1.

Seminal plasma secreted by male accessory glands is rich in

1. Fructose
2. Calcium
3. Certain enzymes
4. All of these

2.

After spermiogenesis and before spermiation which part of the sperm is attached with sertoli cells?

1. Head
2. Neck
3. Tail
4. Middle piece

3.

Lack of menstruation (amenorrhoea) may be indicative of

1. Pregnancy
2. Stress and poor health
3. Lactation
4. All of these

4.

First movement of foetus and appearance of hair on the head are usually observed during the

1. First trimester
2. Fifth month
3. First month
4. 26-28 weeks

5.

Mark the correct statement

1. The cycle of events starting from one menstruation till the next one is menarche
2. Primary oocyte within the secondary follicle grows in size and complete its first meiotic division
3. Secondary oocyte froms a new membrane called zona pellucida surrounding it
4. Secondary follicle is characterised by a fluid filled cavity called antrum

6.

Which of the following statements are true w.r.t. polar body?

1. Non functional by-products of oogenesis
2. First polar body is formed during the reductional division of the primary oocyte
3. Second polar body is formed during unequal division of the secondary oocyte
4. All of these

7.

Which of the following statement is incorrect about menstrual cycle?

1. From day 1, the anterior lobe of pituitary secretes FSH (Follicle Stimulating Hormone) it rapidly begins to rise
2. Around day 14, the middle of the cycle, the high level of estrogen exerts a powerful positive feedback effect on the hypothalamus pituitary axis
3. The ovum travels into the fallopian tube during luteal phase
4. Normally about 30-50 ml of blood is lost in one cycle and menstrual blood does not clot

8.

Which of the following structure in male reproductive system acts as a link between rete testis and epididymis?

1. Vas deferens
2. Vasa efferentia
3. Epididymis
4. Inguinal canal

9.

In human male, sperm is formed in which of the following structure?

1. Rete testes
2. Prostate gland
3. Seminiferous tubules
4. Germinal epithelial cells and Sertoli cells

10.

The difference of temperature of scrotum and abdominal cavlty in human is about

1. $0.2 - 0.3^{\circ}C$
2. $2.0 - 2.5^{\circ}C$
3. $0.3 - 0.5^{\circ}C$
4. Less than $1^{\circ}C$

11.

Which of the following can store sperm temporarily in human?

1. Testis
2. Epididymis
3. Spermatheca
4. Fallopian tube

12.

Reproductive structures in human can be divided into categories - primary and secondary sex organs. Which of the following are not primary sex organs?

i. Mammary gland

ii. Testis

iii. Ovary

iv. Uterus

1. i & II
2. i & iv
3. ii & iii
4. ii & iv

13.

Which layer of uterus undergoes thickening under the influence of progesterone?

1. Perimetrium
2. Endometrium
3. Myometrium
4. Peritoneum

14.

During spermatogenesis the first haploid stage is

1. Spermatids
2. Secondary spermatocytes
3. Primary spermatocytes
4. Spermatogonia

15.

The immature female germ cell undergoes division to produce ova by oogenesis. Choose the correct one with reference to above

1. Oogonia have 46 chromosomes and always undergo meiotic cell division

2. Primary oocytes are stuck at metaphase I before puberty

3. Secondary oocytes have 23 chromosomes and undergo second meiotic division to produce haploid ootids

4. Polar bodies receive equal amount of chromosomal and cytoplasmic content during meiosis

16.

Menstruation is triggred by an abrupt decline in the amount of a hormone secreted by

1. Pituitary gland

2. Primary follicle

3. Corpus luteum

4. All of these

17.

The first sign of growing foetus may be noticed by listening to the heart sound carefully through the stethoscope after

1. Fertilisation

2. Implantation of blastocyst

3. First month of pregnancy

4. After fifth month of pregnancy

18.

Which of the following statements is incorrect?

1. Oogenesis is initiated during the embryonic development stage

2. Tertiary follicle is characterized by a fluid filled cavity called antrum

3. Neck-piece of sperm is filled with enzymes that help in fertilisation of the ovum

4. Secondary oocyte retains bulk of the nutrient rich cytoplasm of the primary oocyte

19.

Which of the following structures helps in collection of ovum after ovulation?

1. Internal os

2. Fimbriae

3. Ampulla

4. Isthmus

20.

The final release of the sperms from the seminiferous tubules is known as

1. Spermiation

2. Spermiogenesis

3. Spermateleosis

4. Spermatogenesis

21.

Which of the following structures are involved in the formation of birth canal in females?

1. Ampulla part of oviducts

2. Cervical canal

3. Vagina

4. Both (2) & (3)

22.

Which of the following statements is not true w.r.t. mammary glands?

1. Contain glandular tissue and variable amount of fat tissues

2. Contain 15-20 mammary lobes containing clusters of cells called alveoli where cells of alveoli secrete milk

3. Several mammary ampullae combine to form mammary duct which is connected to the lactiferous duct

4. milk is sucked out through the lactiferous duct

23.

In a normal female, menstruation occurs if the released ovum is not fertilised. Lack of menstruation can be due to

A. Absence of pregnancy

B. Excessive stress

C. Poor health

1. Only A

2. Both B & C

3. Both A & B

4. A,B & C

24.

Which of the following is the largest/widest part of the fallopian tubes?

1. Infundibulum

2. Ampulla

3. Isthmus

4. Uterine part

25.

Which of the following statements is incorrect?

1. Sperms released from the seminiferous tubules are transported to outside by the accessory ducts

2. Increased levels of GnRH act at the anterior pituitary gland and stimulate secretion of LH and FSH

3. Endometrium exhibits strong contractions during delivery of the foetus

4. The reproductive activity cycle in the female primates is called menstrual cycle

26.

Seminal plasma consists of the secretions of

1. Seminal vesicles

2. Prostate glands

3. Bulbourethral glands

4. All of these

27.

Each testis in humans is covered by a dense connective tissue covering and has about _____ compartments

1. 2

2. 25

3. 250

4. 500

28.

Levels of which of the following hormones increase during pregnancy in a female?

1. Cortisol

2. Thyroxine

3. Estrogen

4. All of these

29.

A tertiary follicle is characterised by all the following, except

1. Antrum
2. Secondary oocyte
3. Two polar bodies
4. Theca interna and theca externa

30.

The target of FSH in males is

1. Granulosa cells
2. Sertoli cells
3. Interstitial cells
4. Both (1) & (2)

31.

Which of the following is a common feature between human sperm and ovum?

1. Same number of mitochondria
2. Presence of zona pellucida outer to plasma membrane
3. 23 chromosomes
4. Self motility

32.

Which of the following event indicates the completion of the meiotic division of the secondary oocyte?

1. The contact of the sperm with the ovum
2. The secretion of the acrosome which help the sperm to enter the cytoplasm of the ovum through zona pellucida and plasma membrane
3. Transport of sperms to ampullary isthmic junction
4. The release of ovum from the ovary

33.

Which of the following hormones are secreted by placenta?

A. Human chorionic gonadotropin

B. Chorionic thyrotropin

C. Estrogen

D. Progesterone

1. A only
2. A & B
3. A,B & C
4. A, B, C & D

34.

Mark the incorrect statement regarding the 23^{rd} day of a 28 day menstrual cycle

1. High plasma estrogen level
2. Low plasma FSH and LH level
3. High plasma progesterone level
4. Spasm of spiral arteries of endometrium

35.

Match the following of the sperm and their functions

Column l	Column ll
a. Head	(i) Hyaluronidase
b. Middle piece	(ii) Energy
c. Acrosome	(iii) First cleavage division
d. Proximal centriole	(iv) Genetic material
	(v) Maintains axial filament

1. a(iii),b(iv),c(v),d(i)
2. a(iv),b(ii),c(i),d(iii)
3. a(iv),b(ii),c(i),d(v)
4. a(ii),b(iv),c(iii),d(v)

36.

During a coitus, the volume of semen in an ejaculate is —with a sperm count of —

1. 200 ml, 60000 sperms

2. 2.5 -5 ml, 200-300 million sperms

3. 7.5 ml, 1 lakh sperms

4. 60 ml, 72 million sperms

37.

Which of the following cells completes the first meiotic division leading to formation of two equal haploid cellls?

1.Spermatogonium

2.Primary spermatocyte

3.Secondary spermatocyte

4.Spermatid

38.

Which of the following is the incorrect match of the major feature of embryonic development w.r.t. the time period of pregnancy?

Month Feature of embryonic development

1. First month : Embryo's heart is formed

2. Start of Second month : Heartbeat of the foetus can be detected

3. Fifth month : The first movements of the foetus can be felt by the mother

and appearance of delicate hair on the body

4. Seventh month : Eyelids separate and testes begin to descend towards scrotum

39.

Extrusion of second polar body from egg nucleus occurs

1. After entry of sperm nucleus but before completion of fertilization

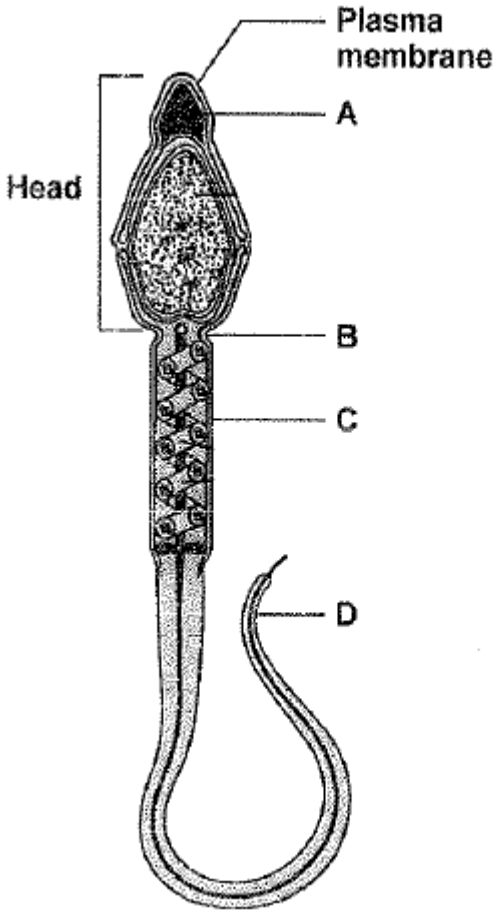
2. After completion of fertilization

3. Before entry of sperm

4. Due to attachment of sperm membrane with ovum

40.

Following diagram represent electron microscopic structure of a sperm with the parts labelled as A, B, C and D



Mark the option which represents a set of correctly labelled matches

(1) A - Acrosome filled with enzymes that help in fertilsation of ovum

B - Neck with two centrioles, proximal centriole forms flagella of tail

(2) B - Neck with two centrioles, proximal centriole helps in the first cleavage of the fertilised ovum

C - Middle priece,made up to numerous mitochondrial which prroduce energy for the movement of the tail to facilitate sperm motility, essential for fertillisation

(3) A - Nucleus containing chromosomal material

D - Tail

(4) C - Nucleus containing chromosomal material

D - Tail

41.

At what stage does the primary oocyte grow in size and complete its first meiotic division?

1. primary follicle

2. Secondary follicle

3. Tertiary follicle

4. Primordial follicle

42.

Which of the following options consists of the set of diploid cells w.r.t. spermatogenesis ?

1. Spermatids and spermatogonia

2. spermatogonia and primary spermatocytes

3. primary spermatocytes and secondary spermatocytes

4. secondary spermatocytes and Spermatids

43.

Which of the following is correct w.r.t. Leydig cells?

1. lmmunologically competent cells

2. Nutritive cells

3. Germinal cells

4. Hormone secreting cells

44.

Which of the following receives both reproductive and excretory secretions in man?

1.Ureter

2. Urethra

3. Both (1) & (2)

4. Seminal vesicle

45.

Select the option which is not an absolute requirement for a normal human fertile male?

1. Ejaculation of 200-300 million sperms during a coitus

2. At least 60% sperms must have normal shape and size

3. At least 80% of them must show vigorous motility

4. Lower temperture for spermatogenesis (2 to 2.5˚C lower than internal body temperture)

46.

Which of the following is not found/occur in a fertile human female after puberty?

1. Secondary oocyte

2. Secondary polar body

3. Addition of oogonia

4. First polar body

47.

Which of the following hormones is found in women in non-pregnant conditions also?

1. hCG

2. hPL

3. placental Lactogen

4. Oxytocin

48.

All the following statements are correct about the embryonic development, except

(1) Cleavage divisions do not bring about any appreciable increase in the amount the amount of protoplasm

(2) Cleavage is influenced by the quantity and the pattern of the distribution of the yolk in the cell

(3) The trophoblast layer gets attached to the endometrium and the inner cell mass gets differentiated as the embryo

(4) The first movements of the foetus and the appearance of hair on the head are usually observed by the end of 12 weeks

49.

The process of childbirth is called __A___ which is induced by a complex neuroendocrine mechanism involving hormones __B__ , __C__ and __D__.

select the option that fills the blanks suitably.

1. A - Parturition B - Estrogen
   C - Progesterone D - Prolactin
2. A - Gestation B - Rolaxin
   C - progesterone D - Oxytocin
3. A - Parturition B - Cortisol
   C - Estrogen D - Oxytocin
4. A - Gestation B - HCG
   C - Estrogen D - Oxytocin

50.

At which of the following stage is the first meiotic division completed in the ovarian follicle?

1. Primary follicle

2. Secondary follicle

3. Tertiary follicle

4. Graafian follicle

Fill OMR Sheet*

*If above link doesn't work, please go to test link from where you got the pdf and fill OMR from there