

Q1. MCQ Based Questions:

1. Which of the following is not a part of human sperm:
(a) Tail (b) Middle Piece (c) Sperm Duct (d) Head
2. Which of the following statements is true:
(a) Each sperm is a single cell (b) Zygote is a single cell
(c) Ovum is a single cell (d) All of these
3. What marks the beginning of the reproductive life of a woman
(a) fertilisation (b) Menopause (c) Menarche (d) Embryo formation
4. In the human male, the tube used to carry both sperm and urine is the
(a) ureter (b) testes (c) vas deferens (d) urethra

Q2. Give Reasons for the following:

- A. Why sperm needs to have motility.
- B. Fishes and frogs lay hundreds of eggs.

Q3. Fill Ups:

- i. _____ is the male gamete produced by _____
- ii. Fertilized egg is also called _____.
- iii. The female reproductive organs include _____, _____ and _____.
- iv. The male reproductive organs include _____, _____ and _____.
- v. _____ reproduction is characterised by the fusion of two cells called gametes.
- vi. The cells involved in sexual reproduction are called _____

Q4. Why reproduction is considered an essential life process?

Q5. List the functions of each of the following:

- A. Tail in a sperm
- B. Layer of Jelly around frog's eggs

Q6. Explain development of an embryo.

Q7. Case Based Question:

Meetal was asked to prepare a project on different methods of asexual reproduction. She included the following organisms in the list:

Frog, Hydra, Amoeba

- (a) Which of the above mentioned organisms should not be included in her list and why?
- (b) Specify the method of reproduction in each of the above mentioned organism.

Q8. Source Based Question:

IVF is a method in which fertilisation occurs outside the body. In some women oviducts are blocked and so they are not able to bear babies as sperm are not able to reach the egg. So, for them, doctors collect freshly released eggs and sperm and keep them together in the test tube for few hours. If fertilisation occurs, then the zygote is placed in the womb of the mother after a week. They are also called test tube babies.

- (1) What does IVF stand for?
- (2) In IVF, the type of fertilization is _____. (External/Internal)
- (3) Why the babies born through this techniques are called test tube babies?