

Class: 12
Subject: Biology
Topic: Reproduction in Organisms
No. of Questions: 20
Duration: 60 Min
Maximum Marks: 60

- Q1.** Apogamy is
- A. reproduction of virus
 - B. failure of fusion of gametes
 - C. development of bacteria
 - D. loss of function of reproduction

Detailed Answer:

Apogamy was first reported by **Farlow** (1874). It can be defined as the development of a sporophyte directly from the gametophyte without the intervention of sex organs and gametes.

Answer: B

- Q2.** Tapetum is
- A. protective
 - B. reproductive
 - C. respiratory
 - D. nutritive

Detailed Answer:

Tapetum is the innermost layer of the wall of pollen sac. The tapetum is **nutritive** in function. The tapetal cells are multinucleate and contain Ubish bodies.

Answer: C

- Q3.** If root of flowering plant has 24 chromosomes, then its gamete has how many chromosomes?
- A. 24
 - B. 12
 - C. 4
 - D. 8

Detailed Answer:

The root cell of flowering plant is diploid ($2n = 24$), while the gamete is haploid, therefore, the number of chromosomes will be 12 in the gamete.

Answer: B

- Q4.** Wind pollination is common in
- A. lilies
 - B. grasses
 - C. orchids
 - D. legumes

Detailed Answer:

Pollination by wind (anemophily) is more common amongst abiotic pollinations. It is quite common in grasses.

Answer: B

Q5. Egg apparatus of angiosperms consist of

- A. one synergid and two egg cells
- B. two synergids and one egg cell
- C. one central cell, two synergids and three antipodal cells
- D. one egg cell, two polar nuclei and three antipodal cells

Detailed Answer:

In embryo sac of angiosperm, egg apparatus occurs towards micropylar pole and generally organises by Two synergids and one egg cell. Egg cell has a large vacuole at its upper and a prominent nucleus near its lower end. Synergids show a filiform apparatus attached to their upper wall. It is known to attract and guide the pollen tube. Each of the synergids has a vacuole at its lower end and the nucleus at its upper end.

Q6. Embryo developed from the somatic cells are called

- A. cybrids
- B. embryoid
- C. callus
- D. hybrids

Detailed Answer:

When the somatic cells are cultured and the culture is made stationary, each cell starts differentiating into an independent embryo showing all the stages of embryo development. These embryos are called **embryoids**, which can give rise to a complete plant.

Answer: B

Q7. Ornithophily refers to the pollination by which of the following?

- A. Insects
- B. Birds
- C. Snails
- D. Air

Detailed Answer:

Allogamous pollination performed by birds is called ornithophily. Entomophily is pollination carried out by insects.

Answer: B

Q8. Sperms are produced in

- A. Vas deferens
- B. Spermatocytes
- C. Seminiferous tubules
- D. None of the above

Answer: C

- Q9.** The fertilization membrane is secreted because
- A. It checks the entry of more sperms after fertilization
 - B. It checks the entry of antigens in ovum
 - C. It represents the left out tail of sperm
 - D. It represents the plasma membrane of sperm

Detailed Answer:

Fertilization membrane is the membrane that forms around a fertilized ovum and prevents penetration by additional spermatozoon.

Answer: A

- Q10.** Gestation period of 280 days is calculated from time of
- A. Last menstruation
 - B. Fertilization
 - C. Next menstruation
 - D. Puberty

Detailed Answer:

The gestation period of a human, from time of conception to birth is approximately 9 months (266 days/38 Weeks). It is calculated from the first day of the last menstrual period.

Answer: A

- Q11.** AIDS is caused by
- A. Fungus
 - B. Virus
 - C. Bacterium
 - D. Helminth

Answer: B

- Q12.** Egg of Frog is
- A. Moderately telolecithal and mesolecithal
 - B. Heavily telolecithal and polylecithal
 - C. Microlecithal and homolecithal
 - D. Polylecithal and centrolecithal

Answer: A

- Q13.** Gonads are derived from
- A. Mesoderm
 - B. Endoderm
 - C. Ectoderm
 - D. All the three layers

Detailed Answer:

The secondary oocyte completes the division and formation of an egg after it is being fertilized by the sperm.

Answer: A

Q14. Termination of gastrulation is indicated by

- A. Obliteration of blastocoel
- B. Obliteration of archenteron
- C. Closure of blastopore
- D. Closure of neural tube

Answer: D

Q15. Hormone responsible for ovulation and development of corpus luteum is

- A. FSH
- B. LH
- C. LTH
- D. ICSH

Answer: B

Q16. During cleavage, nucleocytoplasmic ratio is

- A. Maintained
- B. Decreased
- C. Increased
- D. Variable

Detailed Answer:

During cleavage the volume of cytoplasm is increased.

Answer: C

Q17. In frog micromeres contain

- A. Large amount of yolk
- B. Little amount of yolk
- C. Normal yolk
- D. No yolk

Detailed Answer:

The macromeres contain the largest amount of yolk.

Answer: D

Q18. Acrosome is made up of

- A. Mitochondria
- B. Centrioles
- C. Golgi bodies
- D. Ribosomes

Answer: C

Q19. Cells become variable in morphology and function in different regions of the embryo. The process is

- A. Differentiation
- B. Metamorphosis
- C. Organisation
- D. Rearrangement

Answer: A

Q20. Which of the follow of cells in the male ganad, represent haploid cells?

- A. Sperniatogonial cells
- B. Germinal epithelial cells
- C. Secondary spermatocytes
- D. Primary spermatocytes

Answer: C

askITians