

Reproduction in Plants

Exercise – 1

Multiple Choice Questions

DIRECTIONS: The/allowing questions has four Choices (a), (b), (c) and (d) out of which only one is correct. You have to choose the correct alternative.

1. The process by which plants give rise to new plants without seeds is called
(a) Sexual reproduction
(b) Vegetative propagation
(c) Asexual reproduction
(d) Budding
2. Male reproductive part of a plant is
(a) pores (b) pistil
(c) stamen (d) ovary
3. Reproduction in yeast takes place by
(a) zygote (b) fragmentation
(c) budding (d) spore formation
4. The cell which is formed after fusion of gametes is called _____.
(a) spore (b) embryo
(c) pistil (d) zygote
5. The flower which contain either pistil or stamen is called
(a) Unisexual flowers (b) Asexual flowers
(c) Bisexual flowers (d) None of these
6. Mature ovary forms the
(a) seed (b) fruit
(c) stamen (d) pistil
7. A spore producing plant is
(a) rose (b) potato
(c) bread mould (d) ginger
8. Bryophyllum can reproduce by
(a) stem (b) root
(c) leaves (d) flower
9. Which of the following constitute a pistil?
(a) Stigma, style and anther
(b) Stigma, style and ovary
(c) Stigma, stamen and ovary
(d) Pollen sac, style and ovule
10. Female gametes are present in
(a) anther (b) ovary
(c) pollen tube (d) stigma
11. Male gametes are present in
(a) anther (b) ovary
(c) filament (d) style
12. Reproduction is essential for living organism in order to
(a) Keep individual organ alive
(b) Maintain growth
(c) Fulfill their energy requirement
(d) continue the species for ever.
13. Vegetative propagation refers to the formation of new plants from the following existing organs of the old plants:
(a) stems, roots, flowers
(b) stems, flowers, fruits
(c) roots, stems, leaves
(d) stems, leaves, flowers
14. Reproduction is described as a phenomenon by which of these options?
(a) increase in size
(b) increase in number
(c) form new tissues and organs
(d) develop from zygotes
15. Growth of a new organism on or inside the parent body is called
(a) Fragmentation (b) Grafting
(c) Budding (d) all of these
16. The process of fertilization of angiosperms is called
(a) Single fertilization (b) Double fertilization
(c) Multiple fission (d) None of these
17. The pollen of a flowering plant
(a) Contains sperm cells
(b) is brightly coloured to attract insects
(c) holds the embryo
(d) is produced by the pistil
18. Select the one that does not reproduce from seeds.
(a) Rose (b) Pine
(c) Oak (d) Moss

19. Germination occurs when
 - (a) an already dormant embryo is activated
 - (b) the cotyledons emerge above ground
 - (c) either hypocotyls or epicotyls emerges above ground
 - (d) Vascular tissue begins the transport of water and minerals.
20. Sugarcane plants are generally propagated by vegetative reproduction because
 - (a) they do not produce seeds
 - (b) the seeds are not viable
 - (c) the incidence of disease may be reduced;
 - (d) all of the above
21. Pollen grains of insect pollinated flowers are
 - (a) smooth and sticky (b) Smooth and rough
 - (c) Rough and dry (d) Rough and sticky
22. Select the one that is true about cross pollination
 - (a) generally it results in higher yield of plants
 - (b) It takes place only in unisexual flowers
 - (c) It can fail to occur because of distance barrier
 - (d) It requires production of large number of pollen grains.
23. Select the method of asexual reproduction.
 - (a) Fragmentation (b) Budding
 - (c) Spore formation (d) all of the above
24. Vegetative buds are
 - (a) buds in the axil (b) flower buds
 - (c) both of these (d) none of these
25. Select the plant whose buds are in the margin of leaves.
 - (a) potato (b) ginger
 - (c) sprout leaf plant (d) turmeric
26. Spores are
 - (a) asexual reproductive bodies
 - (b) sexual reproductive bodies
 - (c) covered by delicate coatings
 - (d) all the above are correct
27. Which of the following are bisexual flowers?
 - (a) Corn (b) Papaya
 - (c) Rose (d) Cucumber
28. The cell which results after fusion of gametes is called
 - (a) Fertilization (b) egg
 - (c) Zygote (d) none of these
29. Mature ovary forms the
 - (a) seed (b) stamen
 - (c) pistil (d) fruit
30. When spores of fungi in a bread piece are released, why do they keep floating in air?
 - (a) they are light
 - (b) they can move only slowly
 - (c) they are asexual reproductive bodies
 - (d) all of the above
31. Sweet potatoes reproduce from
 - (a) modified leaves (b) modified stem
 - (c) modified roots (d) modified flowers
32. Mushrooms reproduce through
 - (a) spores (b) modified stems
 - (c) buds on leaf margin (d) fission
33. Onions and gladioli grow from
 - (a) bulbs (b) roots
 - (c) spores (d) buds on leaf margin
34. In potatoes new plant grow from
 - (a) bulbs of modified stems
 - (b) buds on leaflets
 - (c) eyes of modified stems
 - (d) modified roots
35. Which of the following grow from modified roots?
 - (a) Onion (b) Radish
 - (c) Begonia (d) Potato
36. Pollen sacs are found in
 - (a) pollen grain (b) pollen tube
 - (c) anther (d) ovule
37. Stigma is sticky
 - (a) to produce scents to attract birds and insects
 - (b) to hold pollen grains strongly
 - (c) there is no known function
 - (d) none of these
38. Corolla in a flower helps
 - (a) to produce male gametes
 - (b) to produce female gametes
 - (c) to hold pollen grains
 - (d) to attract insects
39. Seeds with looks are dispersed by
 - (a) water (b) wind
 - (c) animals (d) explosion

40. Seeds of poppy are dispersed by
 (a) wind (b) water
 (c) animals (d) explosion

Match the column

DIRECTIONS: Match column I with column II and select the correct answers using the code given below the columns

41.

| Column-I | Column-II |
|--------------|-----------------|
| (a) Mango | (p) Foliar buds |
| (b) Rhizopus | (q) Bulb |
| (c) Begonia | (r) Grafting |
| (d) Onion | (s) Spore |

- (a) (a) → (q), (B) → (p), (C) → (r), (D) → (s)
 (b) (a) → (r), (B) → (p), (C) → (q), (D) → (s)
 (c) (a) → (r), (B) → (s), (C) → (p), (D) → (q)
 (d) (a) → (q), (B) → (r), (C) → (s), (D) → (p)

42.

| Column-I | Column-II |
|--------------|---------------|
| (a) Coastor | (p) Water |
| (b) Lotus | (q) Animals |
| (c) Xanthium | (r) Explosion |
| (d) Maple | (s) Wind |

- (a) (a) → (s), (B) → (p), (C) → (r), (D) → (q)
 (b) (a) → (r), (B) → (p), (C) → (q), (D) → (s)
 (c) (a) → (r), (B) → (p), (C) → (s), (D) → (q)
 (d) (a) → (q), (B) → (r), (C) → (p), (D) → (s)

43.

| Column-I | Column-II |
|------------|-------------|
| (a) Pollen | (p) Calyx |
| (b) Eggs | (q) Corolla |
| (c) Sepals | (r) Ovary |
| (d) Petals | (s) Anther |

- (a) (a) → (s), (B) → (r), (C) → (p), (D) → (q)
 (b) (a) → (r), (B) → (s), (C) → (q), (D) → (p)
 (c) (a) → (s), (B) → (r), (C) → (q), (D) → (p)
 (d) (a) → (r), (B) → (s), (C) → (p), (D) → (q)

Passage Based Questions

DIRECTIONS: Read the passage (s) given below and answer the questions that follow.

Passage – 1

The flowers which contain either only the pistil or only the stamens are called unisexual flowers. The flowers which contain both stamen and pistil are called bisexual flowers.

44. Which of the following is/are parts of a stamen?
 (a) Anther (b) Pistil
 (c) Ovule (d) All of the above
45. Which of the following is a unisexual flower?
 (a) mustard (b) petunia
 (c) corn (d) none of these
46. Anther contains pollen grains which produce
 (a) ovule (b) male gametes
 (c) female gametes (d) none of these

Passage – 2

A filamentous alga X is found in ponds, lakes and streams. The filament of this alga breaks into two (or more) pieces on maturing and each piece then grows to become a new alga

47. Identify the alga from the following:
 (a) Paramecium (b) Hydra
 (c) Spirogyra (d) Yeast
48. What is the method of reproduction described here?
 (a) Budding (b) Fragmentation
 (c) Binary fission (d) Regeneration
49. Which of the following organism also reproduce by the same method as alga X?
 (a) Rhizopus (b) Sea Anemone
 (c) Sponges (d) Yeast

Passage – 3

A thick underground stem of a plant which has stored food has a number of points on it, when the old stem of this plant is planted in the soil, then each point on its surface grows into a new plant.

50. Which of the following could be the example of underground stem?
 (a) Onion (b) Potato
 (c) Radish (d) Carrot
51. What are the points present on the stem known as?
 (a) Nodes (b) buds
 (c) Eyes (d) roots
52. What is the name of this method of reproduction in plants?
 (a) Vegetative propagation of tubers
 (b) Sexual reproduction by seeds
 (c) Vegetative propagation by bulbs
 (d) Sexual reproduction by flowers

Passage – 4

When an insect sits on the flower of a plant then some particles from the little stalks in the flowers sticks to its body when this insect now sits on the flower of another plant, the particles get deposited in the other flower.

53. What are these particles?
(a) Rector (b) Pollen
(c) Dust (d) Honey
54. Which phenomenon is described here?
(a) fertilization (b) fusion of gametes
(c) germination (d) pollination
55. Which of the following steps will occur first after the deposition of particles?
(a) development of pollen tube
(b) fusion of gametes
(c) formation of zygote
(d) development of fruits

Assertion/Reason Based Questions

DIRECTIONS: The questions in this segment consists of two statements, one labeled as "Assertion A" and the other labelled as "Reason R". You are to examine these two statements carefully and decide if the Assertion A and Reason R are individually true and if so, whether the reason is a correct explanation of the assertion. Select your answers to these items using codes given below.

- (a) Both A and R are true and R is the correct explanation of A.
(b) Both A and R are true but R is not the correct explanation of A.
(c) A is true but R is false.
(d) A is false but R is true.
56. Assertion (A): A stamen has 2 parts.
Reason (R): Filament and anther are parts of a stamen.
57. Assertion (A): Seeds are product of sexual reproduction in plants.
Reason (R): Seeds are not products in potatoes.
58. Assertion (A): Moringa seeds have wings.
Reason (R): Moringa seeds are dispersed by wind.
59. Assertion (A): Spores are reproductive structures in some fungi plants.
Reason (R): Spores have thick walls to survive unfavorable conditions.

Statement Based Questions

Directions: Read the following two statements carefully and choose the correct option.

- (a) Statement (i) is correct while statement (ii) is incorrect.
(b) Statement (ii) is correct while statement (i) is incorrect.
(c) Both statements are correct.
(d) Both statements are incorrect.
60. (i) Some plants reproduce by growing vegetative parts into new plants
(ii) In sexual reproduction there is fusion of similar gametes.
61. (i) The integuments leave a small opening called Chalaza
(ii) The basal part of ovule is called micropyle.
62. (i) After fertilization, the ovary becomes the fruit and ovules the seeds.
(ii) Study of pollen grains is called palynology
63. (i) Flowers pollinated by insects are colourless and small in size
(ii) Seeds with spines are dispersed by humans and animals

Figure Based Question

DIRECTIONS: Carefully observe pictures given below and answer the following questions.

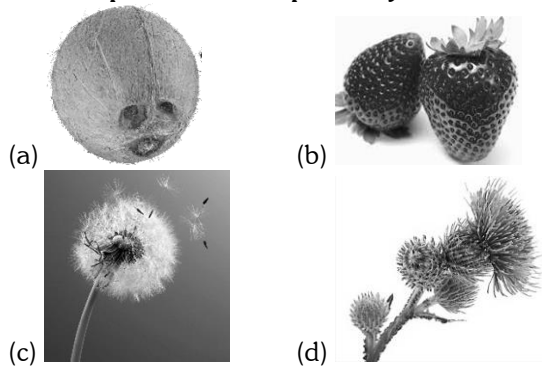
64. Look at the following image



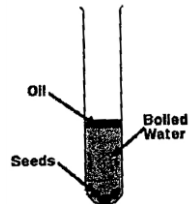
A wind pollinated flower will have:

- (a) large anthers, coloured petals and produce nectar
(b) large petals, small anthers and produce scent
(c) small petals, nectar and produce scent
(d) small petals, large anthers and have a feathery stigma

65. An example of a seed dispersed by the wind is

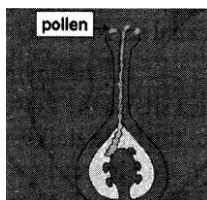


66. In an experiment to determine the conditions necessary for germination, one of the test tubes had seeds placed under cooled boiled water. Why was the water boiled?



- (a) To remove oxygen from the water.
(b) To kill germs in the water.
(c) To get the water to a suitable temperature for germination.
(d) To remove carbon dioxide from the water.

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In the carpel, the male gamete makes its way to the female gamete by passing down through the

- (a) Ovary (b) Pollen tube
(c) Filament (d) Sepal

Exercise – 2

Multiple Choice Questions

DIRECTIONS: The following questions have four choices (a), (b), (c) and (d) out of which only one is correct. You have to choose the correct alternative.

1. Wind pollinated flowers are called
(a) Entomophilous (b) Anemophilous
(c) Hydrophilous (d) Chiropterophilous
2. Vegetative propagation by stem can be seen in
(a) potato (b) ginger
(c) dahlia (d) both (a) & (b)
3. _____ pollinated flowers are colorful and fragrant and have nectaries.
(a) insects (b) wind
(c) water (d) animals
4. Parthenocarpic fruit is found in
(a) pineapple (b) mango
(c) orange (d) plum
5. Development of a fruit without pollination or fertilization is called _____.
(a) germination (b) parthenocarpy
(c) embryogeny (d) reproduction
6. Which of the following is a type of asexual reproduction?
(a) Oogenesis (b) Gametogenesis
(c) Fragmentation (d) none of these
7. Asexual reproduction is also known as
(a) Somatic reproduction
(b) Somatogenic reproduction
(c) Gametogenesis
(d) None of these
8. The pollen grain represents a
(a) male sporophyte
(b) male gametophyte
(c) female sporophyte
(d) female gametophyte
9. Sexual reproduction is given an advantage over asexual reproduction because
(a) it produces more offspring
(b) it preserves parental genotype
(c) it ensures survival of species
(d) it increases variations among the offspring of an individual.
10. These are the buds in the axil of leaves which develop into shoot. These are called
(a) flower buds
(b) vegetative buds
(c) both the above are correct
(d) none of these is correct
11. In this plant the buds are in the margin of leaves. If leaf of this plant falls on a moist soil, each bud can give rise to a new plant. This plant is
(a) Bryophyllum
(b) Sprout leaf plant
(c) both (a) and (b)
(d) algae
12. These are asexual reproductive bodies which are covered by a hard protective coating and they can survive for a long time. The plants of moss and ferns reproduce by means of these bodies. These are
(a) stamen (b) stigma
(c) spores (d) none of these
13. It is a female gamete and is formed in an ovule. It is
(a) ovary (b) egg
(c) zygote (d) none of these
14. Why are the plants produced by vegetative propagation an exact copy of parent plant?
(a) They are produced under controlled conditions
(b) They are produced from single parents
(c) both the above
(d) none of these
15. Pollination is
(a) Similar to fertilisation of animals
(b) shedding of pollen from anthers
(c) transfer of pollen from anther to stigma
(d) None of these
16. The mode of reproduction shown by fuzzy and greyish growth on bread is
(a) Spore formation (b) Budding
(c) Binary fission (d) Regeneration
17. Flowers which have stamens and pistils are called:
(a) Complete flowers
(b) Incomplete flowers
(c) Unisexual flowers
(d) Homosexual flowers

18. Which of the following is a complete flower?
 (a) Papaya
 (b) Cucumber
 (c) Bittergourd
 (d) Hibiscus
19. When you add yeast to dough, it rises because:
 (a) yeast cells reproduce by budding
 (b) yeast cells form colonies
 (c) of the bulk of new yeast cells
 (d) the rapidly reproducing yeast cells release CO_2 due to anaerobic respiration

Match the column

DIRECTION: Match column I with column II and select the correct answers using the code given below the columns.

20.

| Column-I | Column-II |
|------------------|-------------------|
| (i) Spirogyra | (a) stem cutting |
| (ii) Potato | (b) Leaves |
| (iii) Rose | (c) Tuber |
| (iv) Bryophyllum | (d) Fragmentation |

- (a) (i) → (d), (ii) → (c), (iii) → (a), (iv) → (b)
 (b) (i) → (c), (ii) → (a), (iii) → (b), (iv) → (d)
 (c) (i) → (b), (ii) → (a), (iii) → (c), (iv) → (d)
 (d) (i) → (d), (ii) → (a), (iii) → (b), (iv) → (c)

21.

| Column-I | Column-II |
|----------------------|-------------------|
| (i) Drumstick, maple | (p) sori (sopres) |
| (ii) Xanthium | (q) winged seeds |
| (iii) Yeast | (r) spiny seeds |
| (iv) Fern | (s) Budding |

- (a) (i) → (q), (ii) → (s), (iii) → (p), (iv) → (r)
 (b) (i) → (q), (ii) → (r), (iii) → (s), (iv) → (p)
 (c) (i) → (r), (ii) → (q), (iii) → (s), (iv) → (p)
 (d) (i) → (r), (ii) → (q), (iii) → (p), (iv) → (s)

22.

| Column-I | Column-II |
|-------------------|--|
| (a) Fragmentation | (i) Found in Potato |
| (b) Spores | (ii) Short stem around which immature developing leaves are folded |
| (c) Bud | (iii) fungi on a bread grow from them |
| (d) Eye | (iv) Process by which algae grow and multiply rapidly |

- (a) (a) → (i), (B) → (ii), (C) → (iii), (D) → (iv)
 (b) (a) → (ii), (B) → (iii), (C) → (iv), (D) → (i)
 (c) (a) → (iii), (B) → (iv), (C) → (i), (D) → (ii)
 (d) (a) → (iv), (B) → (iii), (C) → (ii), (D) → (i)

23.

| Column-I | Column-II |
|-----------------|---|
| (a) Node | (i) Part of the stem from which a leaf arises |
| (b) Axil | (ii) Point of attachment of leaf at node |
| (c) roots | (iii) can give rise to new plants in Dahlia |
| (d) Bryophyllum | (iv) Sprout leaf plant |

- (a) (a) → (i), (B) → (ii), (C) → (iii), (D) → (iv)
 (b) (a) → (ii), (B) → (iii), (C) → (iv), (D) → (i)
 (c) (a) → (iii), (B) → (iv), (C) → (i), (D) → (ii)
 (d) (a) → (iv), (B) → (iii), (C) → (ii), (D) → (i)

Passage Based Questions

DIRECTIONS: Read the passage (s) given below and answer the questions that follow.

Passage – 1

The cell which results after fusion of gametes is called a zygote. The fusion of male and female gametes (to form a zygote) is called fertilization. The zygote develops into an embryo.

24. Zygote formation occurs in
 (a) asexual reproduction
 (b) sexual reproduction
 (c) both asexual and sexual reproduction
 (d) all the above are correct
25. The cell which results after fusion of male gametes and female gametes is called
 (a) zygote
 (b) fertilization
 (c) embryo
 (d) none of these
26. The part of the flower which produce male gametes is called
 (a) Anther
 (b) Stamen
 (c) filament
 (d) none of these

Passage – 2

The transfer of pollen from the anther to the stigma of a flower is called pollination. If the pollen lands on the stigma of the same flower it is called self-pollination. When the pollen of a flower lands on the stigma of another flower of

the same plant, or that of a different plant of the same kind, it is called cross-pollination.

- 27.** Which of the following can carry pollen grains?
(a) Wind
(b) Water
(c) both wind and water
(d) none of these
- 28.** In self pollination
(a) the pollen of a flower lands on anther of the same flower
(b) the pollen of a flower lands on stigma of a different flower on the same plant
(c) the pollen of a flower lands on stigma of the same flower
(d) none of the above is correct
- 29.** In cross pollination
(a) the pollen of a flower lands on the stigma of another flower of the same plant
(b) the pollen of a flower lands on the stigma of another flower of a different plant of the same kind.
(c) both the above are correct
(d) none of these is correct

Passage – 3

The phenomenon of formation of new individuals from existing ones to increase the population is called reproduction. Reproduction can be broadly grouped into two types: asexual reproduction and sexual reproduction

- 30.** Vegetative reproduction is
(a) a sexual reproduction
(b) an asexual reproduction
(c) a pollination
(d) a type of fertilization
- 31.** The mode of reproduction in which an individual produces offspring with the help of another individual is called:
(a) sexual reproduction
(b) asexual reproduction
(c) tissue culture
(d) fertilization
- 32.** In vegetative propagation new plants are produced from
(a) roots (b) stem
(c) leaves (d) all of the above

Assertion/Reason Based Questions

DIRECTIONS: The questions in this segment consists of two statements, one labelled as "Assertion A" and the other labelled as "Reason R". You are to examine these two statements carefully and decide if the Assertion A and Reason R are individually true and if so, whether the reason is a correct explanation of the assertion. Select your answers to these items using codes given below.

- (a) Both A and R are true and R is the correct explanation of A.
(b) Both A and R are true but R is not the correct explanation of A.
(c) A is true but R is false.
(d) A is false but R is true.
- 33.** Assertion (A): A flower may either have a male or a female part.
Reason (R): A flower having both male and female parts is called bisexual flower.
- 34.** Assertion (A): Vegetative propagation is a method of asexual reproduction in plants.
Reason (R): In asexual reproduction new plants are obtained without production of seed or spore.
- 35.** Assertion (A): Yeast grows and multiplies every few hours if sufficient nutrients are available to it.
Reason (R): When water and nutrients are available algae grow and multiply rapidly by budding.
- 36.** Assertion (A): Seeds germinate and form new plants.
Reason (R): A spore germinates and develops into a new individual.
- 37.** Assertion (A): Parts of pistil are anther and filament.
Reason (R): Bisexual flowers are those which contain both stamen and pistil.

Statement Based Questions.

DIRECTIONS: Read the following three statements carefully and choose the correct option.

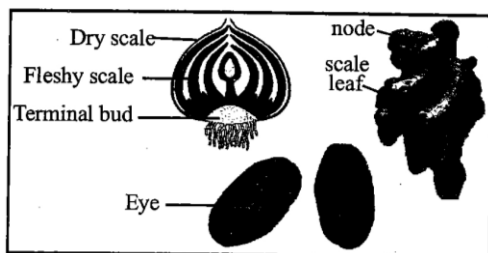
- (a) Statements (i) and (iii) are incorrect but (ii) is correct.
(b) Statements (i) and (ii) are incorrect but (iii) is correct.
(c) All statements are correct.
(d) All statements are incorrect.

38. (i) Anther is a part of stamen
(ii) Filament is a part of stamen
(iii) Anther contains pollen grains
39. (i) Roots of potato cannot give rise to new plants
(ii) Plants produced by vegetative propagation take longer time to grow and bear flowers.
(iii) Spores are asexual reproduction bodies
40. (i) To cut any branch of a plant called cutting
(ii) In asexual reproduction, without seeds plant can give rise to new plants
(iii) Vegetative propagation is a method of asexual reproduction
41. (i) A flower that contain only male or female parts is called bisexual flowers.
(ii) A flower that contain all four parts is known as incomplete flower.
(iii) A flower which contains only male or female part is called complete flower.
42. (i) Moringa seeds are dispersed by wind
(ii) The seeds of Balsam are dispersed by explosion
(iii) Seeds of coconut are dispersed by water
43. (i) Spirogyra reproduce by budding
(ii) Rose reproduce by stem cutting
(iii) Yeast reproduce by fragmentation

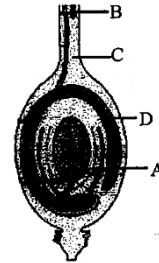
Statement Based Questions

DIRECTIONS: Carefully observe pictures given below and answer the following questions.

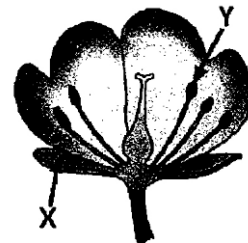
44. In the following figure are shown some modifications of vegetative reproduction. These are
(a) modified roots
(b) modified underground stems
(c) modifical underground leaves
(d) All of these



45. The given figure represents a carpel. Select the part that bears the female gamete.
(a) A (b) B
(c) C (d) D



46. Study the picture given below and then answer the question.



The parts in the flower labeled as X and Y are

- (a) X= petal, Y= stalk
(b) X= sepal, Y= carpel
(c) X= petal, Y= anther
(d) X = sepal, Y = anther

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Name the parts labeled as X and Y

- (a) X= plumule, Y= testa.
(b) X = plumule, Y = radicle.
(c) X = food store, Y = radicle.
(d) X= radicle, Y= testa.

Hints & Solutions

Exercise – 1

Multiple Choice Questions

1. (b)
 2. (b)
 3. (c)
 4. (d)
 5. (a)
 6. (b)
 7. (c)
 8. (c)
 9. (b)
 10. (b)
 11. (a)
 12. (d)
 13. (c)
 14. (b)
 15. (c) It is called budding.
 16. (b)
 17. (a) It contains sperm cells.
 18. (d)
 19. (a)
 20. (b)
 21. (d) They are rough and sticky.
 22. (d)
 23. (d)
 24. (c)
 25. (c)
 26. (b)
 27. (c) Rose is a bisexual flower.
 28. (c) It is called zygote
 29. (d) Mature ovary forms the fruit.
 30. (a)
 31. (c)
 32. (b)
 33. (b)
 34. (c)
 35. (b)
 36. (c)
 37. (b)
 38. (d)
 39. (c)
 40. (a)
- #### Match the Column
41. (c)
 42. (b)
 43. (a)
- #### Passage Based Questions
44. (a) Anther is a part of stamen.
 45. (c) Corn is unisexual.
 46. (b)
 47. (c)
 48. (b)
 49. (b) Sea anemones reproduce by fragmentation.
 50. (b)

51. (c)
52. (a)
53. (b)
54. (d)
55. (a)

Assertion/Reason Based Questions

56. (a)
57. (b)
58. (a)
59. (b)

Statement Based Questions

60. (a) Dissimilar gametes fuse in sexual reproduction.
61. (d) The small opening/pore is called micropyle and the basal part of ovule is Chalaza
62. (c)
63. (b) Insect pollinated flowers are large, brightly coloured and scented.

Figure Based Questions

64. (d)
65. (c)
66. (a)
67. (b)

EXERCISE – 2

Multiple Choice Questions

1. (c)
2. (d)
3. (a)
4. (a)
5. (b)

6. (c) Fragmentation is a type of asexual reproduction.
7. (b)
8. (b)
9. (d)
10. (b) Such buds are called vegetative buds.
11. (c)
12. (c)
13. (b) The female gamete is called egg.
14. (b)
15. (c)
16. (a)
17. (a)
18. (d)
19. (d) Rapidly reproducing yeast cells release CO_2 gas due to anaerobic respiration thereby causing the dough to rise

Match the Column

20. (a)
21. (b)
22. (d)
23. (a)

Passage Based Questions

24. (b) Zygote formation occurs in sexual reproduction.
25. (a) It is called zygote.
26. (a) Anther (a part of stamen) contains pollen grains which produce male gametes.
27. (c)
28. (c)
29. (c)

30. (b)

31. (a)

32. (d)

Assertion/ Reason Based Questions

33. (b) Both correct. Reason R is not correct explanation of assertion A.

34. (a) Both correct. Reason R is correct explanation of assertion A.

35. (c) Assertion A is correct. Reason R is incorrect.

36. Algae multiply by fragmentation.

37. (b)

38. (d) Assertion A is incorrect and reason R is correct.

Statement Based Questions

39. (c)

40. (b)

41. (a)

42. (d) All the statements are incorrect

43. (c)

44. (a) Spirogyra reproduces by fragmentation and yeast by budding.

Figure Based Questions

45. (b) These are modified underground stems.

46. (a)

47. (d)

48. (d)