

# SCIENCE

## HOW DO ORGANISMS REPRODUCE

1. Vegetative propagation in *Bryophyllum* takes place by :-  
(A) stem      (B) leaf      (C) root      (D) none of these  
ANS : B
2. The group of petals is called :-  
(A) sepals      (B) calyx      (C) root      (D) None of these  
ANS : D
3. During grafting, the portion of plant that is grafted is called :-  
(A) stock      (B) scion      (C) stalk      (D) stem  
ANS : B
4. In roses, the method commonly used to produce new plants is :-  
(A) tissue      (B) cutting      (C) layering      (D) None of these  
ANS : B
5. Pollen grains are produced by :-  
(A) ovary      (B) anther      (C) stigma      (D) petal  
ANS : B
6. Which one is applicable to insect pollinated flowers :-  
(A) Flowers are very small produced in large quantities.  
(B) Flowers are not prominent and without nectar.  
(C) Flowers are conspicuous and scented having nectar.  
(D) None of these

ANS : C

7. The group of sepals is called :-

- (A) gynoecium      (B) calyx      (C) corolla      (D) androecium

ANS : B

8. Maize is :-

- (A) self pollinated      (B) cross pollinated by rain  
(C) cross pollinated by insects      (D) cross pollinated by wind

ANS : D

9. Which of the following produces male gametes in a flower :-

- (A) sepals      (B) petals      (C) carpels      (D) stamens

ANS : D

10. During pollination, pollen grains get carried to which part of the carpel ?

- (A) Ovary      (B) Stigma      (C) Ovule      (D) Style

ANS : B

11. At the time of entering into ovule, pollen tube has :-

- (A) three male nuclei      (B) two ~~male~~ <sup>male</sup> nuclei      (C) one gamete nucleus      (D) four male gametes

ANS : B

12. The transfer of pollen grains from anther to stigma is termed :-

- (A) ovulation      (B) double fertilization      (C) pollination      (D) fertilization

ANS : C

13. Fertilization in plants occurs in the :-

- (A) embryo sac      (B) style      (C) pollen tube      (D) stigma

ANS : A

14. Stem cutting are commonly used for propagation in :-

- (A) mango                      (B) jasmine                      (C) cotton                      (D) sugarcane

ANS : D

15. Vegetative reproduction in plants like citrus, jasmine and grapevine is done by the process of :-

- (A) stem layering              (B) stem cutting              (C) stem grafting              (D) none of these

ANS : A

16. Asexual reproduction are :-

- (A) Fission    (B) Budding  
(C) Vegetative propagation                      (D) All of these

ANS : D

17. Binary fission occurs in :-

- (A) Plasmodium              (B) Hydra                      (C) Pomegranate              (D) Amoeba

ANS : D

18. Multiple fission occurs in :-

- (A) Euglena                      (B) Yeast                      (C) Plasmodium                      (D) Paramecium

ANS : C

19. In which of the following reproduction parental identity is lost :-

- (A) Budding                      (B) Binary                      (C) Multiple fission                      (D) Both B and C

ANS : D

20. Which of the following organisms shows budding :-

- (A) Spirogyra                      (B) Hydra                      (C) Amoeba                      (D) Paramecium

ANS ; B

21. If the pollen is transferred to the stigma of the same flower, it is termed :-

- (A) allogamy                      (B) geitnogamy                      (C) autogamy                      (D) all of these

ANS : C

22. Which part of the flower forms the fruit ?

- (A) Whole flower (B) Only stamens and carpel  
(C) Only ovary (D) Only carpel

ANS : C

23. In angiosperm after the fertilization endosperm becomes :-

- (A) Haploid (B) Diploid (C) Triploid (D) Tetraploid

ANS : C

24. After fertilization ovule grows into :-

- (A) seed (B) fruit (C) placenta (D) None

ANS : A

25. Which is not a part of carpel :-

- (A) Stigma (B) Ovary (C) Anther (D) Style

ANS : C

26. Nucleus of the bud is formed by the division of :-

- (A) Meiosis (B) Amitosis (C) Mitosis (D) All of these

ANS : C

27. Clones are formed as a result of :-

- (A) Budding (B) Regeneration  
(C) Vegetative propagation (D) All of these

ANS : D

28. Malarial parasite reproduces by :-

- (A) Multiple fission      (B) Binary fission      (C) Budding      (D) Regeneration

ANS : B

29. The outgrowth of *Hydra* is termed as :-

- (A) Bulb      (B) Bud      (C) Daughter      (D) Tentacles

ANS : C

30. Asexual reproduction takes place by the process of budding :-

- (A) Plasmodium (B) Amoeba      (C) Yeast      (D) Rhizopus

ANS : C

31. Asexual reproduction involves :-

- (A) Only one parent      (B) Two parent  
(C) Meiosis and syngamy      (D) Fusion of two gametes

ANS : A

32. Which is a part of stamen :-

- (A) Stigma      (B) Filament      (C) Style      (D) None

ANS : B

33. Binary fission occurs in :-

- (A) Amoeba      (B) Paramecium      (C) Planaria      (D) A & B both

ANS : D

34. Which one of the following is concerned with asexual reproduction ?

- (A) Zygote      (B) Spores      (C) Gametes      (D) Gonads

ANS : B

35. Which type of reproduction of Hydra is most common ?

- (A) Budding (B) Fragmentation  
(C) Sexual reproduction (D) Gametogenesis

ANS : A

36. The most fundamental characteristics of living being :-

- (A) Locomotion (B) Regeneration (C) Fragmentation (D) Reproduction

ANS : D

37. Multiple fission occurs in :-

- (A) Hydra (B) Plasmodium (C) Planaria (D) All of these

ANS : B

38. The animals consist of both male & female sex known as :-

- (A) Viviparous (B) Oviparous (C) Sterile (D) Hermaphrodite

ANS : D

39. Animals which give birth to young ones are called :-

- (A) amphibious (B) oviparous (C) triploblastic (D) viviparous

ANS : D

40. <sup>testis</sup> ~~Testis~~ of man occur :-

- (A) inside body (B) upper side of kidney  
(C) on either side of dorsal aorta (D) in scrotal sacs

ANS : D

41. Fertilization of ovum takes place in :-

- (A) ovary (B) fallopian tube (C) cervix (D) uterus

ANS : B

42. Oogenesis is a process of formation of :-

- (A) Sperms                      (B) Ova                      (C) Sperms and ova                      (D) None of these

ANS : B

43. Middle piece of a mammalian sperm contains :-

- (A) nucleus                      (B) acrosome                      (C) vacuole                      (D) mitochondria

ANS : D

44. Male hormone is :-

- (A) Corpus luteum                      (B) Testosterone                      (C) Progesterone                      (D) Gonadotropin

ANS : B

45. Sperms move by :-

- (A) head                      (B) acrosome                      (C) middle piece                      (D) tail

ANS : D

46. Binary fission is a form of :-

- (A) sexual reproduction                      (B) asexual reproduction  
(C) both of these                      (D) none of these

ANS : B

47. Fertilization of frog takes place in :-

- (A) Uterus                      (B) Fallopian tube  
(C) Water                      (D) Cervix

ANS : C

48. Which of the following can reproduce through regeneration ?

- (A) Hydra                      (B) Planaria                      (C) Wall lizard                      (D) Both (A) and (B)

ANS : D

49. Development of an organism from an unfertilised ovum is called :-

- (A) oogenesis (B) parthenogenesis  
(C) vegetative propagation (D) asexual reproduction

ANS : B

50. Egg-producing animals such as birds are called :-

- (A) unisexual (B) oviparous (C) viviparous (D) hermaphrodite

ANS : B

51. What is true for gametes ?

- (A) They are diploid (B) They form gonads  
(C) They are formed from gonads (D) They produce hormones

ANS : C

52. Which of these secretes seminal fluid ?

- (A) Prostate gland (B) Cowper's gland (C) Seminal vesicle (D) All of these

ANS : D

53. The normal duration of menstrual cycle is :-

- (A) 7-8 days (B) one day (C) 3-4 days (D) none of the above

ANS : C

54. Female sex hormones are :-

- (A) Progesterone (B) Estrogen (C) Testosterone (D) A & B Both

ANS : C

55. The process of attachment of blastocyst in the endometrium of uterus is known as :-

- (A) placentation (B) implantation (C) gestation (D) cleavage

ANS : B

56. Which of the following is an IUCD ?

- (A) Copper-T (B) Diaphragm (C) Oral pills (D) Tubectomy

ANS : A

57. The Primary reason for increase in human population is :-

- (A) the increase in agricultural production
- (B) the increases in birth rate and decreases in death rate
- (C) the improvement in medical technology
- (D) all of the above

ANS : D

58. The importance of reproduction in organisms is because of :-

- (A) Formation of new individuals
- (B) Production of individuals with same traits
- (C) Production of individuals with different traits so as to being varieties in a population
- (D) All of the above

ANS : D

59. Twins absolutely resembling each other in sex and external appearance result when :

- (A) Two similar sperms fertilise two similar eggs
- (B) Same sperm fertilises two eggs
- (C) Two halves of the same egg develop separately after it is fertilised by one sperm
- (D) Two halves of the same egg are fertilised by two separate sperms

ANS : C

60. Copulation in human beings may result in fertilisation during (normal menstrual cycle is for 28 days)

(A) 4th day and 10th day

(B) 21th day and 28th day

(C) 11th day and 21st day

(D) any day between 1st day and 28th day

ANS : C

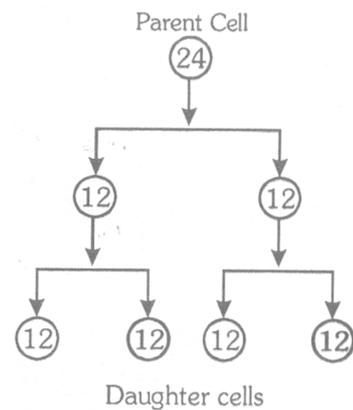
61. The chart given here shows a cell division. The division is :-

(A) Mitosis

(B) Meiosis

(C) Division of a zygote during development

(D) Division of an Amoeba during binary fission



ANS : B

62. The gametes are formed as a result of :-

(A) Vegetative propagation

(B) Asexual reproduction

(C) Meiosis

(D) Mitosis

ANS : C

63. Which of the following tests is for determining, the sex of the foetus ?

(A) Blood group test

(B) Amniocentesis

(C) Blood sugar test

(D) pH value test

ANS : B

64. The structure which provides a place for attachment and exchange of materials between mother and the foetus is called :-

(A) Uterus

(B) Umbilical cord

(C) Oviduct

(D) Placenta

ANS : D

65. Reproduction by budding takes place in :-

(A) Hydra and Earthworm

(B) Hydra and Yeast

(C) Yeast and Bacteria

(D) Bacteria and Amoeba

ANS : B

66. During mitosis which of the following is / are equally distributed in daughter cells ?

(A) Chloroplasts

(B) Cytoplasm

(C) Chromosomes

(D) Centrosome

ANS : C

67. In cells after they attain a certain size, growth stops and the cell undergoes division. The probable reason for this is :-

(A) The volume increases more than the surface area and the ratio between the two becomes

(B) Both the volume and surface area increases in equal proportion

(C) The surface area increases faster than the volume

(D) The surface area is several times more than the volume.

ANS : A

68. Puberty age in girls is between :-

(A) 12-18 years of age

(B) 10-16 years of age

(C) 14-20 years of age

(D) 15-18 years of age

ANS : B

69. Fertilisation of an ovum with a sperm takes place in :-

(A) Uterus

(B) Vagina

(C) Fallopian tube

(D) Cervix

ANS : C

70. A human zygote has :-

- (A) 46 chromosomes (B) 23 chromosomes  
(C) 47 chromosomes (D) 48 chromosome

ANS : A

71. Regeneration is a process in which :-

- (A) A tumour is produced (B) A new individual is produced  
(C) Missing parts grow again (D) Old individuals are replaced by new ones

ANS : C

72. As compared to human egg the spermatozoa has less :-

- (A) Chromosomes (B) Centrosomes  
(C) Cytoplasm (D) Mobility

ANS : C

73. Bryophyllum can be propagated vegetatively by-

- (A) Stem (B) Root (C) Leaf (D) Flower

ANS : C

74. Which of the following can not regenerate with the help of layering ?

- (A) Jasmine (B) Rose (C) Mango (D) Cactus

ANS : D

75. Offspring formed by asexual method of reproduction have greater similarity among themselves because:

- (i) Asexual reproduction involves only one parent  
(ii) Asexual reproduction does not involve gametes  
(iii) Asexual reproduction occurs before sexual reproduction  
(iv) Asexual reproduction occurs after sexual reproduction  
(A) (i) and (ii) (B) (i) and (iii) (C) (ii) and (iv) (D) (iii) and (iv)

ANS : A

76. A feature of reproduction that is common to *Amoeba*, *Spirogyra* and *Yeast* is that  
(A) They reproduce asexually (B) They are all unicellular  
(C) They reproduce only sexually (D) They are all multicellular

ANS : A

77. The grafted portion of a plant is called  
(A) Stalk (B) Stock (C) Layer (D) Scion

ANS : D

78. The process by which root, stem and leaves give rise to new plants is called  
(A) vegetative reproduction. (B) spore formation.  
(C) fragmentation. (D) sexual reproduction.

ANS : A

79. Vegetative propagation refers to formation of new plants from  
(A) Stem, roots and flowers (B) Stem, roots and leaves  
(C) Stem, flowers and fruits (D) Stem, leaves and flowers

ANS : B

80. Regeneration is carried out by  
(A) the mass of any kind of body cells (B) specialised cells  
(C) muscle cells (D) nerve cells

ANS : B

81. Advantage of vegetatively reproducing organism is  
(A) dissimilar organisms. (B) genetic similarity.  
(C) genetic variation. (D) varied offsprings

ANS : B

82. The artificial method of formation of new plants is called  
(A) vegetative reproduction. (B) tissue culture.  
(C) layering. (D) regeneration.

ANS : B

83. Development of egg without fertilization is  
(A) parthenocarpy (B) polyembryony  
(C) parthenogenesis (D) adventive embryony

ANS : C

84. Vegetative propagation is shown by  
(A) Hydra. (B) Rhizopus. (C) sugarcane. (D) Amoeba.

ANS : C

85. Anemophily is pollination by  
(A) air (B) water (C) insects (D) animal

ANS : A

86. The capacity of organisms to reproduce after being cut into many pieces is called  
(A) budding. (B) fragmentation (C) regeneration. (D) reproduction

ANS : C

87. The specific type of asexual reproduction found in Hydra is  
(A) binary fission. (B) fragmentation. (C) regeneration. (D) budding.

ANS : D

88. The unique method of propagation of banana, orange, rose and jasmine is  
(A) sexual reproduction. (B) vegetative reproduction.  
(C) regeneration. (D) fragmentation.

ANS : B

89. Vegetative propagation is a kind of  
(A) asexual reproduction (B) sexual reproduction  
(C) gametogenesis (D) spore formation

ANS : A

90. The thread like structures that develop in the bread mould are  
(A) flagella. (B) cilia. (C) sporangia. (D) hyphae.

ANS : D

91. Variations in an asexually reproducing population are due to  
(A) DNA copying. (B) error in DNA copying  
(C) cell division. (D) spore formation.

ANS : B

92. The vegetative reproduction takes place in Bryophyllum by  
(A) leaf buds. (B) scale leaves. (C) cuttings. (D) nodes.

ANS : A

93. Binary fission and budding are examples of  
(A) Asexual Reproduction (B) Sexual Reproduction  
(C) In favourable conditions asexual reproduction while in unfavourable conditions sexual reproduction (D) Conjugation

ANS : A

94. The body of the parent breaks into discrete pieces, each of which can produce an offspring, this is known as  
(A) reproduction (B) fragmentation (C) reformation (D) fission

ANS : B

95. The mode of asexual reproduction in Protistans and Monerans is  
(A) cell division. (B) fragmentation. (C) budding. (D) vegetative propagation

ANS : A

96. Pollination between different flowers of same plant is called  
(A) autogamy (B) geitonogamy (C) allogamy (D) xenogamy

ANS : B

97. Double fertilization is  
(A) fusion of two male gametes with egg  
(B) fusion of one male gamete with egg and the other male gamete with the polar bodies  
(C) both are correct  
(D) both are incorrect

ANS : B

98. Emasculation is achieved by  
(A) removal of stigma (B) removal of anthers  
(C) removal of sepal & petals (D) removal of gynoecium

ANS : B

99. A clone is defined as  
(A) a part of DNA (B) genetically similar individuals  
(C) genetically different individuals (D) morphologically different individuals

ANS : B

100. The structure meant for the nourishment of developing embryo in case of plants is -  
(A) pollen tube (B) endosperm  
(C) both A & B are correct (D) none of these

ANS : B

