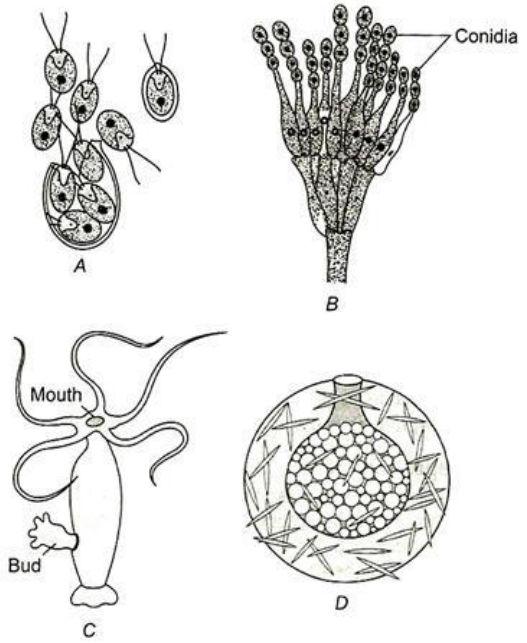
Session: 2025-26 **Total Questions: 159**

NEET BIOLOGY

1.REPRODUCTION IN ORGANISMS

Single Correct Answer Type

1. Clone is two or more individuals which are similar:
   a) Genetically b) Morphologically c) Sexually d) Both (A) and (B)
2. Which of the following is wrongly matched pair?
   a) Tuber-Potato b) Rhizome-Ginger c) Bulbil-Agave d) Leaf buds-Banana
3. Bamboo species flower only in
   a) 50-100 yrs b) 25-50 yrs c) 75-100 yrs d) 60-80 yrs
4. Somaclonal variation appears in plants:
   a) Growing in polluted soil or water b) Exposed to gamma rays
   c) Raised in tissue culture d) Transformed by recombinant DNA technology
5. During favourable conditions, *Amoeba* reproduces by:
   a) Binary fission b) Multiple fission c) Both of these d) None of these
6. Asexual reproduction in plants is called
   a) Vegetative reproduction b) Syngamy
   c) Parthenocarpy d) Parthenogenesis
7. Identify the following diagram

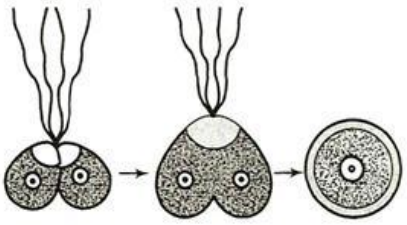


a. Zoospore in *Chlamydomonas*
b. Conidia of *Penicillium*
c. Buds in *Hydra*
d. Gemmules in sponge
All the above are
a) Bodies involved in sexual reproduction b) Bodies involved in asexual reproduction
c) Bodies of young ones d) All the above are correct

8. The process of release of egg from the ovary is called:
   a) Reproduction b) Ovulation c) Menstruation d) Insemination
9. Juvenile phase in plants, is
   a) Vegetative phase b) Reproductive phase c) Growth phase d) Senescence phase
10. Essential and most critical event in sexual reproduction is
    a) Fertilization b) Fusion of male and female gemetes
    c) Division in male and female gametes d) Both (a) and (b)
11. 
    The above figure depicts
    a) Budding b) Binary fission c) Fission d) Zoospore
12. 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
13. Nuclear membrane is absent in:
    a) Monera b) Protista c) Fungi d) Plantae
14. *Bryophyllum* can be propagated vegetatively by:
    a) Stem b) Root c) Leaf d) Flower
15. Self-fertilisation occurs in the
    a) Bisexual flower b) Unisexual flower c) Both (a) and (b) d) Monoecious flower
16. Vegetative propagation in *Pistia* occurs by:
    a) Stolon b) Offset c) Runner d) Sucker
17. One of the followings is not the characteristic feature of cyanobacteria:
    a) They are multicellular b) They form colonies
    c) They form blooms in polluted water bodies d) They can fix atmospheric nitrogen
18. The condition, in which, both male and female reproductive organs are found on the same plant, is called
    a) Unisexual b) Bisexual c) Both (a) and (b) d) Monoecious
19. Male gametes are also called
    a) Antherozoid b) Sperm c) Egg d) Both (a) and (b)
20. Bamboo plant flowers only once in their life time, generally 50-100 years, produce larger number of fruits and die. Blue stretches were formed by flowering of plant. *Strobilanthus kunthiana* in Kerala, Karnataka and Tamil Nadu. It flowers once in how many years?
    a) 15 years b) 12 years c) 20 years d) 48 years
21. The "eyes" of the potato tubers are:
    a) Root buds b) Flower buds c) Shoot buds d) Axillary buds
22. Who worked on embryological aspects and popularized the use of embryological characters in taxonomy?
    a) P. Guha b) P. Maheshwari c) Ivanovosky d) D. Graaf
23. Vegetative propagation by leaf takes place in:
    a) Ginger b) *Bryophyllum* c) Rose d) *Duranta*
24. Binary fission is the mode of asexual reproduction in
    a) *Amoeba* b) *Paramecium* c) Both (a) and (b) d) Yeast
25. The part where fertilization of ovum takes place in rabbit, humans and other placental mammals is:

a) Ovary b) Uterus c) Vagina d) Fallopian tube

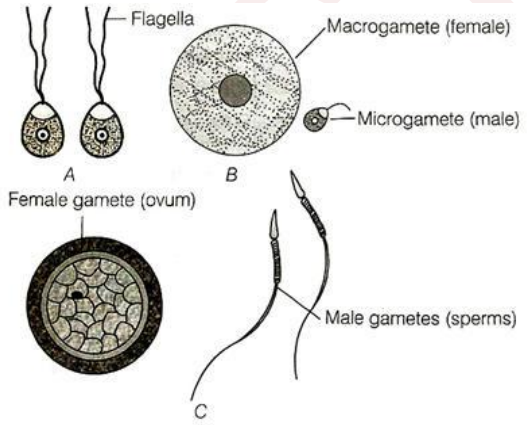
26. Grafting is used to propagate plants because:
    a) It is faster than seeds
    b) It maintains a desired set of genetic characteristics
    c) It combines the genetic characteristics of two desirable plants
    d) A plant can produce many more scions than seeds
27. Seasonal breeders are the organisms which reproduces during
    a) Favourable season only b) Unfavourable season only
    c) Maturation period d) Juvenile period
28. Flower *of Hibiscus* is:
    a) Bisexual b) Unisexual c) Neuter d) Very small
29. Life span of Cow is 20-25 years. What is the life span of horse?
    a) 140 years b) 20-30 years c) 100-150 years d) 60 years
30. 'Bisexual animals that possess both male and female reproductive organs are called hermaphrodite'. The above statement is
    a) True b) False
    c) Sometimes (a) and sometimes (b) d) Neither (a) and (b)
31. Regeneration of a plant cell to give rise to new plant is called:
    a) Reproduction b) Budding c) Totipotency d) Pleuripotency
32. Which of the following is hermaphrodite?
    a) Ant b) Aphids c) Earthworm d) Cockroach
33. The separation of single cell from the rest of the callus is:
    a) Organ culture b) Tissue culture c) Basal medium d) Nurse tissue
34. Vivipary is observed in:
    a) Banyan b) *Bryophyllum* c) *Ipomea* d) *Rhizophora*
35. Vegetative propagation in *Pistia* occurs by:
    a) Stolon b) Offset c) Runner d) Sucker
36. *Rhizopus* reproduces asexually by:
    a) Conidia b) Spores c) Gemma d) Bulbil
37. Reproduction is a biological process in which an organism give rise to young ones (offspring) similar to itself. An organism's method of reproduction depends upon factors:
    a) Habitat b) Internal physiology c) Genitalia d) All of above
38. Use of stem cutting is common method of vegetative propagation. Juvenile wood grows roots more readily than mature wood. The superior rooting of juvenile cutting may be due to:
    a) Lower ABA contents b) Higher endogenous auxin contents
    c) Higher endogenous gibberellins contents d) They being still in the vegetative stage
39. Events in the diagram are (in sequential order)



    a) Fission of gametes → new individual → zygote
    b) Fusion of gametes → zygote → new individual (cell $2n$)
    c) Fission of gametes → zygote → new individual (cell $2n$)

d) Stages in the gametogenesis

40. Examples of vegetative propagation are
    a) Rhizome b) Tuber c) Offset d) All of these
41. Gametogenesis is the formation of
    a) Male gamete b) Female gamete c) Both (a) and (b) d) Spore
42. Which of the following require water for gamete transfer?
    a) Algae, bryophytes and pteridophyte b) Pteriodophyles only
    c) Gymnosperms d) Angiosperms
43. During embryogenesis the zygote undergoes
    a) Cell division (mitosis) b) Cell division (meiosis)
    c) Cell differentiation d) (a) followed by (c)
44. Find out the wrong pair with respect to number of chromosomes in meiocytes:
    a) Fruit fly -8 b) Apple -36 c) Rice -24 d) House fly -12
45. Which of the following is pollinated by water?
    a) Viola b) Yucca c) Oxalis d) Zostera
46. Large number of offspring produced in the case of
    a) Fertilization that occur in external medium
    b) Fertilization that occur in internal medium
    c) Either (a) or (b)
    d) Both (a) and (b)
47. The period from birth to natural death is called
    a) Life span b) Life cycle c) Life style d) Reproductive phase
48. Reproduction takes place in which stage of life span
    a) Juvenile stage b) Maturation stage c) Reproductive stage d) Ageing phase
49. In case of Marchantia, antheridiophore is produced by:
    a) Female thallus b) Male thallus c) Monoecious plant d) None of above
50. Identify the gametes in fig A, B and C



    a) A-Heterogametes, B-Isogametes, C-Homogametes
    b) A-Homogametes, B-Isogametes, C-Heterogametes
    c) A-Isogametes, B-Heterogametes, C-Heterogametes
    d) A-Heterogametes, B-Heterogametes, C-Isogametes
51. Isogamous condition with non-flagellated gametes is found in:
    a) Spirogyra b) Volvox c) Fucus d) Chlamydomonas
52. Which of the following statement support the view that elaborate sexual reproductive processes appeared much later in organic evolution?
    I. Lower groups of organisms have complex body design

II. Asexual reproduction is common in lower groups
III. Asexual reproduction is common in higher groups of organisms
IV. High incidences of sexual reproduction are visible in angiosperms and vertebrates

a) I and II b) I and IV c) II and IV d) II and III

53. Name the plants, the structures of which are given in the previous question and select the correct answer the given option

	A	B	C	D	E
a)	Pot-ato	Gin-ger	*Bryop-hyllum*	Water hyaci-nth	*Agave*
b)	Pot-ato	Gin-ger	Water-hyaci nth	Agave	*Bryop-hyllum*
c)	Pot-ato	Gin-ger	Bryop-hyllu m	Agave	Water hyaci-nth
d)	Pot-ato	Gin-ger	Agave	*Bryop-hyllum*	Water hyaci-nth

54. Parameters of old age are
a) End of reproductive phase b) Concomitant changes in the body
c) Slowing down of vital process d) All of the above

55. Bud grafting is commonly used in:
a) Litchi b) Pomegranate c) Rose d) Jasmine

56. Immortal individuals are
a) Single celled organisms b) Double celled organisms
c) Multi-celled organisms d) Green plants

57. Air layering is performed in case of:
a) Jasmine b) Grapevine c) Goose berry d) Litchi

58. Product of sexual reproduction generally generates:
a) Prologned dormancy b) New genetic combination leading to variation
c) Large biomass d) Longer viability of seeds

59. When mature anthers of *Datura inxonia* are cultured in a culture medium supplemented with phytohormone named kinetin, coconut milk and plum juice, several embryos can be obtained floating inside the microsporangia. These embryos can develop into plants that are:
a) Haploid b) Diploid c) Tetraploid d) Both (A) and (B)

60. In papaya, the flowers, are:
a) Unisexual b) Bisexual
c) Neuter d) Flowers are not formed

61. In oviparous individuals the fertilized egg is covered by
a) Calcareous shell b) Phosphorus cell c) Both (a) and (b) d) Hard shell

62. Improved method of grafting is:
a) Both scion and stock plants are allowed to remain intact b) Stock and scion are given oblique cuts
c) Both (A) and (B) d) None of the above

63. Banana is multiplied by means of:
    a) Seeds b) Leaf margins c) Rhizome d) Offsets
64. Breeding of crops with high levels of minerals, vitamins and proteins is called:
    a) Somatic hybridization b) Bioforfication
    c) Micropropagation d) Biomagnification
65. Life begin in all sexually reproducing organism from
    a) Single celled zygote b) Double celled zygote c) Haploid zygote d) From gametes
66. Konar and Nataraja demonstrated callus *i. e.*, embryoids in buttercup also develops from:
    a) Pith cells b) Mesodermal cells
    c) Epidermal cells of hypocotyl region d) Cortex cells
67. Clones are
    a) Morphologically similar individuals b) Genetically similar individuals
    c) Both (a) and (b) d) None of the above
68. Micropropagation is based on:
    a) Tissue culture b) Hybridization c) Microtomy d) Genetic control
69. Grafting is attempted in those plants which show:
    a) Adventitious roots b) Buds
    c) Folliage leaves and herbaceous stems d) Secondary growth
70. Chances of survival of young ones is greater in:
    a) Fishes b) Eutherian mammals
    c) Birds d) Amphibians
71. In potato, vegetative propagation takes place by:
    a) Root b) Leaf c) Grafting d) Stem tuber
72. Offsprings formed by sexual reproduction exhibit more variation than those formed by asexual reproduction because
    a) Sexual reproduction is a lengthy process
    b) Gametes of parents have quantitatively different genetic composition
    c) Genetic material comes from two parents of same species
    d) Greater amount of DNA is involved in sexual reproduction
73. Syngamy means:
    a) Fusion of similar spores b) Fusion of dissimilar spores
    c) Fusion of cytoplasm d) Fusion of gametes
74. 'Gemmule formation is a common mode of reproduction in *Paramecium*'
    a) True b) False
    c) Sometimes (a) and sometimes (b) d) Neither (a) nor (b)
75. *Strobilanthus kunthiana* is also called
    a) Neela Kuranji b) Peela Kuranji c) Hara Kuranji d) Violet Kuranji
76. *Hydra* reproduces by binary fission. This sentence is
    a) True b) False
    c) Sometimes (a) and Sometimes (b) d) Neither (a) nor (b)
77. Vegetative type of reproduction means:
    a) Plant portion is used as a means of propagation
    b) Seed is used as a means of propagation
    c) Flower is used as a means of propagation
    d) None of the above
78. Transverse binary fission occurs in

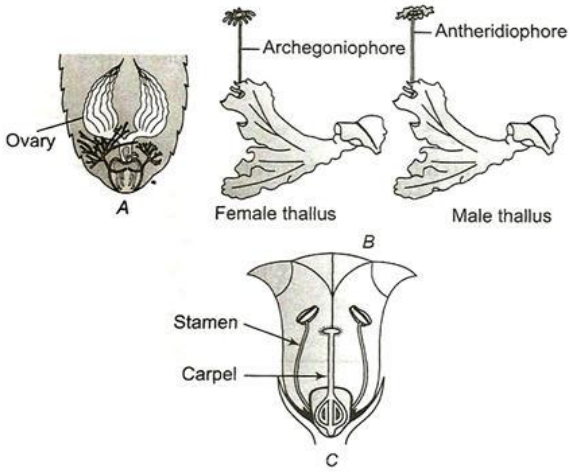
a) *Euglena* b) *Amoeba* c) *Hydra* d) *Paramecium*

79. In vegetative propagation, characters of parent plants are:
a) Changed b) Not preserved c) Preserved d) Exchanged
80. Asexual reproduction is a method of reproduction in which participation of …… takes place
a) One individual b) Two individuals c) Multi-individuals d) Meiosis
81. Common mode of reproduction in *Penicillium* is
a) Conidia b) Buds c) Gemmules d) Zoospore
82. An example of corm is
a) Ginger b) *Colocasia* c) Onion d) Potato
83. Corm is modification of:
a) Root b) Leaf c) Stem d) Bud
84. Female gametes are also called
a) Egg b) Ovum c) Both (a) and (b) d) Antherozoid
85. Which of the following have haploid plant body in most of organisms?
a) Monera b) Fungi
c) Algae and Bryophytes d) All of above
86. The most significant value of vegetative propagation is that:
a) It enables rapid production of genetic variation
b) It is a means of producing a large population of individuals genetically identical to the parent
c) It ensures that the progeny are safe from attack of diseases and practice
d) It is an ancient practice
87. Embryogenesis is process of development of embryo from the zygote. During this process zygote undergoes:
a) Meiosis b) Cell division (mitosis)
c) Cell differentiation d) Both (B) and (C)
88. Embryo sac is found in:
a) Endosperm b) Embryo c) Ovule d) Seed
89. *Hydra* reproduces asexually through:
a) Fragmentation b) Budding c) Binary fission d) Sporulation
90. Eyes on the potato, sugar cane, ginger are
a) Condensed nodes b) Condensed internode
c) Interspread rhizome d) Interspread corm
91. Which one of the following is correctly matched?
a) Ginger-Sucker b) *Chlamydomonas*-Conidia
c) Yeast-Zoospores d) Onion-Bulb
92. Period of pregnancy is called:
a) Gestation period b) Incubation period c) Pre-patent period d) Blastulation
93. Menstrual cycle is completed in:
a) 30 Days b) 31 Days c) 28 Days d) 27 Days
94. Reproduction is
a) Biological process of producing young ones
b) Non-biological process of producing young ones
c) Biological process of producing mature ones
d) None of the above
95. Why water hyacinth is called Terror of Bengal?
a) It is being used as food for fish

b) It consumes oxygen from cultivated plant and destroy them
c) It consumes oxygen from water and decreases O_2 concentration in water
d) It is a weed

96. Development of fruit without fertilization is called:
a) Cell division b) Cell culture c) Parthenocarpy d) Parthenogenesis

97. Give the name of the following diagram



a) A-Male cockroach, B-*Funaria,* C-Unisexual flower
b) A-Male cockroach, B-*Marchantia*, C-Bisexual flower
c) A-Female cockroach, B-*Cycas*, C-Unisexual flower
d) A-Female cockroach, B-*Marchantia*, C-Bisexual flower

98. In diploid organism the gamete producing cells are called
a) Gamete mother cell b) Meiocytes c) Both (a) and (b) d) None of these

99. Clone is a group of individuals got through:
a) Self pollination b) Cross pollination
c) Vegetative propagation d) Hybridization

100. Zoospores are
a) Motile gametes b) Female motile gametes
c) Sessile gametes d) Female sessile gametes

101. In oviparous individuals development of zygote takes place
a) Outside the body b) Inside the body
c) Inside the freshwater d) Inside the marine water

102. Which is correct about anthers. They are:
a) Haploid b) Diploid
c) Diploid as well as triploid d) Haploid, diploid and triploid

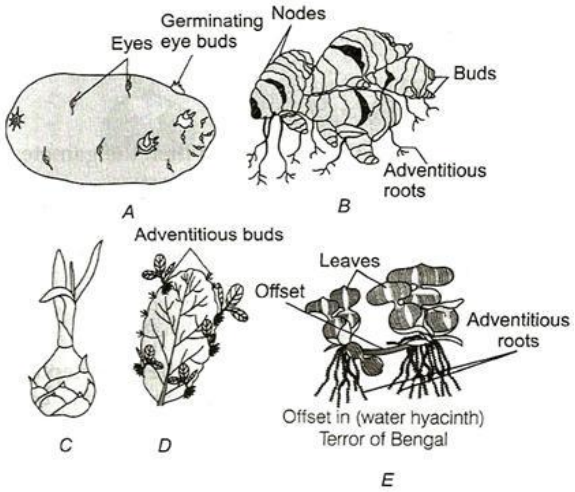
103. In grafting scion forms:
a) Shoot system b) Root system c) New plant d) Hybrid plant

104. Vegetative propagation in mint occurs by:
a) Runner b) Offset c) Rhizome d) Sucker

105. Division in a bacterial cell is carried out through
a) Multiple fission b) Binary fission c) Budding d) Plasmotomy

106. During oogenesis, each diploid oocyte produces:
a) Four functional ova b) Two functional eggs and two polar bodies
c) Four functional polar bodies d) One functional egg and three polar bodies

107. Choose the option with correct identification of A, B, C, D and E given below:



	A	B	C	D	E
a)	Tuber	Rhizome	Eyes	Leaf bud	offset
b)	Offset	Eyes	Leaf bud	Stolon	Sucker
c)	Offset	Leaf buds	Eyes	Stolon	Sucker
d)	Tuber	Rhizome	Bulbil	Leaf buds	offset

108. Which one of the following pairs is wrongly matched, while the remaining three are correct?
a) *Bryophyllum* – Leaf buds
b) *Agave* –Bulbils
c) *Penicillium* –Conidia
d) Water hyacinth –runner

109. 'Unisexual male flower is called pistillate'. The above statement is
a) True
b) False
c) Sometimes (a) and sometimes (b)
d) Neither (a) nor (b)

110. In which of the following organisms self fertilisation is seen?
a) Fishes
b) Leech
c) Earthworm
d) Liverfluke

111. One of the following is not a method of asexual reproduction:
a) Cutting
b) Grafting
c) Budding
d) Conjugation

112. Parthenogenesis is the process in which new organism is formed
a) With fertilization
b) Without fertilization
c) Through mitosis
d) Through meiosis

113. Internal fertilization is the one in which syngamy
a) Occur outside the body
b) Occur inside the body
c) Followed by meiosis
d) None of these

114. Terror of Bengal is
a) Freshwater plant called water lily
b) Marine plant called water propagules
c) Aquatic plant called water hyacinth
d) None of the above

115. A scion is grafted to stock. The quality of fruits produced will be determined by the genotype of:
a) Stock
b) Scion
c) Both stock and scion
d) Neither stock nor scion

116. Oestrus cycle is cyclic changes in the activities of ovaries and accessory duct during
a) Reproductive (seasonal) period
b) Maturation period
c) Ageing period
d) Juvenile period

117. 'Unisexual female flower is called staminate'. The above statement is
a) True
b) False
c) Sometimes (a) and sometimes (b)
d) Neither (a) nor (b)

118. Animals giving birth to young ones are:
a) Oviparous
b) Ovoviviparous
c) Viviparous
d) Both (B) and (C)

119. Pollination is
    a) Transfer of gametes on stigma
    b) Transfer of male gametes on stigma
    c) Transfer of female gametes on stigma
    d) Fusion of male and female gametes
120. What is common between vegetative reproduction and apomixis?
    a) Both occur round the year
    b) Both produce progeny identical to the parent
    c) Both are applicable to only dicot plants
    d) Both bypass the flowering plant
121. In which pair both the plants can be vegetatively propagated by leaf pieces?
    a) *Bryophyllum* and *Kalanchoe*
    b) *Chrysanthemum* and *Agave*
    c) *Agave* and *Kalanchoe*
    d) *Asparagus* and *Bryophyllum*
122. Which is not a method of vegetative propagation?
    a) Micropropagation b) Sowing c) Budding d) Layering
123. Micropropagation is a technique for the production of
    a) New plant b) Haploid pants c) Hybrid variety d) Somaclonal plants
124. Largest bird is:
    a) Emu b) Penguin c) Kiwi d) Ostrich
125. Diploid zygote is universal in
    a) All sexually reproducing organisms
    b) All asexually reproducing organisms
    c) All sexually and asexually reproducing organisms
    d) All plants and animals
126. The condition in which male and female parts present on the different plant, is called
    a) Heterothallic b) Dioecious c) Unisexual d) All of these
127. Cell division is the mode of reproduction in
    a) Monera b) Protista c) Both (a) and (b) d) Plants
128. Man is:
    a) Unisexual b) Bisexual c) Hermaphroditic d) Protogynous
129. Events in the sexual reproduction
    I. Pre-fertilisation
    II. Fertilisation
    III. Post-fertilisation
    The sequential order of their occurrence is
    a) I → III → II b) II → I → III c) III → II → I d) I → II → III
130. Asexual reproduction is carried out by:
    a) Single parent
    b) Without fusion of gametes
    c) With or without formation of gametes
    d) All of above
131. The living organisms can be unexceptionally distinguished from the non-living things on the basis of their ability for:
    a) Interaction with environment and progressive evolution
    b) Reproduction
    c) Growth and movement
    d) Responsive to touch
132. Fusion of male and female gametes is called
    a) Syngamy b) Fertilization c) Both (a) and (b) d) Heterogamy
133. Meiosis takes place in:
    a) Conidia b) Gemmule c) Megaspore d) Meiocyte
134. Which one is female gametophyte?
    a) Embryo b) Embryo sac c) Endosperm d) Synergid

135. Callus is a
    a) Organized mass of the cell
    b) Differentiated mass of the cell
    c) Dedifferentiated mass of the cell
    d) Undifferentiated mass of the cell
136. The technique of obtaining large number of plantlets by tissue culture method is called
    a) Plantlet culture
    b) Organ culture
    c) Micropropagation
    d) Macropropagation
137. Stem cuttings are employed in the propagation of:
    a) Banana
    b) Mango
    c) Sugar cane
    d) Cotton
138. Embryogenesis is the process of development of
    a) Embryo
    b) Endosperm
    c) Individual
    d) Internal organs
139. Which of the following is correct about Neela Kuranji?
    a) Last time it was flowered in Sept-Oct.2006
    b) Next time it will have flower in Sept-Oct.2018
    c) It is found in Kerala, Tamil Nadu and Karnataka
    d) All of the above
140. Vegetatively propagated plants:
    a) Clone of their parent
    b) Show adaptive variations
    c) Better fitted for struggle for existence
    d) Stouter than parents
141. Menstrual cycle is
    a) Seasonal hormonal ovarian change
    b) Conditional hormonal ovarian change
    c) Periodic hormonal ovarian change
    d) Habitual hormonal ovarian change
142. If the parent body is haploid then the gametes are
    a) Haploid
    b) Diploid
    c) Triploid
    d) None of these
143. Which of the following is not immortal?
    a) Banyan tree
    b) Amoeba
    c) *Euglena*
    d) *Paramecium*
144. Even in absence of pollinating agents seed-setting is assured in:
    a) *Zostera*
    b) *Salvia*
    c) Fig
    d) *Commellina*
145. Many scientists consider viruses as living entities because these:
    a) Respire
    b) Can cause diseases
    c) Reproduce (inside host)
    d) Respond to tough environment
146. Where does syngamy occur in ……..
    a) External medium
    b) Internal medium
    c) Both (a) and (b)
    d) None of these
147. Micropropagation is a technique:
    a) For production of true to type plants
    b) For production of haploid plant
    c) For production of somatic hybrids
    d) For production of somaclonal plants
148. Scion is the term used in relation to:
    a) Embryology
    b) Grafting
    c) Agamospermy
    d) Emasculation
149. The DNA in the cell …….. is the information source for making proteins:
    a) Nucleus
    b) Ribosome
    c) Cell wall
    d) Plasma membrane
150. Female gamete undergoes development to form new organisms without fertilization. The process called parthenogenesis. It occurs in:
    a) Rotifers
    b) Turkey birds
    c) Some reptiles
    d) All of above
151. Zygote develops into:
    a) Embryo
    b) Ovule
    c) Seed
    d) Fruit
152. Asexual reproduction is common in
    a) Single celled organisms
    b) Plants with relatively simple organization

c) Animals with relatively simple organization
d) All of the above

153. The mode of asexual reproduction in bacteria are:
a) Formation of gametes
b) Endospore formation
c) Conjugation
d) Zoospore formation

Session: 2025-26 **Total Questions: 159**

NEET BIOLOGY

1.REPRODUCTION IN ORGANISMS

: ANSWER KEY :

1)	d	2)	d	3)	a	4)	c	81)	a	82)	b	83)	b	84)	c
5)	a	6)	a	7)	c	8)	b	85)	d	86)	d	87)	d	88)	c
9)	a	10)	d	11)	a	12)	d	89)	b	90)	a	91)	d	92)	a
13)	b	14)	c	15)	a	16)	b	93)	c	94)	a	95)	c	96)	c
17)	a	18)	c	19)	d	20)	b	97)	d	98)	c	99)	a	100)	a
21)	d	22)	b	23)	b	24)	c	101)	a	102)	a	103)	a	104)	a
25)	d	26)	d	27)	a	28)	a	105)	b	106)	b	107)	d	108)	d
29)	d	30)	a	31)	c	32)	c	109)	b	110)	c	111)	a	112)	b
33)	d	34)	d	35)	b	36)	d	113)	b	114)	c	115)	b	116)	a
37)	d	38)	c	39)	b	40)	d	117)	b	118)	c	119)	b	120)	b
41)	c	42)	a	43)	d	44)	b	121)	a	122)	b	123)	d	124)	d
45)	d	46)	a	47)	a	48)	b	125)	a	126)	d	127)	c	128)	a
49)	b	50)	c	51)	a	52)	c	129)	d	130)	d	131)	b	132)	c
53)	d	54)	d	55)	c	56)	a	133)	d	134)	b	135)	d	136)	c
57)	a	58)	b	59)	b	60)	a	137)	c	138)	a	139)	d	140)	a
61)	d	62)	c	63)	c	64)	b	141)	c	142)	a	143)	a	144)	c
65)	a	66)	d	67)	c	68)	a	145)	c	146)	c	147)	c	148)	b
69)	d	70)	b	71)	d	72)	c	149)	b	150)	d	151)	a	152)	d
73)	d	74)	b	75)	a	76)	b	153)	c						
77)	c	78)	d	79)	c	80)	a								

Session: 2025-26 **Total Questions: 159**

NEET BIOLOGY

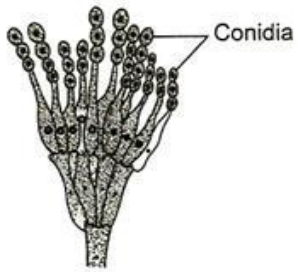
1.REPRODUCTION IN ORGANISMS

: HINTS AND SOLUTIONS :

3 **(a)**
Bamboo is the monocarpic plant (which reproduce once in their life time). They reproduce once in 50-100 yrs after their birth and after flowering they die

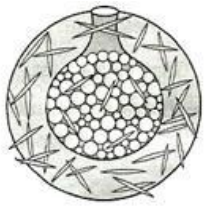
6 **(a)**
Asexual reproduction in plants called vegetative reproduction. Rhizome, runner, sucker all are the examples of asexual reproduction

7 **(c)**
Bodies involved in asexual reproduction
Conidia are non-motile gametes found singly or in chain on the parent body, *e*. *g*., *Penicillium*

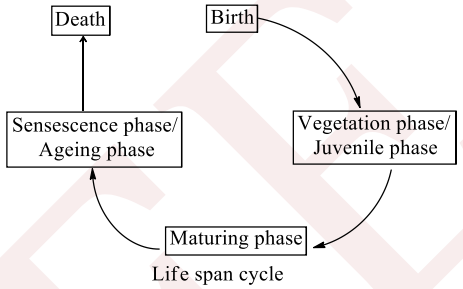


Conidia formation in *Penicillium*

False **Gemmule formation** is the type of reproduction in which the buds are formed with in the parent body, *e*. *g*., Sponge


Gemmule formation in sponge

9 **(a)**
Juvenile phase is the phase of life span in which growth of body and full development of reproductive organ takes place. It is called vegetative phase in plants



Life span cycle

10 **(d)**
Very essential event in sexual reproduction is fertilization and in fertilization the fusion of male and female gametes takes place

11 **(a)**
Budding In this type of asexual reproduction the daughter individual is formed on the small outgrowth of parent body, *e*. *g*, Yeast, *Hydra*, etc

15 **(a)**
Self-fertilisation is very common phenomenon in plants. This phenomenon takes place only when there is the presence of bisexual flower

18 **(c)**
Hermaphrodite/bisexual/monoecious/homothallic term used when both the sexes are present in same organism. Term 'hermaphrodite' is used in case of animals. Bisexual and monoecious used in both (animal/plant)

19 **(d)**
Male gametes are called antherozoids in case of lower organism like fungi and algae and in higher organism it is called sperm like mammals, reptiles, etc.

24 **(c)**
Binary fission It is the mode of reproduction in which the single organism divides into two parts, *i.e., Amoeba, Paramecium*

27 **(a)**
Seasonal breeders which reproduced in the favourable season only. Their reproductive

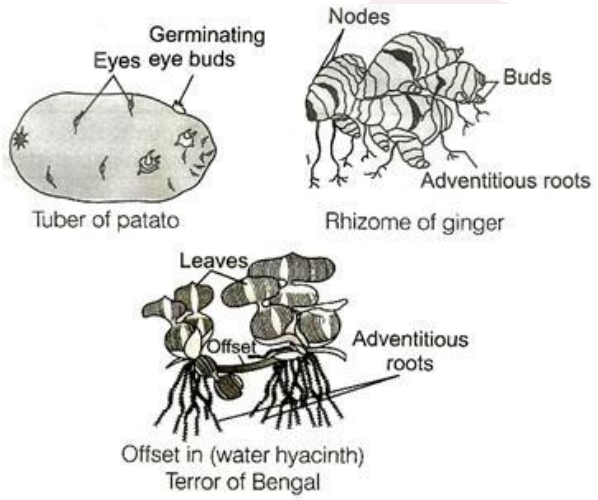
organs starts functioning due to seasonal changes thus they have the specific time period in which the reproduction takes place
e. *g*., Mammals (dog, cow, etc.)

30 **(a)**
True. When both the sexes are present on the same organism called hermaphrodite, *e*. *g*., Earthworm, leech, etc

32 **(c)**
Ant, aphids, cockroaches are unisexual only earthworm have both the sexes (hermaphrodite)

39 **(b)**
In the given diagram three figures are there first figure indicate the fusion of male and female gametes
Second figure indicate the zygote because there are two nuclei visible in completely fused condition
Third figure indicates the complete one cell after fusion is over, all is there can be called new individual

40 **(d)**
All examples shown below are, the examples of vegetative reproduction



41 **(c)**
Gametogenesis Process of formation of gametes (male and female) is called gametogenesis.
Gametes are the haploid reproducing cells

43 **(d)**
After forming the zygote it under goes successive cleavage and becomes mass of cells. Cleavage is considered as mitosis without resting phase.
As in nature in the process of mitosis the genetic constitution remains the same hence, resulting all cells have similar genetic constitution. Cleavage is followed by cell differentiation processes like gastrulation, etc., which finally gives rise to different body parts

46 **(a)**
Large number of offsprings produced in case of externally fertilized animals because there is no direct protection, from the environment

47 **(a)**
The time period from birth till death is called **life span**.
The life span is generally divided into four parts
(i) **Juvenility** Period of life span from birth till the organism develops the capacity to reproduce
(ii) **Maturity** Reproduction begins and flourished in this stage
(iii) **Senescence or ageing** Progressive detoriation of the body is called ageing. Ageing ends in senescence
(iv) **Death** It stopping of all vital activity of an organism at senescence leads to death

48 **(b)**
Maturation stage
The time period from birth till death is called **life span**.
The life span is generally divided into four parts
(i) **Juvenility** Period of life span from birth till the organism develops the capacity to reproduce
(ii) **Maturity** Reproduction begins and flourished in this stage
(iii) **Senescence or ageing** Progressive detoriation of the body is called ageing. Ageing ends in senescence
(iv) **Death** It stopping of all vital activity of an organism at senescence leads to death

50 **(c)**
A-clearly indicate the homogametes or isogametes because both gametes are identical
B-Clearly indicates that, it is not homogametes because there is much size difference
C-Indicate the two well defined gametes which are not similar, *i.e.,* ovum (female) and sperm (male)

52 **(c)**
Statement I It is incorrect. The correct sentence is 'lower groups of organisms have simple body forms'.

Statement II It says the organisms, which evolve earlier reproduced by asexual mode of reproduction because of their simpler body plans

Statement III It is wrong sexual reproduction is common in higher organism

Statement IV It says that in complex organism or organism, which evolve later have the complex body plan and they reproduce by means of sexual reproduction which is complex than the asexual one

53 **(d)**

A-Potato, B-Ginger, C-*Bryophylllum*, D-Water hyacinth, E-*Agave*

Name of plants	Types of Reproduction /Characteristics
Potato	Tuber
Ginger	Rhizome
Agave	Bulbil
Bryophyllum	Leaf buds
Water hyacinth	Offset

54 **(d)**

Old age is the phase in life span which occur before death and after maturity period.

In old age almost all of the vital processes starts slowing down. Gamete formation also stops in old age

56 **(a)**

Prokaryotes (bacteria) and Protista are single celled organisms. Their mode of reproduction is cell division. In them the parent body as a whole constitute the reproductive unit and divided into two by various mode. So, they are immortal

61 **(d)**

As we know oviparous individuals lay eggs with white hard shell around it and this white hard shell is made up of calcium

65 **(a)**

Zygote considered as the single cell with two nuclei. Because zygote is the union of male and female gametes, which are haploid

Two haploid cell fuse form diploid cell. That's way it considered as single cell and from zygote every organism begin their life

67 **(c)**

Morphologically and genetically similar organisms are called **clones**

These are produced through asexual reproduction which is the type of reproduction where there is the participation of only single organism

72 **(c)**

Sexual reproduction is characterized by genetic recombination. Due to genetic recombination the progeny is different from the parents.

In sexual reproduction the genetic material comes from the two parents of same species. But in asexual reproduction only one individual participate to produce offspring

74 **(b)**

False **Gemmule formation** is the type of reproduction in which the buds are formed with in the parent body, *e*. *g*., Sponge

Gemmule formation in sponge

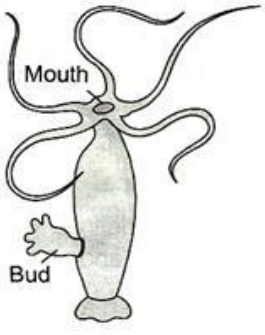
75 **(a)**

Strobilanthus kunthiana also called Neela Kuranji in local language. It is found in Kerala, Maharashtra, Tamil Nadu. It reproduce once in 12 yr

Last time it was reproduced in Sept-Oct, 2006 and produced blue flower in massive quantity. It attracted tourist because all of the area appeared blue

76 **(b)**

False. Because in *Hydra* the common mode of reproduction is bud formation which is the small outgrowth attach to parent body externally

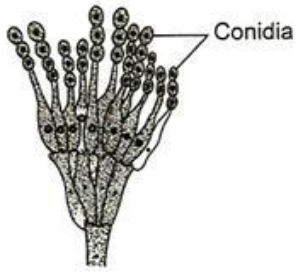


Budding in *Hydra*

78 **(d)**
Irregular binary fission – *Amoeba*
Longitudinal binary fission – *Euglena*
Transverse binary fission — *Parameciu*m

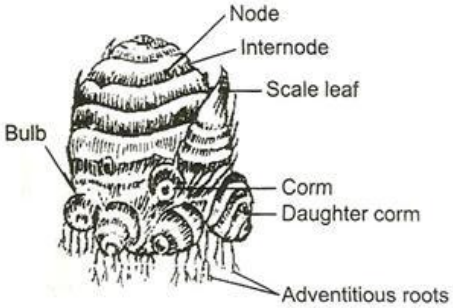
80 **(a)**
Participation of one individual
Morphologically and genetically similar organisms are called clones
These are produced through asexual reproduction which is the type of reproduction where there is the participation of only single organism

81 **(a)**
Conidia are non-motile gametes found singly or in chain on the parent body, *e. g., Penicillium*



Conidia formation in *Penicillium*

82 **(b)**
Corms are the unbranched rounded underground stems. They buds for daughter plants. Axillary buds occur at places. Their base contains a number of adventitious roots



Corms in *Colocasia*

84 **(c)**
Female gametes are called ovum in case of higher organism. The term egg is also used.
Interchangeably Archegonia also used for female gametes containing organs but in case of lower organism, *i.e.,* Bryophytes and pteridophytes

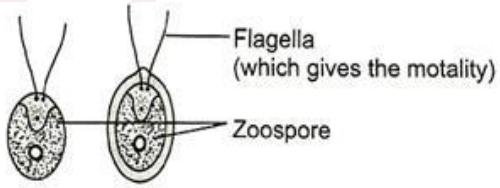
94 **(a)**
Reproduction is one of the fundamental processes in which individual produces a young one

95 **(c)**
Water hyacinth consumes oxygen from water and decreases its O_2 content.
'Terror of Bengal' is the aquatic plant (water hyacinth) introduced in Bengal for its beautiful leaves and flower. But it grows very faste and consumes O_2 from water.
Due to which lot of fish died. That's why it was called Terror of Bengal

97 **(d)**
A-indicate female cockroach because leaf like structure of ovary is distinguished character of female cockroach. B-plant body is thalloid and sexes are separate indicates *Marchantia*
C-Male and female gametes on same plant so monoecious or bisexual flower

98 **(c)**
Gamete mother cells are called gamete producing cells. In these the meiotic cell division takes place. Hence, they are also called meiocytes

100 **(a)**
Zoospore zoo-motile, *spore*—minature gamete.
Generally, male gametes are motile. They are commonly found in the fungi and animal kingdom
Sessile spore are generally female gametes. Here, one must understand that zoospores are not differentiated to male and female



101 **(a)**
As we know that oviparous individuals lay eggs outside the body hence, further development takes place outside.
But, the process of fertilization takes place inside their body

105 **(b)**
Binary fission is the common mode of reproduction in bacteria and Protista.
It may be of many types
Irregular binary fission – *Amoeba*
Longitudinal binary fission – *Euglena*
Transverse binary fission — *Parameciu*m

107 **(d)**

Name of plants	Types of Reproduction /Characteristics

Potato	Tuber
Ginger	Rhizome
Agave	Bulbil
Bryophyllum	Leaf buds
Water hyacinth	Offset

109 **(b)**
False. **Staminate** are the unisexual male flower/or plant which produces the male gametes only called staminate plant

110 **(c)**
Fishes are dioecious so no self - fertilisation. Earthworm, liverfluke, leech all are hermaphrodite but hermaphrodism is not necessary to give rise to self - fertilisation. In given options only liverfluke does self - fertilisation

112 **(b)**
New organism without fertilization is called parthenogenesis, *e*. *g*., Ant, bees, termites

113 **(b)**
In internal fertilization syngamy takes place inside the body of female reproductive tract. It is direct protection from the environment to the developing progeny

114 **(c)**
'Terror of Bengal' is the aquatic plant (water hyacinth) introduced in Bengal for its beautiful leaves and flower. But it grows very faste and consumes O_2 from water.
Due to which lot of fish died. That's why it was called Terror of Bengal

116 **(a)**
Generally, the oestrus cycle takes place in the seasonal breeders. It is the cyclic change in the activity of ovaries and accessory duct during reproductive (seasonal) period

117 **(b)**
False. **Pistillate** are unisexual female plant. These plant produce only female flower

119 **(b)**
Transfer of male gametes (pollen) to the receptacle (stigma) of the female is called pollination
Generally, the pollination takes place by various means like air/ water / animals / insects, etc.

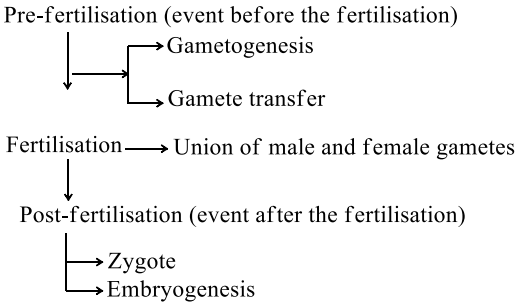
123 **(d)**
Production of plant by culturing the cells in laboratory is called micropropagation
It is also called **tissue culture**. In this technique the plants are genetically similar to parent one. That's why called somaclonal plants

125 **(a)**
Presence of diploid zygote is universal in all sexually reproducing organism. Irrespective of the fact that, the parents are haploid or diploid.
In haploid parent condition, the diploid zygote undergoes meiosis and become haploid body again, while in diploid organisms, the diploid zygote changes to diploid individual after undergoing mitosis

126 **(d)**
Heterothallic/dioecious/unisexual term used when the sexes present on different organisms called male and female
The archegonia and antheridia term used in case of lower organism

127 **(c)**
In cell division the cell divides into two parts having same genetic constituent. Only Monera and Protista are the organisms, which are single celled in five kingdom of classification.
That's why cell division is the common mode of reproduction in Monera and Protista

129 **(d)**
Sequential events in the sexual reproduction are



132 **(c)**
Syngamy and fertilization both the terms are used interchangeably, for the fusion of male and female gametes

135 **(d)**
Propagation by plant Tissue Culture (micropropagation) includes propagation of plants by culturing the cells, tissue, etc.

Initially the culturing of cells or tissue results in the formation of an undifferentiated mass of cell called **callus,** which differentiate to produce large number of plantlets

136 **(c)**

In micropropagation (tissue culture) there is the origin of an individual plant from few cells, so in laboratory many plants could be propagated in little time.

This technique basically used for the plants, which are endangered

138 **(a)**

Embryogenesis refers to the development of embryo from the zygote. During embryogenesis, zygote undergoes cell division (mitosis) and cell differentiation. Cell division of zygote is called **cleavage**

139 **(d)**

All are correct

Strobilanthus kunthiana also called Neela Kuranji in local language. It is found in Kerala, Maharashtra, Tamil Nadu. It reproduce once in 12 yr

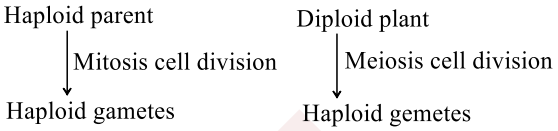
Last time it was reproduced in Sept-Oct, 2006 and produced blue flower in massive quantity. It attracted tourist because all of the area appeared blue

141 **(c)**

Menstrual cycle is the periodic hormonal ovarian change. It takes place in every month in the primates Stopping of menstrual cycle is called menopause

142 **(a)**

Irrespective of the fact whether plant is haploid or diploid, it has haploid gametes



In mitotic cell division the chromosome number remains the same. In meiotic cell division the chromosomes number becomes half

146 **(c)**

Syngamy (fertilisation) fusion of male and female gametes is called syngamy or fertilization. *It is of two types*

(i) **External Fertilisation** When the syngamy takes place in the external medium. Generally, the external medium is water, *e*. *g*., Amphibians, fishes

(ii) **Internal Fertilisation** When the syngamy takes place inside the female body, *e*. *g*., Reptiles, bird, mammals

152 **(d)**

Asexual reproduction is common in single celled organisms, because in asexual reproduction mitotic cell division takes place which is quick and simple as compared to meiosis, so asexual reproduction is the most common mode of reproduction in the given options

Session: 2025-26 **Total Questions: 159**

NEET BIOLOGY

1.REPRODUCTION IN ORGANISMS

Assertion - Reasoning Type

This section contain(s) 0 questions numbered 1 to 0. Each question contains STATEMENT 1(Assertion) and STATEMENT 2(Reason). Each question has the 4 choices (a), (b), (c) and (d) out of which **ONLY ONE** is correct.

a) Statement 1 is True, Statement 2 is True; Statement 2 **is** correct explanation for Statement 1

b) Statement 1 is True, Statement 2 is True; Statement 2 **is not** correct explanation for Statement 1

c) Statement 1 is True, Statement 2 is False

d) Statement 1 is False, Statement 2 is True

1

Statement 1: Zygote is a single cell

Statement 2: Two haploid cell fuse to form two diploid cell

2

Statement 1: A plant can be retained and multiplied indefinitely without any change of variation through asexual reproduction

Statement 2: Asexual reproduction does not involve meiosis and syngamy

3

Statement 1: Zygote is the link between two generations

Statement 2: Zygote is the product of two gametes and producer of next generation

Session: 2025-26 **Total Questions: 159**

NEET BIOLOGY

1.REPRODUCTION IN ORGANISMS

: ANSWER KEY :

1) c 2) a 3) a

Session: 2023-24 **Total Questions: 159**

NEET BIOLOGY

1.REPRODUCTION IN ORGANISMS

: HINTS AND SOLUTIONS :

1 **(c)**
Two haploid cell form one diploid cell in sexual reproduction. In higher organism diploidy is the most common nature of cell

2 **(a)**
Asexual mode of reproduction in which the genetic constituent remains the same. So due to that offspring and parent are morphologically and genetically same

3 **(a)**
Zygote is the product of two individual and if succeeded than produce the gamete (male or female) for next generation

Session: 2025-26 **Total Questions: 159**

NEET BIOLOGY

1.REPRODUCTION IN ORGANISMS

Matrix-Match Type

This section contain(s) 0 question(s). Each question contains Statements given in 2 columns which have to be matched. Statements (A, B, C, D) in **columns I** have to be matched with Statements (p, q, r, s) in **columns II**.

1. Match the following columns

Column-I	Column- II
(A) Clone	(1) Agamospermy
(B) Plant apomixes	(2) Scion
(C) Grafting	(3) Callus
(D) Tissue culture	(4) Flower
(E) Inflorescence	(5) Ramet

CODES :

	A	B	C	D	E
a)	5	1	2	3	4
b)	5	1	3	2	4
c)	1	2	3	4	4
d)	5	2	3	4	4

2. Match the following based on life span:

Column-I	Column- II
(A) Elephant	(p) 1 Month
(B) Fruit fly	(q) 4 months
(C) Rice plant	(r) 7-15 days
(D) Butter fly	(s) 60-90 yrs

CODES :

	A	B	C	D
a)	c	b	a	d
b)	d	a	c	b
c)	d	a	b	c
d)	d	c	a	b

3. Match the following columns

Column-I	Column- II
(A) Binary fission	(1) Algae
(B) Zoospore	(2) *Amoeba*
(C) Conidium	(3) *Hydra*
(D) Budding	(4) *Penicillium*
(E) Gemmules	(5) Sponge

CODES :

	A	B	C	D	E
a)	1	4	5	3	2
b)	2	1	4	3	2
c)	1	2	3	4	2
d)	1	4	3	2	2
e)	4	1	3	5	2

4. Match the following and choose the correct combination from the options given

Column-I	Column- II
(A) Butterfly	(1) 60 years
(B) Crow	(2) 140 years
(C) Parrot	(3) 15 years
(D) Crocodile	(4) 1-2 weeks

CODES :

	A	B	C	D
a)	1	2	3	4
b)	4	3	1	2
c)	2	3	4	1
d)	4	3	2	1

Session: 2025-26 **Total Questions: 159**

NEET BIOLOGY

1.REPRODUCTION IN ORGANISMS

: ANSWER KEY :

1) a 2) c 3) b 4) d

Session: 2025-26 **Total Questions: 159**

NEET BIOLOGY

1.REPRODUCTION IN ORGANISMS

: HINTS AND SOLUTIONS :

1 **(a)**
Ramet is the synonym of clone. **Plant apomixes** and **agamospermy** are same. During bud grafting a cut called **scion** is made, which is T-shaped and from this point bud formation takes place
Callus is the unorganized mass of tissue produced during tissue culture. After giving appropriate hormone it changes into the new plant.
Infloresence gives rise to flower

3 **(b)**
Binary fission –*Amoeba*
Zoospore – Algae
Conidium –*Penicillium*
Budding –*Hydra*
Gemmules — Sponge