

Human Reproduction

3.1 The Male Reproductive System

1. Select the correct sequence for transport of sperm cells in male reproductive system.
 - (a) Testis → Epididymis → Vasa efferentia → Vas deferens → Ejaculatory duct → Inguinal canal → Urethra → Urethral meatus
 - (b) Testis → Epididymis → Vasa efferentia → Rete testis → Inguinal canal → Urethra
 - (c) Seminiferous tubules → Rete testis → Vasa efferentia → Epididymis → Vas deferens → Ejaculatory duct → Urethra → Urethral meatus
 - (d) Seminiferous tubules → Vasa efferentia → Epididymis → Inguinal canal → Urethra

(NEET 2019)
2. Which of the following depicts the correct pathway of transport of sperms?
 - (a) Rete testis → Efferent ductules → Epididymis → Vas deferens
 - (b) Rete testis → Epididymis → Efferent ductules → Vas deferens
 - (c) Rete testis → Vas deferens → Efferent ductules → Epididymis
 - (d) Efferent ductules → Rete testis → Vas deferens → Epididymis

(NEET-II 2016)
3. The shared terminal duct of the reproductive and urinary system in the human male is
 - (a) urethra
 - (b) ureter
 - (c) vas deferens
 - (d) vasa efferentia.

(2014)
4. The Leydig's cells as found in the human body are the secretory source of
 - (a) progesterone
 - (b) intestinal mucus
 - (c) glucagon
 - (d) androgens.

(2012)
5. If for some reason, the vasa efferentia in the human reproductive system get blocked, the gametes will not be transported from
 - (a) testes to epididymis
 - (b) epididymis to vas deferens
 - (c) ovary to uterus
 - (d) vagina to uterus.

(2011)

6. The testes in humans are situated outside the abdominal cavity inside a pouch called scrotum. The purpose served is for
 - (a) maintaining the scrotal temperature lower than the internal body temperature
 - (b) escaping any possible compression by the visceral organs
 - (c) providing more space for the growth of epididymis
 - (d) providing a secondary sexual feature for exhibiting the male sex.

(2011)
7. Sertoli cells are found in
 - (a) ovaries and secrete progesterone
 - (b) adrenal cortex and secrete adrenaline
 - (c) seminiferous tubules and provide nutrition to germ cells
 - (d) pancreas and secrete cholecystokinin.

(2010)
8. Vasa efferentia are the ductules leading from
 - (a) testicular lobules to rete testis
 - (b) rete testis to vas deferens
 - (c) vas deferens to epididymis
 - (d) epididymis to urethra.

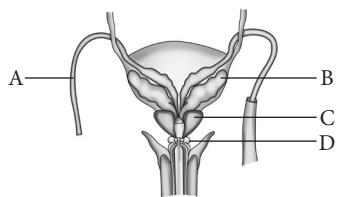
(2010)
9. Seminal plasma in human males is rich in
 - (a) fructose and calcium
 - (b) glucose and calcium
 - (c) DNA and testosterone
 - (d) ribose and potassium.

(2010)
10. Secretions from which one of the following are rich in fructose, calcium and some enzymes?
 - (a) Male accessory glands
 - (b) Liver
 - (c) Pancreas
 - (d) Salivary glands

(Mains 2010)
11. Seminal plasma in humans is rich in
 - (a) fructose and calcium but has no enzymes
 - (b) glucose and certain enzymes but has no calcium
 - (c) fructose and certain enzymes but poor in calcium
 - (d) fructose, calcium and certain enzymes.

(2009)

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



- (a) A-Vas deferens, B-Seminal vesicle, C-Prostate, D-Bulbourethral gland
 - (b) A-Vas deferens, B-Seminal vesicle, C-Bulbourethral gland, D-Prostate
 - (c) A-Ureter, B-Seminal vesicle, C-Prostate, D-Bulbourethral gland
 - (d) A-Ureter, B-Prostate, C-Seminal vesicle, D-Bulbourethral gland
- (2009)

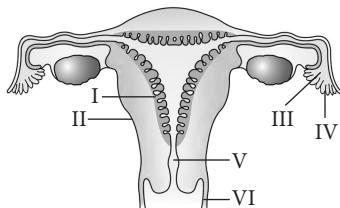
- 13.** Male hormone is produced in the testis by cells of
- (a) Sertoli
 - (b) epithelial
 - (c) spermatocytes
 - (d) Leydig.
- (1993)

- 14.** Location and secretion of Leydig's cells are
- (a) liver-cholesterol
 - (b) ovary-estrogen
 - (c) testis-testosterone
 - (d) pancreas-glucagon.
- (1991)

3.2 The Female Reproductive System

- 15.** Hysterectomy is surgical removal of
- (a) vas deferens
 - (b) mammary glands
 - (c) uterus
 - (d) prostate gland.
- (2015 Cancelled)

- 16.** The figure given below depicts a diagrammatic sectional view of the human female reproductive system. Which 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 tube
- (2011)

- 17.** The part of Fallopian tube closest to the ovary is
- (a) isthmus
 - (b) infundibulum
 - (c) cervix
 - (d) ampulla.
- (2010)

- 18.** Bartholin's glands are situated
- (a) on the sides of the 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.
- (2003)

3.3 Gametogenesis

- 19.** Meiotic division of the secondary oocyte is completed
- (a) prior to ovulation
 - (b) at the time of copulation
 - (c) after zygote formation
 - (d) at the time of fusion of a sperm with an ovum.
- (NEET 2020)

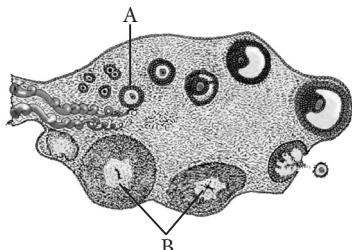
- 20.** The difference between spermiogenesis and spermiation is
- (a) in spermiogenesis spermatids are formed, while in spermiation spermatozoa are formed
 - (b) in spermiogenesis spermatozoa are formed, while in spermiation spermatids are formed
 - (c) in spermiogenesis spermatozoa from Sertoli cells are released into the cavity of seminiferous tubules, while in spermiation spermatozoa are formed
 - (d) in spermiogenesis spermatozoa are formed, while in spermiation spermatozoa are released from Sertoli cells into the cavity of seminiferous tubules.
- (NEET 2018)

- 21.** Which of the following layers in an antral follicle is acellular?
- (a) Stroma
 - (b) Zona pellucida
 - (c) Granulosa
 - (d) Theca interna
- (2015)

- 22.** Which of the following cells during gametogenesis is normally diploid?
- (a) Spermatogonia
 - (b) Secondary polar body
 - (c) Primary polar body
 - (d) Spermatid
- (2015 Cancelled)

- 23.** What is the correct sequence of sperm formation?
- (a) Spermatogonia, spermatozoa, spermatocytes, spermatids
 - (b) Spermatogonia, spermatocytes, spermatids, spermatozoa
 - (c) Spermatids, spermatocytes, spermatogonia, spermatozoa
 - (d) Spermatogonia, spermatocytes, spermatozoa, spermatids
- (NEET 2013)

- 24.** The figure shows a section of human ovary. Select the option which gives the correct identification of either A or B with function/characteristic.



- | | |
|-------------------------|---|
| (a) B- Corpus luteum | - Secretes progesterone |
| (b) A-Tertiary follicle | - Forms Graafian follicle |
| (c) B- Corpus luteum | - Secretes estrogen |
| (d) A- Primary oocyte | - It is in the prophase I of the meiotic division |
- (Karnataka NEET 2013)*

- 25.** Which one of the following statements is false in respect of viability of mammalian sperm?
- Sperm is viable for only up to 24 hours.
 - Survival of sperm depends on the pH of the medium and is more active in alkaline medium.
 - Viability of sperm is determined by its motility.
 - Sperms must be concentrated in a thick suspension. *(2012)*
- 26.** Which one of the following statements about human sperm is correct?
- Acrosome has a conical pointed structure used for piercing and penetrating the egg, resulting in fertilisation.
 - The sperm lysins in the acrosome dissolve the egg envelope facilitating fertilisation.
 - Acrosome serves as a sensory structure leading the sperm towards the ovum.
 - Acrosome serves no particular function. *(2010)*
- 27.** The correct sequence of spermatogenetic stages leading to the formation of sperms in a mature human testis is
- spermatogonia - spermatocyte - spermatid - sperms
 - spermatid - spermatocyte - spermatogonia - sperms
 - spermatogonia - spermatid - spermatocyte - sperms
 - spermatocyte - spermatogonia - spermatid - sperms. *(2009)*
- 28.** In humans, at the end of the first meiotic division, the male germ cells differentiate into the
- spermatids
 - spermatogonia
 - primary spermatocytes
 - secondary spermatocytes. *(2008)*
- 29.** Sertoli cells are regulated by the pituitary hormone known as
- LH
 - FSH
 - GH
 - prolactin. *(2006)*

- 30.** The middle piece of the sperm contains
- proteins
 - mitochondria
 - centriole
 - nucleus. *(1999)*
- 31.** How many sperms are formed from a secondary spermatocyte?
- 4
 - 8
 - 2
 - 1 *(1990)*
- 32.** Egg is liberated from ovary in
- secondary oocyte stage
 - primary oocyte stage
 - oogonial stage
 - mature ovum stage. *(1989)*

3.4 Menstrual Cycle

- 33.** Which of the following hormone levels will cause release of ovum (ovulation) from the Graafian follicle?
- High concentration of Estrogen
 - High concentration of Progesterone
 - Low concentration of LH
 - Low concentration of FSH *(NEET 2020)*
- 34.** No new follicles develop in the luteal phase of the menstrual cycle because
- follicles do not remain in the ovary after ovulation
 - FSH levels are high in the luteal phase
 - LH levels are high in the luteal phase
 - both FSH and LH levels are low in the luteal phase. *(Odisha NEET 2019)*
- 35.** Match the items given in column I with those in column II and select the correct option given below.
- | Column I | Column II |
|------------------------------|-------------------------------------|
| A. Proliferative phase | (i) Breakdown of endometrial lining |
| B. Secretory phase | (ii) Follicular phase |
| C. Menstruation | (iii) Luteal phase |
| A B C | |
| (a) (iii) (ii) (i) | |
| (b) (i) (iii) (ii) | |
| (c) (ii) (iii) (i) | |
| (d) (iii) (i) (ii) | <i>(NEET 2018)</i> |
- 36.** Changes in GnRH pulse frequency in females is controlled by circulating levels of
- progesterone only
 - progesterone and inhibin
 - estrogen and progesterone
 - estrogen and inhibin. *(NEET-I 2016)*
- 37.** Select the incorrect statement.
- LH and FSH decrease gradually during the follicular phase.
 - LH triggers secretion of androgens from the Leydig cells.
 - FSH stimulates the Sertoli cells which help in spermiogenesis.
 - LH triggers ovulation in ovary. *(NEET-I 2016)*

- 38.** Identify the correct statement on 'inhibin'.
(a) Is produced by granulosa cells in ovary and inhibits the secretion of LH
(b) Is produced by nurse cells in testes and inhibits the secretion of LH
(c) Inhibits the secretion of LH, FSH and prolactin
(d) Is produced by granulosa cells in ovary and inhibits the secretion of FSH (NEET-I 2016)
- 39.** Which of the following events is not associated with ovulation in human female?
(a) Release of secondary oocyte
(b) LH surge
(c) Decrease in estradiol
(d) Full development of Graafian follicle (2015)
- 40.** The main function of mammalian corpus luteum is to produce
(a) estrogen only
(b) progesterone
(c) human chorionic gonadotropin
(d) relaxin only. (2014)
- 41.** Menstrual flow occurs due to lack of
(a) oxytocin (b) vasopressin
(c) progesterone (d) FSH. (NEET 2013)
- 42.** The secretory phase in the human menstrual cycle is also called
(a) luteal phase and lasts for about 6 days
(b) follicular phase and lasts for about 6 days
(c) luteal phase and lasts for about 13 days
(d) follicular phase and lasts for about 13 days.
(Mains 2012)
- 43.** 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
(Mains 2011)
- 44.** Which one of the following is the correct matching of the events occurring during menstrual cycle?
(a) Proliferative phase : Rapid regeneration of myometrium and maturation of Graafian follicle
(b) Secretory phase : Development of corpus luteum and increased secretion of progesterone
(c) Menstruation : Breakdown of myometrium and ovum not fertilised
(d) Ovulation : LH and FSH attain peak level and sharp fall in the secretion of progesterone (2009)
- 45.** Which one of the following is the most likely root cause why menstruation is not taking place in regularly cycling human female?
(a) Maintenance of the hypertrophical endometrial lining
(b) Maintenance of high concentration of sex hormones in the blood stream
(c) Retention of well-developed corpus luteum
(d) Fertilisation of the ovum (2009)
- 46.** Which one of the following statements is incorrect about menstruation?
(a) At menopause in the female, there is especially abrupt increase in gonadotrophic hormones.
(b) The beginning of the cycle of menstruation is called menarche.
(c) During normal menstruation about 40 mL blood is lost.
(d) The menstrual fluid can easily clot. (2008)
- 47.** Which part of ovary in mammals acts as an endocrine gland after ovulation?
(a) Stroma
(b) Germinal epithelium
(c) Vitelline membrane
(d) Graafian follicle (2007)
- 48.** 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. (2007)
- 49.** Withdrawal of which of the following hormones is the immediate cause of menstruation?
(a) Progesterone (b) Estrogen
(c) FSH (d) FSH-RH (2006)
- 50.** If mammalian ovum fails to get fertilised, which one of the following is unlikely?
(a) Corpus luteum will disintegrate.
(b) Progesterone secretion rapidly declines.
(c) Estrogen secretion further increases.
(d) Primary follicle starts developing. (2005)
- 51.** Ovulation in the human female normally takes place during the menstrual cycle
(a) at the mid secretory phase
(b) just before the end of the secretory phase
(c) at the beginning of the proliferative phase
(d) at the end of the proliferative phase. (2004)
- 52.** Which set is similar?
(a) Corpus luteum - Graafian follicles
(b) Sebum - Sweat
(c) Bundle of His - Pacemaker
(d) Vitamin B₇ - Niacin (2001)

- 53.** After ovulation Graafian follicle regresses into
 (a) corpus artesia (b) corpus callosum
 (c) corpus luteum (d) corpus albicans.
 (1999)

- 54.** In the fertile human female, approximately on which day of the menstrual cycle does ovulation take place?
 (a) Day 14 (b) Day 18
 (c) Day 1 (d) Day 8 (1997)

- 55.** The mammalian corpus luteum produces
 (a) luteotrophic hormone
 (b) luteinising hormone
 (c) estrogen
 (d) progesterone. (1995)

- 56.** In the 28 day human ovarian cycle, the ovulation takes place typically on
 (a) day 14 of the cycle
 (b) day 28 of the cycle
 (c) day 1 of the cycle
 (d) day 5 of the cycle. (1994)

3.5 Fertilisation and Implantation

- 57.** Extrusion of second polar body from egg occurs
 (a) simultaneously with first cleavage
 (b) after entry of sperm but before fertilisation
 (c) after fertilisation
 (d) before entry of sperm into ovum.
 (NEET 2019, 1993)

- 58.** Capacitation occurs in
 (a) epididymis
 (b) vas deferens
 (c) female reproductive tract
 (d) rete testis. (NEET 2017)

- 59.** Fertilisation in humans is practically feasible only if
 (a) the ovum and sperms are transported simultaneously to ampullary-isthmic junction of the cervix
 (b) the sperms are transported into cervix within 48 hrs of release of ovum in uterus
 (c) the sperms are transported into vagina just after the release of ovum in fallopian tube
 (d) the ovum and sperms are transported simultaneously to ampullary-isthmic junction of the fallopian tube. (NEET-I 2016)

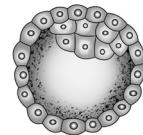
- 60.** In human females, meiosis-II is not completed until
 (a) uterine implantation
 (b) birth
 (c) puberty
 (d) fertilisation. (2015)

- 61.** Capacitation refers to changes in the
 (a) ovum after fertilisation
 (b) sperm after fertilisation
 (c) sperm before fertilisation
 (d) ovum before fertilisation. (2015 Cancelled)

- 62.** In our society women are blamed for producing female children. Choose the correct answer for the sex-determination in humans.
 (a) Due to some defect like aspermia in man.
 (b) Due to the genetic make up of the particular sperm which fertilises the egg.
 (c) Due to the genetic make up of the egg.
 (d) Due to some defect in the women.

(Karnataka NEET 2013)

- 63.** Identify the human developmental stage shown as well as the related right place of its occurrence in a normal pregnant woman and select the right option for the two, together.



Developmental stage	Site of occurrence
(a) Late morula	- Middle part of Fallopian tube
(b) Blastula	- End part of Fallopian tube
(c) Blastocyst	- Uterine wall
(d) 8-celled morula	- Starting point of Fallopian tube

(Mains 2012)

- 64.** What happens during fertilisation in humans after many sperms reach close to the ovum?
 (a) Secretions of acrosome helps one sperm enter cytoplasm of ovum through zona pellucida.
 (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 zona pellucida. (Mains 2011)

- 65.** The second maturation division of the mammalian ovum occurs
 (a) shortly after ovulation before the ovum makes entry into the fallopian tube
 (b) until after the ovum has been penetrated by a sperm
 (c) until the nucleus of the sperm has fused with that of the ovum
 (d) in the Graafian follicle following the first maturation division. (2010)

- 66.** Which one of the following statements about morula in humans is correct?
 (a) It has almost equal quantity of cytoplasm as an uncleaved zygote but much more DNA.

- (b) It has far less cytoplasm as well as less DNA than in an uncleaved zygote.
(c) It has more or less equal quantity of cytoplasm and DNA as in uncleaved zygote.
(d) It has more cytoplasm and more DNA than an uncleaved zygote. (2010)

67. 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. (Mains 2010)

68. A change in the amount of yolk and its distribution in the egg will affect

- (a) pattern of cleavage
(b) number of blastomeres produced
(c) fertilisation
(d) formation of zygote. (2009)

69. Grey crescent is the area

- (a) at the point of entry of sperm into ovum
(b) just opposite to the site of entry of sperm into ovum
(c) at the animal pole
(d) at the vegetal pole. (2005)

70. What is true for cleavage?

- (a) Size of embryo increases
(b) Size of cells decreases
(c) Size of cells increases
(d) Size of embryo decreases (2002)

71. Blastopore is the pore of

- (a) archenteron (b) blastocoel
(c) coelom (d) alimentary canal. (2000)

72. Fertilizin is a chemical substance produced from

- (a) polar bodies
(b) middle piece of sperm
(c) mature eggs
(d) acrosome. (1997, 1991)

73. In human beings, the eggs are

- (a) mesolecithal (b) alecithal
(c) microlecithal (d) macrolecithal. (1997)

74. In an egg, the type of cleavage is determined by

- (a) the amount and distribution of yolk
(b) the number of egg membranes
(c) the shape and size of the sperm
(d) the size and location of the nucleus. (1995)

75. What is true about cleavage in the fertilised egg in humans?

- (a) It starts while the egg is in fallopian tube.
(b) It starts when the egg reaches uterus.
(c) It is meroblastic.
(d) It is identical to the normal mitosis. (1994)

76. Termination of gastrulation is indicated by

- (a) obliteration of blastocoel
(b) obliteration of archenteron
(c) closure of blastopore
(d) closure of neural tube. (1993)

77. In telolecithal egg the yolk is found

- (a) all over the egg (b) on one side
(c) both the sides (d) centre. (1993)

78. Acrosome reaction in sperm is triggered by

- (a) capacitation (b) release of lysin
(c) influx of Na^+ (d) release of fertilizin. (1993)

79. Meroblastic cleavage is a division which is

- (a) horizontal (b) partial/parietal
(c) total (d) spiral. (1992)

80. Blastopore is

- (a) opening of neural tube
(b) opening of gastrocoel
(c) future anterior end of embryo
(d) found in blastula. (1992)

81. During cleavage, what is true about cells?

- (a) Nucleocytoplasmic ratio remains unchanged.
(b) Size does not increase.
(c) There is less consumption of oxygen.
(d) The division is like meiosis. (1991)

82. Freshly released human egg has

- (a) one Y-chromosome
(b) one X-chromosome
(c) two X-chromosome
(d) one X-chromosome and one Y-chromosome. (1991)

83. Sperm and egg nuclei fuse due to

- (a) base pairing of their DNA and RNA
(b) formation of hydrogen bonds
(c) mutual attraction due to differences in electrical charges
(d) attraction of their protoplasts. (1990)

84. Cells become variable in morphology and function in different regions of the embryo. The process is

- (a) differentiation (b) metamorphosis
(c) organisation (d) rearrangement. (1989)

3.6 Pregnancy and Embryonic Development

85. Match the following columns and select the correct option.

Column-I	Column-II
(A) Placenta	(i) Androgens
(B) Zona pellucida	(ii) Human Chorionic Gonadotropin (HCG)
(C) Bulbourethral glands	(iii) Layer of the ovum
(D) Leydig cells	(iv) Lubrication of the penis
(A) (B) (C) (D)	
(a) (iv) (iii) (i) (ii)	
(b) (i) (iv) (ii) (iii)	
(c) (iii) (ii) (iv) (i)	
(d) (ii) (iii) (iv) (i)	

(NEET 2020)

86. Hormones secreted by the placenta to maintain pregnancy are

- (a) hCG, hPL, progestogens, prolactin
- (b) hCG, hPL, estrogens, relaxin, oxytocin
- (c) hCG, hPL, progestogens, estrogens
- (d) hCG, progestogens, estrogens, glucocorticoids.

(NEET 2018)

87. The amnion of mammalian embryo is derived from

- (a) ectoderm and mesoderm
- (b) endoderm and mesoderm
- (c) mesoderm and trophoblast
- (d) ectoderm and endoderm.

(NEET 2018)

88. Match column I with column II and select the correct option using the given codes.

Column I	Column II
A. Mons pubis	(i) Embryo formation
B. Antrum	(ii) Sperm
C. Trophectoderm	(iii) Female external genitalia
D. Nebenkern	(iv) Graafian follicle
(a) A-(iii), B-(iv), C-(ii), D-(i)	
(b) A-(iii), B-(iv), C-(i), D-(ii)	
(c) A-(iii), B-(i), C-(iv), D-(ii)	
(d) A-(i), B-(iv), C-(iii), D-(ii)	

(NEET-II 2016)

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

- (a) ovary
- (b) placenta
- (c) fallopian tube
- (d) pituitary.

(NEET-II 2016)

90. Ectopic pregnancies are referred to as

- (a) implantation of defective embryo in the uterus
- (b) pregnancies terminated due to hormonal imbalance

- (c) pregnancies with genetic abnormality
- (d) implantation of embryo at site other than uterus.

(2015)

91. Select the correct option describing gonadotropin activity in a normal pregnant female.

- (a) High level of FSH and LH stimulates the thickening of endometrium.
- (b) High level of FSH and LH facilitates implantation of the embryo.
- (c) High level of hCG stimulates the synthesis of estrogen and progesterone.
- (d) High level of hCG stimulates the thickening of endometrium.

(2014, 2012)

92. Which one of the following is not the function of placenta?

- (a) Facilitates removal of carbon dioxide and waste material from embryo
- (b) Secretes oxytocin during parturition
- (c) Facilitates supply of oxygen and nutrients to embryo
- (d) Secretes estrogen

(NEET 2013)

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

- (a) Fourth month
- (b) Fifth month
- (c) Sixth month
- (d) Third month

(2010)

94. Which extraembryonic membrane in humans prevents desiccation of the embryo inside the uterus?

- (a) Yolk sac
- (b) Amnion
- (c) Chorion
- (d) Allantosis

(2008)

95. Which of the following hormones is not a secretion product of human placenta?

- (a) Human chorionic gonadotropin
- (b) Prolactin
- (c) Estrogen
- (d) Progesterone

(2004)

96. During embryonic development, the establishment of polarity along anterior/posterior, dorsal/ventral or medial/lateral axis is called

- (a) organiser phenomena
- (b) axis formation
- (c) anamorphosis
- (d) pattern formation.

(2003)

97. The extra embryonic membranes of the mammalian embryo are derived from

- (a) trophoblast
- (b) inner cell mass
- (c) formative cells
- (d) follicle cells.

(1994)

98. Eye lens is formed from

- (a) ectoderm
- (b) mesoderm
- (c) endoderm
- (d) ectoderm and mesoderm.

(1992)

99. Gonads develop from embryonic

- (a) ectoderm
- (b) endoderm
- (c) mesoderm
- (d) both mesoderm and endoderm.

(1990)

(b) oxytocin released from maternal pituitary

(c) placenta only

(d) fully developed fetus only.

(2012)

3.7 Parturition and Lactation

100. Which of these is not an important component of initiation of parturition in humans?

- (a) Release of oxytocin
- (b) Release of prolactin
- (c) Increase in estrogen and progesterone ratio
- (d) Synthesis of prostaglandins

(2015 Cancelled)

101. The fetal ejection reflex in humans triggers the release of

- (a) oxytocin from fetal pituitary
- (b) human chorionic gonadotropin (hCG) from placenta
- (c) human placental lactogen (hPL) from placenta
- (d) oxytocin from maternal pituitary.

(Karnataka NEET 2013)

102. Signals for parturition originate from

- (a) both placenta as well as fully developed fetus

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

- (a) estrogen from placenta
- (b) oxytocin from maternal pituitary
- (c) oxytocin from fetal pituitary
- (d) relaxin from placenta.

(Mains 2010)

104. Fetal ejection reflex in human female is induced by

- (a) release of oxytocin from pituitary
- (b) fully developed fetus and placenta
- (c) differentiation of mammary glands
- (d) pressure exerted by amniotic fluid.

(2009)

105. In human adult females oxytocin

- (a) stimulates pituitary to secrete vasopressin
- (b) causes strong uterine contractions during parturition
- (c) is secreted by anterior pituitary
- (d) stimulates growth of mammary glands.

(2008)

ANSWER KEY

- | | | | | | | | | | |
|----------|----------|----------|----------|----------|---------|---------|---------|---------|----------|
| 1. (c) | 2. (a) | 3. (a) | 4. (d) | 5. (a) | 6. (a) | 7. (c) | 8. (b) | 9. (a) | 10. (a) |
| 11. (d) | 12. (a) | 13. (d) | 14. (c) | 15. (c) | 16. (b) | 17. (b) | 18. (c) | 19. (d) | 20. (d) |
| 21. (b) | 22. (a) | 23. (b) | 24. (a) | 25. (a) | 26. (b) | 27. (a) | 28. (d) | 29. (b) | 30. (b) |
| 31. (c) | 32. (a) | 33. (a) | 34. (d) | 35. (c) | 36. (c) | 37. (a) | 38. (d) | 39. (c) | 40. (b) |
| 41. (c) | 42. (c) | 43. (a) | 44. (b) | 45. (b) | 46. (d) | 47. (d) | 48. (b) | 49. (a) | 50. (c) |
| 51. (d) | 52. (a) | 53. (c) | 54. (a) | 55. (d) | 56. (a) | 57. (b) | 58. (c) | 59. (d) | 60. (d) |
| 61. (c) | 62. (b) | 63. (c) | 64. (a) | 65. (b) | 66. (a) | 67. (d) | 68. (a) | 69. (b) | 70. (b) |
| 71. (a) | 72. (c) | 73. (b) | 74. (a) | 75. (a) | 76. (a) | 77. (b) | 78. (c) | 79. (b) | 80. (b) |
| 81. (b) | 82. (b) | 83. (d) | 84. (a) | 85. (d) | 86. (c) | 87. (a) | 88. (b) | 89. (b) | 90. (d) |
| 91. (c) | 92. (b) | 93. (b) | 94. (b) | 95. (b) | 96. (a) | 97. (a) | 98. (a) | 99. (c) | 100. (b) |
| 101. (d) | 102. (a) | 103. (b) | 104. (b) | 105. (b) | | | | | |