

Reproduction in and Endocrine System [8th Science]

(I) answer the following questions in one word

1. What is the age of puberty in girl?

Ans: 10 – 12 years

2. Which gland secretes Corticoid hormones?

Ans: Adrenal Glands

3. What types of fertilization takes place in Man?

Ans: Internal Fertilization

4. What is the other name of Endocrine gland?

Ans; Ductless gland

5. What is the term used for development of Ovum without fertilization?

Ans: Parthenogenesis

6. Name the hormones secreted by pineal glands?

Ans: Melatonin

7. Which gland is called master glands?

Ans: Pituitary Gland

8. When chromosome is not sex chromosomes, what is it called?

Ans: autosomes

9. Name the term used for having X and Y chromosomes.

Ans: Sperm gamete

10. Name the hormones secreted by testes?

Ans: Testosterone

(II) Answer the following questions in brief

1. Why does our body changes when we reach to teens?

Ans: when we reach to teens, Endocrine system of our body regulate the release of hormone that create change in our body.

2. How sex determined in some species of Reptiles?

Ans: In some species of reptile including alligator and turtle, the sex of offspring is determined by the temperature at which egg is incubated.

3. What happen to zygote after it is formed?

Ans: A newly formed zygote immediately begins the process of cell division and differentiation and form hollow ball made of hundred cells which is called an embryo.

4. How egg -lying animal fertilize their egg?

Ans: For fertilization, egg -lying animal sits on its eggs to provide sufficient warmth to the egg for development of the embryo inside egg. Fully developed baby bird rapture the egg and young bird emerged out.

5. Differentiate between oviparous and viviparous animals. Give one example of each.

Ans: Differences between oviparous and viviparous animals are:

| Oviparous | Viviparous |
|--|---|
| These animals lay eggs which develop into young ones later on. | These give birth to young ones instead of eggs. |
| e.g. Birds, frogs, etc. | e.g. Humans, dogs, etc. |

6. What is reproduction? Why an individual has some characteristics of father and some of mother?

Ans: Process of producing new individuals is called reproduction. Reproduction is of two types: Sexual reproduction and asexual reproduction

An individual is formed from a zygote which is a result of fusion of sperm from father and ovum from mother. Hence it inherits some characteristics of father and some of mother.

7. What is test-tube baby?

Ans: Oviducts of some women are blocked due to which these women are not be able to bear babies. In these type of cases IVF or in vitro fertilization is done in which freshly released egg and sperms are kept them together for a few hours.

Zygote is allowed to develop for about a week and then it placed in the mother's uterus and the baby is born and this technique is called as test-tube babies.

8. What is implantation?

Ans: The close attachment of the embryo with the walls of uterus is called implantation.

9. What is placenta?

Ans: A special tissue between the uterus wall and the embryo (foetus) that fulfils the nutritional, respiratory and excretory needs of the foetus from mother's body is called placenta.

10. What is the function of amniotic fluid ?

Ans: The function of amniotic fluid is to protect the foetus against temperature changes and mechanical shocks.

11. What is gestation?

Ans: The development of the foetus inside the uterus till birth is called gestation.

12. What is parturition?

Ans :The birth of a fully developed foetus after the completion of gestation period is called parturition.

13. What is metamorphosis?

Ans: Transformation of a larva into an adult through drastic changes is called metamorphosis.

14. What are the differences between development of young ones in frogs and in humans?

Ans:

| Development in frogs | Development in humans |
|---|--|
| It takes place outside the body of the female. | It takes place inside the body of the female. |
| Stages in the development are egg, larva and adult. | Stages in the development are foetus, young one and adult. |
| The young one is different from the adult. | The young one is similar to the adult. |

15. Which hormone is secreted by pituitary gland?

Ans: Growth hormones, Tropic Hormone, Prolactine , Vasopression and oxytocin.

16. What is the function of thyroid glands?

Ans: Thyroid glands produce thyroxin hormones that regulate the metabolism of fats, protein and carbohydrates.

(III) Answer the following questions in Detail?

1. What are the characteristics of hormones?

Ans: Characteristics of hormones:

- (i) They are secreted by glands
- (ii) They are poured directly into blood stream.
- (iii) They are called chemical messengers
- (iv) They regulate body growth and co-ordinate the activities of the body.

2. What is puberty? What happened this stage?

Ans: Puberty is the period during which growing boys or girls undergo the process of sexual maturation. Puberty involves a series of physical stages and the development of the so-called secondary sex characteristics, the physical features associated with adult males and females (such as the growth of pubic hair).

3. What is sexual reproduction? Discuss?

Ans: Reproduction involve two parent organism and produce especial type of cell gamete is called sexual reproduction

Steps that occur during sexual reproduction are:

- (a) Formation of Gametes: Males as well as females produce gametes from their reproductive organs. Gametes are the single celled structures that help in reproduction.
- (b) Fertilization: The male and the female gametes fuse together to form zygote.
- (c) Development of Zygote: The zygote divides and develops to give rise to the new individual.

4. What is gland? What is the 'endocrine system'?

Ans: A group of cells produce and secretes chemicals (hormones) are called glands.

Endocrine system is an integrated system of organ which regulates the release of hormones. A hormone is a chemical substance produced by specially formed tissue called Endocrine glands or ductless glands. This system help in regulating metabolism, tissue function, growth and development of body.

5. Why pituitary glands are known as master glands?

Ans: It is a tiny gland of the size of a pea attached to the hypothalamus of the brain. Pituitary glands are known as master glands because it produces hormones that control several other endocrine glands.

7. Why frogs and fish produce a large number of gametes?

Ans: In frogs and fish, external fertilization takes place with the help of water. Their gametes are released in the water where other animals can feed on them. Hence, to ensure

fertilization of at least few of the gametes, these animals produce a large number of gametes.

(IV) Multiple Choice Questions

1. A placental mammal would be

(a) larviparous. (b) viviparous. (c) external fertilizers. (d) oviparous. Answer: (b)

2. The male reproductive system includes all EXCEPT which of the following?

(a) testes (b) epididymis (c) penis (d) fimbriae answer:(d)

3. In the human male, the tube used to carry both sperm and urine is the

(a) ureter. (b) seminiferous tubule. (c) vas deferens. (d) urethra. answer:(d)]

4. In the human male, sperm cells are produced in the

(a) interstitial tissue. (b) urethra. (c) seminiferous tubules. (d) vas deferens. answer: (C)

5. Secondary sexual characteristics in the male are directly maintained by the hormone

(a) testosterone. (b) estrogen. (c) FSH. (d) TSH. answer: (a)