HUMAN REPRODUCTION

Each question carry one score

1. The testes are situated outside the abdominal cavity within a pouch called **……**
2. ……..is the Pouch outside the abdominal cavity in which testis is placed.
3. …….. helps in maintaining the low temperature of the testes (2–2.5º C lower than the normal internal body temperature) necessary for spermatogenesis
4. Male germ cells, which lines the seminiferous tubule of testis is called……..
5. Name the two types of cells, which line inside the seminiferous tubule?
6. What is the significance of Extra abdominal testis in human?
7. Note the relationship between first two terms and filll the blank
   a)Progesteron : Corpus luteum
   HCG : .....
   b)Testis : Sperms
   …….. ……. : Eggs
   c)Testis : Male
   ……. : Female
   d) FSH : Sertoli cells: Spermiogenesis
   LH :Leydigcells :……
8. Funnel shaped part of oviduct is called
   a)Ampulla b)Isthmus
   c)Infundiulam d)Fimbriae
9. The external Opening of Urethra is called…….
10. Cervical canal along with vagina forms……canal
11. Which type of muscle is present in middle layer of uterus
    a)Skeletal muscle b)Smooth Muscle
    c)Cardiac Muscle d)No muscle
12. The middle layer of uterus is called……
13. How many sperms are produced from a 200 primary spermatocyte ?
14. Which of the following cells undergo meiotic division to produce sperms
    a)Sertoli cells b)Ley dig cells
    c)Oogonia d)Spermatogonia
15. The part of oviduct close to the ovary is called……..
    a)Ampulla b)Isthmus
    c)Infundiulam d)Fimbriae
16. Which hormone is essential for maintaining the endometrium ?
    a)Estrogen b)Progesterone
    c)Androge d)LH
17. Sudden fall in the level of progesterone/Degeneration of corpus luteum in a female results……..
18. Uterus is supported by……..attached to pelvic wall
    a)Tendon b)Bone c)Ligaments d)Ovary
19. Which of the following cells undergo meiotic division
    a)Zygote b)Secondary spermatocyte
    c)Primary spermatocyte
    d)Secondary Oocyte
20. The milk produced during the initial few days of lactation is called……..
21. How many eggs are produced from a single secondary oocyte ?
22. Choose the odd one from the following and write common features of others.
    a)Estrogen b)Androgen
    c)Relaxin d)Progesterone
23. Feeding.....in the first few days is essential for preventing infection in a newly born baby
24. Name the cells in testis which synthesize and secrete androgens?
25. The embryo with 8 to 16 blastomeres is called a……
    a)Sperm b)Oogonia
    c)Morula d)Blastocyst
26. Inverted pear is the shape of……
27. Which of the following is not an Ovarian Hormone ?
    a)Androgen b)Estrogen
    b)Progesterone d)Relaxin

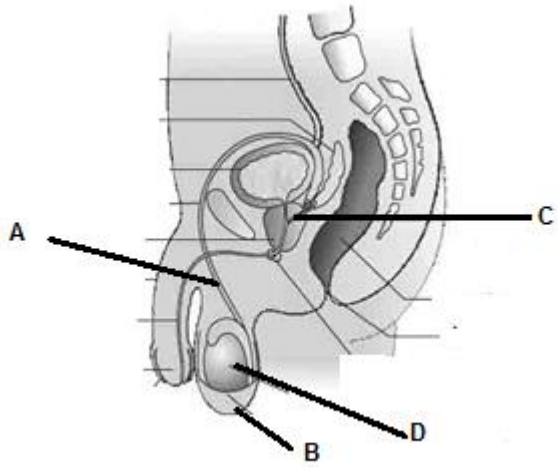
28. Where does fertilization in Human taking place ?
29. Name the loose pouch of skin which suspended testis outside the abdominal cavity?
30. Which hormones are called gonadotropins hormones?
    a)FSH and LH
    b)Estrogen and Progesterone
    c)Androgen and Estrogen
    d)GnRH and FSH
31. Human female possess 44+XX chromosome number. The chromosome number of secondary oocyte is
    a)44+XX b)22+X c)44+XX d)22+XX
32. Which of the following ducts store and transport the sperms from the testis to the outside through urethra.
    a)Vas deferens b)Rete testis
    c)Ejaculatory Duct d)Ureter

Each question carry two score

33. Why Testes is placed in scrotal sac?
34. Which cells provide nutrition to the male germ cells?
35. Match the following

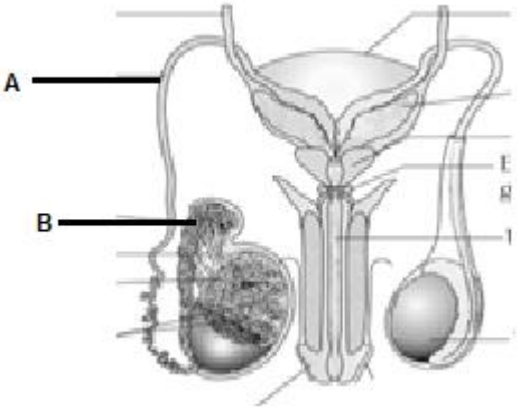
Column A	Column B
Perimetrium	Middle thick layer
Myometrium	Thin outer layer of uterus
Endometrium	Fimbriae
finger-like projections of oviduct	Inner glandular layer

36. Write the functions of the following organs/parts
    a)Testis
    b)Fimbriae of oviduct
    c)Cilated epithelium lining oviduct
    d)Myometrium of uterus
37. Name the layer of uters
    a)……layer undergoes cyclical changes during menstrual cycle
    b)……exhibits strong contraction during delivery of the baby
38. Figure shown below is the male reproductive system



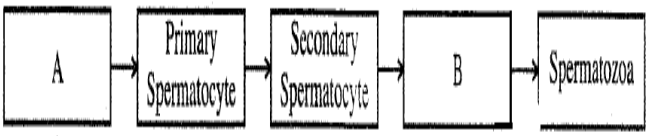
    a)Name the part A and C
    b)Mention the function of B and D

39. Diagrammatic view of male reproductive system is given below



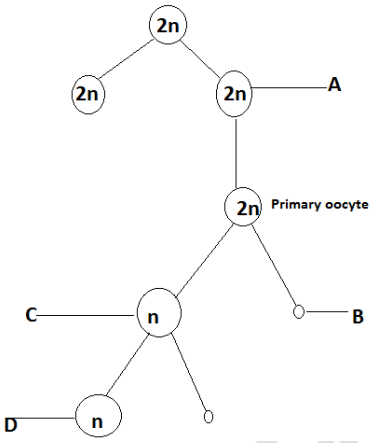
    a)Label A and B
    b)Chromosome number of sperm is…….
40. A student conceived the layers of uterus as follows If you find any mistake in the underlined part, correct them with appropriate words
    a)The **Middle thin** membranous perimetrium,
    ii)middle thick layer of smooth muscle, **Perimetrium**
    iii)inner glandular layer called **endometrium**
    iv)The **Perimetrium** undergoes cyclical changes during menstrual cycle
    v)the **Myometrium** exhibits strong contraction during delivery of the baby.

41. The presence or absence of hymen is not a reliable indicator of virginity or sexual experience, Evaluate this statement ?
42. Write any 4 difference between spermatogenesis and oogenesis ?
43. Complete the flow chart showing spermatogenesis by filling A and B and answer the question



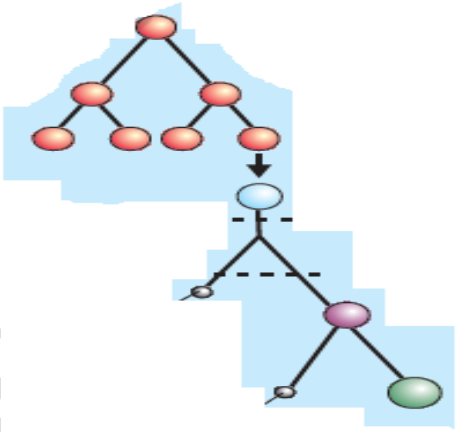
a)what is the chromosome number of primary spermatocyte?
b)what is the significance of reduction division in spermatognenesis

44. Observe the diagram provided and identify the process:

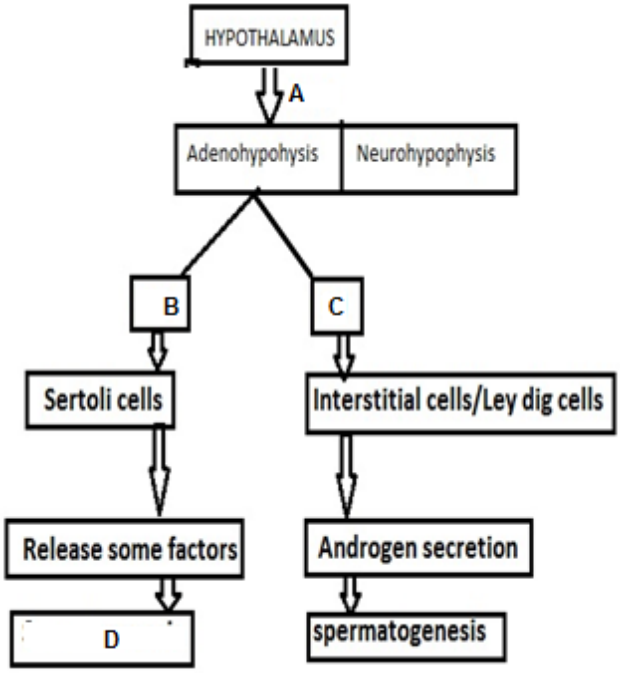


a)Label; A,B,C and D
b)Why the gametes produced are haploid even though the gamete mother cells are diploid?

45. Write the role of FSH and LH in spermatogenesis ?
46. The following statements compare the process of Oogenesis and spermatogenesis. Which one is not true
a)Production of ovum ceases at certain age, but sperm production continues even in old men
b)Oogenesis begins in the embryonic stages, but spermatogenesis starts at the oneset of puberty.
c)Meiotic arrest occurs both in Oogenesis and spermatogenesis.
d)Polar bodies are formed in Oogenesis
47. The diagram represents a process of gametogenesis. Closely observe it and answer the following
a)Is it spermatogenesis or Oogenesis?
b)What does smaller shaded circle represent?
c)Write down two significance of production of same?

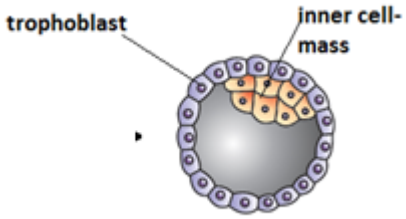


48. Write the difference between
a)Spermiation and Spermiogenesis
b)Spermatogenesis and Oogenesis
49. Hormonal regulation of spermatogenesis in male is represented in flow chart as below.

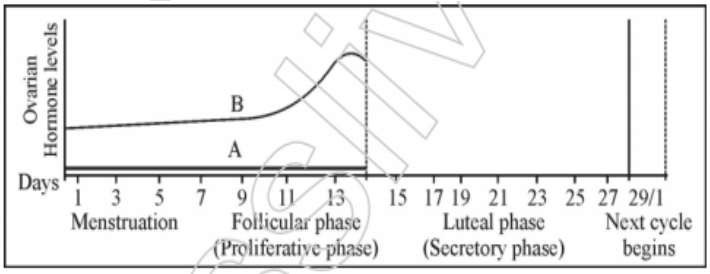


a)Name the Hormones A,B and C
)Name the process D

50. Name the Hormone and its source
    a) Spermatogenesis starts at the age of puberty due to significant increase in the secretion of ……..
    b) Hormones that stimulate leydig cells to secrete androgen.
51. The structure of blastocyst is given below

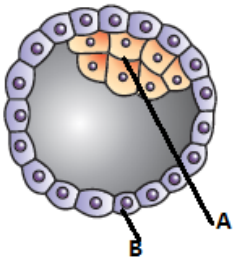


    a)Which part of blastocyst helps in implantation in to the endometrium ?
    b)Which part of blastocyst become embryo ?
52. Placenta is considered as the structural and functional unit between developing embryo (foetus) and maternal body.
    a)Write any 2 functions of placenta ?
    b)Why placenta is called as endocrine tissue ?
53. Which of the following statement is wrong about Oogenesis?
    a) The process of formation of a mature male gamete is called Oogenesis
    b) Oogenesis is initiated Only after Puberty
    c) Mature ovarian follicle is called Graffian follicle
    d) a tertiary follicle is characterised by a fluid filled cavity called antrum.
54. The graph given below shows the level of the ovarian hormones in a normally menstruating woman during the follicular phase.

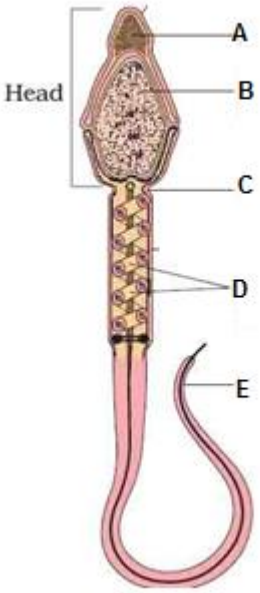


    (a) Name ‘A’ and ‘B’.
    (b) Reconstruct the graph showing the level of hormones in luteal phase.
    (c) Name the hormone secreted by Corpus Luteum and mention its function.

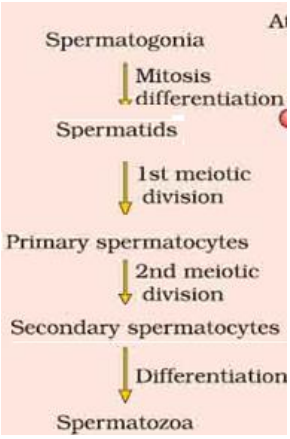
55. Given below is the diagrammatic representation of Human blastocyst. Observe the diagram and answer the following questions.



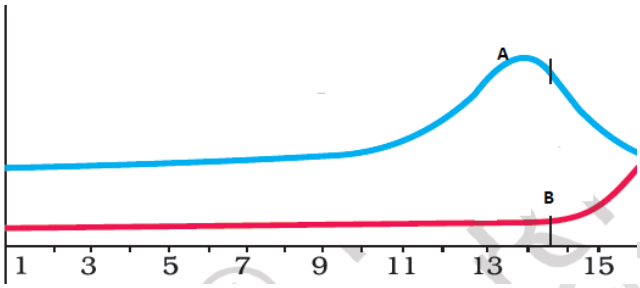
    a)Identify A and B
    b)Write the function of A and B
56. Which ovarian and Pituitary Hormones are involved in Menstrual cycle ?
57. a)Diagram of mammalian sperm is given below. Label the parts marked
    b)The seminal plasma along with the sperms constitute the **……**



58. Find the mistake and re arrange it in correct order



59. What is LH surge ?
60. The graph shows the level of ovarian hormones in a normally menstruating women during follicular phase



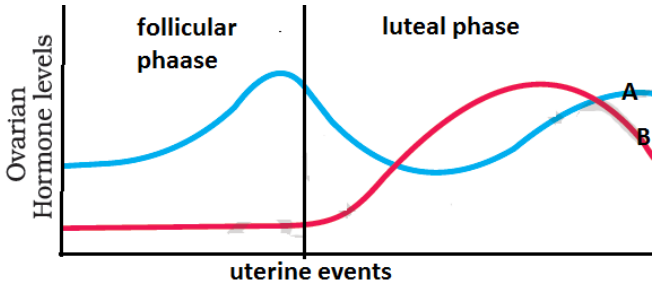
(3)

a)Name A and B
b)Mention the role of pituitary hormones in maintaining this condition
c)Reconstruct the graph for luteal phase?

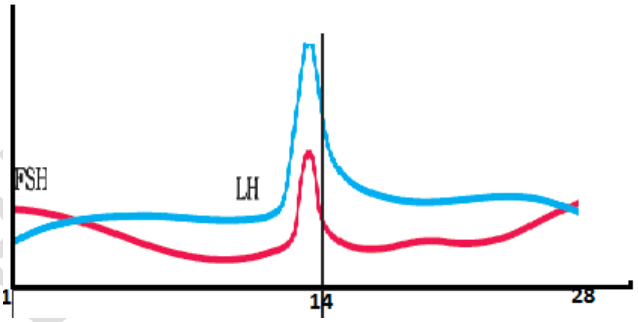
61. LH and FSH are gonadotrophins. Distinguish their roles in male and female?
62. match the columns A and B

A	B
Corpus Luteum	Embryo
Leydig cells	Implantation
Blastocyst	Progesterone
Inner cell mass	Androgens
	Prolactin

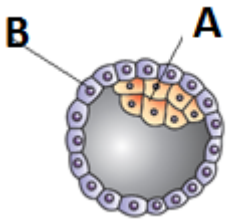
63. Arrange the following hormones under 2 heading
FSH,LH,Estrogen,Progesterone
64. Observe the Graph provided



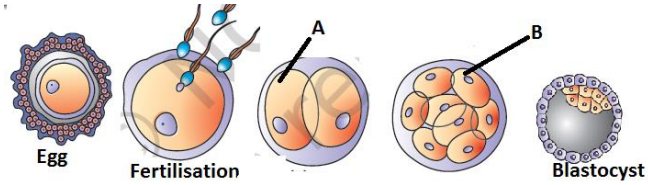
a)What do A and B stands for?
65. In which part of human reproductive system the following events occur?
a)Fertilisation b)Implantation
66. The graph shown below shows the levels of LH and FSH at various stages of menstrual cycle.



a)Name the source of LH and FSH
b)The level of LH is maximum during the middle day of cycle. Mention its effect?
c)Note the function of LH in male?
67. Expand the following
Hcg hPL
68. 'LH Surge' induces the rupture of Graffian follicle
(a) Which gland produces LH and in which day LH Surge happens?
(b) Write the role of LH in males.
69. Mothers milk is considered as very essential for a new born baby.
a) Name the first milk released from the mother just after birth.
b) What is its importance?
70. Diagram of a Human blastocyst is given below .Identify A and B



71. Some stages of embryonic development are given below. Observe these diagram and answer the question



Name the two types of cells found in the Blastocyst?

72. Breast feeding during initial period of infant growth is necessary to develop immunity of new born babies. Why ?

73. Match the following

Column A	Column B
Sperm	Embryo with 8-16 cells
Egg	Germ layers
Inner cell mass	Spermatogonia
Morula	Oogonia

74. Which of the following hormones are produced in a women only during pregnancy ?

Estrogen,hCG,Relaxin,Androgen, Progesterone, Androgen,hPL

75. Spermatogenesis works only when the body temperature is 2 to 2.5^0 C less than normal body temperature.How it works in human body,since human internal body temperature is 37^0C.

76. Raju has lost his mother at birth. He is unhealthy and contract diseases easily. In his Doctor's opinion, Raju's ill health is due to his not drinking mother's milk.
How will you justify the doctor's opinion in the light of your knowledge of immunity?

77. Which of the following statement is wrong about hymen?
a)In some women the hymen persists even after coitus.
b)The opening of the vagina is often covered partially by a membrane called hymen
c) Hymen never be broken by a sudden fall or jolt, insertion of a vaginal tampon, active participation in some sports like horseback riding, cycling
d) The presence or absence of hymen is a reliable indicator of virginity or sexual experience

78. When the urine sample of a lady is tested, presence of Human chorionic gonadotropin (HCG) was detected
a)What does the presence of HCG indicate?
b)Which is the source of HCG?

79. Match the following

Column A	Column B
Androgen	Placenta
Progesteron	Growing ovarian follicle
Estrogen	Corpus luteum
hCG	Leydig cells

80. Progesterone is called pregnancy hormone
a)Name the source of that Hormone ?
b)What is the role of progesterone in menstrual cycle ?

81. Match the following

Column A	Column B
Rete testis	Female reproductive tract
Fallopian tubule	Testis
Acrosome	Sperm
Antrum	Tertiary follicle

82. What you meant by
a)Spermiation
b)Ovulation
c)Spermiogenesis
d)LH Surge

83. The human male ejaculates about 200 to 300 million sperms during a coitus of which, For normal fertility at least ……...% of sperm must have at least

normal size and shape and ……% of them must show vigorous motility.
and what is its function ?

84. Match the following

Column A	Column B
Hypothalamus	Gonadotropin hormone
Ovary	Progesterone
Corpus luteum	Estrogen
Pituitary Gland	GnRH

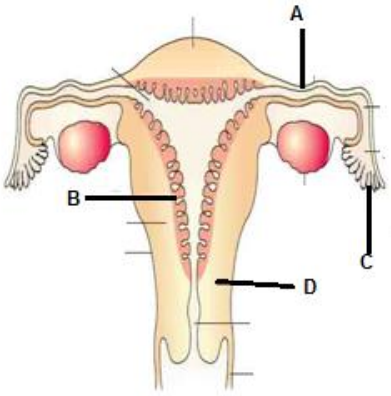
85. How secondary oocyte become larger in size and polar body became smaller after first meiotic divison of primary ooyte ?What is its advantage.

Each question carries three score

86. Arrange the following ducts in male reproductive system based on the path of sperm from inside to outside.
Rete testis, Vas deferens, Vasa efferentia, Seminiferous tubule, Ejaculatory duct, Urethral Meatus, Urethra

87. Name the part of oviduct
a)Wider part of oviduct ?
b)Part of oviduct close to the ovary ?
c)The last part of oviduct with narrow lumen ?

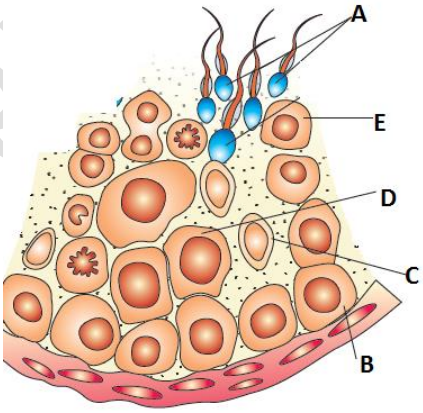
88. Diagrammatic sectional view of female reproductive system is given below



a) Label A ,B,C and D
b) Which part of the oviduct helps in collection of ovum after fertilization ?
c)The opening of the vagina is often covered partially by a membrane called **……..**

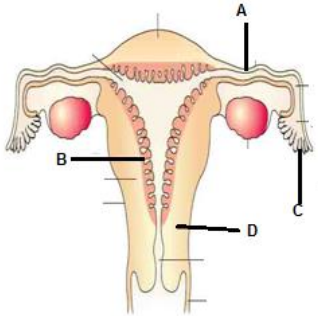
89. Answer the following questions
a)Which part of sperm contain Mitochondria ?
b)What is the function of mitochondria in a sperm ?
c)Acrosome of the sperm plays an important role in reproductive event. Explain

90. Observe the diagram and answer the question
a) Identify A and B
b) What is the function of C
c) In which of the marked part reduction division takes place? What is the significance of it?



91. Name the following
a)8-16 celled stage of embryo is called …
b)The structural and functional unit between developing embryo (foetus) and maternal body called……
c)The placenta is connected to the embryo through……

92. Diagrammatic sectional view of female reproductive system is given below

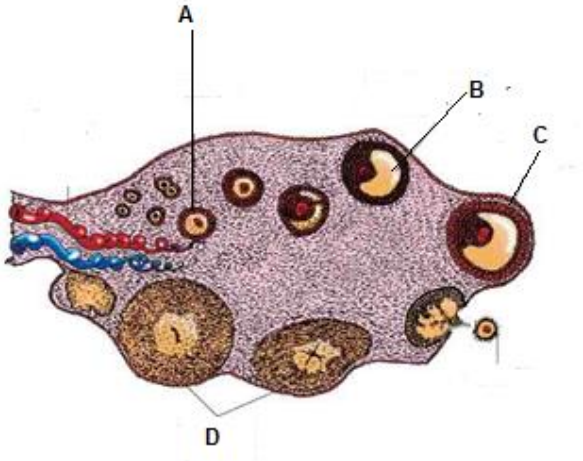


a) Label A ,B,C and D

b) Which part of the oviduct helps in collection of ovum after fertilization ?

c)The opening of the vagina is often covered partially by a membrane called **……..**

93. Diagrammatic sectional view of Ovary is given below



a)Label A,B,C and D

b)Which hormone is secreted by D

94. Categorize the following cells based on the chromosome number (Haploid/Diploid)

Spermatid, Spermatogonia, Egg, Secondary oocyte, Polar body, Primary spermatocyte

Diploid cells	Haploid cells

95. Based on the features written below, Write name the uterine layers.

a)Muscular layer of uterus

b)Glandular layer of uterus

c)Thin membranous layer of uterus

96. Name the hormones

a)Growing ovarian follicle secrete…….hormone

b)Corpus luteum secrete…….hormone

c)The functions of male accessory ducts and glands are maintained by…….hormones.