

BIOLOGY

BOOKS - TRUEMAN BOOK COMPANY BIOLOGY (HINGLISH)

HUMAN REPRODUCTION

Multiple Choice Questions

1. Which of the following is secondary sex organ?

- A. Beard
- B. Uterus
- C. Ovary
- D. Broad hips



Watch Video Solution

2. Scrotal sacs of man is connected with the abdominal cavity by-

- A. epididymis
- B. spermatic canal
- C. inguinal canal
- D. haversian canal

Answer: C



Watch Video Solution

3. In mammals, failure of testes to descend into the scrotum is known as

A. castration
B. impotency
C. paedogenesis
D. cryptorchidism

Answer: D



View Text Solution

4. Mesorchium in frog refers to

A. capsule in testis

- B. capsule in ovary
- C. a peritoneal fold that covers testis

D.

Answer: C



- 5. Tunica albuginea is the covering around
 - A. testes
 - B. kidneys

C. uterus

D. epididymis

Answer: A



Watch Video Solution

6. Supporting cells found in between the germinal epithelium is called:

A. Phagocytes

B. Sertoli cells

- C. Leydig cells
- D. granular cells



- **7.** Setoli cells are found in testis. These cells are
 - A. nurse cells
 - B. reproductive cells

- C. receptor cells
- D. none of these

Answer: A



- **8.** Rete testis opens to
 - A. urethra
 - B. vasa efferentia
 - C. bidder's canal

D. cauda epididymis

Answer: B



- 9. Major part of semen is secreted by:
 - A. Seminal vesicle
 - B. prostate gland
 - C. Cowper's gland
 - D. bartholin's gland

Answer: A



Watch Video Solution

10. The common duct formed by the union of vas deferens and duct from seminal vescial is :

- A. urethra
- B. stenson's duct
- C. spermatic duct
- D. ejaculatory duct

Answer: D



Watch Video Solution

11. Which gland in mammel makes alkaline secreation for lubrication?

- A. Testis
- B. Pineal body
- C. Cervical glands
- D. Cowper's gland

Answer: D



- 12. Seminal fluid contains the secreation of:
 - A. follicles, uterus and prostate gland
 - B. prostate, cowper's and bartholin's gland
 - C. seminal vesicle, uterus and prostate gland

D. seminal vesicle, prostate and cowper's gland

Answer: D



Watch Video Solution

13. Which one is unpaired gland in male reproductive system?

A. Seminal vesicle

B. Cowper's gland

- C. Prostate gland
- D. Lacrimal gland

Answer: C



- **14.** Which of the following sugars in semen is a source of energy for the spermatoza?
 - A. sucrose
 - B. fructose

C. glucose

D. galactose

Answer: B



Watch Video Solution

15. Sugar fructose is present in the secretion of:

A. seminal vesicles

B. Cowper's gland

- C. perneal gland
- D. bartholin's gland

Answer: A



Watch Video Solution

16. At what speed a human sperm moves in the female genetial tract?

- A. 3mm/min
- B. 10 mm/min

- C. 15mm/min
- D. 20 mm/min

Answer: A



Watch Video Solution

17. Which is the correct sequence of layers in the mammalian egg from outside to inside?

A. Zona pellucida, corona radiate, plasma membrane

B. Corona radiata, zona pellucida, plasma membrane

C. Plasma membrane, zona pellucida, corona radiata

D. None of the above

Answer: B



18. Bartholin's glands of female correspond to which gland in male?

A. Rectal glands

B. inguinal glands

C. prostate glands

D. Cowper's glands

Answer: D



19. labium majora of a female mammalis homologous to

A. scrotal sac

B. prostate gland

C. epididymis

D. seminal vesicle

Answer: A



20. Which of the following hormones is active during proliferative phase of menstrual cycle?

- A. Estrogen
- B. Progesterone
- C. Testosterone
- D. All of these

Answer: A



21. Progesterone hormone is active during

A. follicular phase

B. secretory phase

C. menstrual phase

D. proliferative phase

Answer: B



22. Cessation of menstrual cycle in women is called

A. menarche

B. menopause

C. inpotency

D. puberty

Answer: B



23. At menopause there is rise in urinary excretion of

A. FSH

B. STH

C. Oxytocin

D. Oestrogen

Answer: A



- **24.** In spermatogenesis, the phase of maturation involves
 - A. The growth of spermatogonia into primary spermatocyte
 - B. The formation of spermatogonia from gonocytes through mitosis
 - C. The formation of spermatids from primary spermatocytes through meiosis

D. The formation of spermatogonia from

the spermatocytes through meiosis

Answer: C



Watch Video Solution

25. Which of the following are haploid in nature?

A. Spermatids

B. Spermatogonia

- C. Primary spermatocytes
- D. Secondary spermatocytes



- 26. Acrosome of sperm is formed from
 - A. nucleus of spermatid
 - B. centrosome of spermatid
 - C. mitochondia of spermatid

D. golgi complex of spermatid

Answer: D



Watch Video Solution

27. How many centrioles are normally present in a sperm?

A. One

B. Two

C. Many

D. None of these

Answer: B



Watch Video Solution

28. Which organelle is absent in human sperm?

A. ER

B. Nucleus

C. Centriole

D. Mitochondria

Answer: A



Watch Video Solution

29. Middle piece of sperm contains

- A. mitochondria and golgi body
- B. centriole and golgi body
- C. axial filament and golgi body
- D. mitochondria and axial filament

Answer: D



Watch Video Solution

30. Oogonium is

A. haploid

B. diploid

C. triploid

D. euploid

Answer: B

31. The number of chromosomes in a mature gamete gets halved during

- A. Meiosis II
- B. Formation of first polar body
- C. Formation of second polar body
- D. Division of secondary oocyte and secondary spermatocyte



Watch Video Solution

32. In which phase of cell division is oocyte arrested?

- A. Interphase
- B. Prophase I
- C. Anaphase II
- D. Both prophase I and II



Watch Video Solution

33. 100 eggs and 100 sperms can be produced

from____and____meiotic division respectively.

- A. 25,25
- B. 100,25
- C. 100,100
- D. 25,100



- **34.** One million oocytes and one million secondary spermatocytes will give:
 - A. 2 million ova 1 million sperms
 - B. 2 million ova and 2 million sperms
 - C. 1 million ova and 2 million sperms
 - D. 1 million ova and 1 million sperms

Answer: C



Watch Video Solution

35. Which statement is true?

- A. At the onset of menopause, the human female stops producing FSH & LH
- B. Primary oocytes are produced by the human female throughout adolescence

- C. Oocytes produced by the females are stored in the seminiferous tubules
- D. At birth, the human female has produced all the oocytes she will ever produce

Answer: D



Watch Video Solution

36. Cytoplasm of ovum does not contain:

- A. Ribosomes
- B. Mitochondria
- C. Golgi bodies
- D. Centrosomes

Answer: D



Watch Video Solution

37. During a women's life time, she produces about:

- A. 40-50 eggs
- B. 300-350 eggs
- C. 400-500 eggs
- D. 750-850 eggs

Answer: C



Watch Video Solution

38. Capacitation occurs in

A. epididymis

- B. vas efferens
- C. vas deferens
- D. female genital tract

Answer: D



Watch Video Solution

39. Find out the correct sequence in embryonic development of animal:

A. cleavage, zygote, fertilization, morula, glastula, gastrula

B. Fertilization, zygote, cleavage, morula, blastula, gastrula

C. Fertilization, cleavage, morula, zygote, blastula, gastrula

D. Fertilization, zygote, blastula, morula, cleavage, gastrula

Answer: B



40. What is true about cleavage in fertilized egg in humans?

A. It is meroblastic

B. It is idential to normal itosis

C. It starts when the egg reaches uterus

D. It starts while the egg is in fallopian

Answer: D



41. Cleavage in mammals is:

- A. Discoidal
- B. superficial
- C. equal holoblastic
- D. unequal holoblastic

Answer: C



42. Zona pellucida disintegrates just:

A. just after fertilization

B. before fertilization

C. before cleavage

D. after completion of cleavage

Answer: D



43. The portion of the endometrium that covers the embryo and located between the embryo and the uterine cavity is the:

- A. decidua basalis
- B. decidua umbilicus
- C. decidua capsularis
- D. decidua functionalis

Answer: C



44. Human embryo will be called as a 'foetus' after:

A. two months

B. six months

C. four months

D. seven months

Answer: A



45. Study the following:

A. Testosterone influences the male secondary sexual characters

B. Gestation period in rabbit is approximately

276 days

C. Bulbo-uretheral glands secrete a vaginal lubricant

D. Placenta secretes estrogen

The correct answer is:

A. C and D

B. A and B

C. A and D

D. B, C and D

Answer: C



Watch Video Solution

46. In oogenesis, haploid egg is ferrtilized by sperm at which stage?

A. Ovum

B. Oogonium

C. Primary oocyte

D. Secondary oocyte

Answer: D



Watch Video Solution

47. 2n=6 in a primary spermatocyte which is in metapahase of first meiotic divison. What shall be the totalk number of chromatids in each of the secondary spermatocyte?

- A. 6
- B. 8
- C. 24
- D. 32

Answer: A



Watch Video Solution

48. Some important events in the human female reproductive cycle are given below.

Arrange the events in a proper squence.

A- Secretion of FSH, B - Growth of corpus luteum,

C- Growth of the follicle and oogenesis, D-

Ovulation

E - Sudden increase in the levels of LH.

A. ADCEB

B. BACDE

C. ACEDB

D. CADBE

Answer: C



Watch Video Solution

49. The 16 cells stage of the human embryo is

A. smaller than the fertilized egg

B. same size as the fertilized egg

C. two times of the size of the fertilized

egg

D. four times the size of the fertilized egg

Answer: B



50. The principal tail piece of human sperm shows the microtubular arrangement of

- A. 7+2
- B.9 + 2
- C. 11+2
- D. 13+2

Answer: B



51. Eggs of placental mammals/human egg are expected to be

- A. alecithal
- B. polylecithal
- C. telolecithal
- D. mesolecithal

Answer: A



52. The eggs of some mammals have more yolk. They are

A. eutherians

B. prototherians

C. metatherians

D. aquatic mammals

Answer: B



53. The primary egg membrane of mammalians egg is termed as -

A. Zona pellucida

B. corona radiata

C. shell

D. All of these

Answer: A



54. After a sperm has penetrated an ovum, entry of further sperm is prevented by

- A. condensation of yolk
- B. formation of pigment coat
- C. development of vitelline membrane
- D. development of cortical reaction

Answer: D



55. Fusion of male and female pronuclei of two conjugate Paramecium is known as

- A. apomixis
- B. capacitation
- C. acrosome reaction
- D. amphimixis

Answer: D



56. Cleavage is a unique form of mitotic cell division in that

A. there is no growth of cells

B. the nucleus does not particulars

C. no spindle develops to drag

chromosomes

D. The plasma membranes of daughter cells do not separate

Answer: A



57. During cleavage, the cell division is very rapid. The daughter cells do not undergo any growth and the cells thus become gradually smaller in volume. Hence

- A. the embryo becomes haploid
- B. the embryo grows in volume
- C. the embryo becomes smaller in volume
- D. there is no increase in the volume of the

embryo

Answer: D



- **58.** Which one of the following is incorrect?
 - A. fertilization follows capacitation
 - B. cleavage of fertilized ovum results in blastula
 - C. fusiion of sperm and ovum occurs in fallopian tube

D. cleavage leads to increase in the mass of protoplasm

Answer: D



Watch Video Solution

59. In embryo, cleavage brings about

A. Increased size

B. increased DNA content

C. change in shape and size

D. increased mass of protoplasm

Answer: B



Watch Video Solution

60. A zygote is completely divided into two by a cleavage furrow. The cleavage type is

A. radial

B. equatorial

C. holoblastic

D. meroblastic

Answer: C



Watch Video Solution

61. Solid ball like structure formed after completion of cleavage is

A. morula

B. foetus

C. gastrula

D. blastocyst

Answer: A



Watch Video Solution

62. A morula can be differentiated from blastula in

A. absence of yolk

B. presence of cavity

C. absenceof cavity

D. presence of more yolk

Answer: C



Watch Video Solution

63. Morphogenetic movements convert hollow spherical blastula into

A. morula

B. gastrula

C. foetus

D. embryonic disc

Answer: B



Watch Video Solution

64. The best definition of the process of gastrulation is that it is a process where the

A. blastocoel is formed

B. zygote gets converted to larva

C. cells move the occupy their definite position

D. simple layeres blastula becomes two layeres

Answer: C



Watch Video Solution

65. Notochord develops from

A. ectoderm

- B. endoderm
- C. mesoderm
- D. All of these

Answer: C



Watch Video Solution

66. Extra embryonic membrane of the mammals embryo are derived from

A. trophoblast

- B. follicle cells
- C. endodermal cells
- D. inner cell mass

Answer: A



Watch Video Solution

67. Mammalian foetus is directly surrounded by

A. yolk sac cavity

- B. aminiotic cavity
- C. allantoic cavity
- D. primary digestive cavity

Answer: B



Watch Video Solution

68. The fluid released from the vagina just prior to childbirth is

A. amniotic fluid

- B. baby's accumulated urine
- C. mother's plasma from umbilical cord
- D. baby's plasma form its foetal circulation

Answer: A



Watch Video Solution

69. Blood flowing through umbilical cord of mammalian embryo is

A. 100% foetal

- B. 100% maternal
- C. 50% maternal and 50% foetal
- D. 75% maternal and 25% foetal

Answer: A



Watch Video Solution

70. Drugs causing embryo malformations during pregnancy are called

A. nicotine

- B. sedatives
- C. teratogens
- D. tranquillizer

Answer: C



Watch Video Solution

71. The chemical substances released by activated spermatozoa that acts on the ground substances of the follicle cells is known as

- A. relaxin
- B. teratogen
- C. progesterone
- D. hyaluronidase

Answer: D



Watch Video Solution

72. Choose the incorrect statement from the following

A. In birds and mammals internal

fertilisation takes place

- B. colostrum contains antibodies and
- C. Polyspermy in mammals is prevented by
 the chemical changes in the sperm
 surface
- D. In the human female implantation occurs almost seven days after fertilisation.

Answer: C



Watch Video Solution

73. Spot the odd one out from the following structures with reference to the male reproductive system by

i. seminal vesicle

ii. Prostate

iii. Urethra.

iv. Bulbourethral gland

- A. Rete testis
- B. Epididymis
- C. Vasa efferentia
- D. Isthmus

Answer: D



Watch Video Solution

74. Seminal plasma, the fluid part of semen, is contributed by

- (i) seminal vesicle (ii) prostate
- (iii) urethra (iv) bulbourethral gland
 - A. Bulbourethral gland
 - B. i,ii and iv
 - C. ii,iii and iv
 - D. i and iv

Answer: B



75. Spermiation is the process of the release of sperms from

- A. Seminiferous tubules
- B. Vas deferens
- C. Epididymis
- D. prostate gland

Answer: A



76. Mature Graffian follicle is generally present in the ovary of a healthy human female around.

- A. 5-8 day of menstrual cycle
- B. 11-17 day of menstrual cycle
- C. 18-23 day of menstrual cycle
- D. 24-28 day of menstrual cycle

Answer: B



77. Acrosomal reaction of the sperm occurs due to

A. its contact with zona pellucida of the ova

B. reactions within the uterine environment of the female

C. Reactions within the epididymal environment of the male

D. androgens produced in the uterus

Answer: A



Watch Video Solution

78. 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

Answer: C



79. The vas deferens receives duct from the seminal vesicle and opens into urethra as

- A. epididymis
- B. ejaculatory duct
- C. efferent ductule
- D. ureter

Answer: B



80. Morula is a development stage:

A. between the zygote and blastocyst

B. between the blastocyst and gastrula

C. after the implantation

D. between implantation and parturition

Answer: A



81. The cellular cover of the ovum at ovulation is

A. corona radiate

B. zona radiata

C. zona pellucida

D. chorion

Answer: A



82. Identify the odd	one from	the following.
----------------------	----------	----------------

A. Labia minora

B. Fimbriae

C. Infundibulum

D. Isthmus

Answer: A



- **83.** Which of the following statements about he female reproductive system are true (+) or false (-)?
- 1. Both FSH and LH are necessary for ovulation to take place.
- 2. Oestrogen tends to inhibit the production of FSH b the anterior pituitary gland.
- 3. Fertilization of the ovum by the spermatozoon normally takes place in the uterus.
- 4. Progesterone production is largely under the control of LH

5. Throughout the part of the menstrual cycle that follows ovulation, there is a slight risein body temperature.

$$A. + \pm + +$$

$$B.--+++$$

$$\mathsf{C.-}\pm$$

$$D. + \pm - -$$

Answer: A



- 84. Go through the following statements
- (i) The secodnary oocyte undergoes meiosis II which proceeds only till metaphase until a sperm enters it.
- (ii) Ovulation occurs about 36-38 hours after the start of LH surge at midcycle.
- (iii) In humans, it takes about 74 hours to form a mature sperm from a primitive germ cells.
- (iv). About 70% of the human ejaculate is

contributed by bulbourethral glands

Which of these are correct?

A. (i) & (iii)

- B. (ii) & (iii)
- C. (i) & (ii)
- D. all are correct

Answer: C



Watch Video Solution

85. What would happen if vasa deferentia of man are cut?

A. Sperms are non-nucleate

- B. spermatogenesis does not occur
- C. Semen is without sperms
- D. Sperms are nonmotile

Answer: C



- 86. Go through the following statement
- (i) Relaxin produced by the ovary, facilitates delivery of the foetus by softening the connective tissue of pubic symphysis and

relaxing the pelvic ligaments and joints.

(ii) By the end of fifth month of pregnancy, the foetus develops limbs and digits.

(iii) Thalidomide is a teratogenic drug which causes a condition called phocomelia.

(iv). Although the levels of prolactin are high during pregnancy, milk secretion does not occur because of the high oestrogen and progesterone levels which make the breast unresponsive to the prolactin.

Which of these are correct?

A. i,ii and iii

B. i, iii and iv

C. ii, iii and iv

D. all are correct

Answer: B



Watch Video Solution

87. Find the correct match regarding human foetal development

A. Month of Pregnancy- End of 4^{th} month,

Event occurring-Eyelashes appear

B. Month of pregnancy-End of 3^{rd} month,

Event occurring-Movements of foetus

C. Month of pregnancy-End of 5^{th} month,

Event occurring-Hair on head

D. Month of pregnancy-End of 2^{nd} month-

Event occurring-organ system develop

Answer: C



88. Trace a sperm ell from the structure where

it is produced to fertilization of the egg

1. Seminiferous tubules

2. Vas deferens

3. Uterus

4. Fallopian tube

5. Vagina

6. Epididymis

7. Urethra

A. 6,1,2,7,5,3,4

- B. 1,6,2,7,5,3,4
- C. 1,6,2,7,5,4,3
- D. 1,2,6,7,5,3,4

Answer: B



Watch Video Solution

89. How are the time of ovulation and the onset of menstruation related in the human menstrual cycle?

A. Both are triggered by high luteinizing hormone "spikes" (sharp increase in concentration).

B. Ovulation occurs approximately 7 days after the first day of menstruation

C. Ovulation occurs approximately 14 days before the first day of menstruation.

D. All of the above

Answer: C



90. Tick the correct statement

A. Proximal and distal centrioles in the middle piece of sperm help anchor the flagellum

B. whereas proximal entrioleis non functional, distal centriole acts as basal body for the flagellum of sperm

- C. The functions of proximal and distal centriolesare not known
- D. Proximal centriole forms the spindle fibreas during cleavage an the distal centriole anchors the flagellum of sperm

Answer: D



91. The intra-testicular genital duct system does not involve

- A. Rete testis
- B. Ductuli efference
- C. Tubuli recti
- D. Ductus deference

Answer: D



92. Which of the following hormones is not secreted by human placenta?

- A. Relaxin
- B. Lactogen
- C. Gonadotropin
- D. Oxytocin

Answer: D



93. In humans, the first polar body formed during oogenesis has

(i) 46 chromosomes

(ii) 23 chromosomes

(iii) 46 chromatids

(iv). 23 chromatids

A. (ii) and (iv)

B. (ii) and (iii)

C. (i) and (iii)

D. (i) and (iv)

Answer: B



- 94. Go through the following statements
- (i) Androgens are produced by the interstitial cells
- (ii) Sertoli cells give rise to germ cells
- (iii). Secretions of male accessory glands
- constitute the seminal plasma which is rich in
- fructose, calcium and certain enzymes
- (iv) The presence or absence of hymen is a very

reliable indicator of virginity.

Which of these are correct?

- A. *i* & iii
- B. iii & iv
- C. *i*, iii & iv
- D. all are correct

Answer: A



- **95.** Go through the following statements:-
- divisions to produce secondary spermatocytes

(i). Primary spermatocytes undergo mitotic

- (ii). Sperms released from the seminiferous
- tubules are fuly mature and motile
- (iii) The head of sperm possesses may mitochondria which produce energy for the
- movement of tail
- (iv) The human male ejaculates about 20-30 million sperms during a cuitus
- which of these are correct?

- A. (i), (ii) & (iii)
 - B. (ii), (iii) & (iv)
 - C. (i), (iii) & (iv)
 - D. All are wrong

Answer: D



- **96.** Go through the following statements
- (i) Mammary glands are modified sweat glands
- and each mammary gland consists of 15-25

lobules of the compund tubulo-alveolar type. (ii) The tertiary follicle is characterised by a fluid filled cavity called antrum (iii) Both LH and FSH attain a peak level towareds the middle of teh menstrual cycle (iv). In oogenesis, both first and second meiotic divison are unequal Which of these are correct?

A. (ii) & (iii)

B. (i), (iii) & (iv)

C. (i),(ii) & (iv)

D. All are correct

Answer: D



- 97. Go through the following statement:-
- (i) In both pre-pubertal and post-meno-pausal females, there are low levels of female sex hormones and high levels of gonadotrophins.
- (ii) There is no bleeding in an oestrous cycle as the broken endometrium is absorbed.

(iii) Oestrogen is mainly secreted by the granulosa cells and progesterone mainly by the theca cells

(iv) Some of the menopausal symptoms can be reversed HRT wherein a small sode of gonadotrophins is given to the patient.

Which of these are correct?

A. (ii) & (iii)

B. (i), (ii), (iv)

C. (i), (ii) & (iii)

D. All are correct

Answer: A



- **98.** Go through the following statements
- (i) HCG from placenta stimulates the sertolicells of the male foetus to produce testosterone and is thus indirectly ivolved in the development of male external genitalia

 (ii) Sertolicells secrete a protein called inhibin, which suppresses FSH synthesis.
- (iii) Humans have haemo-endothelial type of

placenta.

(iv) oxytcin stimulates the placenta to secrete prostaglandins which in turn stimulate more contractions of uterus.

Which of these correct?

A. (i) & (iv)

B. (ii) & (iv)

C. (i), (ii) & (iv)

D. All are correct

Answer: B



Watch Video Solution

99. Both corpus lutea and macula lutea are

A. found in human ovaries

B. a source of hormones

C. characterized by a yellow colour

D. Contributory I maintaining pregnancy

Answer: C



100. The phase of menstrual cycle in humans that lasts for 7-8 days, is

- A. Follicular phase
- B. Ovulatory phase
- C. Luteal phase
- D. Menstruation

Answer: A



101. Which one of the following statements with regard to embryonic development in humans is correct?

A. Cleavage divisions bring about considerable increase in the mass of protoplasm.

B. In the second cleavage division, one of the two blastomeres usually divides a little sooner than the second

- C. With more cleavage divisions, the resultant blastomeres become larger and larger.
- D. Cleavage division results in a hollow ball of cells called morula

Answer: B



102. Assertion:Holoblastic cleavage with almost equal sized blastomeres is a characteristic of placental animals.

Reason: Eggs of most mammals, including humans, are of centrolecithal type.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion, then mark a.

B. if both assertion and reason are ture but the reason is not the correct explanation of assertion, then mark b.

C. if assertion is true statement but reason is false, then mark c.

D. If both assertion and reason are false statements, then mark d.

Answer: C



103. Which one of the following events is correctly matched with the time period in a normal menstrual cycle?

- A. Release of egg, 5^{th} day
- B. Endometrium regenerates: 5-10 days
- C. Endometrium secretes nutrients for
- D. Rise in progesterone level: 1-15 days

implantation: 11-18 days

Answer: B



104. Which of the following has the longest gestation period:-

A. Man

B. Cat

C. Dog

D. Elephant

Answer: D



105. Go through the following diagram carefully which of the following option shows the correct labelling and events occurring in that organ:-

A. (i) Ovary-Follicle rupture, beginning of

 1^{st} and 2^{nd} meiotic division.

Completion of 2^{nd} meiotic division

(iii) Uterus-Blastocyst formation,

implantation.

B. (i) Ovary-Follicle rupture, completion of

 2^{nd} meitic division

(ii) Fallipian tube-Fertilisation,

Blastocystformation.

(iii) Uterus-Implantation

C. (i) Ovary-Follicle maturation, Beginning

of $\mathbf{1}^{st}$ and $\mathbf{2}^{nd}$ meiotic division

(ii) Fallopian tube-Fertilisation,

Completion of 2^{nd} meiotic division

(iii) Uterus-Beginning of cleavage, Implantation.

D. (i) Ovary-Follicle maturation completion of 2^{nd} meiotic division.

(ii) Fallopian tube-Beginning of cleavage,

Implantation. ltBrgt (iii) Uterus-

Fertilisation, blastocyst formation

Answer: A



View Text Solution

106. Secretion of GnRH would lead to

A. secretion of testosterone leading to mammary gland development

B. release of prolactin leading to milk production in mammary glands

C. secretion of LH and FSH leading to follicle development

D. All of the above

Answer: C

107. Fid the odd one out

- A. HIV
- B. Trichomoniasis
- C. Gonorrhoea
- D. typhoid

Answer: D



108. Assertion: If scrotal sacs removed, testosterone is still found in the body.

Reason: Small amount of adrogents is secreted by the adrenal cortex.

A. If both assertion and reason are true and the reason is the correct explanation of the assertion, then mark a.

B. if both assertion and reason are ture but the reason is not the correct explanation

of assertion, then mark b.

C. if assertion is true statement but reason is false, then mark c.

D. If both assertion and reason are false statements, then mark d.

Answer: A



109. The entry of additional sperms into the ovum is prevented because of:-

A. release of secretions from the acrosome

B. changes in the zonapellucida

C. changes in the corona radiata

D. contractions and secretions of the fallopian tube

Answer: B



110. Ovulation in the human female normally takes place during the menstrual cycle

A. at the beginning of the proliferative phase

B. at the end of the proliferative phase

C. at the mid secretory phase

D. just before the end of the secretory phase

Answer: B

111. Which part of ovary in mammals acts as an endocrine gland after ovulation ?

A. Stroma

B. Germinal epithelium

C. Vitelline membrane

D. Graffian follicle

Answer: D



Watch Video Solution

112. In the human female, menstruation can be referred by the administration of :-

A. combination of FSH and LH

B. combination of estrogen and

progesterone

C. FSH only

D. LH only

Answer: B

113. Compared to a bull a bullock is docile because of

A. higher levels of cortisone

B. lower levels of blood testosterone

C. lower levels of adrenalin/noradrenalin in

its blood

D. higher levels of thyroxin

Answer: B



Watch Video Solution

114. In humans, at the end of the first meiotic division, the male germ cells differentiate into the

- A. spermatozonia
- B. Primary spermatocytes
- C. secondary spermatocytes
- D. spermatids

Answer: C



Watch Video Solution

115. Which extra-embryonic membrane in human prvents desiccation of the embryo inside the uterus?

- A. Amnion
- B. Chorion
- C. Allantois
- D. Yolk sac

Answer: A



Watch Video Solution

116. Which one of the following statement is incorrect about menstruation?

- A. The beginning of the cycle of menstruation is called menarche.
- B. During normal menstruation about 40 ml blood is lost.

C. The menstrual fluid can easily clot.

D. At menopause I the female, there is especially abrupt increase in gonadotropic hormones

Answer: C



Watch Video Solution

117. In human adult females, oxytocin

- A. causes strong uterine contractions during parturition
- B. is secreted by anterior pituitary
- C. stimulates growth of mammary gands
- D. stimulates pituitary to secrete vasopressin

Answer: A



118. Which one of the following is the correct matching of the events occurring during mentrual cycle?

A. Development of corpus luteum-secretory

phase and increased secretion of

progesterone.

B. Menstruation-Breakdown of myometrium and ovum not fertilized.

C. Ovulation-LH and FSH attain peak level

and sharp fall in the secretion of

progesterone.

D. Proliferative phase- Rapid regeneration of myometrium and maturation of graafian follicle.

Answer: A



Watch Video Solution

119. The correct sequence of spermatogenetic stages leading to the formation of sperms in a mature human testis is

A. Spermatid-spermatocytespermotogonia-sperms B. Spermatogonia-spermatid-spermatocytesperms C. spermatocyte-spermatogonia-spermatid-

sperms

D. Spermatogonia-spermatocyte-spermatidsperms

Answer: D



120. Foetal ejection reflex in human female is induced by:

A. fully developed foetus and placenta

B. differentiation of mammary glands

C. pressure exerted by amniotic fluid

D. release of oxytocin from pituitary

Answer: A



121. In a regularly cycling human female, which can be the root cause of menstrual failure?

A. Maintenancy of high concentration of sex-hormones in the blood stream

B. Retention of well-developed corpus

C. Fertilisation of the ovum

D. Maintenancy of the pypertrophical endometrial lining

Answer: C



Watch Video Solution

122. A change in the amount of yolk and its distribution in the egg will affect :-

A. number of blastomeres produced

- B. fertilization
- C. Formation of zygote
- D. pattern of cleavage

Answer: D



Watch Video Solution

123. Seminal plasma in humans is rich in

A. glucose and certain enzymes but has no calcium

B. fructose and certain enzymes but poor in calcium

C. fuctose, calcium and certain enzymes

D. fructose and calcium but has no enzymes

Answer: C



Watch Video Solution

124. Vasa efferentia are the ductules leading from:

A. epididymis to urethra

B. testicular lobules to rete testis

C. rete testic to vas deferens

D. vas deferens to epididymis

Answer: C



Watch Video Solution

125. The first movements of the fetus and appearance of hair on its head are usually observed during which month of pregnancy?

A. Third month

- B. fourth month
- C. fifth month
- D. sixth month

Answer: C



Watch Video Solution

126. Which is correct about human sperm

A. Acrosome serves no particular function

B. Acrosome has a conical pointed structure used for piercing and penetrating the egg resulting in fertilization

C. The sperm lysins in the acrosome disolve the egg envolope facilitating fertilization

leading the pserm towards the ovum

D. Acrosome serves as a sensory structure

Answer: C



127. Sertoli cells are found:

- A. pancreas and secrete cholecystokinin
- B. ovaries and secrete progesterone
- C. adrenal cortex and secrete adrenaline
- D. seminiferous tubules and provide nutrition to germ cells

Answer: D



128. The part of Fallopian tube closest to the ovary is:

A. ampulla

B. isthmus

C. infundibulum

D. cervix

Answer: C



- **129.** The second maturation division of the mammalian ovum occurs
 - A. in the graafian follicle following the first maturation division
 - B. shortly after ovulation before the ovum makes entry into the fallipian tube
 - C. until after he ovum has been penetrated by a sperm

D. until the nucleus of the sperm has fused with that of the ovum

Answer: C



Watch Video Solution

130. Which one of the following statements about morula humans is correct?

A. It has more cytoplasm and more DNA than an uncleaved zygote

B. It has almost equal quantity of cytoplasm as an uncleaved zygote but much more DNA

C. It has far less cytoplasm as less DNA than in an uncleaved zygote

D. It has more or less equal quantity of cytoplasm and DNA as in uncleaved zygote

Answer: B



131. If for some reason, the vesa effectentia in the human reproductive system get blocked, the gametes will not transported from

- A. testes to epididymis
- B. epididymis to vas deference
- C. ovary to uterus
- D. vagina to uterus

Answer: A



132. The testes in humans are situated outside the scrotum. The pupose served is for

A. maintaining the scrotal temperature lower than the internal body temperature

B. escaping any possible compression by the vesceral organs

C. providing more space for the growth of epididymis

D. providing a secodary sexual feature for exhibiting the male sex.

Answer: A



Watch Video Solution

133. What is correct to say about the hormone action in humans?

A. Secretion of thymosins is stimulated with aging

B. In females, FSH first binds with specific receptors on ovarian cell membrane

C. FSH stimulates the secretion of estrogen and progesterone

D. Glucagon is secreted by \widehat{a} -cells of islets of langerhans and stimulates glycogenolysis

Answer: B

134. In a normal pregnant woman, the amount of total gonadotropin activity was assessed. The result expected was

- A. High level of cirulating HCG to stimulate endometrial thickening
- B. High levels of FSH and LH in uterus to stimulate endometrial thickening

C. High level of circulating HCG to stimulate estrogen and progesteroe synthesis

D. High level of circulating FSH and LH in the uterus to stimulate implantation of the embryo

Answer: C



135. Signals for parturition originate from

- A. Oxytocin released from maternal pituitary
- B. placenta only
- C. Fully developed foetus only
- D. Both placenta as well as fully developed foetus

Answer: D



136. The leydig cells as found in the human body are the secretory source of

A. intestinal mucus

B. glucagon

C. androgens

D. progesterone

Answer: C



137. Which one of the following statements is not true with respect to viability of mammalian sperm?

- A. Survival of sperm depends on the pH of the medium and is more active in alkaline medium
- B. Vibility of sperm is determined by its motility
- C. sperms must be concentrated in a thick suspension

D. Sperrm is viable for only up to 24 hours

Answer: D



Watch Video Solution

138. Signals from the fully developed foetus and placenta ultimately lead to parturition which requires the release of

A. Estrogen from placenta

B. oxytocin from maternal pituitary

- C. oxytocin from foetal pituitary
- D. Relaxin from placenta

Answer: B



Watch Video Solution

139. In human female the blastocyst:

A. Forms placenta even before

implantation

- B. gets implanted into uterus 3 days after ovulation
- C. Gets nutrition from uterine endometrial secretion only after implantation
- D. gets implanted in endometrium by the trophoblast cells

Answer: D



- **140.** What happens during fertilization in humans after many sperms reach close to the ovum?
 - A. Secretions of acrosome helps one sperm enter cytoplasm of ovum through zonapellucida
 - B. All sperms except the one nearest to the ovum lose their tails
 - C. Cells of corona radiata trap all the sperms except one

D. Only two sperms nearest the ovum penetrate zonapellucida

Answer: A



Watch Video Solution

141. About which day in a normal human menstrual cycle does rapid secretion of LH (popularly called LH-surge) normally occurs?

A. 14th day

- B. 20th day
- C. 5th day
- D. 11th day

Answer: A



Watch Video Solution

142. The secretory phase in the human menstrual cycle is also called:

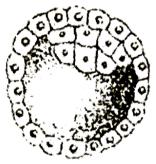
A. luteal phase and lasts for about 13 days follicular phase and lasts for about 13 days

- B. luteal phase and lasts for about 6 days
- C. follicular phase and lasting for about 6 days
- D. Follicular phase lasts for about 13 days

Answer: A



143. Identify the human development stage shown below as well as the related right place of its occurrence in a normal pregnant woman, and select the right option for the two together.



Options:

Developmental stage	Site of occurrence
(1) Blastocyst	Uterine wall
(2) 8-celled morula	Starting point of
	Fallopian tube
(3) Late morula	Middle part of
	Fallopian tube
(4) Blastula	End part of
,	Fallopian tube

- A. Developmental stage-Blastocyst, Site of occurrence-Uterine wall
- B. Developmental stage-8celled morula,

 Site of occurrence-Starting point of fallopian tube
- C. Developmental stage-Late morula, Site of occurrence-Middle part of Fallopian tube
- D. Developmental stage-Blastula, Site of occurrenec-End part of fallopian tube

Answer: A

144. Bartholin's glands are situated:

A. On the sides of head of some amphibians

B. At the reduced tail end of birds

C. On either side of vagina in humans

D. On either side of vas deferens in humans

Answer: C

145. Placenta in human beings is formed by:

- A. amnion
- B. chorion
- C. allantois
- D. chorion and allantois

Answer: B



146. Which gland secretes alkaline mucus in urethra to neutralise the acidity of urine?

- A. Prostrate gland
- B. Cowper's gland
- C. Seminal vesicles
- D. preputial glands

Answer: B



147. A temporary end	docrine	gland	in	humans	is
-----------------------------	---------	-------	----	--------	----

- A. Islets of langerhans
- B. Pineal body
- C. Corpus luteum
- D. corpora allata

Answer: C



Watch Video Solution

148. Braxton Hicks contractione occur during

A. paggase of food through amimentary cenal

B. peristaltic movements

C. pregnancy

D. lactation

Answer: C



149. Correct sequence of human embryonic development is

A. Blastocoel-gastrocoel-neural crestnotochord

B. gastrocoal-blastocoel-notochord-neural crest

C. gastrocoel-blastocoel-neural crest-

notochord

D. blastocoel-neural crest-gastrocoel-

notochord

Answer: A



Watch Video Solution

150. Onset of menstrual cycle in female anthrapoid primates is

A. Puberty

B. Menarche

- C. Menopause
- D. Menstruation

Answer: B



Watch Video Solution

151. Thick yellow, high protein fluid produced by mammary glands of a woman during first 2-3 days after child birth is

A. Meconium

- B. Hymen
- C. Cumulus oophorus
- D. Colostrum

Answer: D



Watch Video Solution

152. Which hormones is produced in women during pregnancy?

A. human chorionic gonadotropin (hcG)

- B. human placental lactogen (hpL)
- C. Relaxin
- D. All of above

Answer: D



Watch Video Solution

153. Menstrual phase is followed by

A. luteal phase and lasts for about 13 days

follicular phase and lasts for about 13

days

B. follicular phase

C. Fertilization, cleavage, morula, zygote,

blastula, gastrula

D. Implantation

Answer: B



154. Which layer of uterus undergoes cyclic changes during menstrual cycle

- A. Perimetrium
- B. Myometrium
- C. Endometrium
- D. All the above

Answer: C



155. Which type of germ cells contain 23 chromosomes

- A. Spermatogonia
- B. Secondary spermatocytes
- C. Primary spermatocytes
- D. None of the above

Answer: B



156. In human females, menstrual cycle ceases around 50 years of age. It is termed as

- A. Menarche
- B. Diapause
- C. Menopause
- D. None of the above

Answer: C



157. Which hormone is mainly secreted by corpus luteum?

- A. Luteinizing hormone
- B. Estrogen
- C. Follicle stimulating hormone
- D. Progesterone

Answer: D



158. Thei internal cavity commonly formed by ell division prior to gastrulation is the

- A. Enteron
- B. Blastopore
- C. Blastocoel
- D. Coelom

Answer: C



159. Number of autosomes in human primary spermatocyte is

A. 46

B. 44

C. 23

D. 22

Answer: B



160.	Which	of the	followin	g organs	is devoi	id of
glar	nds?					

- A. Uterus
- B. Vagina
- C. Vulva
- D. Oviduct



161. Primary spermatocyte differs from spermatogonium in

- A. Number of chromosomes
- B. size and volume
- C. DNA content
- D. Size of chromosomes

Answer: B



162. In human, cleavage divisions are:

- A. slow and synchronous
- B. Fast and synchronous
- C. Slow and asynchronous
- D. Fast and asynchronous

Answer: C



163. Vertebrate brain differentiates from

A. endoderm

B. mesoderm

C. ectoderm

D. blastoderm

Answer: C



164. Which one is not a placental hormone

A. HCG

B. HPL

C. Progesterone

D. melatonin

Answer: D



165. In human females, the ovarian cycle begains when the:

A. levels of oestrogen reach their maximum

B. hypothalamus stimulates the anterior

pituitary to increase its output of FSH

and LH

C. level of progesterone drops precipitously

D. hypothalamus increases its release of

FSH and LH

Answer: C



Watch Video Solution

166. Sperm of animal species \underline{a} cannot fertilise ovum of species \underline{b} because

A. Fertilizin of A and antifertilizin of B are not compatible

B. antifertilizin of A and fertilizin of B are not compatible

C. fertilizin of A and B are not compatible.

D. antifertilizin of A and B are not compatible

Answer: B



167. In spermatogenesis, reduction division of chromosomes occurs during conversion of

A. spermatogonia to primary spermatocytes

B. primary spermatocytes to secondary spermatocytes

C. secondary spermatcytes to spermatids

D. spermatids to sperms

Answer: B

168. Presence of which of the following hormones in the urine confirms pregnancy?

A. Progesterone

B. oestrogen

C. Human chorionic gonadotropin

D. prolactin

Answer: C



169. What is the correct sequence of sperm formation?

A. Spermatogonia, spermatozoa,

spermatocyte, spermatid

B. spermatogonia, spermatocyte,

spermatid, spermatozoa

C. spermatid, spermatocyte,

spermatogonia, Spermatozoa

D. spermatogonia,

spermatocyte,

spermatozoa, spermatid

Answer: B



Watch Video Solution

170. Which one of the following is not the function of placenta?It:

A. facilitates removal of carbon dioxide and waste material from embryo

- B. Secretes oxytocin during parturition.
- C. Facilitates supply of oxygen and nutrients to embryo.
- D. secretes estrogen.



Watch Video Solution

171. Product of sexual reproduction generally generates

- A. new genetic combination leading to variation
- B. Lage biomass
- C. Longer viability of seeds
- D. Prolonged dormancy

Answer: A



Watch Video Solution

172. Menstrual flow occurs due to lack of:

- A. Oxytocin released from maternal pituitary
- B. Vasopressin
- C. Progesterone
- D. FSH

Answer: C



173. The shared terminal duct of the reproductive and urinary system in the human male is

A. vasa efferentia

B. urethra

C. ureter

D. vas deferens

Answer: B



- **174.** Select the correct option describing gonadotropin activity in a normal pregnant female.
 - A. High level of hCG stimulates the thickening of endometrium
 - B. High level of FSH and LH stimulates the thickening of endometrium
 - C. High level of FSH and LH facilitate implantation of the embryo

D. High level of hCG stimulates the synthesis of estrogen and progesterone

Answer: D



Watch Video Solution

175. Which of these is not and important component of initiation of parturition in humans?

A. Synthesis of prostaglandins

- B. release of oxytocin
- C. release of prolactin
- D. increase in estrogen and progesterone ratio

Answer: C



Watch Video Solution

176. Capacitation refers to changes in the

A. ovum before fertilization

- B. ovum after fertilization
- C. sperm after fertilization
- D. sperm before fertilization

Answer: D



- 177. Hysterectomy is surgical removal of
 - A. prostate gland
 - B. vas-deferens

- C. Mammary glands
- D. Uterus

Answer: D



Watch Video Solution

178. Which of the following cells during gametogenesis is normally diploid?

- A. Spermatid
- B. Spermatogonia

- C. Secondary polar body
- D. Primary polar body



Watch Video Solution

179. A childless couple can be assisted to have a child through a technique called GIFT. The full form of this technique is:-

A. Gamete inseminated fallopian transfer

- B. Gamete intra fallopian transfer
- C. Gamete internal fertilization and transfer
- D. Germ cell internal fallopian transfer



Watch Video Solution

180. Ectopic pregnancies are referred to as

A. pregnancies with genetic abnormality

- B. implantation of embryo at site otherr than uterus
- C. implantation of defective embryo in the uterus
- D. pregnancies terminated dur to hormonal imbalance



181. Which of the following events is not associated with ovulation in human female?

- A. Decrease in estradiol
- B. Full development of graafian follicle
- C. release of secondary oocyte
- D. LH surge

Answer: A



182. Which of the following layers in an antral follicle is acellular?

- A. Granulosa
- B. Theca interna
- C. Stroma
- D. Zona pellucida

Answer: D



183. In human females, moiosis-II is not completed until

- A. puberty
- B. fertilization
- C. uterine implantation
- D. birth

Answer: B



184. Which of the following approaches does not give the defined action of contraceptive?

A. Intra uterine devices-Increase phagocytosis of sperms, suppress sperm motility and fertilizing capacity of sperms

B. Hormonal contraceptives- Prevent-retard entry of sperms, prevent ovulation & fertilization

C. Vasectomy-Prevents spermatogenesis

D. Barrier methods-prevent fertilization

Answer: C



Watch Video Solution

185. Fertilization in humans is practically feasible only if

A. the ovum and sperms are transported simultaneously to ampullary-isthmic junction of the fallopian tube

- B. the ovum and sperms are transported simultaneously to ampullary-isthmic junction of the cervix
- C. the sperms are transported into cervix within 48 hrs of release of ovum in uterus
 - D. the sperms are transported into vagina just after the release of ovum in fallopian tube.

Answer: A

186. Identify the correct statement on 'inhibin'

A. is produced by granulosa cells in ovary

B. Is produced by granulose cells in ovary and inhibits the secretion of LH.

C. Is produced by nurse cells in testes and inhibits the secretion of LH.

D. Inhibits the secretion of H, FSH and prolactin

Answer: A



Watch Video Solution

187. Select the incorrect statement

- A. LH triggers ovulatio in ovary.
- B. LH and FSH decrease gradually during the follicular phase.
- C. LH triggers secretion of androgens from the Leydig cells.

D. FSH stimulates the sertoli cells which help in spermiogenesis

Answer: B



Watch Video Solution

188. Changes in HbRH pulse frequency in females is controlled by circulating levels of

A. Estrogen and inhibin

B. Progesterone only

- C. progesterone and inhibin
- D. Estrogen and progesterone

Answer: D



Watch Video Solution

189. Embryo with more than 16 blastomeres formed due to in vitro ferilization is transferred into

A. Uterus

- B. Fallopian tube
- C. Fimbriae
- D. Cervix

Answer: A



Watch Video Solution

190. Which of the following depicts the correct pathway of transport of sperms?

A. Rete testis \rightarrow Efferent ductules \rightarrow

Epididymis \rightarrow vas deferens.

B. Rete testis \rightarrow Epididymis \rightarrow efferent

ductules \rightarrow vas deferens

C. Rete testis \rightarrow vas deferens \rightarrow efferent

ductules \rightarrow Epididymis

D. Efferent ductules \rightarrow Rete testis \rightarrow Vas

deferens \rightarrow Epididymis

Answer: A



Vatch Video Solution

191. Match column-I with column-II and select the correct option using the codes given below:-

		column – I		Column – II
	1.	Mons pubi	(i)	Embryo formation
	2.	Antrum	(ii)	Sperm
	3	Trophectoderm	(iii)	Female external
				genitalia
2	1	Nebenkern	(iv)	Graafian follicle

A. 1-iii,2-iv,3-ii,4-*i*

B. 1-iii,2-iv,3-*i*,4-ii

C. 1-iii,2-*i*,3-iv,4-ii

D. 1-i,2-iv,3-iii,4-ii

Answer: B



View Text Solution

192. Several hormones like hCG, hPL, estrogen, progesterone are produced by

A. Ovary

B. Placenta

C. Fallopian tube

D. Pituitary

Answer: B



Watch Video Solution

193. Select the correct route for the passage of sperms in male frogs:-

A. Testes ightarrow Bidder's ightarrow canal ightarrow kidney ightarrow

 $\mathsf{vasa} \quad \mathsf{efferentia} \to \mathsf{Urinogenital} \quad \mathsf{duct}$

ightarrow cloaca

B. Testes \rightarrow vasa efferentia \rightarrow kidney \rightarrow seminal vesicle ightarrow urinogenital duct ightarrowcloaca

C. Testes \rightarrow vasa efferentia \rightarrow Bidder's canal \rightarrow ureter \rightarrow cloaca

D. Testes ightarrow vasa efferentia ightarrow kidney ightarrowbidder's canal \rightarrow urinogenital duct \rightarrow cloaca

Answer: D



Watch Video Solution

194. A temporary endocrine gland in the human body is

A. Pineal gland

B. corpus cardiacum

C. Corpus luteum

D. corpus allatum

Answer: C



Watch Video Solution

195. GnRH, a hypothalamic hormone, needed in reproduction, acts on

A. anterior pituitary gland and stimulates secretion of LH an oxytocin.

B. Anterior pituitary gland and stimulates secretion of LH and FSH

C. posterior pituitary gland and stimulates secretion of oxytocin and FSH

D. posterior pituitary gland and stimulates

secretion of LH and relaxin.

Answer: B



Watch Video Solution

196. Capacitation occurs in

A. Rete testis

B. Epididymis

C. Vas deferens

D. Female reproductive tract

Answer: D



Watch Video Solution