

BIOLOGY

BOOKS - DINESH PUBLICATION ENGLISH

REPRODUCTION IN ORGANISMS



- 1. Apromixis is
 - A. Development of plants in darkness
 - B. Development of plants without fusion of gametes
 - C. Inability to perceive stimulus for flowering

D. Effect of low temperature on plant growth.

Answer: B



Watch Video Solution

2. Amphimixis is development of an organism obtained through

- A. Apospory
- B. Apogamy
- C. Fusion of gametes
- D. Without fusion of gametes.

Answer: C

- **3.** Parthenogenesis is development of new individual from
 - A. A single gamete without fertilization
 - B. Fertilization of female gamete with female gamete
 - C. Fertilization of male gamete with male gamete
 - D. Vegetative structure.

Answer: A



4. Reproduction which does not involve gametic union is						
A. Paarasexual reproduction						
B. Apomixis						
C. Parthenogenesis						
D. Agamospermy.						
Answer: B						
Watch Video Solution						
5. Vegetative propagation through budding occurs in						

A. Rose



Watch Video Solution

- 7. A part of root of Dalbergia placed in the soil will
 - A. Sprout
 - B. Decay
 - C. Develop underground complex
 - D. Grow depending upon availbility of food.

Answer: A



8. Which root will form a new plant								
A. Populus								
B. Dahlia								
C. Azadirachta								
D. Both A and B.								
Answer: D								
Watch Video Solution								
9. It is more economical to propagate Potato and								

A. Pieces of tubers

B. Whole tubers C. Seeds D. Tissue culture. **Answer: A Watch Video Solution** 10. Onion is propagated through its A. Tubers B. Bulbs C. Seeds D. Rhizomes.



Watch Video Solution

- 11. Bulbils are employed for multiplication of
 - A. Bryophyllum
 - **B.** Crocus
 - C. Agave
 - D. Strawberry.

Answer: C



A. Begonia
B. Bryophyllum
C. Sensevieria
D. Adiantum caudatum.
Answer: D
Watch Video Solution
13. Bryophyllum diagremontianum is characterised by the formation of

A. Plantlets in leaf notches while attached to plant

12. Leaf tips help in vegetative propagation in

- B. Plantlets from marginal notches when the leaf fallson the groundC. Buds in the marginal notches of leaves
- D. Plantlets on the leaves in the region of injury.

Answer: A



- **14.** Corm is used as a means of vegetative multiplication in
 - A. Ginger
 - B. Gladiolus

- C. Banana
- D. Pineapple.



- 15. Banana is multiplied by means of
 - A. Seeds
 - B. Leaf cuttings
 - C. Rhizome
 - D. Offsets.

Answer: C



Watch Video Solution

16. Leaf cuttings are used for quick vegetative propagation of

- A. Sansevieria
- B. Jasminum
- C. Tea
- D. Blackberry.

Answer: A



17. Blackberry is multiplied through

- A. Stem cuttings
- B. Bulbils
- C. Leaf cuttings
- D. Root cuttings.

Answer: D



Watch Video Solution

18. Stem cuttings are often treated with NAA before sowing in order to promote

- A. Sprouting of buds
- B. Rooting
- C. Layering
- D. Development of adventitious buds.



- **19.** Leaf and stem cuttings are sown
 - A. Vertically with morphological apical end upwards
 - B. Vertically with morphological basal end upwards
 - C. Laterally with morphological upper side upwards

D. Laterally with morphological lower side upwards

Answer: A



Watch Video Solution

20. Air layering is performed in case of

- A. Jasmine
- B. Grape Vine
- C. Gooseberry
- D. Litchi.

Answer: D



Match Mideo Solution

21. Many new plants are obtained through

A. Air layering

B. Mound layering

C. Serpentine layering

D. Both B and C.

Answer: D



Watch Video Solution

22. The stem branch used in layering is

- A. Upper branch
- B. Young branch
- C. Soft basal branch
- D. Hard basal branch.

Answer: C



- **23.** IN grafting, scion forms
 - A. Shoot system
 - B. Root system
 - C. New plant

D. Hybrid plant.

Answer: A



Watch Video Solution

24. The technique of pegging a branch in soil is called

A. Grafting

B. Layering

C. Cutting

D. Vegetative propagation.

Answer: B



vateri video Solution

25. Bud grafting is commonly used in

A. Litchi

B. Pomegranate

C. Rose

D. Jasmine.

Answer: C



Watch Video Solution

26. Vegetatively propagated plants

- A. Show adaptive veriations
- B. Better fitted in the struggle for existence
- C. Stouter than parents
- D. Clone of their parent.

Answer: D



Watch Video Solution

27. Clone is

- A. Descendants of a single parent
- B. Vegetatively produced descendants of a single

parent

- C. Sexually produced descendants of a single couple
- D. All the above



- 28. Which one is propagated by cuttings
 - A. Bougainvillea
 - B. Tea
 - C. Sansevieria
 - D. All the above

Answer: D



Watch Video Solution

29. Grafting is employed for better and quicker yield of good varieties of

- A. Apple
- B. Citrus
- C. Mango
- D. All the above

Answer: D



- 30. Parthenogenesis is formation of
 - A. Embryo without fertilization
 - B. Embryo from pollen sac
 - C. Sporophytic plantlet from gametophyte
 - D. Fruit without fertilization.

Answer: A



Watch Video Solution

31. The smallest viable unit which can grow, multiply and form a plant in tissue culture is

B. Nucleus C. Cell D. Tissue **Answer: C Watch Video Solution 32.** Microproopagation is A. Raising of plants from a small tissue in culture B. Multiplication of small plants C. Propagation of small parts of organisms

A. Chromosome

D. Indefinite maintenance of an organ or tissue

Answer: A



Watch Video Solution

33. Tissue culture is

- A. Growth of specific plant structures on artificial medium
- B. Growth and multiplication of cells on artifical medium
- C. Cryogenic maintenance of tissues

D. Maintenance, growth and differentiation of cells, tissues and organs on artificial medium.

Answer: D



Watch Video Solution

34. Plant part used for culture is called:

- A. Scion
- B. Explant
- C. Stock
- D. Callus.



Watch Video Solution

- 35. Tissue culture technique was first attempted by
 - A. Haberlandt
 - B. Hanning
 - C. Nobecourt
 - D. Gautheret.

Answer: A



36.	Tissue	culture	technique	was	first	performed	
suc	cessfully	by					

- A. Haberlandt
- **B.** Nobecourt
- C. White
- D. Gautheret.

Answer: C



Watch Video Solution

37. The structure employed by White for first successful tissue culture was

- A. Root of Carrot
- B. Root of Tomato
- C. Leaf cells
- D. Apical meristem.



Watch Video Solution

38. Callus is

- A. Tissue that forms embryo
- B. An insoluble carbohydrate
- C. Tissue that grows to form embryoid

D. Unorganised actively dividing mass of cells maintained in culture.

Answer: D



Watch Video Solution

39. Callus formation is promoted by

- A. Proper light and subculuring
- B. Darkness and subculturing
- C. Excess of NAA
- D. Absence of salts.



Watch Video Solution

- 40. Differentiation of callus into plant parts is
 - A. Embryogenesis
 - B. Embryoid formation
 - C. Morphogenesis
 - D. Totipotency.

Answer: C



41.	Who	discovered	that	morphogenesis	in	culture						
medium is controlled by hormones												

- A. Muir et al
- B. Vasil and Hilderbrandt
- C. Skoog and Miler
- D. Helperin and Wetherell.

Answer: C



- 42. Embryoid culture technique was discovered by
 - A. Guha and Maheshwari

- B. Skoog and Miler
- C. Muir et al
- D. Steward.

Answer: D



Watch Video Solution

43. Embryoid is

- A. A miniature embryo
- B. Non-zygotic embryo formed in vitro culture
- C. Embryo raised in culture medium

D. Cellular aggregate similar to embryo in appearance.

Answer: B



- 44. The concept of cellular totipotency was given by
 - A. Steward
 - B. Vasil and Hilderbrandt
 - C. Carlson et al
 - D. Barski et al.

Answer: A



Watch Video Solution

45. Ramet is

- A. Clone
- B. Individual of clone
- C. Cell aggregate
- D. Callus.

Answer: B



A. Shoot tip culture
B. Protoplast fusion
C. Embryoid culture
D. Pollen culture.
Answer: D
Watch Video Solution
Watch Video Solution
Watch Video Solution 47. The technique of protoplast fusion was developed by

46. Guha and Maheshwaris are famous for

B. Carlson at al C. White D. Steward. **Answer: B Watch Video Solution** 48. Explant is required to be disinfected before placing in culture. This is done by A. Autoclaving B. Ultra-violet rays C. Clorax or hypochlorite

D. X-rays.

Answer: C



Watch Video Solution

- 49. Aseptic culture means
 - A. Absence of life
 - B. Presence of bacteria
 - C. Absence of other organisms like microbes
 - D. Parthenogenetic development.

Answer: C



Match Mideo Solution

50. Variations appearing suddenly in cultures are

- A. Somatic variations
- B. Somaclonal variations
- C. Mutations
- D. Aberrations.

Answer: B



Watch Video Solution

51. Virus-free plants can be obtained by:

- A. Shoot tip culture
- B. Haploid culture
- C. Protoplast fusion
- D. Embryo culture

Answer: A



- **52.** What additional treatment is required for protoplats fusion in plants
 - A. Polyethylene glycol and sodium nitrate
 - B. Coconut milk and glycine

- C. Cellulase and pectinase
- D. All the above

Answer: C



Watch Video Solution

53. Protoplast fusion results in

- A. Parasexual/somatic hybridisation
- B. Genetic hybridisation
- C. Male sterility
- D. Rapid growth and acclimitisation.

Answer: A



Watch Video Solution

54. Pollen culture produces

A. Haploid plants where every gene can express its effect

- B. Homozygous diploid plants
- C. Abundant seeds of rare plants
- D. Abundant pollen in male sterile plants.

Answer: A



55. An androgenic plant can be converted into homozygous diploid plant through the application of

- A. Nitrogen mustard
- B. Nitrous acid
- C. Colchicine
- D. Acridine orange.

Answer: C



56. The enzymes required to obtain protoplast from a plant cell are

- A. Cellulase and proteinase
- B. Cellulase and pectinase
- C. Cellulase and pectinase
- D. Cellulase and amylase

Answer: B



Watch Video Solution

57. Which technique can be helpful in over-coming hybridisation barrier

- A. Shoot tip culture
- B. Embryo rescue
- C. Protoplast fusion
- D. Both B and C.

Answer: D



- **58.** Two protoplasts can be made to fuse through the apllication of
 - A. Electrofusion
 - B. Polyethylene glycol

D. All the above
Answer: D
Watch Video Solution
59. Who developed the technique of nurse tissue to show cellular totipotency
A. Hilderbrandt
B. Steward
C. Muir
D. Konar.

C. Sodium nitrate

Answer: C



Watch Video Solution

- **60.** Pollen embryoids were discovered by
 - A. Konar and Nataraja
 - B. Guha and Maheshwari
 - C. Skoog and Miler
 - D. Helperin and Wetherell.

Answer: B



61. The term parthenogenesis was introduced by
A. Charles Bonnet
B. Karl von Baer
C. Spallanzani
D. None of the above.
Answer: A
Watch Video Solution

62. Endogenous budding occurs in

A. Hydra

- B. Marine sponge
- C. Fresh water sponge
- D. Obelia.

Answer: C



- **63.** Pseudopodiospores are formed in
 - A. Amoeba
 - B. Plasmodium
 - C. Planaria
 - D. Euglena

Answer: A



Watch Video Solution

64. Crocodile lives for about

- A. 10 years
- B. 20 years
- C. 40 years
- D. 60 years.

Answer: D



65. Binaary fission is longitudinal in
A. Paramoecium
B. Vorticella
C. Amoeba
D. Plasmodium.
Answer: B



Watch Video Solution

66. Penicillium produces

A. Zoospores

- **B.** Mitospores
- C. Meisopores
- D. Both B and C.

Answer: D



Watch Video Solution

67. Tapeworm shows

- A. Strobilation
- B. Plasmotomy
- C. Multiple fission
- D. Binary fission.

Answer: A



Watch Video Solution

68. A dioecious plant is

- A. Pinus
- B. Maize
- C. Cycas
- D. Chara.

Answer: C



69. The dioecid	ous plant	Marchantia	develops	sex	organs
on					

- A. Antheridiophore
- B. Archegoniophore
- C. Both A and B
- D. Tassel.

Answer: C



Watch Video Solution

70. Dog is a

A. Continuous breeder

- B. Seasonal breeder
- C. Monoestrus
- D. Polyoestrus.

Answer: B



Watch Video Solution

71. Fertilization is internal in

- A. Amphibians
- B. Star Fishes
- C. Bony Fishes
- D. Sharks.

Answer: D



Watch Video Solution

72. Whiptail lizards show

- A. Periodic parthenogenesis
- B. Paedogenic parthenogenesis
- C. Obligatory parthenogenesis
- D. Incomplete parthenogenesis.

Answer: C



73. Thelytoky occurs in

- A. Aphids
- B. Typhlina
- C. Honey Bee
- D. Wasp.

Answer: B



Watch Video Solution

74. Endogamy is reported in

A. Fasciola

- B. Earthworm
- C. Marchantia
- D. Rabbit.

Answer: A



Watch Video Solution

75. Apomixis is deveolpment of new plant

- A. Without fusion of gametes
- B. From fusion products of gametes
- C. From stem cuttings
- D. From root cuttings.

Answer: A



Watch Video Solution

- **76.** Development of an organism from female gamete/egg without involving fertilisation is
 - A. Adeventitive embryony
 - B. Polyembryony
 - C. Parthenocarpy
 - D. Parthenogenesis

Answer: D



77. An example of parthenogenesis in the development of fruit is the one

- A. With viable seeds after fertilization
- B. With viable seeds after pollination
- C. With viable seeds without fertilisation
- D. Without seeds after pollination.

Answer: C



Watch Video Solution

78. Scion is the term used in relation to

- A. Embryology
- B. Grafting
- C. Agamospermy
- D. Emasculation.

Answer: B



- **79.** Clone is a group of individuals got through
 - A. Self pollination
 - B. Cross pollination
 - C. Vegetative propagation

D. Hybridisation.

Answer: C



Watch Video Solution

80. Which is not a method of vegetative propagation?

A. Micropropagation

B. Budding

C. Sowing

D. Layering

Answer: C



vateri video Solution

81. A population of genetically identical individuals, obtained from asexual reproduction is

- A. Callus
- B. Clone
- C. Deme
- D. Aggregate.

Answer: B



- A. Development of embryo without fertilization
- B. Development of fruit without fertilization
- C. Development of fruit without hormones
- D. Development of embryo from egg without fertilization

Answer: D



- 83. Cellular totipotency was demostrated by
 - A. Theodore Schwann
 - B. A.V. Leeuwenhoek

- C. F.C. Steward
- D. Robert Hooke.

Answer: C



Watch Video Solution

84. Totipotent cell refers to

- A. An undifferentiated cell capable of developing into a system or entire plant
- B. An undifferentiated cell capable of developing into an organ

- C. An undifferentiated cell capable of developing into complete embryo
- D. Cell which lacks the capability to differentiate into an organ or system.

Answer: A



- **85.** A major use of embryo culture is in
 - A. Induction of somaclonal variations
 - B. Overcoming hybridsation barriers
 - C. Production of alkaloids

D. Clonal propagation

Answer: B



Watch Video Solution

86. After culturing the anther of a plants few diploid plant were got along with haploid plant. Which of the following part might have given rise to diploid plant

- A. Exine of pollen gram
- B. Vegetative cell of pollen
- C. Cells of anther wall
- D. Generative cell of pollen.

Answer: C



Watch Video Solution

87. Which ones produce androgenic haploids in anther cultures

- A. Anther wall
- B. Tapetal layer of anther wall
- C. Connective tissue
- D. Young pollen grains.

Answer: D



88. In Tobacco callus, which one shall induce shoot differentiation in combination of auxin and cytokinin

A. Higher concentration of cytokinin and lower concentration of auxin

B. Lower concentration of cytokinin and higher concentration of auxin

C. Only cytokinin and no auxin

D. Only cytokinin and no auxin

Answer: A



89. Who could grow tomato roots successfully and develop the technique of tissue culture of rthe first time ?

- A. Hilderbrandt
- B. P.R. White
- C. W.H. Muir
- D. F.C. Steward.

Answer: B



90. Which of the following cells in plant show totipotency

- A. Sieve tubes
- B. Xylem vessels
- C. Meristem
- D. Cork cells.

Answer: C



Watch Video Solution

91. Variation observed during tissue culture of some plants are known as

B. Somaclonal variations C. Somatic variations D. Tissue culture variations. **Answer: B Watch Video Solution 92.** Virus free plants can be obtained by A. Antibiotic treatment B. Bordeaux mixture C. Root tip culute

A. Clonal variations

D. Shoot tip culture.

Answer: D



Watch Video Solution

93. Tissue culture technique can produce infinite number of new plants from a small parental tissue. The economic improtance of the technique is in raising.

- A. Variants through picking up somaclonal variations
- B. Genetically uniform population of an elite species
- C. Homozygous diploid plants
- D. Development of new species.

Answer: B



Watch Video Solution

- 94. External water is not essential for fertilization in
 - A. Pteriodophytes
 - B. Bryophytes
 - C. Thallophytes
 - D. Spermatophytes.

Answer: D



95. Syngamy means

- A. Fusion of gametes
- B. Fusion of cytoplasms
- C. Fusion of two similar spores
- D. Fusion of two dissimilar spores

Answer: A



Watch Video Solution

96. Estrous cycle is indications of

A. Breeding period

B. Estrogen secretion C. Pregnancy D. Menopause **Answer: A Watch Video Solution** 97. A quicker regeneration of grass leaves shall occur by A. Cutting B. Grazing C. Irrigation D. Clipping.

Answer: D



Watch Video Solution

- 98. Monoestrous animals have
 - A. One ovulation each month
 - B. One egg
 - C. One breeding season in a year
 - D. One menses each month.

Answer: C



- 99. For ovulation in reflex ovulators
 - A. Coitus is necessary
 - B. Coitus is not necessary
 - C. Plenty of food is not neceassary
 - D. Plenty of food is necessary

Answer: A



- 100. Estrous cycle is a characteristic of
 - A. Human females

- B. Mammalian females
- C. Mammalian females other than primates
- D. Mammals.

Answer: C



- 101. Grafting is not possible in monocots because they
 - A. Lack cambium
 - B. Are herbacous
 - C. Have scattered vascular bundles
 - D. Have parallel venation

Answer: A



Watch Video Solution

102. A piece of potato tuber will form a new plant if it possess

- A. Branches
- B. Stored food
- C. Roots
- D. Scales/eyes.

Answer: D



103. Layering is used in vegetativ propagation of
A. Rose
B. Jasmine
C. Mango
D. All the above
Answer: B
Watch Video Solution
104. Roots are used in vegetative propagation of

A. Ginger

- B. Chrysanthemum
- C. Sweet Potato
- D. Potato.

Answer: C



Watch Video Solution

105. Individuals of a clone have

- A. Same age
- B. Same height
- C. Same genome
- D. Same number of leaves.

Answer: C



Watch Video Solution

106. Asexually produced organism inheriting all the characters of the parent is

- A. Offspring
- B. Clone
- C. Variety
- D. Hybrid

Answer: B



107. Stem cutting are commonly used in propagation of
A. Mango
B. Cotton
C. Rose
D. Banana.
Answer: C Watch Video Solution
108. Haploid plant cultures are got from

A. Leaves

- B. Root tip
- C. Pollen grain
- D. Buds

Answer: C



Watch Video Solution

109. Somacional variations are

- A. Caused by mutagens
- B. Produced during tissue culture
- C. Induced during sexual embryogeny
- D. Caused by gamma rays.

Answer: B



Watch Video Solution

110. Parasexual hybridisation means fusion of

- A. Male gamete with female gamete
- B. Male gamete with synergid
- C. Somatic protoplasts
- D. Male gamete with somatic cell

Answer: C



- 111. Application of embryo culture is in
 - A. Clonal propagation
 - B. Overcoming hybridisation barrier
 - C. Production of alkaloids
 - D. Formation of somaclonal variations.

Answer: B



- **112.** Plants developed in vitro culture from pollen grains are
 - A. Androgenic haploids

- B. Pollen plants
- C. Male plants
- D. Sterile plants.

Answer: A



Watch Video Solution

113. In bacterial/tissue culture, glassware and nutrients are streilised through

- A. Water bath at $200\,^{\circ}\,C$
- B. Dry air oven at $200\,^{\circ}\,C$
- C. Dehumidifier

D. Autoclave at 200 c

Answer: D



Watch Video Solution

114. Development of shoot and root is determined by

- A. Cytokinin and auxin ratio
- B. Enzymes
- C. Temperature
- D. Plant nutrients.

Answer: A



valcii video Solution

115. Plant medium used widely in preparation of culture medium is got from

- A. Cycas revoluta
- B. Cocos nucifera
- C. Pinus roxburghii
- D. Borassus flabellifera.

Answer: C



A. Tissue culture B. Grafting C. Stem cuttings D. Layering. **Answer: B Watch Video Solution** 117. Chrysanthemum multiplies vegetatively by A. Suckers **B. Runners** C. Stolons

D. Rhizomes.

Answer: A



Watch Video Solution

118. In vegetative propagation of tubers, which of the following remains constant through generation ?

- A. Morphology
- B. Vigour only
- C. Vigour and morphology only
- D. Morphology, vigour and disease resistance.

Answer: D

119. Induction of rooting on stems before separting them from parent plant is

- A. Grafting
- B. Layering
- C. Cutting
- D. Root-stem joint

Answer: B



120. Clonal cell lines can be obtained by:

- A. Tissue culture
- B. Tissue fractionation
- C. Tissue homogenisation
- D. Tissue system

Answer: A



Watch Video Solution

121. Axenic culture is

A. Culture of tissue

- B. Culture of genes
- C. Pure culture without contamination
- D. Pure culture of microbe without any external nutrient.

Answer: C



- **122.** A cell from leaf is made to grow into complete plant under culture conditions. It shows cellular
 - A. Cloning
 - **B.** Totipotency

- C. Hybridisation
- D. All the above

Answer: B



- **123.** Out of the following which two methods yield genetically similar plants:
- (i) Stem cuttings (ii) Seed production
- (iii) Mutation (iv) Tissue culture
 - A. (i) and (ii)
 - B. (ii) and (iii)

C. (i) and (iv)

D. (ii) and (iv)

Answer: C



Watch Video Solution

124. In tissue culture, callus can be induced to form shoot or root by altering the ratio of:

- A. Auxin to cytokinin
- B. Cytokinin to ethylene
- C. Auxin to gibberellin
- D. Gibberellin to cytokinin.

Answer: A



Watch Video Solution

125. Method of raising new plants in large number from a small plant tissue over a culture medium is

- A. Callus formation
- B. Micropropagation/tissue culture
- C. Micrografting
- D. Juvenility

Answer: B



126. First succesful animal clone was

- A. Dooly goat
- B. Dolly sheep
- C. Molly goat
- D. Molly sheep

Answer: B



Watch Video Solution

127. Hormone used in tissue culture for better growth is

A. Gibberellin

- B. Auxin
- C. Cytokinin
- D. Both B and C.

Answer: D



Watch Video Solution

128. First step in protoplasm fusion is

- A. Collection of somatic cell
- B. Selection and isolation of somatic cells
- C. Isolation of protoplasts
- D. Hybridisation.

Answer: B



Watch Video Solution

129. Potatoes are cultivated by

- A. Seeds
- B. Foliar buds
- C. Buds on tubers
- D. Cuttings of roots.

Answer: C



130. Ginger is multiplied vegetatively by means of
A. Rhizome
B. Tuber
C. Stem
D. Bud.
Answer: A
Watch Video Solution

131. Bryphyllum is mutiplied vegetatively by

A. Roots

- B. Leaves
- C. Stem branch
- D. Rhizome

Answer: B



Watch Video Solution

132. Development of haploid plants from pollen is

- A. Parthenocarpy
- B. Emasculation
- C. Androgenesis
- D. Somatic hybridisation

Answer: C



Watch Video Solution

133. Pieces of plant used in tissue culture is called

- A. Inoculant
- B. Somaclone
- C. Clone
- D. Explant.

Answer: D



134. In tissue culture medium, the embryoids formed from pollen grains are due to

- A. Test tube culture
- B. Cellular totipotency
- C. Organogenesis
- D. Double fertilisation.

Answer: B



Watch Video Solution

135. F.C. Steward is associated with

A. Molecular biology

- **B.** Genetics
- C. Tissue culture
- D. Immunology.

Answer: C



Watch Video Solution

136. Explant is

- A. A small part of plant for tissue culture
- B. Exploited part of plant
- C. Harvested plant
- D. Uprooted part for transplantation.

Answer: A



Watch Video Solution

137. Callus is

- A. Material that heals injury in phloem
- B. Undifferentiated mass of cells
- C. Tissue developed in the region of wound
- D. All the above

Answer: D



138. Plant propagated by leaves is

- A. Kalanchoe
- B. Agave
- C. Potato
- D. Gladiolus.

Answer: A



Watch Video Solution

139. Binary fission is a form of

A. Vegetation propagation

- B. Asexual reproduction
- C. Sexual reproduction
- D. Nuclear fragmentation.

Answer: B



Watch Video Solution

140. In oogarmy, fertilization involves

- A. A small non-motile female gamete and large motile male gamete
- B. A large non-motile female gamete and a small motile male gamete

^	
•	

D. A large motile female gemete and a small nonmotile male gamete.

Answer: B



Watch Video Solution

141. Maximum life span of dog in years is

A. 5

B. 10

C. 15

D. 20

Answer: D



Watch Video Solution

142. Menstrual cycle occurs in

- A. Female primates
- B. Human females
- C. Mammalian females
- D. Rabbit.

Answer: A



143. Parthenogenesis is a type of :

- A. Sexual reproduction
- B. Asexual reproduction
- C. Regeneration
- D. Budding

Answer: B



Watch Video Solution

144. In which one pair both the plants can be vegetatively propagated by leaf?

A. Agave and Kalanchoe

- B. Bryophyllum and Kalanchoe
- C. Asparagus and Bryophyllum
- D. Chrysanthemum and Agave.

Answer: B



Watch Video Solution

145. Artificia vegetative reproduction through cutting of roots is carried out in

- A. Lemon and Rose
- B. Rose and Hibiscus
- C. Tamarind and Chrysanthemum

D. Lemon and Tamarind

Answer: D



Watch Video Solution

146. Seedless fruits in Banana are produced through

- A. Asexual reproduction
- B. Parthenogenesis
- C. Triploid
- D. Cross pollination.

Answer: B



Water Video Solution

147. The internal buds of fresh water sponges are otherwise called

- A. Choanocyte
- B. Gemmule
- C. Osculum
- D. Blastula

Answer: B



148. Which one group of plants is propagated through underground roots ?

- A. Bryophyllum and kalanchoe
- B. Ginger, potato, onion and zamikand
- C. Pistia, chrysanthemum and pineapple
- D. Sweet potato, asparagus, tapioca and dahlia

Answer: D



Watch Video Solution

149. Grafting is successful in dicots but not in monocots because the dicots have-

- A. Vascular bundles arranged in a ring
- B. Cambium for secondary growth
- C. Vessels with elements arranged end to end
- D. Cork cambium.

Answer: B



- **150.** A scion is grafted to a stock. The quality of fruits produced will be determined by the genotype of
 - A. Scion
 - B. Stock

- C. Both A and B
- D. None of the above.

Answer: A



Watch Video Solution

151. Through which technique more female plants can be proudced in Papaya

- A. Genetic engineering
- B. Polyploid breeding
- C. Spraying ethephon
- D. Tissue culture.

Answer: D



Watch Video Solution

152. Hermaphrodite animal is

- A. Spider
- B. Honey Bee
- C. Ascaris
- D. Leech.

Answer: D



153. Greek word "sexus" means

- A. Disjunction
- **B.** Disintegration
- C. Union
- D. Both A and B.

Answer: C



Watch Video Solution

154. During favourable condition the encysted amoeba divides by multiple fission and produces pseudopodiospores. This phenomenon is known as

B. Sporulation C. Fragmentation D. Regeneration. **Answer: B Watch Video Solution 155.** Transverse binary fission occurs in A. Euglena B. Amoeba C. Hydra

A. Budding

D. Paramecium.

Answer: D



Watch Video Solution

156. Plants with poor root system are propagated through

- A. Layering
- B. Leaf cuttings
- C. Stem cuttings
- D. Grafting.

Answer: D

157. Type of asexual reproduction found in Hydra is

- A. Gemmule formation
- B. Sporulation
- C. Binary fission
- D. Budding

Answer: D



A. Hydra				
B. Monocystis				
C. Plasmodium				
D. Planaria				
Answer: B				
Watch Video Solution				
159. Vegetative propagation in mint occurs by :				
A. Sucker				
A. Sucker B. Runner				

D. Rhizome.

Answer: A



Watch Video Solution

160. Identify the correct statement

- A. Because of marked climatic variations, plants growing near the sea shore do not produce annual rings
- B. The age of the plant can be determined by its height

- C. Grafting is difficult in monocot plants as they have scattered vascular bundles
- D. Healing of damaged tissue is because of activity of sclerenchyma cells.

Answer: C



- **161.** Hydra reproduces by budding. It is
 - A. Asexual reproduction
 - B. Sexual reproduction
 - C. Regeneration

D. Parthenocarpy

Answer: A



Watch Video Solution

162. In grafting, stock is

- A. Stem of desired variety
- B. Bud of disired variety
- C. Part of rooted plant
- D. Part to be grafted.

Answer: C



Match video Solution

163. The term parthenogenesis was coined by

- A. Grobben
- B. Balfour
- C. Boveri
- D. siebold

Answer: D



Watch Video Solution

164. Micropropagation is a tecnique for production of

- A. True to type plants
- B. Haploid plants
- C. Somatic hybrids
- D. Somaclonal plants

Answer: A



- **165.** Find out wrongly match pair
 - A. Tuber-Potato
 - B. Leaf bunds-Banana
 - C. Offsets Water Hyacinth

D. Rhizome- Ginger

Answer: B



Watch Video Solution

166. Which is not an example of vegetative propagule in angiosperms

- A. Zoospores of Chlamydomonas
- B. Eyes of Potato
- C. Rhizome of Ginger
- D. Bulbil of Agave.

Answer: A

167.	Vegetative	propagation	in	Pistia/Water	Hyacinth
occı	ırs by				

- A. Sucker
- B. Runner
- C. Offset
- D. Stolon.

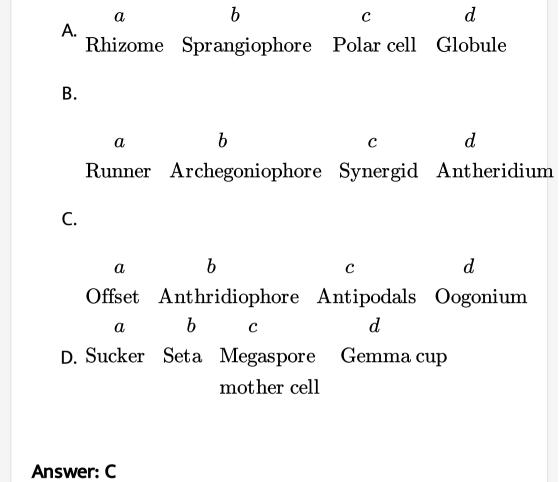
Answer: C



168. Examine the figures (A-D) given below and select the right option out of 1-4 in which all the four structure A,B,C,D are identified correctly



A	В	С	D
(1) Rhizome	Sporan-	Polar	Globule
	giophore	cell	
(2) Runner	Archego-	Syner-	Antheri-
	niophore	gid	dium
(3) Offset	Antheridio-	Antipo-	Oogo-
, ,	phore	dals	nium
(4) Sucker	Seta	Megas	Gemma
		pore	cup
		mother	i i i i i i i i i i i i i i i i i i i
		cell	





169. In which of the following asexual reproduction, a maternal cell produ8ces innumerable unicellular

unincleate offspring A. Sporulation B. Fragmentation C. Pathenogenesis D. Multiple fission **Answer: D Watch Video Solution** 170. Vegetative propagation by leaves is seen in A. Albizzia lebbek B. Dalbergia sisso

- C. Bryophyllum diagremontianum
- D. Murraya sp.

Answer: C



Watch Video Solution

171. The mode of asexual reproduction in Euglena is

- A. Transverse binary fission
- B. Irregular binary fission
- C. Multiple fission
- D. Longitudinal binary fission

Answer: D



Watch Video Solution

172. Natural parthenogenesis occurs in

- A. Drosophila
- B. Housefly
- C. Honey Bee
- D. All the above

Answer: C



173. Petiole is used in multiplication of

- A. Bignonia
- B. Saintpaulia
- C. Sansevieria
- D. Pepromia.

Answer: D



174. Match the columns and select the correct options

A)
$$a-s$$
, $b-t$, $c-p$, $d-r$, $e-q$
(B) $a-s$, $b-r$, $c-q$, $d-p$, $e-t$
(C) $a-r$, $b-t$, $c-s$, $d-q$, $e-p$
(D) $a-s$, $b-p$, $c-t$, $d-r$, $e-q$
(E) $a-r$, $b-t$, $c-s$, $d-p$, $e-q$.

- A. a-s,b-t,c-p,d-r,e-q
- B. a-s,b-r,c-,d-p,e-t
- C. a-r,b-t,c-s,d-q,e-p
- D. a-s,b-t,c-s,d-p,e-q

Answer: A



watch video Solution

175. What is common between vegetative reproduction an apomixis ?

- A. Both applicable to dicots
- B. Both bypass flowering phase
- C. Both occur around the year
- D. Both produce progeny identical to parent.

Answer: D



176. Which is wrongly matched

- A. Agave-bulbils
- B. Penicillum-conidia
- C. Water Hyacinth -runner
- D. Bryophyllum-leaf buds.

Answer: C



Watch Video Solution

177. Fusion of dissimilar gametes is

A. Allogamy

- B. Dichogamy
- C. Autogamy
- D. Fertilization

Answer: D



- 178. Animals which posses cleidoic eggs exhibit
 - A. External fertilization and internal development
 - B. Internal fertilization and internal development
 - C. Internal fertilization and external development
 - D. External fertilization and external development

Answer: C



Watch Video Solution

179. A clone is

- A. A group of genetically similar organisms produced as a result of asexual reproduction.
- B. A group of genetically similar organisms produced through sexual reproduction.
- C. A group of genetically dissimilar organisms produced as a result of asexual reproduction.

D. A group of genetically dissimilar organisms produced as a result of sexual reproduction.

Answer: A



Watch Video Solution

180. In sexual reproduction of algae fusion between one large, non-motile (static) female gamete and a smaller motile male gamete is termed as

- A. Isogamous
- B. Anisogamous
- C. Oogamous

D. None of these

Answer: C



Watch Video Solution

181. Regarding fertilization which among the following statements is incorrect

- A. It restores diploid condition in the zygote
- B. It activates egg both physiologically and metabolically
- C. Paternal and maternal sets contribute to the diploid number without causing any variation.

D. It determines the sex of the offspring.

Answer: C



Watch Video Solution

182. Which among the following statements is correct to indicate the difference between sperm and egg

- A. Cytoplasm in sperm is more abundant than in egg
- B. Accessory membranes are absent in sperm but present in egg
- C. Nucleus is clear in sperm and very compact in egg

D. Mitochondria forms a sheath in egg and diffused in sperm.

Answer: B



Watch Video Solution

183. Bacteria, fungi and lower plants survive during adverse conditions by

- A. Suspended growth
- B. Migration
- C. Diapause
- D. Formation of thick-walled spores.

Answer: D



Watch Video Solution

184. Which one of the following is common to multicellular fungi,filamentous algae and protonema of mosses?

- A. Diplontic life cycle
- B. Members of kingdom plantae
- C. Multiplication by fragmentation
- D. Mode of nutrition.

Answer: C

185. Which is connected to asexual reproduction

- A. Gemmules
- **B.** Gametes
- C. Gonads
- D. Genitalia

Answer: A



186. Consider the following statement with respect to reproduction in

the lower living organisms

A. Organismis like yeast and Planaria reproduce asexually by means

of budding

B. True regeneration is observed in Hydra

C. The protonema of mosses multiply by fragmentation

D. In the unicellular organisms like bacteria algae and

Amoeba, reproduction is synonymous with growth i.e

cells

increase in number of

A. a and b correct

B. b and c correct

- C. a and d correct
- D. c and d correct

Answer: D



Watch Video Solution

187. Find out correct order of vegetative propagules of plants like potato, ginger, Agave, Bryophyllum and water hyacinth

- A. Offset, bulbil, leaf bud, rhizome and eyes
- B. Leaf bud, bulbil, offset, rhizome and eyes
- C. Eyes, rhizome, bulbil, leaf bud and offset

D. Rhizome, bulbil, leaf bud, eyes and offset

Answer: C



Watch Video Solution

188. Why asexual reproduction is sometimes disadvantageous?

- A. It allows sedentary animals to produce offspring without mates
- B. It allows animals to produce many offspring quickly
- C. It saves times and energy of gamete formation
- D. It produces genetically uniform population.

Answer: D



Watch Video Solution

189. Which one represents male gametc

- A. Antipodals
- B. Synergids
- C. Endosperm
- D. Pollen grain.

Answer: D



190. Monoecious plant of Chara shows occur-rence of

- A. Upper oogonium and lower antheridium on the same plant
- B. Antheridiophore and archegoniophore on the same plant
- C. Stamen and carpel on the same plant
- D. Upper antheridium and lower oogonium on the same plant.

Answer: A



191. Meiosis takes place in				
A. Megaspore				
B. Meiocyte				
C. Conidia				
D. Gemmule.				
Answer: B				
Watch Video Solution				
192. Product of sexual reproduction generally generates				
A. Large biomass				
B. Longer viability of seeds				

- C. Prolonged dormancy
- D. New genetic combinations leading to variations.

Answer: D



Watch Video Solution

193. Megasproes are produced from the megasproe mother cells afer

- A. Formation of thick walls
- B. Differentiation
- C. Meiotic division
- D. Mitotic division.

Answer: C



Watch Video Solution

194. Syngamy can occur outside the body of the organism in

- A. Algae
- B. Ferns
- C. Fungi
- D. Mosses.

Answer: A



195. Human gametes differ from all other body cells in being

- A. Haploid
- B. Diploid
- C. Motile
- D. Without cell wall.

Answer: A



196. Assertion a. Gametes are formed independently either from diploid or haploid parents. Gametes are always haploid

Reason r. In diploid parents, gametes are formed through mitosis and meiosis while in haploid parents it occurs through meiosis.

- A. a is wrong and r is correct
- B. a is correct and r is wrong
- C. Both a and r are correct but r is not correct explanation of a
- D. a and r both are correct and r is correct explanation of a

Answer: B



Watch Video Solution

197. In which set of organisms does external fertilization occur

- A. Echinodermata and mosses
- B. Hemichordata and ferns
- C. Amphibians and algae
- D. Reptiles and gymnosperms.

Answer: C



198. Match the following and choose the correct combination

,	Name Chromosome Nu in Meiocyte (2n)		
(a) (b)	Housefly Fruitfly	(1) (2)	20 34
(c) (d)	Apple Maize	$ \begin{array}{c} (3) \\ (4) \end{array} $	8 12

Answer: D



199. Process of sexual reproduction which involves meiosis and syngamy is

- A. Apomixis
- B. Amphimixis
- C. Agamospermy
- D. Diplospory.

Answer: B



A. Man				
B. Cat				
C. Rabbit				
D. Horse.				
Answer: C				
Watch Video Solution				
201. Adventitious buds at the leaf notches help to				
propagate the plant				
A. Potato				
B. Agave				

- C. Bryophyllum
- D. Cactus

Answer: C



Watch Video Solution

202. Gametogensis refers to the process of

- A. Fusion of two gametes
- B. Fusion of two gametangia
- C. Formation of two types of gametes
- D. Formation of male gametes only.

Answer: C



Watch Video Solution

203. Chromosome number of apple meiocytes is

- A. 12
- B. 34
- C. 46
- D. 78

Answer: B



204. Zygote is formed by the process of

- A. Isogamy
- B. Anisogamy
- C. Oogamy
- D. Syngamy.

Answer: D



Watch Video Solution

205. Life span of Parrot is

A. 15 years

- B. 50 years
- C. 25 years
- D. 140 years.

Answer: D



Watch Video Solution

206. Chromosome number in endosperm cell of plant a and in the root apical meristem cell of plant b together equal to chromosome number in shoot apical meristem cell of apple. Plants a and b respectively are

A. Maize, Haplopappus

- B. Rice, Potato
- C. Rice, Haplopappus
- D. Rice, Maize

Answer: A



Watch Video Solution

207. The type of syngamy in Trichonympha is

- A. Hologamy
- B. Anisogamy
- C. Isogamy
- D. Conjugation.

Answer: A



Watch Video Solution

208. Marchantia is considered heterothallic because it is

- A. Heterogametic
- B. Bisexual
- C. Monoecious
- D. Dioecious.

Answer: D



209. Match the columns and choose the appropriate option.

1

- (a) Rhizome
- (p) Agave
- (b) Offset
- (q) Bryophyllum
- (c) Sucker
- (r) Ginger
- (d) Leaf buds
- (s) Chrysanthemum
- (t) Eichhornia

A. a-r,b-s,c-p,d-q

B. a-s,b-t,c-q,d-r

C. a-r,b-t,c-s,d-q

D. a-q,b-p,c-t,d-s.

Answer: C



210. The motile reproductive structures of algae and fungi, which directly give rise to new individuals are called

- A. Zygospores
- B. Zoospores
- C. Cysts
- D. Conidia

Answer: B



211. All Albizzia, vegetative propagation takes place with the help of

- A. Fasciculated tuberous roots
- B. Epiphyllous buds
- C. Subaerial branches
- D. Nonfleshy roots.

Answer: D



Watch Video Solution

212. Which one of the following is wrong about Chara?

- A. Globule and nucule present on the same plant
- B. Upper antheridium and lower oogonium
- C. Globule is male reproductive structure
- D. Upper oogonium and lower round antheridium.

Answer: B



- 213. Planaria possess high capacity of
 - A. Regeneration
 - B. Alternation of generations
 - C. Bioluminescence

D. Metamorphosis

Answer: A



Watch Video Solution

214. Which one of the following shows isogamy with non-flagellated gametes?

- A. Ectocarpus
- B. Ulothrix
- C. Spirogyra
- D. Sargassum

Answer: C

215. Choose the correct pair

- A. Coconut, cucurbits- dioecious
- B. Honeybee, rotifers-parthenogenesis
- C. Ornithorhyncus, whale viviparity
- D. Frog, peacock external fertilization.

Answer: B



- A. Formation of seeds by fusion of gametes
- B. Formation of seeds without syngamy and meiosis
- C. Formation of seeds with syngamy but no meiosis
- D. None of the above.

Answer: B



Watch Video Solution

217. Which of the following organisms breeds only once in lifetime?

- A. Bamboo
- B. Oysters

- C. Pelagic fishes
- D. Birds

Answer: A



Watch Video Solution

218. Flowers are unisexual in

- A. Pea
- B. Cucumber
- C. China Rose
- D. Onion.

Answer: B



Watch Video Solution

219. Which of the following is not correctly matched

- A. Offset-Water Hyacinth
- B. Rhizome-Banana
- C. Binary fission Sargassum
- D. Conidia- Penicillium.

Answer: C



220. Which of the following plants does not help in vegetative propagation by leaves

- A. Begonia
- B. Kalanchoe
- C. Bryophyllum
- D. Oxalis.

Answer: D



Watch Video Solution

221. Which one of the following is not a natural method of vegetative propagation

- A. Runner
- B. Foliar buds
- C. Stem tuber
- D. Grafting.

Answer: D



Watch Video Solution

222. Match the columns and chosse the correct option

a. Yeast

b. Penicillium

T

c. Filamentous algae

d. Chlamydomonas

 Π

. Fragmentation

ii. Zoospores

iii. Budding

iv. Conidia

- A. a-iii, b-iv, c-I, d-ii
- B. a-ii, b-iii,c-l,d-iv
- C. a-iv, b-iii,c-ii,d-i
- D. a-iii,b-ii,c-I,d-iv.

Answer: A



Watch Video Solution

223. The type of reproduction adopted by an organism depends on

- A. Habitat and morphology of organism
- B. Morphology of an organism

- C. Morphology and physiology of an organism
- D. Organism's habitat, physiology and genetic make up.

Answer: D



Watch Video Solution

224. Some plants flower only once in their life, generally after 50-100 years. They produce a large number of fruits and die

- A. Strobilanthus kunthiana
- B. Bamboo

C. Callistemon linearis D. Cymbopogon reptocus. **Answer: B Watch Video Solution**

225. A true is the one in which the fleshy part of the fruit is derved from

- A. Thalamus
- B. Ovary
- C. Inflorescene axis
- D. Apocarpous gynoccium.

Answer: B



Watch Video Solution

226. Identify the wrong statement

- A. Plants produced vegetatively or asexually are called clones
- B. Organisms exhibiting external fertilization release a large number of gametes
- C. Development of embryo from fertilized female gamete is called parthenogenesis
- D. Conidia are formed in Alternaria

Answer: C



Watch Video Solution

227. With respect to Eichhornia

Statement X. It drains off oxygen from water and is seen growing in standing water.

Statement Y. It is an indigenous species of our country

- A. Both statements X and Y are wrong.
- B. Only statement Y is correct, X is wrong
- C. Both the statements X and Y are correct.
- D. Only statement X is correct, Y is wrong.

Answer: D



Watch Video Solution

228. The chromosome number in meiocyte is 34. The organism could be

- A. Apple
- B. Onion
- C. Dog
- D. Ophioglossum.

Answer: A



229. Explant and totipotency are used in :
A. Cutting
B. Grafting
C. Layering
D. Micropropagation.
Answer: B
Watch Video Solution

230. The fertilization in plants was discovered by

A. Strasburger

- B. Nawaschin
- C. Hoffmeister
- D. Leeuwenhoek.

Answer: A



Watch Video Solution

231. Identify from the following group of animals, which exhibit oestrous cycle

- A. Lion, deer, dog and cow
- B. Cow, monkey, elephant and ape
- C. Monkey, ape, man and elephant

D. Lion, dog, monkey and ape.

Answer: A



Watch Video Solution

232. ___ is the most convenent and cheap method of artificial vegetative propagation

- A. Grafting
- B. Budding
- C. Cutting
- D. Micropropagation.

Answer: C

233. Asexual reproduction through formation of gemmule occurs in

- A. Ascidia
- B. Hydra
- C. Planaria
- D. Spongilla.

Answer: D



234. The employes sexual reproduction

- A. Amoeba
- B. Euglena
- C. Plasmodium
- D. Sycon.

Answer: D



Watch Video Solution

235. Arrange the following in descending order

(a) Number of bivalents formed during meiosis of a spore mother of Ophioglossum

(b) Number of chromatids seen on equator at metaphase

I in pollen mother cell of Haplopappus gracilis during
meiosis

(c.) Number of chromosomes found at one pole after

(c) Number of chromosomes found at one pole after anaphase II during meiosis in butterfly(d) Total number of chromosomes found in all daughter cells formed during meiosis from one megaspore mother cell in Potato

A. b,d,c,a

B. a,c,d,b

C. a,d,c,b

D. d,c,b,a

Answer: B

236. Assertion (A). Sugar Beet, Cabbatge, Carrot like plants are monocarpic

Reasson (R). Both vernalisation and photoperiodism are related to flowering

A. A and R are true and R is correct explanation of A

B. A and R are true and R is not correct explanation of

Α

C. A is true, R is false

D. A is false, R is true.

Answer: B

237. The term 'terror of Bengal' is used for

- A. Erythroxylum
- B. Eichhornia
- C. Echinus
- D. Echidna.

Answer: B



238. Arrange the following in the ascending order based on their chromosome number (i) Primary endosperm cell of Maize (ii) Meristematic cell of Apple (iii) Xylem parenchyma cell of Potato (iv) Aleurone layer cell of Rice.

- A. iv, I, ii,iii
- B. iii,iv,I,ii
- C. I,ii,iv,iii
- D. ii,iii,l,iv

Answer: D



239. Match the columns and find the correct combination

I

(a) Yeast

- - (i) Reproduction by true regeneration

П

- (b) Plamaria (ii) Reproduction by budding
- (c) Mules (iii) Multiply by fragmentation
- (d) Protonema (iv) Do not reproduce of mosses

- A. a-I,b-ii,c-iii,d-iv
- B. a-iv,b-iii,c-ii,d-i
- C. a-iii,b-iv,c-I,d-ii
- D. a-ii,b-I,c-iv,d-iii

Answer: D



240. Which one of the following statements is not correct

- A. Water Hyacinth, growing in standing water, drains oxygen from water that leads to death of fishes
- B. Offspring produced by asexual reproduction are called clone
- C. Microscopic, motile asexual reproductive structures are called zoospores
- D. In Potato, Banana, and Ginger, the plantlets arise from internodes present in the modified root.

Answer: D



Watch Video Solution

241. Which one of the following generates new genetic combinations leading to variation?

- A. Nucellar polyembryony
- B. Vegetative reproduction
- C. Parthenogenesis
- D. Sexual reproduction

Answer: D



242. Which one of the following methods is commonly used to maintain the genetic traits of a given plant?

- A. Propagation through seed germination
- B. Propagation through vegetative multiplication
- C. Generating hybrids through intergeneric pollination
- D. Treating seeds with gamma radiations.

Answer: B



Check Your Grasp

- A. Mound layering
- B. Serpentine layering
- C. Air layering
- D. Sugarcane.

Answer:



Watch Video Solution

2. Scion is narrow as compared to stock in

B. Bud grafting C. Crown grafting D. Side and crown grafting. **Answer: Watch Video Solution** 3. In Rubber plant, horticultural multiplication is carried out by A. Stem cutting B. Grafting

A. Wedge grafting

- C. Air layering D. Roots **Answer: Watch Video Solution** 4. Panmictic plant multiplies
 - A. Sexually
 - B. Asexually
 - C. Parthenogenetically
 - D. By stolons.



Watch Video Solution

- **5.** What is the best time for growth of cuttings
 - A. Summer
 - B. Winter
 - C. Spring
 - D. Both spring and rainy season.

Answer:



6. Which hormone promotes rootings in cuttings
A. Gibberellin
B. Cytokinin
C. Auxin
D. None of the above.
Answer:
Watch Video Solution
7. The auxin commonly used in promoting rootings of cuttings is
A. NAAM

- B. IBA
- C. NAA
- D. Both B and C.

Answer: D



- 8. Grafting results in
 - A. Mixing of traits of two varieties without resorting to hybridisation
 - B. Providing hormones and stimulating chemicals from stock to scion

C. Quick growth of desirable variety with poor root system

Answer:

D. All the above



- **9.** Multiple shoot culture requires
 - A. NAA
 - B. High salt content
 - C. Subculturing
 - D. All the above



Watch Video Solution

- 10. Callus develops roots if medium is supplied with
 - A. Cytokinin
 - B. Auxin
 - C. Both cytokinin and auxin
 - D. More cytokinin and less auxin.

Answer:



A. Laibach
B. White
C. Skoog and Miler
D. Harrie and Matkins.
Answer:
Watch Video Solution
12. Barski et al (1960) are famous for successful
A. Tissue culture clones

11. Who performed embryo culture for the first time?

- B. Morphogenesis in tissue culture

 C. Protoplast fusion
- D. Shoot tip culture.



- **13.** Embryoid formation is favoured by
 - A. Auxin
 - B. Gibberellin
 - C. Ammonium salts + little auxin
 - D. NAA + Cytokinin.



Watch Video Solution

- 14. Axenic culture is
 - A. Culture of callus
 - B. Culture containing embryoids
 - C. Culture devoid of nutrients
 - D. Culture without contamination.

Answer: D



- 15. An economically useful somaclonal variation is
 - A. Short duration Sugarcane
 - B. High protein content in Potato
 - C. Leaf hopper resistance in Rice
 - D. All the above



- 16. Autoclaving for tissue culture apparatus involves
 - A. Heating at $120^{\circ}\,C$ for 15-30 minutes

- B. Cooling at $-5\,^{\circ}\,C$ for 60 minutes
- C. Cooling at $-25\,^{\circ}\,C$ for 1 week
- D. Heating at $100\,^{\circ}\,C$ for 2-3 hours.

Answer: A



Watch Video Solution

17. Embryo culture is performed to

A. Develop seeds quickly

embryo through shaking

- B. Overcome dormancy and multiple difficult hybrids
- C. Raise a large number of plants from cells of

D. Overcome the requirement of fertilization.

Answer: B



Watch Video Solution

18. Cyclic pedogenesis occurs in

A. Honey Bee

B. Gall Fly

C. Typhlina

D. Lacerta.

Answer:



vateri video Solution

19. Artifical parthenogenesis was studied first by

A. Loeb

B. Owen

C. Bonnet

D. Tyson.

Answer: A

