BIOLOGY

BOOKS - ARIHANT NEET BIOLOGY (HINGLISH)

REPRODUCTION IN ORGANISMS

Check Point 1 1

1. Asexual reproduction involves

A. single parent

B. two parents

C. more than one parent

D. both a and b

Answer: A

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2. In asexual reproduction,.....divisions are not involved.

A. mitotic

B. amitotic

C. meiotic

D. both a and c

Answer: C

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3. Asexual reproduction os common in

A. vertebrates

B. unicellular organisms

C. multicellular organisms

D. none of the above

Answer: B

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4. Cell division is mode of reproduction in

A. Amoeba

B. bacteria

C. yeast

D. All of these

Answer: D

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5. Longitudinal binary fission takes place in

A. Euglena

B. Paramecium

C. Bacteria

D. Diatoms

Answer: A

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6. Multiple fission in Amoeba may occur by?

A. encystation

B. without encystation

C. pseudopodiospore formation

D. all of the above

Answer: D

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7. Exogenous budding is usually sen in

A. yeast

B. Hydra

C. annelids

D. both a and b

Answer: D

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8. The mass of cells enclosed inside a gemmule is known as

A. archaeocytes

B. micropyle

C. spicules

D. both b and c

Answer: A

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9. A mode of asexual reproduction found in Monera, Protista, Algae and Fungi is

A. binary fisson

B. multile fission

C. budding

D. sporulation

Answer: D

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10. The thick-walled, various ornamented spores found in diatoms are known as

A. statospores

B. hormospores

C. chlamydospores

D. oidia

Answer: A

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11. Soredia is found in

A. fungi

B. algae

C. Bacteria

D. lichen

Answer: D

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12. Vegetative propagation by stolons takes place in

A. Eichhornia

B. Strawberry

C. both a and b

D. None of the these

Answer: B

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

A. Bryophyllum and Saintpaulia

B. Chrysanthemum and Agave

C. Agave and Kalanchoe

D. Asparagus and bryophyllum

Answer: A

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14. A method in which roots are induced on the stem/branch, whilse it is still attached to the parent plant is called

A. cutting

B. grafting

C. layering

D. micropropagation

Answer: C

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15. One disadvantage of asexual reproduction is

A. it does not produce variations

B. it is complex

C. it is a slow process

D. none of the above

Answer: A

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Check Point 1 2

1. A formation of gametes is sexual reproduction occurs by

A. mitosis

B. meiosis

C. amitosis

D. both a and c

Answer: B

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2. Fusion of gametes in sexual reproduction leads to the formation of

A. zygote (2n)

B. a haploid cell

C. embryo (n)

D. none of the above

Answer: A

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3. Exogamy is also known as

A. cross-fertilisation

B. external fertilisation

C. self-fertilisation

D. internal fertilisation

Answer: B

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4. External fertilization takes place in

A. pteridophytes

B. amphibians

C. all algae

D. angiosperms

Answer: B

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5. In conjugation, the donor cell poossesses

A. gametes

B. zygote

C. F-factor

D. none of these

Answer: C

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6. The male and female sex organs in Oomycetes are

A. antheridium and oogonium, respectively

B. oogonium and antheridium, resectively

C. globule and nucule, respectively

D. archegonium and antheridium, respectively.

Answer: A

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7. Sexual reproduction in fungi involves

A. plasmogamy

B. karyomgamy

C. meiosis

D. All of the above

Answer: D

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8. The multicellular flask-shaped structure having a swollen venter and elongated neck inbryophytes is known as

A. antheridium

B. oogonium

C. archegonium

D. basidium

Answer: C

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9. In angiosperms, gamete transfer takes place via

A. pollination

B. syngamy

C. gametogenesis

D. both b and c

Answer: A

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10. Which of the following includes the formation of fruits without fertilisation?

A. Parthenocarpy

B. Polyembryony

C. Apogamy

D. Apomixis

Answer: A

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11. Formation of a sporophyte directly from gametophyte without meiosis and syngamy is known as

A. apomixis

B. apogamy

C. androgenesis

D. apospory

Answer: B

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12. The process of development of reproductive maturity in larvae is known as

A. neoteny

B. androgenesis

C. apogamy

D. syngamy

Answer: A

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13. Which of the following represents a process of development of embryo with paternal chromosomes only?

A. Paedogenesis

B. Parthenogenesis

C. Gynogenesis

D. Androgenesis

Answer: D

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14. Male drones in honeybee are produced by

A. syngamy

B. paedogenesis

C. parthenogenesis

D. neoteny

Answer: C

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15. Sexual reproduction results in

A. evolution

B. variation

C. survival

D. All of these

Answer: D

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Chapter Exercises A Taking Together Assorted Questions Of The Chapter For Advanced Level Practice

1. Asexual reproduction is related to

A. amphimixis

B. budding

C. vegetative propagation

D. both b and c

Answer: D

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2. Asexual reproduction through budding occurs in

A. rose

B. agave

C. yeast

D. ginger

Answer: C

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3. Gammae are means of vegetative reproduction in

A. Colocasia

B. Spirogyra

C. Marsilea

D. Marchantia

Answer: D

Watch Video Solution

4. Binary fission is a regular mode of reproduction in

A. yeast

B. bacteria

C. Marchantia

D. mosses

Answer: B

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5. Onion is propagated through its

A. tubers

B. bulbs

C. seeds

D. rhizomes

Answer: B

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6. Bulbils are employed for multiplication of

A. Bryophyllum and Saintpaulia

B. Crocus

C. Agave and Kalanchoe

D. Strawberry

Answer: C

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7. Leaf helps in vegetative propagation in

A. Begonia

B. Bryophyllum

C. Sensevieria

D. Both a and b

Answer: D

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8. Corm is used as a means of vegetative multiplication in

A. Ginger

B. Potato

C. Banana

D. Amorphophallus

Answer: D

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9. Air layering is performed in case of

A. jasmine

B. grapevine

C. gooseberry

D. litchi

Answer: D

Watch Video Solution

10. IN grafting, scion forms

A. shoot system

B. root system

C. new plant

D. hybrid plant

Answer: A

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11. Bud grafting is commonly used in

A. litchi

B. pomegranate

C. rose

D. jasmine

Answer: C

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12. Asexual reproduction involves

A. only maternal parents

B. only paternal parents

C. both a and b

D. only one parent either paternal or maternal

Answer: D

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13. Fusion of two dissimilar gametes is known as

A. allogamy

B. anisogamy

C. autogamy

D. dichogamy

Answer: B

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14. Development of embryo without fertilisation is called

A. parthenogenesis

B. gametogenesis

C. metagenesis

D. oogenesis

Answer: A

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15. Conjugation phenomenon of sexual reproduction is shown by

A. E.coli

B. Paramecium

C. both a and b

D. Hydra

Answer: C

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16. Fusion of gametes is known as

A. karyogamy

B. plasmogamy

C. syngamy

D. hemixis

Answer: C

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17. Multiple fission occurs in

A. Amoeba

B. Cycas

C. Bryophyta

D. All of these

Answer: A

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18. Schizosaccharomyces pombe divides mainly by

A. binary fission

B. budding

C. grafting

D. none of these

Answer: B

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19. The vegetative propagation via stolons includes, which of the following?

A. Subaerial stem

B. Root

C. Underground stem

D. None of these

Answer: A

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20. Gynogenesis is shown by

A. roundworm

B. flatworm

C. both a and b

D. none of these

Answer: C

 Watch Video Solution

21. Notching is involved in which of the following process?

A. Sporulation

B. Cutting

C. Layering

D. None of these

Answer: C

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22. Mango is being propagated through

A. tissue culture

B. grafting

C. stem cuttings

D. layering

Answer: B

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23. Among the following which is not a method of vegetative propagation?

A. Binary fission

B. Layering

C. Stem cutting

D. Tissue culture

Answer: A

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24. Which of the following is regenerated with the help of layering?

A. Cactus

B. Rose

C. Mango

D. Jasmine

Answer: D

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25. The vegetative propagation by mound layering takes place in

A. sugarcane

B. grapes

C. gooseberry

D. none of these

Answer: C

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26. The another name for air layering is

A. gootee

B. mound layering

C. stem layering

D. cutting

Answer: A

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27. Therooted supporting portion of the plant in grafing is known as

A. stock

B. scion

C. grafting

D. none of these

Answer: A

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28. Blackberry is multiplied through

A. stem cuttings

B. bulbils

C. leaf cuttings

D. root cuttings

Answer: D

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29. Which of the following is not a type of grafting?

A. Wedge

B. Whip

C. Crown

D. Micropropagation

Answer: D

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30. Potatoes are cultivated by

A. seeds

B. foliar buds

C. buds in tubers

D. cutting of roots

Answer: C

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31. Induction of adventitious roots on soft stem, while it is still attached to the parent plant is

A. grafting

B. layering

C. cutting

D. root-stem joint

Answer: B

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32. A V-shapted nothc in the stock is made during

A. crown grafting

B. wedge grafting

C. whip grafting

D. none of these

Answer: B

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33. Karyogamy is

A. delayed mitosis

B. delayed meiosis

C. fusioin of gamete protoplats

D. fusion of gametic nuclei

Answer: D

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34. The plants which have lost their capacity to produce seeds is/are

A. banana

B. rose

C. oranges

D. all of these

Answer: D

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35. The method of vegetative propagation in Bougainvillea is

A. grafting

B. layering

C. bulbils

D. cutting

Answer: D

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36. Vegetative propagation by runner takes place in

A. Eichhornia

B. Strawberry

C. Oxalis

D. None of these

Answer: C

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37. Which of the following is a post-fertilisation event in flowering plants ?

A. Transfer of pollen grains

B. Embryo development

C. Formation of flower

D. Formation of pollen grains

Answer: B

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38. It is more economical to propagate Potato and Artichoke through

A. flowers

B. tubers

C. seeds

D. roots

Answer: B

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

A. sprouting of buds

B. rooting

C. layering

D. seeding

Answer: B

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40. The stem branch used in layering is

A. upper branch

B. younger branch

C. soft basal branch

D. hard basal branch

Answer: C

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41. Sexual reproduction involves two parents, each of which contributes

A. gonads

B. zygote

C. gamete

D. gemmules

Answer: C

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42. Which of the following is not a process of asexual reproduction?

A. Budding

B. Syngamy

C. Gemmulation

D. Fragmentation

Answer: B

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43. The spicules giving round shape to gemmules are

A. tetraradiate

B. amphidisi

C. triradiate

D. monoaxon

Answer: D

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44. Binary fission is a mode of

A. micropropagation

B. asexual reproduction

C. macropropagation

D. sexual reproduction

Answer: B

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45. The swollen buds produced by aquatic plants for vegetative propagation are _____

A. turions

B. layering

C. adventitious buds

D. parenchymatous buds

Answer: A

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46. The plants which propagate through the production of tutions are

A. Potamogeton

B. Utricularia

C. Both a and b

D. Rose

Answer: C

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47. Appearance of vegetative propagules from the nodes of plant such as sugarcane and ginger is mainly because of _____

A. nodes are shorter than internodes

B. nodes have meristematic cells

C. nodes are located near the soil

D. nodes have non -photosynthetic cells

Answer: B

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48. The number of chromosomes in the shoot tip cells of a maize plant is 20. The number of chromosomes in the microspore mother cells of the same plant shall be

A. 20

B. 10

C. 40

D. 15

Answer: A

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49. 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: C

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50. The fission in which plane of cytoplamic division coincides with the transverse axis of individual is called

A. longitudinal binary fission

B. transverse binary fission

C. simple binary fission

D. multiple fission

Answer: B

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51. Which of the following is not true about sexual reproduction?

A. Gametes are diploid in humans

B. Sperm and ova fuse to form zygote

C. It introduces new gene combinations in a population

D. Diploid zygote divides by mitosis

Answer: A

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52. Budding and fission are processes used by

A. hermaphroditic organisms

B. organisms requring new gene combinations for each generation

C. sexually reproducing species

D. asexually reproducing species

Answer: D

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53. In monocots, grafting is almost impossible because they lack

A. vascular cambium

B. ground tissue

C. vascular bundle

D. parechymatous cells

Answer: A

Watch Video Solution

54. Girdling cannot be performed in suguarcane because its

A. vascular bundles are scattered

B. phloem is internal to xylem

C. plant body is delicate

D. inability to bear injury

Answer: A

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55. Amoeba and yeast reproduce asexually by fission and budding respectively, because they are

A. microscopic organisms

B. heterotrophic organism

C. unicellular organisms

D. uninucleate organisms

Answer: C

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56. Offspring 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 qualitatively different genetic composition

C. genetic material comes form parents of two different species

D. greater amount of DNA is involved in sexual reproduction

Answer: B

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57. Choose the correct statement from amongst the following.

A. Dioecious (hermaphrodite) organisms are seen only in animals

B. Dioecious organisms are seen only in plants

C. Dioecious organisms are seen in both plants and animals

D. Dioecious organisms are seen only in vertebrates

Answer: C

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58. There is no natural death in single celled organisms like Amoeba and bacteria because

A. they cannot reproduce sexually

B. they reproduce by binary fission

C. parental body is distributed among the offsprings

D. they are micorscopic

Answer: C

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59. There are various types of reproduction. The type of reproduction adopted by an organism depends on

A. the habitat hand morphology of the organisms

B. morphology of the organisms

C. morphology and physiology of the organisms

D. the organism's habitat, physiology and genetic makeup

Answer: D

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60. The terms 'clone' cannot be applied to offspring formed by sexual reproduction because

A. offsprings do not posses exact copies of parental DNA

B. DNA of only one parent is copied and passed on to the offsprigs

C. offsprins are formed at different times

D. DNA of parent and offsprings are completely different

Answer: A

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61. Identify the incorrect statement.

A. In asexual reproduction, the offsprings produced are morphologically and genetically identical to the parent

B. Zoospores are sexual reproductive structures

C. In asexual reproduction, a single parent produces offspring with or without the formation of gametes

D. Conidia are asexual structures in Penicillium

Answer: B

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62. A multicellular, filamentous alga exhibits a type of sexual life cycle in which the meiotic division occurs after the formation of zygote. The adult filament of this alga has

A. haploid vegetative cells and diploid gametangia

B. diploid vegetative cells and diploid gametangia

C. diploid vegetative cells and haploid gametangia

D. haploid vegetative cells and haploid gametangia

Answer: D

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Chapter Exercises B Medical Entrances Special Format Questions Statement Based Questions

1. Go through the following statements.

I. Asexual reproduction occurs without the

involvement of gamete formation.

II. Asexual reproduction ultimately leads to evolution.

III. Asexual reproduction occurs when the conditions are unfavourable.

IV. Asexual reproduction is a slow process.

Choose the statements correctly representing asexual reproduction.

A. I and II

B. I andII

C. Only I

D. II,III and IV

Answer: C

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2. Read the following statements and choose the correct statements.

I. Eichhornia is also known as Terror of Bengal.

II. Zingiber propagates by tap roots.

III. Bryophyllum possess leaf buds.

IV. Neela kuraji flower after every 50 years.

Codes

A. I and III

B. II and IV

C. I,III and IV

D. Only I

Answer: A

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3. A few statements describing certain features of reproduction are given below.

(i) Gametic fusion takes place.

(ii) Transfer of genetic material takes place.

(Iii) Reduction division takes place.

(iv) Progeny have some resemblance with parents.

Select the options that are true for both asexual and sexual reproduction from the options given below.

A. I and II

B. II and III

C. II and IV

D. I and III

Answer: C

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4. A few statements with regard to sexual reprodction are given below.

(i) Sexual reproduction does not always require two individuals.

(ii) Sexual reproduction generally involves gametic fusion.

(iii) Meiosis never occurs during sexual reproduction.

(iv) External fertilisation is a rule during sexual reproduction.

Choose the correct statements from the option below.

A. I and IV

B. I and II

C. II and III

D. III and IV

Answer: B

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5. Given below are a few statements related to exgternal fertilisation. Choose the correct statements.

(i) The male and female gametes are formed and released simultaneously.

(ii) Only a few gametes are released into the

medium.

(iii) Water is the medium in a majority of organisms exhibiting external fertilisation.

(iv) Offspring formed as a result of external fertilisation have better chance of survival than thos formed inside an organism.

A. III and IV

B. I and III

C. II and IV

D. I and IV

Answer: B

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6. Which of the following situations correctly describe the similarity between an angiosperm egg and a human egg ?

(i) Eggs of both are formed only once in a lifetime.

(ii) Both the angiosperm egg and human egg are sttionary.

(iii) Both the angiosperm egg and human egg are motile transported.

(iv) Syngamy in both results in the option given below.

A. II and IV

B. Only IV

C. III and IV

D. I and IV

Answer: B

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7. Which of the following statements, support the view that elaborate sexual reproductive process appeared much later in the organic evolution ?

(i) Lower groups of organisms have simpler body design.

(ii) Asexual reproduction is common in lower groups.

(iii) Asexual reproduction is common in higher groups of organisms.

(iv) The high incidence of sexual reproduction

in angiosperms and vertebrates.

Choose the correct answer given below.

A. I and III

B. I and III

C. II and IV

D. II and III

Answer: C

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Chapter Exercises B Medical Entrances Special Format Questions Statement Based Questions Match The Column

1. Match the columns

Column I	Column II
A. Budding	1. Breaking of multicellular animal into two or more parts
B. Multiple fission	2. Formation of gemmule
C. Gemmulation	3. An unequal division of organism in which individual arises as an out growth from the parent
D. Fragmentation	4. Division of nucleus followed by division of cytoplasm which give rise to many daughter cells

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2. Match the columns

Column I		Column II	
A.	Binary fission	1.	Yeast
B.	Budding	2.	*Amoeba*
C.	Cutting	3.	Mango
D.	Grafting	4.	Raspberry

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Chapter Exercises B Medical Entrances Special Format Questions Statement Based Questions Assertion And Reason

1. Assertion An embryo is formed after some meiotic divisions by the product formed after syngamy.

Reason: An embryo is the first cell of sporophytic generation.

A. Both Assertion and Reson ae true and Reason is the correct explanation of Assertion

B. Both Assertion and Reason are true, but Reason is not the correct explanation of

Assertion

C. Assertion is true, but Reason is false

D. Assertion is false, but Reason are false

Answer: D

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2. Assertion: Asexual reproduction requires only female animals.

Reason: Male animals are not capable for asexual reproduction.

A. Both Assertion and Reson ae true and Reason is the correct explanation of Assertion

B. Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion

C. Assertion is true, but Reason is false

D. Both Assertion and Reason are false

Answer: D

3. Assertion: Bacteria divide by mitotic division.

Reason : Meiosis occurs in Rhizobium.

A. Both Assertion and Reson ae true and Reason is the correct explanation of Assertion

B. Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion

C. Assertion is true, but Reason is false

D. Assertion is false, but Reason are false

Answer: C

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Chapter Exercises C Medical Entrances Gallery Collection F The Following Statement Is Not Correct

1. Which of the following statements is not correct?

A. Offsprings produced by the asexual reproduction are called clone

B. Microscopic, motile asexual reproductive structures are called zoospores

C. In potato, banana and ginger, the plantlets arise from the internodes presenta in the modified stem

D. Water hyacinth, growing in the standing water, drains oxygen from water that leads to the death of fishes

Answer: C

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

A. Vegetative reproduction

B. Parthenogenesis

C. Sexual reproduction

D. Nucellar polyembryony

Answer: C

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3. Stock and scion are used in :

A. cutting

B. grafting

C. layering

D. micropropagation

Answer: B

Watch Video Solution

4. In ginger vegetative propagation occurs through

A. rhzome

B. offsets

C. bulbils

D. runners

Answer: A

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5. Which of the following pairs is not correctly matched

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6. Which of the following processes ensures the continutiy of life on earth?

A. Reproduction

B. Respiration

C. Digestion

D. Growth and development

Answer: A

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7. Match the 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

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8. Sexual mode of reproduction in protozoa is

A. anisogamy

B. plasmogamy

C. plasmotomy

D. schizogony

Answer: A

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

A. choanocyte

B. gemmule

C. osculum

D. blastula

Answer: B

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10. Gemmule formation is sponges is useful in

A. asexual reproduction

B. sexual reproduction

C. parthenogenesis

D. parthenocarpy

Answer: A

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11. Budding is found in

A. Sycon

B. Hydra

C. Fasciola

D. Obelia

Answer: B

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12. Hydra reproduces by budding . This is an example of :

A. regeneration

B. abnormal development

C. asexual repreduction

D. sexual reproduction

Answer: C

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13. Which of the following propagates through leaf tip

A. Walking fern

B. Sprout leaf plant

C. Marchantia

D. mosses

Answer: A

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14. Process of fusion of haploid cells is

A. cell cycle

B. meiosis

C. mitosis

D. syngamy

Answer: D

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