

**SAINIK SCHOOL GOPALGANJ**

**SUB: BIOLOGY**

**CLASS – XII**

**ASSIGNMENT – 3**

**Part - I (Human Reproduction)**

**(Q1 – Q10) Given below are four options against each question. Choose the option which you consider the most appropriate as your answer.**

1. \_\_\_\_\_ is a lytic enzyme released by the sperm.
  - a) Hyaluronidase
  - b) Trypsin
  - c) Helicase
  - d) None of the above
  
2. How many autosomes does a human primary spermatocyte have?
  - a) 34
  - b) 44
  - c) 54
  - d) 33
  
3. \_\_\_\_\_ is an organelle that helps the sperm to penetrate the ovum
  - a) Acrosome
  - b) Zona pellucida
  - c) Megalis
  - d) None of the above
  
4. Umbilical cord contains \_\_\_\_\_
  - a) Pluripotent stem cells
  - b) Cord blood stem cells
  - c) Blood stem cells
  - d) None of the above
  
5. Which of the following option shows correctly matched pairs for column I and column II

Column-I	Column-II
(P) Foetus Cells	(i) Relaxian
(Q) Placenta	(ii) Hyaluronidase
(R) Acrosome	(iii) Prostaglandins
(S) Ovary	(iv) Oxytocin

  

a) P-iv, Q-iii, R-ii, S-i	b) P-iii, Q-iv, R-ii, S-i
c) P-ii, Q-iii, R-iv, S-i	d) P-ii, Q-iii, R-iv, S-i
  
6. Cryptorchidism is a condition where \_\_\_\_\_
  - a) One of both testes are not developed
  - b) One or both testes fail to descend into the scrotum
  - c) One or both testes are not formed
  - d) None of the above

7. Acrosome is made up of \_\_\_\_\_
- a) Lipids
  - b) Hormones
  - c) Digestive enzymes
  - d) None of the above
8. \_\_\_\_\_ is an example of a viviparous animal.
- a) Goat
  - b) Duck
  - c) Crocodile
  - d) None of the above
9. The \_\_\_\_\_ is a temporary organ that connects a mammalian mother to its fetus
- a) Placenta
  - b) Chorion
  - c) Endometrium
  - d) None of the above
10. Fertilization in human takes place in
- a) Vagina
  - b) Uterus
  - c) Ampullary-isthmic junction
  - d) Infundibulum

**Answer the following questions:**

11. Write the effect of high concentration of LH on a mature Graafian follicle.
12. Write the differences between in morula and blastocyst.
13. Draw a labeled diagram of a female reproductive system.
14. Why parturition called a neuro-endocrine mechanism? Explain.
15. Write in proper sequence, the major events in human reproduction.
16. Explain the ovarian and uterine events that occur during a menstrual cycle in a human female under the influence of pituitary and ovarian hormones respectively.
17. (a) Draw a labeled diagram of a male reproductive system.  
(b) What is structure and function of sperm?  
(c) What are the accessory glands present in male reproductive system? State their function.
18. Medically, it is advised to all young mothers that breast feeding is the best for their newborns babies. Do you agree? Give reason in your support of your answer.
19. During the reproductive cycle of a human female when, where and how does a

placenta develop? What is the function of placenta during pregnancy and embryo development?

20. Differentiate between spermatogenesis and oogenesis on the basis of
- (a) Time of initiation of the process
  - (b) Site of completion of process
  - (c) Nature of meiotic division undergone by gamete mother cells

## **Part – II: Reproductive Health**

**Given below are four options against each question. Choose the option which you consider the most appropriate as your answer.**

1. Which Artificial Reproductive Technique can help a lady conceive a child if both her fallopian tubes are blocked?

- (A) SUZI
- (B) IVF
- (C) ZIFT
- (D) GIFT

2. Which of the following is not a copper releasing IUD?

- (A) LNG 20
- (B) CuT
- (C) Lippes Loop
- (D) a and c

3. What is the expansion for MTP?

- (A) Medical Termination of Parturition
- (B) Mechanical Transfer of Pollen
- (C) Medical Termination of Pregnancy
- (D) Maternally Transmitted Pathogens

4. Amniocentesis is a process of

- (A) Growing cells on culture media
- (B) Know about brain disease
- (C) Determine mutations
- (D) Determine disease of the embryo

5. The function of Copper-T is

- (A) Stop gastrulation
- (B) Stop cleavage
- (C) Check mutation
- (D) Stop fertilization

6. What is the shape of the growth curve?
- (A) S shaped
  - (B) V shaped
  - (C) C shaped
  - (D) J shaped
7. Which part of the female reproductive system remains blocked after tubectomy?
- (A) Fallopian tube
  - (B) Oviduct
  - (C) Cervix
  - (D) Uterine cavity
8. What problems in reproductive health care require doctor's help?
- (A) STDs
  - (B) Conception, parturition and abortion
  - (C) Contraception, infertility, menstruation problem
  - (D) All
9. Test tube baby implies which of the following techniques?
- (A) IUI
  - (B) ICSI
  - (C) IVF
  - (D) ZIFT
10. Which technique is used to detect AIDS?
- (A) Northern blot and ELISA
  - (B) Immuno blot and ELISA
  - (C) Western blot and ELISA
  - (D) Southern blot and ELISA

**Answer the following questions.**

11. Explain the barrier methods of birth control.
12. What is amniocentesis? Write its significance.
13. Draw a labeled diagram of vasectomy and tubectomy.
14. Reproductive health refers only to healthy reproductive function. Comment.
15. Give reason why family planning techniques are not adopted by all in our country?
16. Suggest the reproduction related aspects in which counseling can be provided at the school level.
17. Explain one application of each one of the following:

- (a) Lactational amenorrhoea
- (b) MTP
- (c) Saheli

18. A village health worker was talking with women .She tells the women that one has to be very careful while using oral pills as a method of birth control. Wrong usage can actually promote conception.

(a) Analyse the statement and compare the merits and demerits of using oral pills and surgical method of birth control.

(b) Village women are confused as to how a thin metallic copper loop can provide protection against pregnancy. Justify the use explaining the mode of action of IUDs.

19. What is infertility? How is Assisted Reproductive Technologies (ART) helpful in an infertile couple?

20. What are STDs? Mention the different types of STDs along with pathogen and symptoms.

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