filaments into smaller parts
(d) Sexual reproduction by the formation of gametes after meiosis of cells of filaments followed by fusion of male and female gametes

4) *If the part 'P' of the flower is removed, which of the following processes will not take place?*



(a) Formation of pollens (b) Formation of flower
(c) Formation of fruit (d) Formation of seed

5) *In human beings, the implantation of fertilised egg takes place in which part of female reproductive system?*
(a) Oviduct (b) Cervix (c) Uterus (d) Vagina

6) *In a controlled experiment, the anthers of a mustard plant's flowers were carefully removed in the bud stage before they matured. The bud was covered with a paper bag. What will be the most likely result for these flowers?*
(a) They will still produce seeds and fruit through self-pollination
(b) They will attract more insects and produce larger flowers but no fruit
(c) They will not produce any seeds or fruits
(d) They will produce seeds and fruits that are genetically identical to the parent

7) *The Vas deferens and the Oviduct are both targets for surgical contraception (Vasectomy and Tubectomy respectively). Analysing the process of reproduction, what common biological event is prevented by blocking both these structures?*
(a) The production of gametes (sperm and egg)
(b) The implantation of the fertilized egg into the uterine wall
(c) The successful meeting and fusion of the male and the female gametes

(d) The release of hormones - testosterone and estrogen

8) *The male gamete of an apple plant has seventeen chromosomes. What is the number of chromosomes in the female gamete and in the cells of the adult plant respectively?*
(a) 17, 17 (b) 17, 34 (c) 34, 34 (d) 34, 51

9) *The correct/true statement(s) for a bisexual flower is/are:*
(i) They possess both stamen and pistil.
(ii) They possess either stamen or pistil.
(iii) They exhibit either self-pollination or cross-pollination.
(iv) They cannot produce fruits on their own.
(a) (i) only (b) (iv) only (c) (i) and (iii) (d) (i) and (iv)

10) *Bryophyllum produces new plant through:*
(a) Apical buds formed on the tip of the plant
(b) Vegetative buds produced in the notches of the leaf
(c) Flowers produced in the notches of the branches
(d) Fruits formed on the branches of the plant

11) *The number of chromosomes in a cell division is halved. This kind of cell division is observed in:*
(a) Only testis (b) Only ovary (c) Ovary and testis both (d) All cells of the body

12) *Match Column-I with Column-II and select the correct option from the choices provided.*
Column-I: a. Site of fertilisation of egg with the sperm; b. Site of implantation of embryo; c. Site of entry of sperm into the female reproductive tract; d. Site through which the waste materials generated by the developing embryo are removed
Column-II: (i) Vagina; (ii) Uterus; (iii) Oviduct; (iv) Placenta; (v) Cervix
(a) a-(ii), b-(i), c-(v), d-(iv) (b) a-(iii), b-(i), c-(v), d-(iv)
(c) a-(iv), b-(ii), c-(iii), d-(i) (d) a-(iii), b-(ii), c-(i), d-(iv)

13) *Select a pair of bisexual flowers from the following:*
(a) Papaya and mustard (b) Hibiscus and mustard
(c) Hibiscus and papaya (d) Hibiscus and watermelon

14) *Plants like rose and banana have lost the capacity to produce:*
(a) flowers (b) buds (c) seeds (d) fruits

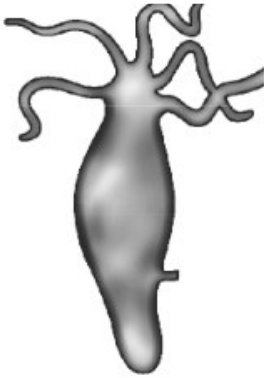
15) *In a bisexual flower the male gametes are present in the:*
(a) anther (b) ovary (c) stigma (d) filament

16) *The modes of reproduction in Spirogyra and Planaria respectively are*
(a) Regeneration and budding (b) Regeneration and fragmentation
(c) Fragmentation and regeneration (d) Budding and regeneration

17) *Select the option having correct matching of the organism given in Column I with the mode of reproduction in Column II:*
Column I: P. Leishmania; Q. Spirogyra; R. Planaria; S. Plasmodium
Column II: 1. Regeneration; 2. Multiple fission; 3. Binary fission; 4. Fragmentation; 5. Budding
(a) P-4, Q-2, R-1, S-3 (b) P-3, Q-4, R-5, S-2
(c) P-3, Q-4, R-1, S-2 (d) P-4, Q-3, R-2, S-1

18) *In which of the following organisms, multiple fission is a means of asexual reproduction?*
(a) Yeast (b) Leishmania (c) Paramoecium (d) Plasmodium

19) *Identify the mode of asexual reproduction in the following organism:*



(a) Fragmentation (b) Multiple fission (c) Budding (d) Binary fission

20) *Part(s) of a flower which attracts insects for pollination is (are)*
(a) petals and Sepals (b) anther and Stigma (c) petals only (d) sepals only

21) *The plants that can be raised by the method of vegetative propagation are:*
(a) Sugarcane, roses, grapes (b) Sugarcane, mustard, potato
(c) Banana, orange, mustard (d) Papaya, mustard, potato

22) *The part of seed which is a source of food during germination of seed is:*
(a) Cotyledon (b) Radicle (c) Plumule (d) Embryo

23) *The incorrect statement about placenta is:*
(a) It is a disc embedded in the uterine wall
(b) It contains villi on the embryo's side of the tissue
(c) It has a very small surface area for glucose and oxygen to pass from mother to the embryo
(d) The embryo gets nutrition from the mother's blood through it

24) *Select from the following the conditions responsible for the rapid spread of bread mould on a slice of bread:*
(i) Formation of large number of spores

(ii) Presence of moisture and nutrients in bread
(iii) Low temperature
(iv) Presence of hyphae
(a) (i) and (ii) (b) (ii) and (iv) (c) (ii) and (iii) (d) (iii) and (iv)

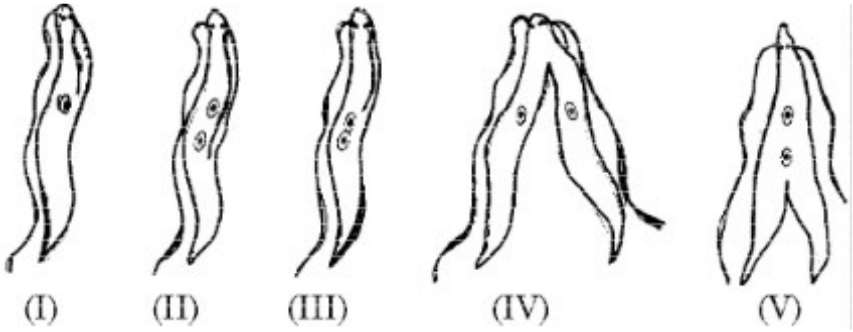
25) *Select the INCORRECT match (between the plant and its vegetative part) from the following:*
(a) Bryophyllum, leaf (b) Potato, stem (c) Money-plant, stem (d) Rose, root

26) *Plants which bear unisexual flowers are:*
(a) Mustard and Papaya (b) Hibiscus and Watermelon
(c) Mustard and Hibiscus (d) Watermelon and Papaya

27) *The number of chromosomes in parents and offsprings of a particular species undergoing sexual reproduction remain constant due to:*
(a) doubling of chromosomes after zygote formation
(b) halving of chromosomes after zygote formation
(c) doubling of chromosomes before gamete formation
(d) halving of chromosomes at the time of gamete formation

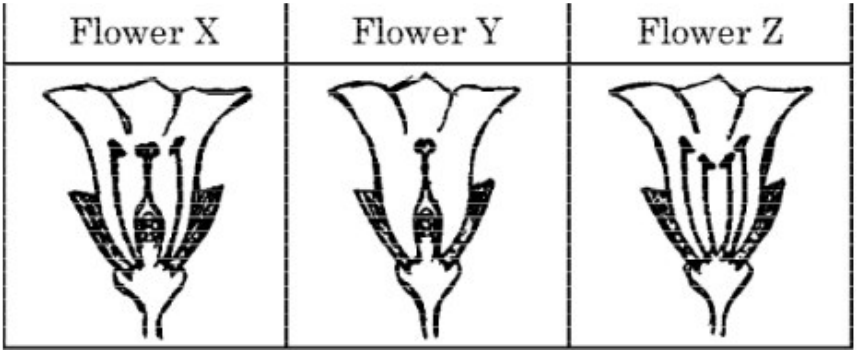
28) *The bacterial and the viral infections that may be caused due to unsafe sex respectively are:*
(a) Warts and HIV-AIDS (b) HIV-AIDS and Warts
(c) Gonorrhoea and Syphilis (d) Syphilis and Warts

29) *Choose the correct order of the stages of binary fission in Leishmania.*



(a) I, II, III, IV, V (b) I, III, II, V, IV (c) I, III, V, II, IV (d) I, II, III, V, IV

30) *Consider the following three flowers namely X, Y and Z. Which flower(s) would develop into a fruit?*

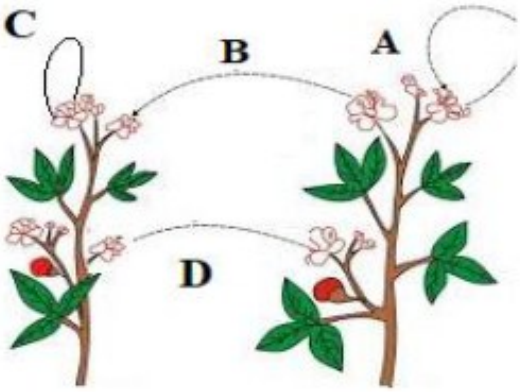


(a) 'X' only (b) 'Z' only (c) 'X' and 'Y' only (d) 'Y' and 'Z'

31) *A farmer wants to grow banana plants genetically similar enough to the plants already available in his field. Which one of the following methods would you suggest for this purpose?*

(a) Regeneration (b) Budding (c) Vegetative propagation (d) Sexual reproduction

32) *The diagram shown below depicts pollination. Choose the options that will show a maximum variation in the offspring.*



(a) A, B and C (b) B and D (c) B, C and D (d) A and C

Assertion and Reason

1) *Assertion (A): Variations are not often seen in off-springs produced by asexual reproduction.*
Reason (R): DNA molecule generated by replication is not similar to the original DNA.

2) *Assertion (A): The embryo gets nutrition from the mother's blood with the help of a special tissue called placenta.*
Reason (R): Placenta is a disc which is embedded in the uterine wall.

3) *Assertion (A): Offsprings produced by asexual reproduction are genetically similar to the parents.*
Reason (R): Asexual reproduction involves a single parent.

4) *Assertion (A): Generally, the number of chromosomes in a cell and in a germ cell is not the same in species.*
Reason (R): When two germ cells combine, they restore the normal number of chromosomes in a species.

5) *Assertion (A): When a bacterium divides into two, and the resultant two bacteria divide again, the four bacteria produced would be almost similar.*

Reason (R): DNA copying involves small inaccuracies in the reproduction process.

6) *Assertion (A): Probability of survival of an organism produced through sexual reproduction is more than that of organism produced through asexual mode.*
Reason (R): Variations provide advantages to individuals for survival.