

## Human Reproduction Test Paper

1. Exflagellation of the sperm during fertilization of egg occurs due to  
1) acrosome                      2) tail                      3) polar body                      4) lysosome
2. Sequence of hormonal secretion during menstrual cycle is  
1) estrogen, progesterone and FSH                      2) Progesterone, estrogen and FSH  
3) FSH, estrogen and progesterone                      4) FSH, progesterone and estrogen
3. For entering the ovum, the sperm penetrates the corona radiate and zona pellucid with the help of  
1) mucopolysaccharide in these layers                      2) acidic layer of vagina  
3) enzymes released by ovum                      4) zona lysine released from sperms
4. The shared terminal duct of the reproductive and urinary system in the human male is  
1) urethra                      2) ureter                      3) vas deferens                      4) seminal duct
5. Acrosome of sperm is derived from  
1) nucleus of spermatid                      2) Golgi complex of spermatid  
3) mitochondria of spermatid                      4) centrosome of spermatid
6. How many days does it take for spermatogenesis to take place?  
1) 40 to 50 days                      2) 60 to 75 days  
3) 75 to 95 days                      4) every day
7. The phase of menstrual cycle in humans that last for 7- 13 days, is  
1) follicular phase                      2) ovulatory phase  
3) luteal phase                      4) menstrual phase
8. Vitellogenesis occurs during the formation of  
1) Ootid in the Fallopan tube                      2) secondary oocyte in the Fallopan tube  
3) Primary oocyte in the Graafian follicle                      4) oogonial cell in the Graafian follicle
9. What is true about cleavage in the fertilized egg in humans?  
1) It is meroblastic                      2) It starts when the egg reaches uterus  
3) It is identical to the normal mitosis                      4) It starts while the egg is in fallopan tube
10. During the development of embryo, which of the following occurs first?  
1) Differentiation of organs                      2) Differentiation of tissue  
3) Differentiation of organ system                      4) Differentiation of cells
11. All of the following are found in seminiferous tubules except  
1) Sertoli cells                      2) Leydig cells                      3) Spermatids                      4) Spermatogonia
12. Vasa efferentia are the ductules leading rom  
1) testicular lobules to rete testis                      2) rete testis to vas deferens  
3) vas deferens to epidydimis                      4) epidydimis to urethra
13. In humans the oocyte is maintained in a state of meiotic arrest by secretions of  
1) granulosa cells                      2) zona pellucida  
3) cumulous oophorus                      4) corona radiate
14. Menstrual flow occurs due to lack of  
1) oxytocin                      2) ADH  
3) progesterone                      4) FSH
15. Human primary spermatocyte contains  
1) 22 autosomes and X-chromosome                      2) 22 autosomes and Y-chromosome  
3) 22 autosomjes and X or Y chromosome                      4) 22 pairs of autosomes and XY chromosomes
16. A change in the amount of yolk and its distribution in the egg will affect  
1) pattern of cleavage                      2) number of blastomeres  
3) Fertilization                      4) Formation of zygote
17. Rebuilding of endometrium takes place in  
1) luteal phase                      2) menstrual phase  
3) follicular phase                      4) ovulatory phase
18. Select mismatched pair  
1) Menorrhagia – Absence of menstruation                      2) Capacitation – Sperm activation  
3) Ectoderm – Enamel of teeth                      4) Myometrium – Uterine contraction

19. Gonads develop from embryonic  
 1) Ectoderm                      2) Mesoderm                      3) Endoderm                      4) both 2 and 3
20. Which of the following is not the reason for very high load of bilirubin in a newborn?  
 1) Excessive red blood corpuscles in the newborn burst, releasing the bilirubin.  
 2) The liver of the newborn is too young to cope up with the heavy load of bilirubin.  
 3) Mother's milk contains a high amount of bilirubin.  
 4) Insoluble in the intestine is reabsorbed by the blood.
21. Which layer develops first during embryonic development?  
 1) Ectoderm                      2) Mesoderm                      3) Endoderm                      4) Both 1 and 3
22. Which one of the following has diploid set of chromosomes?  
 1) ootid                              2) spermatid  
 3) secondary spermatocyte      4) primary oocyte
23. Nebenkern of the sperm is related to  
 1) centriole                      2) mitochondria                      3) nucleus                      4) acrosome
24. The third stage of parturition is called "after-birth". In this state  
 1) excessive bleeding occurs  
 2) foetus is born and cervix and vagina contraction to normal condition happens  
 3) foetus is born and contraction of uterine wall prevents excessive bleeding  
 4) placenta is expelled out
25. Chose the correct sequence of events during sexual reproduction in humans  
 1) gametogenesis-insemination-fertilization- implantation-gestation-parturition  
 2) gametogenesis-insemination- implantation-gestation-fertilization-parturition  
 3) gametogenesis-implantation-gestation-fertilization-insemination-parturition  
 4) gametogenesis-parturition-insemination-gestation-fertilization-implantation
26. Which one of the statements regarding a pair of testes in human male is correct?  
 1) they are present in the abdominal cavity  
 2) they are formed after puberty  
 3) they are both reproductive and endocrine in function  
 4) they are reproductive but not endocrine in function
27. Which one of these is not a accessory glands in male reproductive system  
 1) Prostate gland                      2) seminal vesicle                      3) cowper's gland                      4) bartholins gland
28. Structural and functional units of testes are  
 1) Interstitial cells                      2) testicular lobules                      3) seminiferous tubules                      4) rete testis
29. The hormones LH and FSH are at peak level during  
 1) Menstrual phase                      2) pre ovulatory phase  
 3) ovulatory phase                      4) post ovulatory phase
30. MTP is considered safe up to ---- weeks of pregnancy  
 1) 6 weeks                      2) 8 weeks                      3) 10 weeks                      4) 12 weeks
31. The secretion of one of the following glands is rich in fructose, calcium and some enzymes of  
 1) Salivary glands                      3) Male reproductive accessory gland  
 2) Mammary glands                      4) Female reproductive accessory glands
32. Functions of following structures are given below. Identify the incorrect pair  
 a) endometrium - implantation                      b) fimbriae - sucking of egg  
 c) leydig cell - secretion of estrogen                      d) sperm tail- movement  
 1) a                      2) b                      3) c                      4) d
33. Cryptorchidism is a condition of testis  
 1) unable to descend in scrotum                      2) unable to produce sperms  
 3) unable maintain low temperature                      4) remain undeveloped in adults
34. One of the following statements is true about Graafian follicle  
 1) Antrum is the cavity filled with Amniotic fluid  
 2) fully matured Graafian follicle releases ovum  
 3) secondary oocyte is embedded in cumulous oophorus  
 4) ruptured Graafian follicle immediately develops into corpus albicans
35. Cells of corona radiata remain grouped together by  
 1) FSH                      2) LH                      3) Hyaluronic acid                      3) Lytic enzymes

36. Interstitial cells are found in \_\_a\_\_ and release \_\_b\_\_
- 1) a) Ovary                      b) Estrogen
  - 2) a) Testis                      b) Testosterone
  - 3) a) Graafian follicle      b) Liquor folliculi
  - 4) a) Mammary glands      b) Colostrum
37. In humans, cleavage starts after fertilization in
- 1) uterus                      2) vagina                      3) fallopian tube                      4) ovary
38. The connective tissue around seminiferous tubules possess endocrine cells called
- 1) Sertoli cells                      2) germinal epithelium                      3) Leydig cells                      4) gonial cells
39. One of the following statements is wrong
- 1) Each spermatid undergo metamorphosis and produce four functional sperms
  - 2) Acrosome of the sperm is derived from the golgi complex of spermatid
  - 3) Spherical shaped spermatids are transformed into tadpole like structure
  - 4) Four spermatids are formed from one primary spermatocyte
40. Corpus luteum develops under the influence of
- 1) Estrogen                      2) Progesterone                      3) FSH                      4) LH
41. In the technique of test tube baby,
- 1) zygote is introduced into the uterus of surrogate mother
  - 2) both male and female gametes are transferred into the fallopian tube of female
  - 3) fertilization is generally external
  - 4) entire process occurs in the test tube only
42. In spermatogenesis, reduction division occurs during the conversion of
- 1) spermatids into sperms                      2) primary spermatocyte into secondary spermatocyte
  - 3) spermatogonia into primary spermatocyte                      4) gonial cell into spermatogonia
43. Correct sequence in development is
- 1) Fertilization – Zygote – Morula – Cleavage – Gastrula – Blastula
  - 2) Fertilization – Morula – Zygote – Blastula – Cleavage – Gastrula
  - 3) Fertilization – Zygote – Cleavage – Morula – Blastula – Gastrula
  - 4) Cleavage – Fertilization – Zygote – Gastrula – Morula – Blastula
44. Correct sequence of hormone secretion from beginning of menstruation is
- 1) estrogen, FSH, progesterone                      2) FSH, progesterone, estrogen
  - 3) estrogen, progesterone, FSH                      4) FSH, estrogen, progesterone
45. Fertilizin is a chemical substance produced from
- 1) Mature eggs                      2) Mature sperms                      3) Acrosome                      4) Graafian follicle
46. Immediately after ovulation, the mammalian egg is covered by a membrane known as:
- 1) Corona radiata                      2) Zona pellucid                      3) Granulosa cells                      4) Vitelline membrane
47. Menopause refers to
- 1) loss of reproductive capacity                      2) degeneration of endometrium of uterus
  - 3) absence of menarche                      4) ageing of women
48. When released from ovary, human egg contains
- 1) one X chromosome and 22 autosomes                      2) two X chromosomes and 22 autosomes
  - 3) only 22 autosomes                      4) one X chromosome and 23 autosomes
49. When released from ovary, human egg contains
- 1) one paternal X chromosome and 22 autosomes
  - 2) one maternal X chromosome and 22 autosomes
  - 3) either paternal or maternal X chromosome and 22 autosomes
  - 4) one maternal X chromosome and 22 maternal autosomes
50. Human embryo with 32 cells is
- 1) same size as fertilized egg                      2) two times larger than fertilized egg
  - 3) four times the size of fertilized egg                      4) eight times the size of fertilized egg
51. About 60% of the semen is formed by the secretion of
- 1) Prostrate gland                      2) seminal vesicle                      3) Cowper's gland                      4) Bulbourethral gland
52. Bartholin's glands are situated in
- 1) vagina                      2) testis                      3) uterus                      4) penis

53. Capacitation of sperm occurs in  
 1) vagina                      2) female genital tract                      3) seminiferous tubule                      4) penis
54. Which one of the following statements is incorrect about menopause?  
 1) generally occurs between ages of 45 to 50                      2) causes cessation of female reproductive cycle  
 3) ovaries slowly reduce their secretion of estrogen                      4) pituitary no longer produces FSH and LH
55. Foetal ejection reflex in human female is induced by  
 1) OT (Oxytocin)                      2) pressure exerted by amniotic fluid  
 3) mild contraction of the uterus                      4) pituitary gland
56. What happens during fertilization in humans after many sperms reach close to the ovum?  
 1) all sperms except the one nearest to the ovum lose their tails and enter into ovum  
 2) secretions of acrosome helps one sperm to enter cytoplasm of ovum through zona pellucida  
 3) Cells of Corona radiata trap all sperms except one  
 4) One of the sperm carrying Y chromosome fertilize with ovum
57. Ovulation in the female normally takes place during the menstrual cycle  
 1) at the end of proliferative phase  
 2) at the beginning of proliferate phase  
 3) just before menstrual phase  
 4) 14<sup>th</sup> day of every month in the calendar
58. The part of fallopian tube closest to the ovaries is  
 1) Uterus                      2) Ampula                      3) Infundibulum                      4) Ishtamus
59. Which of the following structures are the derivatives of endoderm in the foetus?  
 1) Muscles and blood                      2) Skin and nervous system  
 3) Alimentary canal and respiratory system                      4) Cartilage and bon
60. In test tube baby technique which of the following is transferred into uterus?  
 1) Zygote                      2) donor's sperms                      3) 32 celled embryo                      4) donor's ovum

## Answer keys

Q no.	Ans	Q no.	Ans	Q no.	Ans	Q no.	Ans	Q no.	Ans	Q no.	Ans
1	D	11	B	21	C	31	C	41	C	51	B
2	C	12	B	22	D	32	C	42	B	52	A
3	D	13	A	23	B	33	A	43	C	53	B
4	A	14	C	24	D	34	C	44	D	54	D
5	B	15	D	25	A	35	C	45	A	55	C
6	B	16	A	26	C	36	B	46	B	56	B
7	A	17	C	27	D	37	C	47	A	57	A
8	C	18	A	28	C	38	C	48	A	58	C
9	D	19	B	29	C	39	A	49	B	59	C
10	D	20	C	30	D	40	D	50	A	60	C