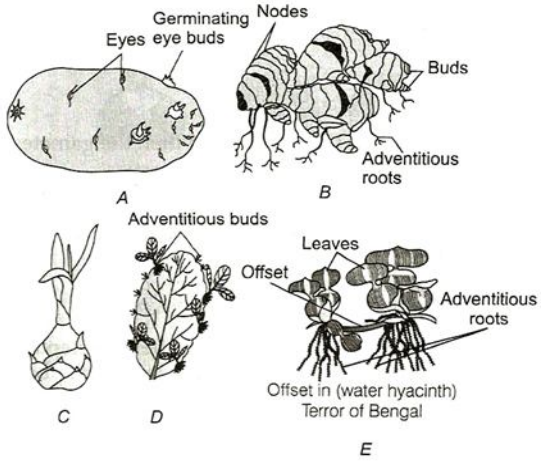
a) Outside the body
b) Inside the body
c) Inside the freshwater
d) Inside the marine water

2. Which is correct about anthers. They are:
   a) Haploid
   b) Diploid
   c) Diploid as well as triploid
   d) Haploid, diploid and triploid
3. In grafting scion forms:
   a) Shoot system
   b) Root system
   c) New plant
   d) Hybrid plant
4. Vegetative propagation in mint occurs by:
   a) Runner
   b) Offset
   c) Rhizome
   d) Sucker
5. Division in a bacterial cell is carried out through
   a) Multiple fission
   b) Binary fission
   c) Budding
   d) Plasmotomy
6. 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
7. Choose the option with correct identification of A, B, C, D and E given below:



a)

A	B	C	D	E
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

8. 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
9. '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)
10. In which of the following organisms self fertilisation is seen?
    a) Fishes
    b) Leech
    c) Earthworm
    d) Liverfluke
11. One of the following is not a method of asexual reproduction:
    a) Cutting
    b) Grafting
    c) Budding
    d) Conjugation
12. Parthenogenesis is the process in which new organism is formed
    a) With fertilization
    b) Without fertilization
    c) Through mitosis
    d) Through meiosis
13. 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
14. 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

15. 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

16. 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

17. '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)

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

19. 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

20. 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

21. 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*

22. Which is not a method of vegetative propagation?
a) Micropropagation
b) Sowing
c) Budding
d) Layering

23. Micropropagation is a technique for the production of
a) New plant
b) Haploid pants
c) Hybrid variety
d) Somaclonal plants

24. Largest bird is:
a) Emu
b) Penguin
c) Kiwi
d) Ostrich

25. 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

26. 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

27. Cell division is the mode of reproduction in
a) Monera
b) Protista
c) Both (a) and (b)
d) Plants

28. Man is:
a) Unisexual
b) Bisexual
c) Hermaphroditic
d) Protogynous

29. 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

30. 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

31. 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

32. Fusion of male and female gametes is called
a) Syngamy b) Fertilization c) Both (a) and (b) d) Heterogamy
33. Meiosis takes place in:
a) Conidia b) Gemmule c) Megaspore d) Meiocyte
34. Which one is female gametophyte?
a) Embryo b) Embryo sac c) Endosperm d) Synergid
35. 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
36. The technique of obtaining large number of plantlets by tissue culture method is called
a) Plantlet culture b) Organ culture c) Micropropagation d) Macropropagation
37. Stem cuttings are employed in the propagation of:
a) Banana b) Mango c) Sugar cane d) Cotton
38. Embryogenesis is the process of development of
a) Embryo b) Endosperm c) Individual d) Internal organs
39. 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
40. Vegetatively propagated plants:
a) Clone of their parent b) Show adaptive variations
c) Better fitted for struggle for existence d) Stouter than parents
41. Menstrual cycle is
a) Seasonal hormonal ovarian change b) Conditional hormonal ovarian change
c) Periodic hormonal ovarian change d) Habitual hormonal ovarian change
42. If the parent body is haploid then the gametes are
a) Haploid b) Diploid c) Triploid d) None of these
43. Which of the following is not immortal?
a) Banyan tree b) Amoeba c) *Euglena* d) *Paramecium*
44. Even in absence of pollinating agents seed-setting is assured in:
a) *Zostera* b) *Salvia* c) Fig d) *Commellina*
45. Many scientists consider viruses as living entities because these:
a) Respire b) Can cause diseases
c) Reproduce (inside host) d) Respond to tough environment
46. Where does syngamy occur in ……..
a) External medium b) Internal medium c) Both (a) and (b) d) None of these
47. 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
48. Scion is the term used in relation to:
a) Embryology b) Grafting c) Agamospermy d) Emasculation
49. The DNA in the cell …….. is the information source for making proteins:
a) Nucleus b) Ribosome c) Cell wall d) Plasma membrane

50. Female gamete undergoes development to form new organisms without fertilization. The process called parthenogenesis. It occurs in:

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-hyllum	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

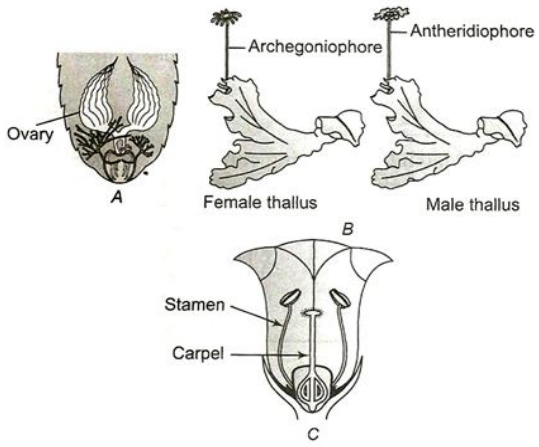
d) None of the above

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

IMPORTANT PRACTICE QUESTION SERIES FOR NEET EXAM – 1 (ANSWERS)

1)	**a**	**2)**	**a**	**3)**	**a**	**4)**	**a**
5)	**b**	**6)**	**b**	**7)**	**d**	**8)**	**d**
9)	**b**	**10)**	**c**	**11)**	**a**	**12)**	**b**

13)	**b**	**14)**	**c**	**15)**	**b**	**16)**	**a**
17)	**b**	**18)**	**c**	**19)**	**b**	**20)**	**b**
21)	**a**	**22)**	**b**	**23)**	**d**	**24)**	**d**
25)	**a**	**26)**	**d**	**27)**	**c**	**28)**	**a**
29)	**d**	**30)**	**d**	**31)**	**b**	**32)**	**c**
33)	**d**	**34)**	**b**	**35)**	**d**	**36)**	**c**
37)	**c**	**38)**	**a**	**39)**	**d**	**40)**	**a**
41)	**c**	**42)**	**a**	**43)**	**a**	**44)**	**c**
45)	**c**	**46)**	**c**	**47)**	**c**	**48)**	**b**
49)	**b**	**50)**	**d**	**51)**	**a**	**52)**	**c**
53)	**d**	**54)**	**d**	**55)**	**c**	**56)**	**a**
57)	**a**	**58)**	**b**	**59)**	**b**	**60)**	**a**
61)	**d**	**62)**	**c**	**63)**	**c**	**64)**	**b**
65)	**a**	**66)**	**d**	**67)**	**c**	**68)**	**a**
69)	**d**	**70)**	**b**	**71)**	**d**	**72)**	**c**
73)	**d**	**74)**	**b**	**75)**	**a**	**76)**	**b**
77)	**c**	**78)**	**d**	**79)**	**c**	**80)**	**a**
81)	**a**	**82)**	**b**	**83)**	**b**	**84)**	**c**
85)	**d**	**86)**	**d**	**87)**	**d**	**88)**	**c**
89)	**b**	**90)**	**a**	**91)**	**d**	**92)**	**a**
93)	**c**	**94)**	**a**	**95)**	**c**	**96)**	**c**
97)	**d**	**98)**	**c**	**99)**	**a**	**100)**	**a**

1 **(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

5 **(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 –*Paramecium*

7 **(d)**

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

9 **(b)**

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

10 **(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

12 **(b)**

New organism without fertilization is called parthenogenesis, $e.g.$, Ant, bees, termites

13 **(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

14 **(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

16 **(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

17 **(b)**

False. **Pistillate** are unisexual female plant. These plant produce only female flower

19 **(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.

23 **(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

25 **(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

26 **(d)**

Heterothallic/dioecious/unisexual term used when the sexes present on different organisms called male and female

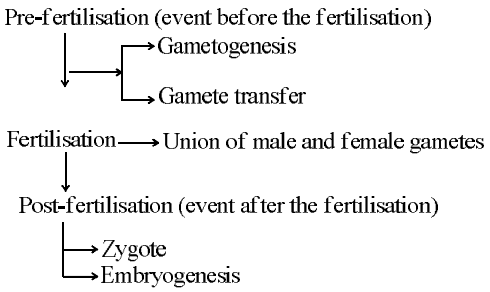
The archegonia and antheridia term used in case of lower organism

27 **(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

29 **(d)**

Sequential events in the sexual reproduction are



32 **(c)**

Syngamy and fertilization both the terms are used interchangeably, for the fusion of male and female gametes

35 **(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

36 **(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

38 **(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**

39 **(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

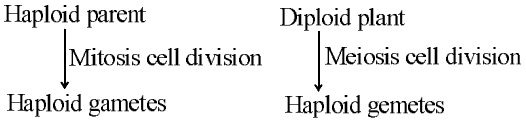
Last time it was reproduced in Sept-Oct, 2006 and produced blue flower in massive quantity. It attracted tourist because all of the area appeared blue

41 **(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

42 **(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

46 **(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.

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 Ginger *Agave* *Bryophyllum* Water hyacinth	Tuber Rhizome Bulbil Leaf buds 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

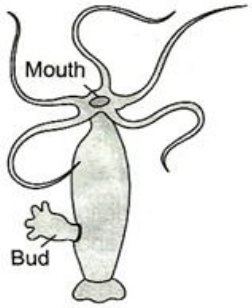
Gemmule formation in sponge

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 – *Paramecium*

80 **(a)**

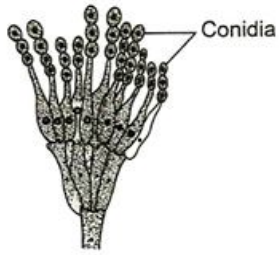
Participation of one individual

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)**

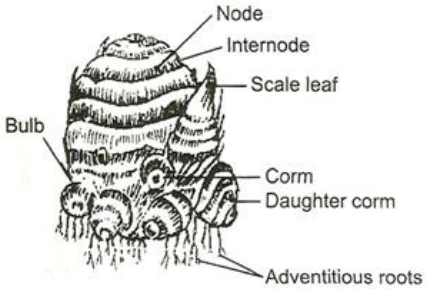
Conidia are non-motile gametes found singly or in chain on the parent body, *e. g.*, *Penicillium*



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