

DPP MCQ TERM I CLASS XII
BIOLOGY – Human Reproduction

Q. 1. Spot the odd one out from the following structures

with reference to the male reproductive system.

(A) Rete testis (B) Epididymis

(C) Vasa efferentia (D) Isthmus

Q. 2. Which one of the following is not a male accessory gland?

(A) Seminal vesicle (B) Ampulla

(C) Prostate (D) Bulbo-urethral gland

Q. 3. The vas deferens receives duct from the seminal

vesicle and opens into urethra as

(A) epididymis

(B) ejaculatory duct

(C) efferent ductule

(D) ureter

Q. 4. Urethral meatus refers to the

(A) urinogenital duct.

(B) opening of vas deferens into urethra.

(C) external opening of the urinogenital duct.

(D) muscles surrounding the urinogenital duct.

Q. 5. Seminal plasma, the fluid part of semen, is on

tributed by

(i) Seminal vesicle (ii) Prostate

(iii) Urethra (iv) Bulbo-urethral gland

(A) i and ii (B) i, ii and iv

(C) ii, iii and iv (D) i and iv

Q. 6. Identify the odd one from the following.

(A) Labia minora (B) Fimbriae

(C) Infundibulum (D) Isthmus

Q. 7. Prostate glands are located below

(A) gubernaculum

(B) seminal vesicles

(C) epididymis

(D) bulbourethral glands

Q. 8. Lower narrow end of uterus is called

(A) urethra (B) cervix

(C) clitoris (D) vulva

Q. 9. The third stage of parturition is called “after-birth”.

In this stage

(A) excessive bleeding occurs

(B) foetus is born and cervix and vagina contraction

to normal condition happens

(C) foetus is born and contraction of uterine wall prevents excessive bleeding

(D) placenta is expelled out.

Q. 10. Which of the following contains the actual genetic part of a sperm?

(A) Whole of it (B) Tail

(C) Middle piece (D) Head

Q. 11. Identify the wrong statement from the following.

(A) High levels of oestrogen triggers the ovulatory surge.

(B) Oogonial cells start to proliferate and give rise to functional ova in regular cycles from puberty onwards.

(C) Sperms released from seminiferous tubules are poorly motile/non-motile.

(D) Progesterone level is high during the postovulatory phase of menstrual cycle.

Q. 12. The immature male germ cells undergo division to

produce sperms by the process of spermatogenesis.

Choose the correct one with reference to above.

(A) Spermatogonia have 46 chromosomes and always undergo meiotic cell division.

(B) Primary spermatocytes divide by mitotic cell division.

(C) Secondary spermatocytes have 23 chromosomes

and undergo second meiotic division.

(D) Spermatozoa are transformed into spermatids.

Q. 13. Spermiation is the process of the release of sperms from

(A) seminiferous tubules.

(B) vas deferens.

(C) epididymis.

(D) prostate gland.

Q. 14. Match between the following representing parts of the sperm and their functions and choose the correct option.

Column A Column B

- A. Head i. Enzymes
B. Middle piece ii. Sperm motility
C. Acrosome iii. Energy
D. Tail iv. Genetic material

Options :

(A) A-ii, B-iv, C-i, D-iii (B) A-iv, B-iii, C-i, D-ii

(C) A-iv, B-i, C-ii, D-iii (D) A-ii, B-i, C-iii, D-iv

Q. 15. Mature Graafian follicle is generally present in the ovary of a healthy human female around stet.

- (A) 5–8 days of menstrual cycle.
(B) 11–17 days of menstrual cycle.
(C) 18–23 days of menstrual cycle.
(D) 24–28 days of menstrual cycle.

Q. 16. Which among the following has 23 chromosomes?

- (A) Spermatogonia (B) Zygote
(C) Secondary oocyte (D) Oogonia

Q. 17. The membranous cover of the ovum at ovulation is

- (A) corona radiata.
(B) zona radiata.
(C) zona pellucida.
(D) chorion.

Q. 18. At what stage of life is oogenesis initiated in a human female ?

- (A) At puberty
(B) During menarch
(C) During menopause
(D) During embryonic development

Q. 19. A human female reaches menopause around the age of

- (A) 50 years (B) 15 years
(C) 70 years (D) 25 years.

Q.20. Layers of an ovum from outside to inside is

- (A) corona radiata, zona pellucida and vitelline membrane
(B) zona pellucida, corona radiata and vitelline membrane

(C) vitelline membrane, zona pellucida and corona radiata

(D) zona pellucida, vitelline membrane and corona radiata.

Directions : In the following questions a statement

of assertion (A) is followed by a statement of reason (R). Mark the correct choice as :

(A) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).

(B) Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).

(C) Assertion (A) is true but reason (R) is false.

(D) Assertion (A) is false but reason (R) is true.

Q. 1. Assertion (A) : Urethra in human male act as a urinogenital canal.

Reason (R) : Urethra carries only urine while sperms are carried by vasa deferentia only.

Q. 2. Assertion (A) : In human male, testes are extraabdominal and lie in scrotal sacs.

Reason (R) : Scrotum protects the testes.

Q. 3. Assertion (A) : The region outside the seminiferous tubules is called interstitial spaces, which contain Leydig's cells.

Reason (R) : Leydig's cells synthesize and secrete testicular hormones called androgen.

Q. 4. Assertion (A) : Large member of mitochondria are present in middle piece of sperm.

Reason (R) : Numerous mitochondria in the middle piece of sperm produce energy which is required for their movement.

Q. 5. Assertion (A) : The secretory phase in the human menstrual cycle is also called the luteal phase.

Reason (R) : During the luteal phase development of

corpus luteum and secretion of progesterone occurs.

Q. 6. Assertion (A) : Vasa efferentia develop from rete testis.

Reason (R) : Sperm conduction takes place by the ciliary current.

Q. 7. Assertion (A) : The fusion of sperm and ovum to form zygote is called fertilization.

Reason (R) : It occurs at ampullary isthmic junction of the fallopian tube.

Q. 8. Assertion (A) : Oxytocin helps in parturition.

Reason (R) : Oxytocin acts on uterine muscle and causes expulsion of the foetus which increase the contractions further.

Q. 9. Assertion (A) : Endometrium is a mucosal tissue made up of two layers.

Reason (R) : It is a inner lining of the uterus. Each month it thickens and renew itself, preparing for pregnancy. place, the embryo implants into the endometrium.

Q. 10. Assertion (A) : The leydig cells of testis are present outside the seminiferous tubules.

Reason (R) : Testis helps to synthesise and secrete hormones called androgens.

Attempt any 4 sub-parts from each question.

Each sub-part carries 1 mark.

I. Read the following text and answer the following

questions on the basis of the same:

During sexual reproduction, the male inserts the sperm into the female reproductive tract, and sperm receive by the ovary and after that sperm fuse with the egg (ovum) in the ampullary region, this process is called fertilization, haploid nucleus of sperm fuse with that of ovum to form Diploid zygote.

Q.1. The phenomenon of sperm activation in mammals

is known as.

(A) Parthenogenesis (B) Amphimixis
(C) Capacitation (D) Acrosomal reaction

Q. 2. Fertilization take place in

(A) Vagina (B) Follicle
(C) Uterus (D) Fallopian tube

Q. 3. Egg development without fertilization is known as

(A) Gametogenesis (B) Parthenogenesis
(C) Metagenesis (D) Oogenesis

Q.4. Site of fusion of sperm with an ovum.

(A) Infundibulum
(B) Ampullary isthmic junction of oviduct
(C) Cervix of uterus
(D) Ovary

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(C) Assertion (A) is true but reason (R) is false.

(D) Assertion (A) is false but reason (R) is true.

Q. 5. Assertion (A) : All copulations do not lead to the fertilisation and pregnancy.

Reason (R) : Fertilisation can occur only if the ovum

and sperms are transported simultaneously to the ampullary-isthmic junction.

II. Read the following text and answer the following

questions on the basis of the same:

Read the passage and answer any four questions :
Implantation is the embedding of the blastocyst into the endometrium of the uterus. Blastocyst is a ball of cells with a large, fluid-filled cavity called

the blastocoel. The blastomeres in the blastocyst are

arranged into an outer layer called trophoblast and inner cell mass. With the formation of blastocoel, morula is converted to blastula which is called

blastocyst in mammals.

Q. 1. State of embryo development, in which implantation occurs in human female is :

- (A) Morula (B) Zygote
(C) Blastocyst (D) Transient 3-celled stage.

Q. 2. Which organ is formed during gastrulation ?

- (A) Gill
(B) Vitelline membrane
(C) Archenteron
(D) Heart.

Q. 3. The process that transforms the embryo into a

three-layered stage is called..... .

- (A) Blastulation (B) Cleavage
(C) Gastrulation (D) Organogenesis.

Q. 4. The ectoderm cells will form the..... .

- (A) Skeletal system (B) Nervous system
(C) Excretory system (D) Respiratory system

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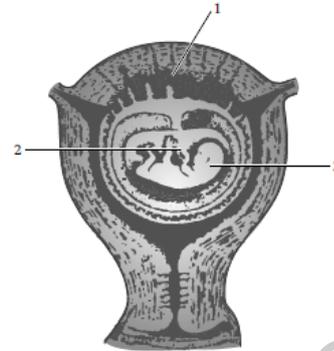
(D) Assertion (A) is false but reason (R) is true.

Q. 5. Assertion (A) : Blastocyst undergoes gastrulation to form three germinal layers.

Reason (R) : This involves cell movements (morphogenetic movement) that help to attain new shape and morphology of embryo.

embryo, forming the three germ layers.

III. Study the given diagram and answer any of the four questions given below :



Q. 1. Identify the parts labelled 1, 2 and 3 in the diagram given.

(A) 1-Placental villi, 2-Umbilical cord with its vessels, 3-Yolk sac.

(B) 1- Umbilical cord with its vessels, 2- Yolk sac,

3- Placental villi

(C) 1- Yolk sac, 2- Umbilical cord with its vessels,

3- Placental villi

(D) None of these

Q. 2. During embryonic development which of the following

is formed first ?

(A) Heart (B) Brain

(C) Skin (D) Neural tube.

Q. 3. The signals for parturition originate from :

(A) Placenta only

(B) Placenta as well as fully developed foetus

(C) Oxytocin released from maternal pituitary.

(D) Fully developed foetus only.

Q. 4. Hormones secreted by the placenta to maintain pregnancy are :

(A) hCG, hPL, progesterone, prolactin

(B) hCG, progesterone, estrogen, glucocorticoid

(C) hCG, hPL, progesterone, estrogen

(D) hCG, hPL, estrogen, relaxin oxytocin.

Q. 5. Gestation period in human is :

(A) 10 weeks (B) 28 weeks

(C) 32 weeks (D) 38 weeks