EXERCISE-III(A) NCERT BASED QUESTIONS

1. Four different modes of vegetative reproduction are in figure given below. Identify the correct match: -

(A)  (B) 

(C)  (D) 

(1) A-Rhizome; B-Tuber; C-Leaf; D-Offset
(2) A-Tuber; B-Rhizome; C-Leaf; D-Offset
(3) A-Rhizome; B-Corm; C-Leaf; D-Offset
(4) A-Tuber; B-Rhizome; C-Offset; D-Leaf

2. The diagram shows: -

(1) Homogametes of Cladophora
(2) Homogametes of Fucus
(3) Heterogametes of Cladophora
(4) Heterogametes of fungus

3. Read the following statements about asexual reproduction and select the correct ones:-

(i) It involves a single parent
(ii) It is slower than sexual reproduction
(iii) It produces progeny that are genetically identical with the parent but not with one another
(iv) The progeny of asexual reproduction can be termed as clones

(1) (i) and (ii)
(2) (ii) and (iii)
(3) (i) and (iv)
(4) (i), (ii) and (iv)

4. Select the incorrect statement about reproduction?

(1) Reproduction is a fundamental feature of living organism
(2) It is a biological process
(3) Offspring produced by organism are identical in both asexual and sexual reproduction
(4) Reproduction ensure the continuity of species.

5. Stobilanthus kunthiana found on large packs of hilly area in kerala, Karnataka & Tamilnadu. Flower once in :-

(1) 10 years (2) 15 years
(3) 12 years (4) 18 years

6. Which phase can be considered as one of the parameter of senescence or old age?

(1) Juvenile phase
(2) End of Juvenile phase
(3) Reproductive phase
(4) End of reproductive phase

7. All organisms have to reach certain stage of growth and maturity in their life before reproduce sexually that period of growth is known as :-

(1) Juvenile phase (2) Vegetative phase
(3) Reproductive phase (4) Both (1) and (2)

8. Slowing of metabolism occurs in which phase of life?

(1) Juvenile phase
(2) Reproductive phase
(3) Senescent phase
(4) None of the above

9. How birds in captivity (Poultry farms) can be made to lay eggs throughout the years?

(1) By giving hormonal treatment
(2) drug treatment
(3) By genetic engineering
(4) By regulation environmental factors.

10. In which of them oestrus cycle is absent?
(1) Dogs (2) Tiger
(3) Cows (4) Monkey

11. Select the incorrect statement: -
(1) The reproduction phase is of variable duration in different organism
(2) In Non-primates' cyclic changes during reproduction are called oestrus Cycle
(3) In primate cycle change during reproduction are called menstrual cycle.
(4) Many mammals are reproductively active throughout their reproductive phase & hence are called seasonal breeders

12. What is the correct sequence of different phases of life?
(1) Juvenile phase → Reproductive phase → Senescent Phase
(2) Juvenile phase → Senescent Phase → Reproductive phase
(3) Juvenile phase → vegetative phase → Senescent Phase
(4) Senescent Phase → Reproductive phase → Vegetative phase

13. Which type of reproduction does involves the fusion of gametes from two different individuals?
(1) Parthenogenesis
(2) Vegetative reproduction
(3) Fragmentation
(4) Sexual reproduction

14. In which one pair, both the plants can be vegetatively propagated by leaves?
(1) Bryophyllum and Kalanchoe
(2) Chrysanthemum and Agave
(3) Agave and Dioscorea
(4) Bryophyllum and Asparagus

15. What is the site of origin of the new plantlet in ginger?
(1) Eyes (2) Buds
(3) Nodes (4) Axillary Bud

16. Asexual method of reproduction by binary fission is common to which of the following?
(i) Some eukaryotes
(ii) All eukaryotes
(iii) Some Prokaryotes (iv) All Prokaryotes
(1) (i) and (ii)
(2) (ii) and (iii)
(3) (i) and (iii)
(4) (iii) and (iv)

17. Identify the mismatch pair?
(1) Potato - Eyes
(2) Rhizome - Ginger
(3) Bulbil - *Bryophyllum*
(4) Offset - Water hyacinth

18. The most vital event of sexual reproduction is: -
(1) Gamete formation
(2) Gamete transfer
(3) Fusion of gamete
(4) Development of Zygote.

19. Select the most appropriate statement explaining external fertilization: -
(1) Fusion of male and female gametes
(2) Fusion of male and female gametes in water
(3) Fusion of gametes outside the body of organism
(4) Fusion of gametes inside the organisms

20. In seed plants the non-motile male gametes are carried to non-motile female gamete: -
(1) Through air (2) Through water
(3) By insect (4) By pollen tube

21. What is parthenogenesis?
(1) Female gamete undergoes development to from new organism without fertilization
(2) Zygote undergoes development to form new organism after fertilisation.
(3) Female gamete undergoes development to form new organism after fertilisation.
(4) Formation of embryo from any somatic cell of an organisms.

22. Binary fission is a method of asexual reproduction in which of the following?
(1) *Amoeba* (2) *Hydra*
(3) *Paramoecium* (4) Both (1) and (3)

23. Select the incorrect statement: -
(1) Events after the formation of zygote are called post fertilisation events.
(2) Formation of haploid zygote is universal in all sexually reproducing organisms.
(3) In organisms belonging to fungi and algae zygote develops a thick wall.
(4) In fungi and algae zygote undergos a period of rest before germination.

24. In flowering plants, after fertilization which plant part remain attached to the plant?
(1) Sepals (2) Petals
(3) Stamens (4) Pistil

25. Select the correct statement regarding flowering plants: -
(1) Zygote forms inside the ovule
(2) Zygote develops into the seed
(3) Ovary develops into seed
(4) Ovules develop into fruit

26. Select the incorrect statement: -
(1) Gametogenesis refers to the process of formation of two zygotes.
(2) Gametes have only single set of chromosomes.
(3) Gametes similar in appearance and not possible to differential them into male & female are called homogamete.
(4) Morphologically distinct gametes are called heterogametes.

27. Select the correct statement: -
(1) A haploid parent produces gametes by meiotic division.
(2) Several organisms belonging to Monera, fungi, algae & bryophytes have diploid plant body.
(3) Organisms belonging to pteridophyte, gymnosperm, angiosperms and most of the animals are haploid.
(4) Chara is a monoecious plant.

28. How many chromosomes does a meiocyte of fruit fly have?
(1) 4 (2) 8
(3) 16 (4) 23

EXERCISE-III(B) (ANALYTICAL QUESTIONS)

29. Identify the correct set of statements :-
(a) Reproduction enables the continuity of species generation after generation.
(b) Sexual reproduction involves fusion of male and female gametes.
(c) The term clone is used to describe morphologically and genetically distinct individuals.
(d) Under favourable conditions amoeba shows encystation.
(e) Life span of crocodile and crow is 60 and 100 years, respectively.
Choose the correct answer from options given below :
(1) a, b and c
(2) a, d and e
(3) a and b
(4) a, b and e

30. Given below are two statements:-
Statement-I : Plants of cucurbits and coconuts are example of monoecious plants.
Statement-II : Earthworm, sponge, tapeworm and leech are example of hermaphrodite animals.
In the light of the above statements, choose the most appropriate answer from the options given below:
(1) Both Statement-I and II both are incorrect.
(2) Statement-I is correct but statement-II is incorrect.
(3) Statement-I is incorrect and Statement-II is correct.
(4) Both Statement-I and Statement-II are correct.

31. Given below are two statements.

Statement-I : The process of formation of new organisms without fertilization of female gametes is called parthenogenesis.

Statement-II : The process of syngamy results in formation of gametes.

In the light of the above statements, choose the most appropriate answer from the options given below:-

(1) Both Statement-I and II both are incorrect.

(2) Statement-I is correct but statement-II is incorrect.

(3) Statement-I is incorrect and Statement-II is correct.

(4) Both Statement-I and Statement-II are correct.

32. Given below are two statements; one is labelled as **Assertion (A)** and the other is labelled as **Reason(R)** .

Assertion (A) : Male Honeybees are always haploid.

Reason (R) : Female and male gametes fuses to form zygote and then zygote will develop in male bee.

In the light of the above statements, choose the **most appropriate** answer from the options given below :-

(1) (1) If (A) & (R) both are correct and (R) is the correct explanation of (A).

(2) If (A) & (R) both are correct but (R) is not the correct explanation of (A).

(3) (A) is correct but (R) is incorrect.

(4) (A) & (R) both are incorrect.

Exercise - III ANSWER KEY

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Answer	2	1	3	3	3	4	4	3	1	4	4	1	4	1	4
Question	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Answer	3	3	3	3	4	1	4	2	4	1	1	4	2	3	4
Question	31	32													
Answer	2	3													