

QB365 Question Paper Software
12th Standard - Biology
Human Reproduction Case Study Questions

Exam Time: 00:30 Hrs

Date: 2025-10-14

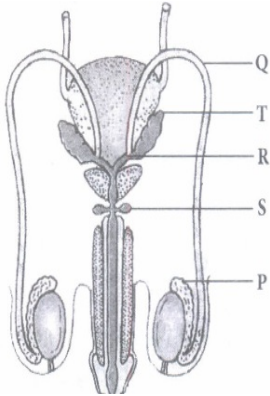
Total Marks: 10

Questions:

Case Study Questions

1. Read the following and answer any four questions from (i) to (v) given below:

Human male reproductive system comprises of a pair of testes, primary sex organs associated with the production of sex hormone. Study the given figure of human male reproductive system and answer the following questions.



(i) Which of the following is correct for labelled part P?

- (a) P is rete testis which transports sperms to outside. (b) P is epididymis which secretes fluid that nourish the sperms (c) P is epididymis that carry sperms and secretion of seminal vesicles

(ii) Identify the correctly matched pair.

- (a) Q - Vasa efferentia (b) R - Ejaculatory duct (c) S - Seminal vesicle

(iii) Which statement is incorrect for Q?

- (a) It carries spermatozoa from epididymis to ejaculatory duct (b) Q are only 2 in number. (c) It arises from rete testis.

(iv) Which structure passes through the prostate gland and carries sperms and secretion?

- (a) P (b) T (c) S (d) R

(v) **Assertion:** Mucus present in secretion of bulbourethral gland decreases the number of spermatozoa.
Reason: Mucus lubricates the end of penis and lining of the urethra.

- (a) Both assertion and reason are true and reason is the correct explanation of assertion.
(b) Both assertion and reason are true but reason is not the correct explanation of assertion.
(c) Assertion is true but reason is false.
(d) Both assertion and reason are false.

2. Read the following and answer any four questions from (i) to (v) given below:

The first menstruation is called menarche, that usually occurs between 12 and 15 years. It is repeated at an average interval of about 28-29 days and is called menstrual cycle. It is regulated by the pituitary gland is stimulated by releasing factors produced in the hypothalamus. The hormones secreted by the ovaries influence the ovaries. The hormones secreted by the ovaries affect the walls of the uterus.

(i) The breakdown of endometrium is characteristic of

- (a) proliferative phase (b) luteal phase (c) ovulatory phase (d) menstrual phase

(ii) Which days of the menstrual cycle marks the proliferative phase?

(a) 1-5 (b) 15-28 (c) 6-13 (d) 10-14

(iii) Which of the following occurs during secretory phase?

(a) Empty Graafian follicle (b) Primary follicle changes into Graafian follicle. (c) Endometrium rebuilds into corpus luteum. (d) Estrogen secretion increases

(iv) Identify the hormones that attain peak level during ovulatory phase

(a) FSH (b) Progesterone (c) LH (d) Both (a) and (c)

(v) Withdrawal of which hormone causes degeneration of corpus luteum?

(a) FSH (b) LH (c) Progesterone (d) Estrogen

Answers Key:

Case Study Questions

1. (i) (b) : P is an epididymis that stores the sperms and secretes a fluid which is considered to nourish the sperms
(ii) (b) : Q - Vas deferens, R - Ejaculatory duct S - Bulbourethral gland, T - Seminal vesicle
(iii) (c) : Q (vas deferens) arises from cauda epididymis
(iv) (d)
(v) (a)
2. (i) (d): During menstrual phase, the endometrium breaks down and menstruation begins.
(ii) (c) : Proliferative phase extends for about 10-12 days usually from day 6th to 13th in a 28 day cycle
(iii) (a)
(iv) (d) : During ovulatory phase, both LH and FSH attain a peak level
(v) (b)