

Class : XIIth Subject : BIOLOGY Date : DPP No. : 4

## **Topic :- Human Reproduction**

	1.	The signals	for parturition	originates from
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a) Placenta only

- b) Placenta as well as fully developed foetus
- c) Oxytocin released from maternal pituitary
- d) Fully developed foetus only

### 2. Infertility could develop when the sperm cells display

- a) A count of 120 million/mL semen
- b) Increased acrosomal activity

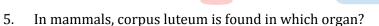
c) Normal morphology

d) Count of less than 20 million/mL semen

#### 3. Exact time of human gestation period is

- a) 9 month  $\pm$  15 days
- b) 9 month ± 20 days
- c) 9 month  $\pm$  7 days
- d) 9 month  $\pm$  1 days

- a) Primary oocyte in the Graafian follicle
- b) Oogonial cell in the Graafian follicle
- c) Ootid in the fallopian tube
- d) Secondary oocyte in the fallopian tube



a) Brain

b) Ovary

c) Liver

d) Eyes

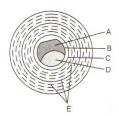
#### 6. External genitalia develops in the ..... of development

- a) 2nd month
- b) 5th month
- c) 3rd month
- d) 1st month

#### 7. Acrosome is the modified

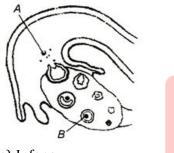
- a) Mitochondria
- b) Lysosome
- c) Golgi body
- d) Nucleus

# 8. The following is a diagram of the just spawned frog's egg; with the parts labelled from A to E. identify the parts and choose the correct option from those given figure.



- a) A –cytoplasm, B-plasma membrane, C-vitelline membrane, D-yolk, E-jelly coat
- c) A -yolk, B- plasma membrane, C- vitelline membrane, D- cytoplasm, E- jelly coat
- b) A –cytoplasm, B- vitelline membrane, C- plasma membrane, D-yolk, E-jelly coat
- d) A yolk, B-jelly coat, C- vitelline membrane, D-cytoplasm, E-plasma membrane
- 9. The chemical substance released by activated spermatozoa that acts on the ground substances of the follicle cells is known as
  - a) Progesterone
- b) Hyaluronidase
- c) Relaxin
- d) Gonadotropin

- 10. The haemoglobin of a human foetus
  - a) Has lower affinity for oxygen than that of the adult b) has affinity for oxygen same as that of an adults
  - c) Has only two protein subunits instead of four
- d) Has higher affinity for oxygen than that of an adult
- 11. When did the structure labelled *B* in the given figure starts to form



- a) Infancy
- b) Before birth
- c) At the start of the menstrual cycle
- d) At puberty



- 12. In human, cleavage/divisions are
  - a) Slow and synchronous
  - c) Show and asynchronous

- b) Fast and synchronous
- d) Fastand asynchronous

- 13. There is no DNA in
  - a) An enucleated ovum
  - c) A mature spermatozoan

- b) Mature RBCs
- d) Hair root

- 14. Natural parthenogenesis is found in
  - a) Housefly
- b) Honey bee
- c) *Drosophila*
- d) All of these
- 15. Inner cell mass contains certain cells called ....., which have the potency to give rise to all the tissues and organs. The suitable word for blank in the above sentence is
  - a) Stem cell
- b) Germ cell
- c) Mesodermal cell
- d) Special cell

16. The given diagram refers to ovum surrounded by few sperms. Identify A,B and C in the diagram



- a) A-Zona pellucida, B-Perivitelline space, C-Corona reticulata
- b) A-Zona pellucida, B-Viteline membrane, C-Corona radiata
- c) A-Zona pellucida, B-Perivitelline space, C-Corona radiata
- d) A-Oolemma, B-Perivitelline space, C-Corona radiate
- 17. Which chemical event of fertilization involves the presence of hyaluronidase enzyme?
  - a) Acrosomal reaction
- b) Cortical reaction
- c) Amphimixis
- d) Activation of egg

- 18. Leydig's cells are concerned with
  - a) Ovary
- b) Seminiferous tubule
- c) Liver

d) Pituitary gland

- 19. Tunica albugenia is the covering of
  - a) Liver

- b) Spleen
- c) Testis

- d) Penis
- 20. Which of the following cells present in the mammalian testis and nourishes the sperm?
  - a) Leydig cells
- b) Oxyntic cells
- c) Interstitial cell
- d) Sertoli cell