

## **BIOLOGY**

## **BOOKS - TRUEMAN BIOLOGY**

## **HUMAN REPRODUCTION**

**Multiple Choice Questions** 

**1.** Which of the following is secondary sex organ?

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



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**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**



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

- A. 1)castration
- B. 2)impotence
- C. 3)paedogenesis
- D. 4)cryptorchidism

#### **Answer: D**



- 4. Mesorchium in frog refers to
  - A. 1)capsule in testis

- B. 2)capsule in ovary
- C. 3)a peritoneal fold that covers testis
- D. 4) none of the above

#### **Answer: C**



- 5. Tunica albuginea is the covering around
  - A. 1)testes
  - B. 2)kidneys

- C. 3)uterus
- D. 4)epididymis

## **Answer: A**



- **6.** Supporting cells found in between the germinal epithelium is called:
- 1. Phagocytes
- 2. Sertoli cells

- 3. Leydig cells
- 4. Granular cells
  - A. Phagocytes
  - B. Sertoli cells
  - C. Leydig cells
  - D. granular cells



**7.** Sertoli cells are found in testis. These cells are

A. nurse cells

B. reproductive cells

C. receptor cells

D. none of these

**Answer: A** 



A. urethra
B. vasa efferentia
C. bidder's canal
D. cauda epididymis
Answer: B
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9. Major part of semen is secreted by:

8. Rete testis opens to

- A. Seminal vesicle
- B. prostate gland
- C. Cowper's gland
- D. bartholin's gland

## **Answer: A**



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

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

#### **Answer: D**



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**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 secretion 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



- **13.** Which one is unpaired gland in male reproductive system?
- 1. Seminal vesicle
- 2. Cowper's gland
- 3. Prostate gland
- 4. Lacrimal gland
  - A. Seminal vesicle
  - B. Cowper's gland
  - C. Prostate gland
  - D. Lacrimal gland

#### **Answer: C**



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**14.** Which of the following sugars in semen is a source of energy for the spermatoza?

- A. sucrose
- B. fructose
- C. glucose
- D. galactose



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**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**



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

- A. 5mm/min
- B. 10 mm/min
- C. 15mm/min
- D. 20 mm/min

#### **Answer: A**



- **17.** Which is the correct sequence of layers in the mammalian egg from outside to inside?
- 1. Zona pellucida, corona radiate, plasma membrane
- 2. Corona radiata, zona pellucida, plasma membrane
- 3. Plasma membrane, zona pellucida, corona

radiata 4. None of the above 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?
- 1. Rectal glands
- 2. inguinal glands
- 3. prostate glands
- 4. Cowper's glands
  - A. Rectal glands
  - B. inguinal glands
  - C. prostate glands

D. Cowper's glands

#### **Answer: D**



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**19.** labium majora of a female mammalis homologous to

A. scrotal sac

B. prostate gland

C. epididymis

D. seminal vesicle

#### **Answer: A**



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**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**



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# 21. Progesterone hormone is active during

- A. follicular phase
- B. secretory phase
- C. menstrual phase
- D. proliferative phase



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**22.** Cessation of menstrual cycle in women is called

- A. menarche
- B. menopause
- C. inpotency
- D. puberty



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**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**



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**25.** Which of the following are haploid in nature?

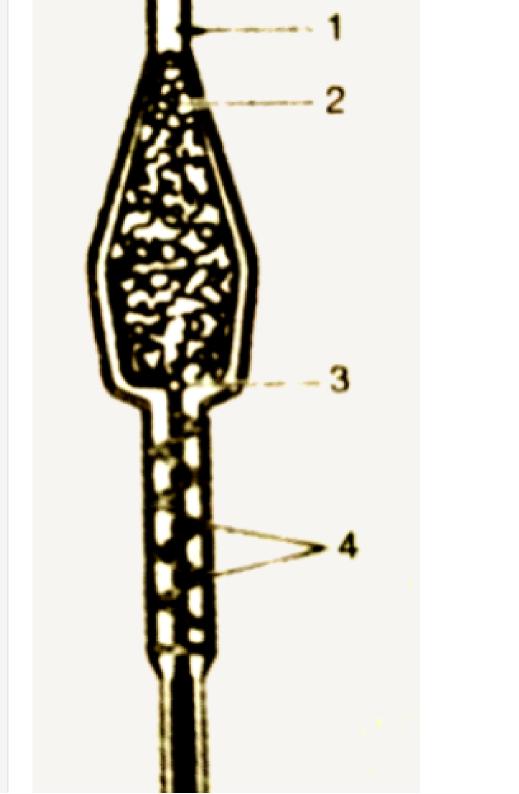
- A. Spermatids
- B. Spermatogonia
- C. Primary spermatocytes
- D. Secondary spermatocytes



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26. In the given diagram identify parts 1-5





# MATURE SPERM

- A. 1-nucleus, 2-tail, 3-mitochondia, 4-acrosome, 5-centriole
- B. 1-acrosome, 2-nucleus, 3-centriole, 4-mitochondria, 5-plasma mambrane
- C. 1-nucleus, 2-mitochondia, 3-plasma membrane, 4-centriole, 5-neck

D. 1-acrosome, 2-centriole, 3-mitochondria,

4-plasma membrane, 5-tail

#### **Answer: B**



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# **27.** 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** 



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**28.** How many centrioles are normally present in a sperm?

A. 1)One

B. 2)Two

C. 3)Many

D. 4)None of these

## **Answer: B**



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**29.** Which organelle is absent in human sperm?

A. 1)ER

B. 2) Nucleus

C. 3)Centriole

D. 4) Mitochondria

#### **Answer: A**



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# **30.** Middle piece of sperm contains

- 1. mitochondria and Golgi body
- 2. centriole and Golgi body
- 3. axial filament and Golgi body
- 4. mitochondria and axial filament

A. mitochondria and golgi body

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

#### **Answer: D**



- **31.** Oogonium is
  - A. haploid
  - B. diploid

- C. triploid
- D. euploid



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**32.** 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

# **Answer: B**



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**33.** In which phase of cell division is oocyte arrested?

A. Interphase

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

# **Answer: B**



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**34.** 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

## **Answer: B**



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**35.** 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**



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**36.** 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



# 37. Cytoplasm of ovum does not contain:

- A. 1)Ribosomes
- B. 2)Mitochondria
- C. 3)Golgi bodies
- D. 4)Centrosomes

#### **Answer: D**



**38.** 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

A. 40-50 eggs

B. 300-350 eggs

C. 400-500 eggs

D. 750-850 eggs

#### **Answer: C**



- 39. Capacitation occurs in
- 1. epididymis
- 2. vas efferens
- 3. vas deferens
- 4. female genital tract
  - A. epididymis
  - B. vas efferens

- C. vas deferens
- D. female genital tract

#### **Answer: D**



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# **40.** Match the following with correct combination

- A hvaluronidase
  - A hyaluronidase

    B corpus luteum
- 1. acrosomal reaction
- morphogenetic movements
- C gastrulation
- Capacitation
- E colostrum
- progesterone
- 4. mammary gland
- 5. sperm activation

i. A-5,B-2,C-4,D-1,E-3

ii. A-1,B-3,C-2,D-5,E-4

iii. A-3,B-2,C-5,D-4,E-1

iv. A-1,B-2,C-3,D-4,E-5

A. A-5,B-2,C-4,D-1,E-3

C. A-3,B-2,C-5,D-4,E-1

B. A-1,B-3,C-2,D-5,E-4

D. A-1,B-2,C-3,D-4,E-5

# **Answer: B**



**41.** 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**



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**42.** What is true about cleavage in fertilized egg in humans?

A. It is meroblastic

B. It is identical to normal mitosis

- C. It starts when the egg reaches uterus
- D. It starts while the egg is in fallopian

# **Answer: D**



- **43.** Cleavage in mammals is:
  - A. Discoidal
  - B. superficial
  - C. equal holoblastic

D. unequal holoblastic

# **Answer: C**



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# **44.** Zona pellucida disintegrates just:

A. just after fertilization

B. before fertilization

C. before cleavage

D. after completion of cleavage

## **Answer: D**



- **45.** 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**



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

A. two months

B. six months

C. four months

D. seven months

# **Answer: A**



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# **47.** 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

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**



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

- A. Ovum
- B. Oogonium
- C. Primary oocyte
- D. Secondary oocyte

**Answer: D** 



**49.** 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**



**50.** 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** 



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**51.** 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**



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

A. 1)7+2

- B. 2)9+2
- C. 3)11+2
- D. 4)13+2

# **Answer: B**



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

A. 1)alecithal

- B. 2)polylecithal
- C. 3)telolecithal
- D. 4)mesolecithal

## **Answer: A**



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**54.** The eggs of some mammals have more yolk. They are

A. eutherians

- B. prototherians
- C. metatherians
- D. aquatic mammals

## **Answer: B**



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**55.** The primary egg membrane of mammalians egg is termed as -

A. Zona pellucida

- B. corona radiata
- C. shell
- D. All of these

## **Answer: A**



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

A. 1)condensation of yolk

- B. 2) formation of pigment coat
- C. 3) development of vitelline membrane
- D. 4) development of cortical reaction

#### **Answer: D**



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

A. apomixis

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

#### **Answer: D**



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**58.** 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



**59.** 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

embryo

- C. the embryo becomes smaller in volume
- D. there is no increase in the volume of the

#### **Answer: D**



- **60.** 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**



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61. 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**



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**62.** 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** 



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**63.** Solid ball like structure formed after completion of cleavage is

A. morula

B. foetus

C. gastrula

D. blastocyst

# **Answer: A**



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**64.** 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**



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**65.** Morphogenetic movements convert hollow spherical blastula into

A. morula

B. gastrula

C. foetus

D. embryonic disc

**Answer: B** 



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**66.** 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**



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**67.** Notochord develops from

A. ectoderm

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

#### **Answer: C**



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**68.** Extra embryonic membrane of the mammals embryo are derived from

A. trophoblast

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



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**69.** Mammalian foetus is directly surrounded by

A. 1) yolk sac cavity

- B. 2) aminiotic cavity
- C. 3) allantoic cavity
- D. 4) primary digestive cavity



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

A. 1)amniotic fluid

- B. 2)baby's accumulated urine
- C. 3)mother's plasma from umbilical cord
- D. 4)baby's plasma form its foetal circulation



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**71.** 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



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**72.** Drugs causing embryo malformations during pregnancy are called

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

#### **Answer: C**



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**73.** 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**



**74.** Choose the incorrect statement from the following

A. In birds and mammals internal fertilisation takes place

B. colostrum contains antibodies and nutrients

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

#### **Answer: C**



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75. 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**



**76.** 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**



**77.** Spermiation is the process of the release of sperms from

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

**Answer: A** 



**78.** 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**



**79.** 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



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**80.** The immature male germ cells undergo division to produce sperms by the process of spermatogenesis. Choose the correct one with reference to above.

A. 1)Spermatogonia have 46 chromosomes and always undergo meiotic cell division

- B. 2)Primary spermatocytes divide by mitotic cell division
- C. 3)Secondary spermatocytes have 23 chromosomes and undergo second meiotic division
- D. 4)Spermatozoa are transformed into spermatids

#### Answer: C



**81.** Match between the following representing parts of the sperms 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

- 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



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# **82.** Match the following and choose the correct options

- A Trophoblast
- (i) Embedding of blastocyst in the endometrium
- **B** Cleavage
- (ii) Group of cells that would differentiate as embryo
- C Inner cell mass (iii) Outer layer of blastocyst attached to
  - the endome-trium
- D Implantation
- (iv) Mitotic division of zygote

- A. A-ii,B-i,C-iii,D-iv
- B. A-iii,B-iv,C-ii,D-*i*
- C. A-i,B-iv,C-ii,D-iii
- D. A-ii,B-iv,C-iii,D-i



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

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



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**84.** 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



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**85.** The cellular cover of the ovum at ovulation is

A. corona radiata

- B. zona radiata
- C. zona pellucida
- D. chorion



- **86.** Identify the odd one from the following.
  - A. Labia minora
  - B. Fimbriae

C. Infundibulum

D. Isthmus

**Answer: A** 



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**87.** 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. 1)+ 
$$\pm$$
 + +

B. 2) 
$$- + + +$$

C. 3)
$$-\pm\pm$$

D. 4)+ 
$$\pm$$
 - -



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# 88. 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** 

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

A. 1)Sperms are non-nucleate

B. 2)spermatogenesis does not occur

C. 3)Semen is without sperms

D. 4)Sperms are nonmotile

**Answer: C** 



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# **90.** 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. A)i,ii and iii
- B. B)i, iii and iv
- C. C)ii, iii and iv
- D. D)all are correct

## **Answer: B**



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**91.** identify X and Y in the diagram related to human reproductive system. Choose the correct option:-



A. X-Seminal vesicle Y-Epididymis

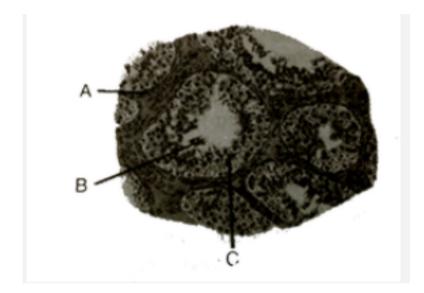
- B. X-prostate Y-seminal
- C. X-prostate Y-vasdeferens
- D. X-Bulbourethral gland Y-Seminal vesicle



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**92.** Three cells are labelled A,B and C. select the option which correctly tells the cells which

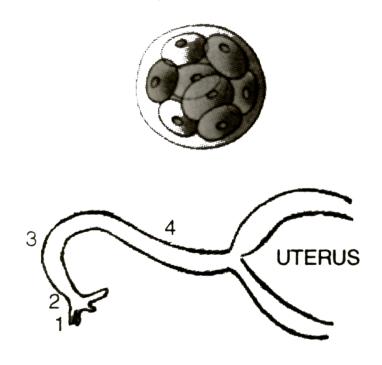
produce androgen.



- A. Only A
- B. Only B
- C. A and C
- D. All three

**Answer: A** 

**93.** Given is the stage of a growing embryo and different regions of the fallopian tube marked 1,2,3,4. Name the parts





**94.** Find the incorrect 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**



- **95.** Trace a sperm cell 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**



**96.** 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**



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97. Tick the correct statement

A. 1)Proximal and distal centrioles in the middle piece of sperm help anchor the

flagellum

B. 2)whereas proximal centrioleis non functional, distal centriole acts as basal body for the flagellum of sperm

- C. 3)The functions of proximal and distal centrioles are not known
- D. 4)Proximal centriole forms the spindle fibres during cleavage an the distal centriole anchors the flagellum of sperm

# Answer: D

**98.** The intra-testicular genital duct system does not involve

A. Rete testis

B. Ductuli efference

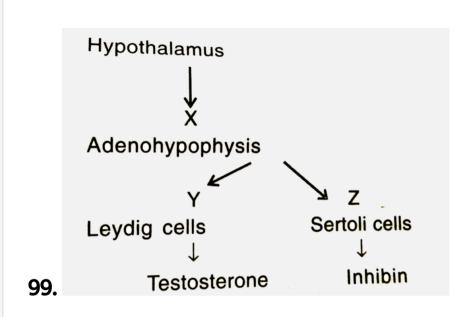
C. Tubuli recti

D. Ductus deference

Answer: D



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In the above diagram identify X, Y and Z with the sequence of number of appropriate hormones given below:-

- (i) progesteron
- (ii) LH
- (iii). HCG

(iv). Estradiol (v). FSH (vi). GnRH A. (iii), (iv), (ii) B. (vi), (ii), (v) C. (i),(iv), (vi) D. (vi), (v), (ii) **Answer: B Watch Video Solution**  **100.** Which of the following hormones is not secreted by human placenta?

- A. 1)hCG
- B. 2)Estrogen
- C. 3)Progesterone
- D. 4)LH

**Answer: D** 



**101.** 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**



- 102. 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** 



- **103.** Go through the following statements:-
- (i). Primary spermatocytes undergo mitotic divisions to produce secondary spermatocytes
- (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 coitus
- which of these are correct?

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

## **Answer: D**



- **104.** 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

A. (ii) & (iii)

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

Which of these are correct?

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

D. All are correct

#### **Answer: D**



- 105. 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 gonadotropins.
- (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 whereas a small dose 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**



- 106. 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)

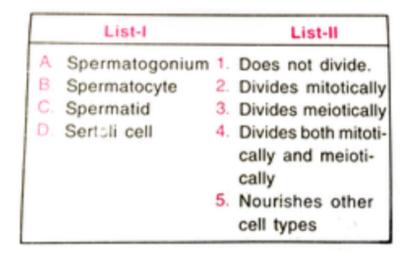
C. (i), (ii) & (iv)

D. All are correct

**Answer: B** 

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**107.** Match list-I (cell type) with list-II (characteristic) and select the correct answer using the codes given below the lists



A. A-5,B-3,C-1,D-4

B. A-1,B-3,C-4,D-5

- C. A-3,B-2,C-4,D-1
- D. A-2,B-3,C-1,D-5

## **Answer: D**



- 108. 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**



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**109.** 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** 



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**110.** 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

**111.** 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

**112.** 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 implantation: 11-18 days
- D. Rise in progesterone level: 1-15 days

## **Answer: B**



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**113.** Which of the following has the longest gestation period:-

- A. Man
- B. Cat
- C. Dog
- D. Elephant

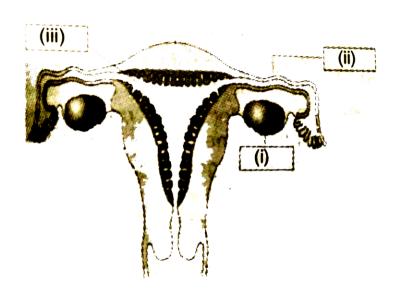
#### **Answer: D**



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114. 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.
  - (ii) 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.

(iii) Uterus-Fertilisation, blastocyst

formation

# **Answer: A**



115. 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**



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## 116. Find the odd one out

A. HIV

B. Trichomoniasis

C. Gonorrhoea

D. typhoid

**Answer: D** 

**117.** 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**



**118.** 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**



**119.** 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** 

120. 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** 



**121.** In the human female, menstruation can be deferred by the administration of :-

A. combination of FSH and LH

B. combination of estrogen and progesterone

C. FSH only

D. LH only

**Answer: B** 

**122.** 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

**123.** 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

**124.** 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

**125.** Which 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**



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126. 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**



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

phase and increased secretion of progesterone.

A. Development of corpus luteum-secretory

- 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** 



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

A. Spermatid-spermatocyte-

spermotogonia-sperms

B. Spermatogonia-spermatid-spermatocytesperms

C. spermatocyte-spermatogonia-spermatidsperms

D. Spermatogonia-spermatocyte-spermatidsperms

Answer: D



**129.** 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**



**130.** 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

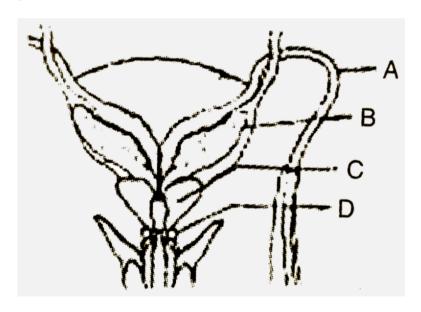
B. Retention of well-developed corpus

C. Fertilisation of the ovum

D. Maintainance of the hyper trophical endometrial lining

# Answer: C

**131.** Given below is a diagrammatic sketch of a portion ofhuman male reproductive system. Select the correct set of the names of the parts labelled A,B,C,D:-



A. A-Vasdeferens. B-Seminal vasicle. C-

Bulbourethrall gland, D-Prostate

B. A, Ureter, B-Seminal vesicle, C-Prostate, D-

Bulbourethral gland

C. A-Ureter, B-Prostate, C-Seminal vesicle, D-

Bulbourethral gland.

D. A-Vasdeferens, B-Seiminal vesicle, C-

prostate, D-Bulbourethral gland

### **Answer: D**



**132.** 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** 



133. 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** 

**134.** Vasa efferentia are the ductules leading from:

A. epididymis to urethra

B. testicular lobules to rete testis

C. rete testis to vas deferens

D. vas deferens to epididymis

**Answer: C** 



**135.** 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** 

136. 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

D. Acrosome serves as a sensory structure

leading the sperm towards ovum

#### **Answer: C**



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### 137. 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**



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

A. ampulla

B. isthmus

C. infundibulum

D. cervix

**Answer: C** 



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**139.** 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



- **140.** 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**



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**141.** 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**



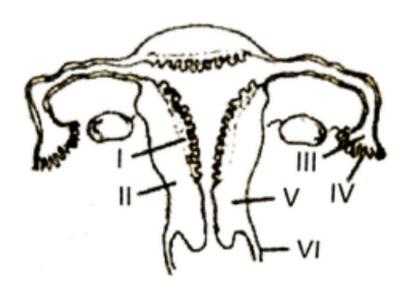
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**142.** The testes in humans are situated outside the scrotum. The pupose served is for

- 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

**143.** The figure given below depists a diagramatic sectional view of the female reproduction system f humans. Which one set of three parts out of I-VI have been correctly identified?



A. (II) Endometrium, (III) Infundibulum, (IV) fimbriae

B. (III) infundibulum, (IV) fimbriae, (V) cervix

C. (IV) oviducal funnel, (V) uterus, (VI) cervix

D. (I) perimetrium, (II) Myometrium, (III)

Fallopian

### Answer: B



**144.** 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**



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**145.** 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**



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# **146.** 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**



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**147.** 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** 



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**148.** 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**



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

- A. 1)Estrogen from placenta
- B. 2)oxytocin from maternal pituitary
- C. 3)oxytocin from foetal pituitary
- D. 4)Relaxin from placenta

#### **Answer: B**



**150.** 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**



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**151.** 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

**152.** 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

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

A. luteal 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**



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**154.** Identify the human development stage shown below as well as the related right place of its occurrence in a normal pregnant woman,

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. Developmentalstage-8celled morula, Site of occurrenceStarting point of fallopian tube
- C. Developmental stage-Late morulaSite of occurrenceMiddle part of Fallopian tube
- D. Developmental stage-Blastula, Site of occurreneEnd part of fallopian tube

#### Answer: A



# **155.** 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**



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

## **Answer: B**



**157.** 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** 



158. A temporary endocrine gland in humans is

A. Islets of langerhans

B. Pineal body

C. Corpus luteum

D. corpora allata

**Answer: C** 



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159. Braxton Hicks contraction occur during

A. passage of food through alimentary canal

B. peristaltic movements

C. pregnancy

D. lactation

**Answer: C** 



**160.** 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** 



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161. Onset of menstrual cycle in female anthrapoid primates is

A. Puberty

B. Menarche

- C. Menopause
- D. Menstruation

**Answer: B** 



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**162.** 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**



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**163.** Which hormones is produced in women during pregnancy?

A. 1)human chorionic gonadotropin (hcG)

- B. 2)human placental lactogen (hpL)
- C. 3)Relaxin
- D. 4)All of above

#### **Answer: D**



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# **164.** Menstrual phase is followed by

A. 1)luteal phase and lasts for about 13

days follicular phase and lasts for about

13 days

B. 2)follicular phase

C. 3) Fertilization, cleavage, morula, zygote,

blastula, gastrula

D. 4)Implantation

## Answer: B



**165.** Which layer of uterus undergoes cyclic changes during menstrual cycle

- A. 1)Perimetrium
- B. 2)Myometrium
- C. 3)Endometrium
- D. 4)All the above

**Answer: C** 



**166.** Which type of germ cells contain 23 chromosomes

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

**Answer: B** 



**167.** 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** 



**168.** Which hormone is mainly secreted by corpus luteum?

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

## **Answer: D**



**169.** The internal cavity commonly formed by cell division prior to gastrulation is the

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

**Answer: C** 



**170.** Number of autosomes in human primary spermatocyte is

- A. 46
- B. 44
- C. 23
- D. 22

**Answer: B** 



**171.** Which of the following organs is devoid of glands?

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

**Answer: B** 



**172.** Primary spermatocyte differs from spermatogonium in

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

## **Answer: B**



173. In human, cleavage divisions are:

A. slow and synchronous

B. Fast and synchronous

C. Slow and asynchronous

D. Fast and asynchronous

#### **Answer: C**



## 174. Vertebrate brain differentiates from

- A. 1)endoderm
- B. 2)mesoderm
- C. 3)ectoderm
- D. 4)blastoderm

#### **Answer: C**



# 175. Which one is not a placental hormone

A. HCG

B. HPL

C. Progesterone

D. melatonin

#### **Answer: D**



**176.** In human females, the ovarian cycle begins 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** 



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**177.** Sperm of animal species  $\underline{a}$  cannot fertilise ovum of species  $\underline{b}$  because

A. 1)Fertilizin of A and antifertilizin of B are not compatible

B. 2)antifertilizin of A and fertilizin of B are not compatible

C. 3) fertilizin of A and B are not compatible.

D. 4)antifertilizin of A and B are not compatible

## Answer: B



**178.** 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** 



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

A. Progesterone

B. oestrogen

C. Human chorionic gonadotropin

D. prolactin

### **Answer: C**



**180.** What is the correct sequence of sperm formation?

A. 1)Spermatogonia, spermatozoa, spermatocyte, spermatid

B. 2)spermatogonia, spermatocyte,

spermatid, spermatozoa

C. 3)spermatid, spermatocyte,

spermatogonia, Spermatozoa

D. 4)spermatogonia, spermatocyte,

spermatozoa, spermatid

**Answer: B** 



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

A. 1)facilitates removal of carbon dioxide and waste material from embryo

- B. 2) Secretes oxytocin during parturition.
- C. 3)Facilitates supply of oxygen and nutrients to embryo.
- D. 4) secretes estrogen.

### **Answer: B**



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**182.** 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** 



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183. Menstrual flow occurs due to lack of:

- A. Oxytocin
- B. Vasopressin
- C. Progesterone
- D. FSH

## **Answer: C**



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

- A. 1) vasa efferentia
- B. 2)urethra
- C. 3)ureter
- D. 4)vas deferens

## **Answer: B**



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**185.** Select the correct option describing gonadotropin activity in 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**



**186.** Which of these is not an 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**



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# 187. Capacitation refers to changes in the

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

#### **Answer: D**

**188.** Hysterectomy is surgical removal of

A. prostate gland

B. vas-deferens

C. Mammary glands

D. Uterus

**Answer: D** 



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

- A. Spermatid
- B. Spermatogonia
- C. Secondary polar body
- D. Primary polar body

### **Answer: B**



**190.** 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

### **Answer: B**



191. Ectopic pregnancies are referred to as

A. pregnancies with genetic abnormality

B. implantation of embryo at site other than uterus

C. implantation of defective embryo in the uterus

D. pregnancies terminated due to hormonal imbalance

### **Answer: B**



- **192.** 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**



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

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

#### **Answer: D**



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**194.** In human females, meiosis-II is not completed until

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

### **Answer: B**



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**195.** 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** 



**196.** 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



197. 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 FSH.

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** 

198. Select the incorrect statement

A. 1)LH triggers ovulation in ovary.

B. 2)LH and FSH decrease gradually during the follicular phase.

C. 3)LH triggers secretion of androgens from the Leydig cells.

D. 4)FSH stimulates the sertoli cells which help in spermiogenesis

### **Answer: B**



- **199.** Changes in GnRH 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**



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

- A. 1)Uterus
- B. 2)Fallopian tube
- C. 3)Fimbriae
- D. 4)Cervix

### **Answer: A**



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**201.** Which of the following depicts the correct pathway of transport of sperms?

A. Rete testis ightarrow Efferent ductules ightarrow

Epididymis  $\rightarrow$  vas deferens.

B. Rete  $testis \rightarrow Epididymis \rightarrow efferent$ 

ductules  $\rightarrow$  vas deferens

C. Rete testis ightarrow vas deferens ightarrow efferent ductules ightarrow Epididymis

D. Efferent ductules ightarrow Rete testis ightarrow Vas deferens ightarrow Epididymis

### **Answer: A**



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**202.** Match column-I with column-II and select the correct option using the codes given

below:-

4

Mons pubi
Antrum
Trophectoderm
(ii) Embryo formation
(iii) Sperm
(iii) Female external
genitalia
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** 

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

- A. 1)Ovary
- B. 2)Placenta
- C. 3)Fallopian tube
- D. 4)Pituitary

### **Answer: B**



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

A. Testes 
$$ightarrow$$
 Bidder's  $ightarrow$  canal  $ightarrow$  kidney  $ightarrow$  vasa efferentia  $ightarrow$  Urinogenital duct

 $\rightarrow$  cloaca

B. Testes 
$$ightarrow$$
 vasa efferentia  $ightarrow$  kidney  $ightarrow$  seminal vesicle  $ightarrow$  urinogenital duct  $ightarrow$  cloaca

C. Testes ightarrow vasa efferentia ightarrow Bidder's

 $\mathsf{canal} o \mathsf{ureter} o \mathsf{cloaca}$ 

D. Testes ightarrow vasa  $\,$  efferentia ightarrow kidney ightarrow

bidder's canal o urinogenital duct o

cloaca

### Answer: D



**205.** A temporary endocrine gland in the human body is

- A. Pineal gland
- B. corpus cardiacum
- C. Corpus luteum
- D. corpus allatum

**Answer: C** 



**206.** 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**



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## 207. Capacitation occurs in

A. Rete testis

B. Epididymis

C. Vas deferens

D. Female reproductive tract

**Answer: D** 

