Exercise-1

✍ **Marked Questions are for Revision Questions.**

ONLY ONE OPTION CORRECT TYPE

SECTION - A # Male Reproductive System

1. The head of epididymis is called
(1) Caput epididymis (2) Cauda epididymis (3) Gubernaculum (4) Vas deferens

2. If the vasa deferentia of a man are surgically cut or blocked
(1) Sperms in the semen become non motile (2) Spermatogenesis will not take place
(3) Testosterone will disappear from blood (4) Semen will be without sperms

3. The ducts which carry sperms from testis to caput epididymis are
(1) Vasa efferentia (2) Vasa deferentia (3) Ureters (4) Bidder's canals

4. Fructose is present in the secretion of
(1) Bartholin's gland (2) Cowper's gland (3) Perineal glands (4) Seminal vesicles

5. In human males the acidity in the urethra is neutralised by the secretions of
(1) Cowper's glands (2) Rectal glands (3) Perineal glands (4) Urinary bladder

6. Which of the following in mammals produce/s alkaline mucous for lubrication?
(1) Pineal body (2) Prostate gland (3) Cowper's glands (4) Testis

7. Seminal plasma (semen) has sperms and secretions of
(1) Follicles, Ureters and Prostate gland
(2) Prostate, Cowper's and Bartholin's glands
(3) Seminal vesicles, Prostate and Cowper's glands
(4) Seminal vesicles, Ureters and Prostate gland

8. Testosterone is secreted by
(1) Mast cells (2) Sertoli cells (3) Kupffer cells (4) Leydig's cells

9. Erection of penis in mammals is an example of
(1) Exoskeleton (2) Endoskeleton (3) Bony skeleton (4) Hydrostatic skeleton

10. Which of the following is correct about mammalian testes?
(1) Graafian follicles, Sertoli cells, Leydig's cells
(2) Sertoli cells, Seminiferous tubules, Leydig's cells
(3) Graafian follicles, Leydig's cells, Seminiferous tubules
(4) Graafian follicles, Sertoli cells, Seminiferous tubules

11. The nutritive cells found in the seminiferous tubules are
(1) Sertoli cells (2) Leydig cells
(3) Chromaffin cells (4) Spermatogonia

12. Which one of the following types of glands is unpaired, in the human male reproductive system?
(1) Seminal vesicle (2) Cowper's gland (3) Prostate gland (4) Lacrimal gland

13. Cauda epididymis leads to the
(1) Rete testis (2) Vas deferens (3) Vas efferens (4) Ejaculatory duct

14. The sertoli cells are present in the

(1) Testis (2) Ovary (3) Blood (4) Lymph

15. Cryptorchidism is a condition in which
(1) Testis does not descend into the scrotal sacs
(2) Sperms are not found in the semen
(3) Male hormones are not active
(4) Ovaries are absent

16. The sertoli cells are found in the testis. These cells are also known as
(1) Nurse cells (2) Reproductive cells (3) Receptor cells (4) Germ cells

SECTION - B # Female Reproductive System

1. Graafian follicles are found in
(1) Ovary of mammals (2) Testis of mammals
(3) Liver of mammals (4) Ovary of frog

2. The part of fallopian tube closer to the ovary is
(1) Isthmus (2) Funnel shaped infundibulum
(3) Vestibule (4) Ampulla

3. The Bartholin's glands of a mammalian female correspond to which glands in the mammalian male?
(1) Cowper's glands (2) Perineal glands
(3) Rectal glands (4) Prostate gland

4. Bartholin's glands occur in the
(1) Males and produce alkaline fluid for neutralizing urethral acidity
(2) Males and form liquid part of the semen
(3) Females and help in the vestibular lubrication
(4) Females and produce Oestrogen for the appearance of secondary sexual characters

5. The clitoris in mammalian female is
(1) Homologous to glans penis of male (2) Analogous to penis of male
(3) Non-functional (4) Overgrown structure

6. The cervix is a part
(1) of kidney (2) of fallopian tube
(3) of epididymis (4) between uterus and vagina

7. Which of the following is primary sex organ?
(1) Vagina (2) Ovary (3) Uterus (4) Fallopian tube

8. Bartholin's glands are situated
(1) At the reduced tail end of birds
(2) On either side of vagina in human females
(3) On either side of vas deferens in human males
(4) On the either side of the head of some amphibians

9. The fertilization of an egg, by the sperm, in the female genital tract, takes place in the
(1) Uterus (2) Ovary (3) Vagina (4) Oviduct (fallopian tube)

10. Corpus luteum develops from the
(1) Oocyte (2) Graafian follicle (3) Nephrostome (4) Corpus albicans

11. In the urinogenital organs of humans, which one of the following part is present in the male but is absent in the female?

(1) Vagina (2) Urethra (3) Fallopian tube (4) Vas deferens

12. Accessory sexual characteristics in human females are under the control of a/an
(1) Androgen (2) Progesterone (3) Oestrogen (4) Testosterone

SECTION - C # Gametogenesis, Reproductive cycles

1. The products of the first maturation division of primary spermatocytes in testis are known as the
(1) Spermatids (2) Spermatogonia
(3) Secondary spermatocytes (4) Spermatozoa

2. The nucleus of a sperm is located in its
(1) Acrosome (2) Head (3) Middle piece (4) Tail

3. Spermiogenesis is the transformation of
(1) Spermatogonia to primary spermatocytes
(2) Spermatogonia to functional spermatozoa
(3) Primary spermatocytes into secondary spermatocytes
(4) Spermatids to spermatozoa

4. The number of spermatozoa produced by a single primary spermatocyte during spermatogenesis is
(1) Eight (2) Four (3) Two (4) One

5. The number of chromosomes in a primary spermatocyte is
(1) Same as that of secondary spermatocyte (2) Same as that of spermatid
(3) Half of that of spermatogonium (4) Same as that of spermatogonium

6. How many secondary spermatocytes are required to form 400 spermatozoa?
(1) 40 (2) 100 (3) 200 (4) 400

7. Mitochondria of a sperm occur in its
(1) Head (2) Middle piece (3) Tail (4) Acrosome

8. Graafian follicles contain
(1) Oogonial cells (2) Corpus albicans
(3) Corpus luteum (4) Theca externa and theca interna

9. The discharge of secondary oocyte from Graafian follicle is termed as
(1) Oogenesis (2) Abortion (3) Fertilization (4) Ovulation

10. The mammalian corpus luteum produces
(1) Progesterone (2) Oestrogen
(3) Luteotrophic hormone (4) Luteinizing hormone

11. The germ cells (gametes) in the gonads of a vertebrate originate due to
(1) Mitosis (2) Meiosis
(3) Both mitosis and meiosis (4) Maturation without cell division

12. The correct sequence of cell stages in spermatogenesis is
(1) Spermatocytes, spermatids, spermatogonia, spermatozoa
(2) Spermatogonia, spermatocytes, spermatids, spermatozoa
(3) Spermatocytes, spermatogonia, spermatids, spermatozoa
(4) Spermatogonia, spermatids, spermatocytes, spermatozoa

13. The genetic material of a sperm is located in its
(1) Head (2) Middle piece (3) Acrosome (4) Tail

14. The middle piece of a mammalian sperm contains
(1) Centrioles only (2) Nucleus and mitochondria
(3) Centrioles and mitochondria (4) Mitochondria only

15. The lytic enzymes released by a sperm is
(1) Acid phosphatase (2) Ligase
(3) Androgamone (4) Hyaluronidase

16. Acrosome is derived from the
(1) Golgi bodies (2) Mitochondria (3) Ribosomes (4) Centrioles

17. Acrosome facilitates the sperm to
(1) Find an ovum (2) Swim
(3) Acquire higher activity (4) Penetrate membrane of an ovum

18. Which is immortal?
(1) Plasma cell (2) Germ cell (3) Brain cell (4) Kidney cell

19. Which one of the following pairs contain diploid cells?
(1) Spermatid and sperm (2) Spermatogonia and spermatid
(3) Primary and secondary spermatocyte (4) Spermatogonia and primary spermatocytes

20. How many eggs will be formed from 100 primary oocytes?
(1) 100 (2) 200 (3) 300 (4) 400

21. Which one of the following is not a phase of the menstrual cycle?
(1) Oestrous phase (2) Luteal phase (3) Follicular phase (4) Menstrual phase

22. Antrum is the fluid filled cavity of
(1) Ovary (2) Blastula (3) Gastrula (4) Graafian follicle

23. Oogonium is
(1) Haploid (2) Diploid (3) Triploid (4) Euploid

24. In a human male, sperms contain autosomes and
(1) One Y-chromosome (2) One X-chromosome
(3) Both X and Y-chromosomes (4) Either X or Y-chromosome

25. Which type of cell division occurs in the gonads?
(1) Mitosis only (2) Meiosis only
(3) Both mitosis and meiosis (4) Amitosis and meiosis

26. The cytoplasm surrounding the mitochondria found in the middle piece of the sperm is called
(1) Acrosome (2) Microsome (3) Manchette (4) Centrosome

27. Which hormone/s control the menstrual cycle in human beings?
(1) LH (2) Progesterone (3) FSH (4) FSH, LH, Oestrogen

28. In a human female, which one of the following is incorrect?
(1) Menstruation takes about 4 days
(2) Menstrual cycle takes about 28 days
(3) Menopause occurs at an age of 45-55 years
(4) Ovulated egg released during pregnancy dies

29. Spermatogenesis is induced by
(1) FSH (2) MSH (3) ACTH (4) hCG

30. In spermatogenesis, the phase of maturation involves the

(1) Growth of spermatogonia to form primary spermatocytes
(2) Formation of spermatogonia from primary spermatocytes through mitosis
(3) Formation of spermatids from primary spermatocytes through meiosis
(4) Formation of oogonia from the spermatocytes through meiosis

31. In females, the hormone inhibin is secreted by
(1) Theca cells (2) Zona pellucida (3) Sertoli cells (4) Corpus luteum

32. The number of chromosomes in a mature gamete gets halved during
(1) Meiosis II
(2) Formation of first polar body
(3) Formation of second polar body
(4) Division of secondary oocyte and secondary spermatocyte

33. Ovulation in human females, is under the control of
(1) LTH (2) ADH and LH (3) FSH and LH (4) LTH and TSH

34. Onset of menstruation is due to the
(1) Increase in the levels of progesterone (2) Fall in levels of progesterone
(3) Increase in levels of FSH (4) None of these

35. Which one of the following hormones does not play any role in the menstruation?
(1) GH (2) FSH (3) LH (4) All of these

36. The shortest phase in the menstrual cycle of women refers to the
(1) Menses (2) Luteal phase (3) Ovulatory phase (4) Follicular phase

37. Ovulation in human female normally takes place during menstrual cycle
(1) At the mid secretory phase (2) At the end of the proliferative phase
(3) Just before the end of the secretory phase (4) At the beginning of the proliferative phase

38. The cellular layer, that cyclically, disintegrates and regenerates, in human females, is the
(1) Dermis of skin (2) Cornea of the eye
(3) Endometrium of uterus (4) Endothelium of blood vessels

39. An ovary secretes large quantity of Oestrogen during
(1) Pregnancy (2) Lactation
(3) Preovulatory phase (4) Secretory phase

40. Ovulation normally occurs during
(1) 11^{th} - 12^{th} (2) 14^{th} -16^{th} (3) 15^{th}- 28^{th} (4) 21^{th} -26^{th}

41. In most mammals, the testes are located in the scrotal sacs for the purpose of?
(1) Spermatogenesis
(2) Sex differentiation
(3) Providing more space to the visceral organs
(4) Optimum growth

42. Spermatogenesis refers to the
(1) Formation of sperms (2) Formation of ova
(3) Formation of zygote (4) Formation of gametes

43. The spermatogonia are formed due to which of the following types of cell divisions?
(1) Amitosis (2) Mitosis (3) Meiosis I (4) Meiosis II

44. An enzyme present in a sperm is/are
(1) Spermin (2) Lysozyme (3) Sperm lysin (4) Hydrolytic enzyme

45. Which of the following groups of cells in the male gonad, represent haploid cells?
(1) Spermatogonia (2) Primary spermatocytes
(3) Germinal epithelial cells (4) Secondary spermatocytes

46. An acrosome of sperm contains
(1) Hyaluronic acid and proacrosine (2) Hyaluronidase and proacrosin
(3) Hyaluronic acid and fertilizin (4) Fertilizin and proacrosin

47. Graafian follicle is maintained due to the activity of
(1) Oestrogen (2) Prolactin
(3) Luteinizing hormone (4) Follicle stimulating hormone

48. The structure that develops at the site of release of ovum from human ovary is
(1) Corpus tectum (2) Corpus callosum (3) Corpus luteum (4) Corpus mammalian

49. Ovulation takes place in/on
(1) Ovary (2) About the 14th day (3) Both (1) and (2) (4) None of these

50. At menopause, there is rise in urinary excretion of
(1) FSH (2) STH (3) LTH (4) MSH

51. Which of the following represents a condition, where the motility of the sperms, is highly reduced?
(1) Oligospermia (2) Athenospermia (3) Azoospermia (4) Polyspermy

52. Withdrawal of which of the following hormones is immediate cause of menstruation?
(1) FSH (2) FSH-RH (3) Progesterone (4) Oestrogen

53. Which one of the following hormones, controls the function of sertoli cells?
(1) FSH (2) Oestrogen (3) ACTH (4) Testosterone

54. In the human females, menstruation can be deferred by the administration of
(1) Combination of Oestrogen and progesterone (2) FSH
(3) LH (4) Combination of FSH and LH.

55. An inhibition of secretion of which of the following hormones is necessary for the disintegration of corpus luteum?
(1) LH (2) Progesterone (3) LTH (4) FSH

56. In humans, at the end of the first meiotic division, the male germ cells differentiate into the
(1) Secondary spermatocytes (2) Spermatids
(3) Spermatogonia (4) Primary sprmatocytes

57. Which one of the following is the most likely root cause of absence of menstruation a human female having regular cycles?
(1) Fertilisation of the ovum
(2) Maintenance of the hypertrophied endometrium
(3) Maintenance of high concentration of sex hormones in the blood stream
(4) Retention of well developed corpus luteum

SECTION - D # Fertilization, Embryonic development

1. Which layer develops first during embryonic development?
(1) Ectoderm (2) Mesoderm (3) Endoderm (4) Both (2) and (3)

2. If the first cleavage furrow divides the zygote completely into two, the cleavage type is

(1) Radial (2) Equatorial (3) Meroblastic (4) Holoblastic

3. The mammalian blastula is known as
(1) Foetal blastula (2) Blastocyst (3) Trophoderm (4) Oolema

4. A change in the amount of yolk and its distribution in the egg will affect
(1) Formation of zygote (2) Pattern of cleavage
(3) Number of blastomeres produced (4) Fertilization

5. Cleavage divisions differ from normal mitotic divisions in that
(1) There is no nuclear division during cell cycle
(2) There is no division of the cytoplasm during cleavage
(3) There is no period of growth in between the divisions
(4) The division of the cytoplasm follows nuclear divisions

6. Which of the following hormones is secreted by implanted blastocyst that acts on the Corpus luteum in the ovary, stimulating the body to produce estrogens and progesterone to maintain the uterine lining?
(1) Lactogen (2) hCG (3) Progesterone (4) Oxytocin

7. The skeleton and muscles orginate in the development from or during embryonic development. Endoskeleton and muscles develop from which germinal layer?
(1) Ectoderm (2) Endoderm (3) Mesoderm (4) Yolk plug

8. Which extra embryonic membrane in humans prevent desiccation of the embryo inside the uterus?
(1) Yolk sac (2) Amnion (3) Chorion (4) Allantois

9. In man the foetal membrane which forms the intimate connection with the uterine tissue is?
(1) Amnion only (2) Chorion only
(3) Allantois only (4) Allanto-chorionic structure

10. The foetal membrane which is source of first blood corpuscle to enter the circulation of the embryo is called
(1) Amnion (2) Chorion (3) Trophoblast (4) Yolk sac

11. Foetal ejection reflex in human females is induced by
(1) Pressure exerted by amniotic fluid (2) Release of oxytocin from pituitary
(3) Fully developed foetus and placenta (4) Differentiation of mammary glands

12. Which of the following induces parturition?
(1) Vasopressin (2) Oxytocin (3) GH (4) TSH

13. Gestation period is the duration
(1) Of fertilization (2) Between egg growth and ovulation
(3) Between fertilization and parturition (4) None of the above

14. The first movements of the foetus and appearance of hair on its head are usually observed during which month of pregnancy?
(1) Third month (2) Fourth month (3) Fifth month (4) Sixth month

15. The process of delivery of the foetus is called
(1) Parturition (2) Implantation (3) Fertilisation (4) Lactation

16. The embryo at 16 cell-stage is known as
(1) Morula (2) Gastrula (3) Blastula (4) Balstodermic vesicle

17. The hormones that initiate ejection of milk, stimulate milk production and growth of ovarian follicles are respectively known as

(1) PRL, OT and LH (2) OT, PRL and FSH
(3) LH, PRL and FSH (4) PRH, OT and LH

18. The capacitation of sperms occurs in the
(1) Female genital tract (2) Vasa deferentia
(3) Vasa efferentia (4) Vagina

19. The fertilization of sperms and ova takes place in the
(1) Ampulla of oviduct (2) Isthmus of oviduct
(3) Fimbrae of oviduct (4) Uterine part of oviduct

20. In humans, the secretion of which of the following is used to confirm the implantation of an embryo?
(1) Gastrula (2) Trophoblast (3) Inner mass of cell (4) Blastocyst

21. In adult human females, oxytocin
(1) Stimulates the growth of mammary glands
(2) Stimulates pituitary to secrete vasopressin
(3) Causes strong uterine contractions during parturition
(4) Is secreted by anterior pituitary

22. In human females, a haploid egg is fertilized by sperm at which stage?
(1) Primary oocyte (2) Secondary oocyte (3) Oogonium (4) Ovum

SECTION - E # Reproductive Health

1. Given below are four methods (A-D) and their modes of action (a-d) in achieving contraception. Select their correct matching from the four options that follow

Method	Mode of action
A. The pill	(a) Prevents sperms reaching cervix
B. Condom	(b) Prevents implantation
C. Vasectomy	(c) Prevents ovulation
D. Copper T	(d) Semen without sperms

(1) A-(c), B-(d), C-(a), D-(b) (2) A-(b), B-(c), C-(a), D-(d)
(3) A-(c), B-(a), C-(d), D-(b) (4) A-(d), B-(a), C-(b), D-(c)

2. Consider the statements given below and answer as directed thereafter
(A) Medical Termination of pregnancy (MTP) during first trimester is generally safe
(B) Generally chances of contraception are nil until mother breast-feeds the infant upto two years
(C) Intrauterine devices like copper-T are effective contraceptives
(D) Contraception pills may be taken upto one week after coitus to prevents conception
Which two of the above statements are correct?
(1) A,C (2) A,B (3) B,C (4) C,D

3. Test tube baby means a baby born when
(1) It develops from a non-fertilized egg
(2) It develops in a test tube
(3) It is developed through tissue culture method
(4) The ovum is fertilised externally and thereafter implanted in the uterus

Exercise-2

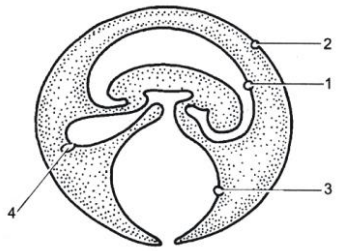
1. Which statement is false? **(3rd CBO)**
(1) Cell division to form a blastocyst begins after the fertilized egg is implanted in the endometrium of the uterus.
(2) The placenta contains cells derived both from the embryo and the mother
(3) Follicle stimulating hormone (FSH) stimulates the production of sperm in the testes of male

(4) Human males can continue to produce sperm throughout life whereas females stop producing eggs during menopause.

2. If an adult human female took a drug that inhibited the release of LH (luteinizing hormone) which of the following would not occur? **(7th CBO)**

(1) The menstrual cycle
(2) Release of an ovum from a mature follicle
(3) Secretion of FSH (follicle stimulating hormone) from the pituitary
(4) Secretion of Oestrogen by the follicle cells

3. Extra embryonic membranes are shown in the given figure amnion, allantois, chorion and yolk sac are labelled in the figure respectively as: **(2nd NSO I L)**



(1) 4,1, 2 and 3 (2) 4,1,3 and 2 (3) 1,4,3 and 2 (4) 1,4,2 and 3

4. Trace path of sperm cell from the structure where it is produced and reaches for fertilization of the egg: **(2nd NSO II L)**

(a) Seminiferous tubule (b) Vasa deferens
(c) Uterus (d) Fallopian tube
(e) Vagina (f) Epididymis
(g) Urethra

(1) f,a,b,g,e,c,d (2) a,f,b,g,e,c,d (3) a,f,b,g,e,d,c (4) a,b,f,g,e,c,d

5. How are mature human sperm and ova similar? **(2nd NSO I L)**

(1) They are approximately the same size
(2) They are formed before birth
(3) They each have a flagellum that provides motility
(4) They both have the same number of chromosomes

6. Fetilization in humans usually takes place in **(KVPY_2009_SB)**

(1) Uterus (2) Graafian follicle (3) Ovary (4) Fallopian tube

7. Soon after the three germ layers are formed in a developing embryo, the process of organogenesis starts. The human brain is formed from the **(KVPY_2011_SB)**

(1) ectoderm (2) endoderm
(3) mesoderm (4) partly endoderm and partly mesoderm

Exercise-3

PART - I : NEET / AIPMT QUESTION (PREVIOUS YEARS)

1. In rabbit, head of the epididymis present at the head of the testis is called **(CBSE PMT-2000)**
(1) Vas deferens (2) Cauda epididymis
(3) Gubernaculum (4) Caput epididymis

2. If both ovaries are removed from a rat, then which hormone is decreased in blood? **(CBSE PMT-2002)**
(1) Oxytocin (2) Oestrogen
(3) Prolactin (4) Gonadotropins

3. Which of the following cells are present in mammalian testes and help to nourish sperms? **(CBSE PMT-2003)**
(1) Leydig cells (2) Oxyntic cells
(3) Interstitial cells (4) Sertoli cells

4. Bartholin's glands are situated **(CBSE PMT-2003)**
(1) On either side of vas deferens in humans (2) On the side of the head of frog
(3) At the reduced tail end of birds (4) On either side of vagina in humans

5. Ovulation in the human female normally takes place during the menstrual cycle
(1) At the beginning of the proliferative phase **(CBSE PMT-2004)**
(2) At the end of the proliferative phase
(3) At the mid secretory phase
(4) Just before the end of the secretory phase

6. Acrosome of sperm is formed from **(CBSE PMT-2005)**
(1) Nucleus of spermatid (2) Mitochondria of spermatid
(3) Golgi complex of spermatid (4) Centrosome of spermatid

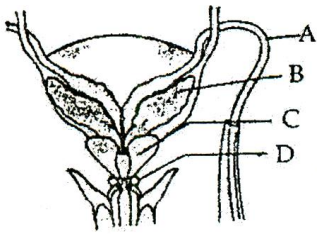
7. Sperms formed from 4 Primary spermatocytes are **(CBSE PMT-2005)**
(1) 4 (2) 1 (3) 16 (4) 32

8. Withdrawal of which of the following hormones is the immediate causes of menstruation? **(CBSE PMT-2006)**
(1) FSH-RH (2) Progesterone (3) Estrogen (4) FSH

9. In the human female, ovulation can be deferred by the administration of **(CBSE PMT-2007)**
(1) LH only
(2) Combination of FSH and LH
(3) Combination of estrogen and progesterone
(4) FSH only

10. Which one of the following statements is incorrect about menstruation **(CBSE PMT-2008)**
(1) At menopause in female, there is especially abrupt increase in gonadotropic hormones
(2) The beginning of the cycle of menstruation is called menarche
(3) During normal menstruation about 40 ml blood is lost
(4) The menstrual fluid can easily clot

11.# Given below is a diagrammatic sketch of a portion of human male reproductive system. Select the correct set of names of the parts labelled A,B,C, D **(CBSE PMT-2009)**



	A	B	C	D
(1)	Ureter	Prostate	Seminal Vesicle	Bulbourethral gland
(2)	Vas deferens	Seminal vesicle	Prostate	Bulbourethral gland
(3)	Vas deferens	Seminal vesicle	Bulbourethral gland	Prostate
(4)	Ureter	Seminal vesicle	Prostate	Bulbourethral gland

12. Which one of the following is the correct matching of the events occurring during menstrual cycle? **(CBSE PMT-2009)**

(1) **Ovulation:** LH and FSH attain peak level and sharp fall in the secretion of progesterone
(2) **Proliferative phase:** Rapid regeneration of myometerium and maturation of Grasfian follicle
(3) **Development of Corpus luteum:** Secretory phase and increased secreation of progesterone
(4) **Menstruation:** Breakdown of myometrium and ovum not fertilised

13. Seminal plasma in humans is rich in **[CBSE PMT (Pre.2010)]**

(1)Fructose, calcium, certain enzymes
(2) Fructose and calcium but has no enzymes
(3) Glucose and certain enzymes but has no calcium
(4) Fructose and certain enzymes but poor in calcium

14. Secretions from which one of the following are rich in fructose, calcium and some enzymes? **[CBSE PMT (Mains) 2010]**

(1) Male accessory glands (2) Liver
(3) Pancreas (4) Salivary glands

15. The part of fallopian tube closest to the ovary is **(AIPMT Pre. 2010)**

(1) Infundibulum (2) Cervix (3) Ampulla (4) Isthmus

16. Vasa efferentia are the ductules leading from **(AIPMT Pre. 2010)**

(1) Rete testis to epididymis (2) Vas deferens to epididymis
(3) Epididymis to urethra (4) Testicular lobules to rete testis

17. Which one of the following statements about human sperm is correct? **(AIPMT Pre. 2010)**

(1) The sperm lysins in the acrosome dissolve the egg envelope facilitating fertilisation
(2) Acrosome serves as a sensory structure leading the sperm towards the ovum
(3) Acrosome serves no particular function
(4) Acrosome has a conical structure used for piercing and penetrating the egg resulting in fertilisation.

18. In vitro ferilisation involves the transfer of …….in fallopian tube **(AIPMT Pre. 2010)**

(1) Either zygote or early embryo upto 8 cell stage
(2) Embryo upto 32 cell stage
(3) Zygote
(4) Embryo upto 8 cell stage

19. Sertoli cells are found in the **(AIPMT Pre. 2010)**
(1) Adrenal cortex and secrete adrenaline
(2) Seminiferous tubules and provide nutrition to germ cells
(3) Pancreas and secrete progesterone
(4) Ovaries and secrete progesterone

20. Which one of the following statements about morula in humans is correct? **(AIPMT Pre. 2010)**
(1) It has far less cytoplasm as well as less DNA than that in an uncleaved zygote
(2) It has more or less, equal quantity of cytoplasm and DNA as in an uncleaved zygote
(3) It has more cytoplasm and more DNA than that of an uncleaved zygote
(4) It has almost equal quantity of cytoplasm as that of an uncleaved zygote but much more DNA

21. Cu^{2+} ions released from copper releasing Intra Uterine Devices (IUDs) **(AIPMT Pre. 2010)**
(1) Increase phagocytosis of sperms (2) Suppress sperm motility
(3) Prevent ovulation (4) Make uterus unsuitable for implantation

22. The second maturation division of the mammalian ovum occurs **(AIPMT Pre. 2010)**
(1) Until after the ovum has been penetrated by a sperm
(2) Until the nucleus of the sperm has fused with that of the ovum
(3) In the Graafian follicle after the first maturation division
(4) Shortly after ovulation before the ovum makes entry into the fallopian tube

23. The first movement of the foetus and appearance of hair on its head are usually observed during which month of pregnancy? **(AIPMT Pre. 2010)**
(1) Fifth month (2) Sixth month (3) Third month (4) Fourth month

24. The permissible use of amniocentesis is for **(AIPMT Pre. 2010)**
(1) Artificial insemination (AI)
(2) Transfer of an embryo into the uterus of a surrogate mother
(3) Detecting any genetic abnormality
(4) Detecting sex of the unborn foetus

25. Signals from fully developed foetus and placenta ultimately lead to parturition, which require the release of **(AIPMT Mains 2010)**
(1) Relaxin from placenta (2) Oestrogen from placenta
(3) Oxytocin from maternal pituitary (4) Oxytocin from foetal pituitary

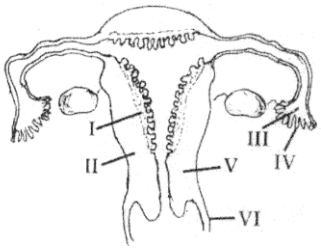
26. In human females, the blastocyst **(AIPMT Mains 2010)**
(1) Gets implanted in the endometrium by the trophoblast cells
(2) Forms placenta even before implantation
(3) Gets implanted into uterus 3 days after ovulation
(4) Gets nutrition from uterine endometrial secretions after implantation

27. Which one of the following, at present, is the most widely accepted method of contraception in India?
(1) Use of cervical caps (2) Tubectomy **(AIPMT Pre. 2011)**
(3) Use of diaphragms (4) IUDs' (Intra Uterine Devices)

28. If the vasa efferentia, in the human reproductive system, get blocked, the gametes will not be transported from the **(AIPMT Pre. 2011)**
(1) Testis to epididymis (2) Epididymis to vas deferens
(3) Ovary to uterus (4) Vagina to uterus

29. # The figure given below depicts a diagrammatic sectional view of the female reproductive system of humans. Which one of the following sets containing three parts out of I-VI is correct?

(AIPMT Pre. 2011)



(1) (II) Endometrium, (III) Infundibulum, (IV) Fimbriae
(2) (III) Infundibulum, (IV) Fimbriae, (V) Cervix
(3) (IV) Oviduct funnel, (V) Uterus, (VI) Cervix
(4) (I) Perimetriurm, (II) Myometrium, (Ill) Fallopian tube **(AIPMT Pre. 2011)**

30. The technique called Gamete Intra Fallopian Transfer (GIFT) is recommended for those females
(1) Who can not produce an ovum **(AIPMT Main 2011)**
(2) Who can not retain the foetus inside uterus
(3) Whose cervical canal is too narrow to allow the passage of the sperms
(4) Who can not provide suitable environment for fertilisation

31. What happens during fertilisation in humans, after many sperms reach close to the ovum?

(AIPMT Main 2011)

(1) Secretions of acrosome help one sperm enter cytoplasm of ovum through Zona pellucida
(2) All sperms except the one nearest to the ovum lose their tails
(3) Cells of Corona radiata trap all the sperms except one
(4) Only two sperms nearest the ovum penetrate Zona pellucida

32. On which day, in a normal human female menstrual cycle, rapid secretion of LH (popularly known as LH surge) normally occurs? **(AIPMT Main 2011)**

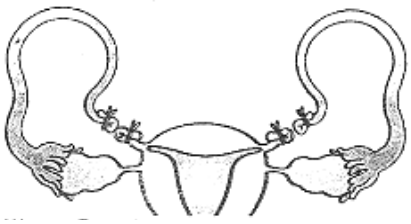
(1) 14^{th} day (2) 20^{th} day (3) 5^{th} day (4) 11^{th} day

33. Which one of the following conditions of the zygote would lead to the birth of a normal human female child? **(AIPMT Main 2011)**

(1) Two X chromosomes (2) Only one Y chromosome
(3) Only one X chromosome (4) One X and one Y chromosome

34. Which one of the following statements is false, with respect to the viability of mamalian sperm?
(1) Sperm is viable for only up to 24 hours **(AIPMT Pre. 2012)**
(2) Survival of sperm depends on the pH of the medium and is more active in alkaline medium
(3) Viability of sperm is determined by its motility
(4) Sperms must be concentrated in a thick suspension

35. # What is the figure given below, showing? **(AIPMT Pre. 2012)**



(1) Ovarian cancer (2) Uterine cancer (3) Tubectomy (4) Vasectomy

36. In a normal pregnant woman, the amount of total gonadotropin activity was assessed. The result expected was **(AIPMT Pre-2012)**

(1) High levels of circulating FSH and LH in the uterus to stimulate implantation of the embyro

(2) High level of circulating hCG to stimulate endometrial thickening

(3) High levels of FSH and LH in the uterus to stimulate endometrial thickening

(4) High levels of circulating hCG to stimulate Oestrogen and progesterone synthesis

37. The test-tube baby programme employs which one of the following techniques? **(AIPMT Pre. 2012)**

(1) Intra Cytoplasmic Sperm Injection (ICSI)

(2) Intra Uterine Insemination (IUI)

(3) Gamete Intra Fallopian Transfer (GIFT)

(4) Zygote Intra Fallopian Transfer (ZIFT)

38. The Leydig's cells found in humans, are the source of **(AIPMT Pre. 2012)**

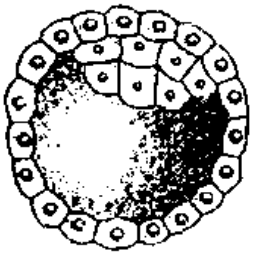
(1) Progesterone (2) Intestinal mucus (3) Glucagon (4) Androgens

39. The secretory phase in the human female menstrual cycle is also called **(AIPMT Mains 2012)**

(1) Luteal phase and lasts for about 6 days (2) Follicular phase lasting for about 6 days

(3) Luteal phase and lasts for about 13 days (4) Follicular phase and lasts for about 13 days

40. # Identify the human developmental stage shown below, as well as the related right place of its occurrence in a normal pregnant woman and select the correct option for the two. **(AIPMT Mains 2012)**



Options:

	Developmental stage	**Site of occurrence**
(1)	Late morula	Middle part of fallopian tube
(2)	Blastula	Last part of fallopian tube
(3)	Blastocyst	Uterine wall
(4)	8-celled morula	Starting point of fallopian tube

41. Which of the following cannot be detected in a developing foetus by amniocentesis? **(NEET-2013)**

(1) Sex of the foetus (2) Down syndrome

(3) Jaundice (4) Klinefelter syndrome

42. Menstrual flow occurs due to lack of **(NEET-2013)**

(1) FSH (2) Oxytocin (3) Vasopressin (4) Progesterone

43. What is the correct sequence of sperm formation? **(NEET-2013)**

(1) Spermatogonia, spermatocyte, spermatozoa, spermatid

(2) Spermatogonia, spermatozoa, spermatocyte, spermatid

(3) Spermatogonia, spermatocyte, spermatid, spermatozoa

(4) Spermatid, spermatocyte, spermatogonia, spermatozoa

44. One of the legal methods of birth control is **(NEET-2013)**
(1) by abstaining from coitus from day 10 to 17 of the menstrual cycle
(2) by having coitus at the time of day break
(3) by a premature ejaculation during coitus
(4) abortion by taking an appropriate medicine

45. Which one of the following is not the function of placenta? It **(NEET-2013)**
(1) Secretes Oestrogen
(2) Facilitates removal of carbon dioxide and waste material from embryo.
(3) Secretes oxytocin during parturition
(4) Facilitates supply of oxygen and nutrients to embryo

46. Artificial insemination mean **(NEET-2013)**
(1) Transfer of sperms of husband to a test tube containing ova
(2) Artificial introduction of sperms of a healthy donor into the vagina
(3) Introduction of sperms of a healthy donor directly into the ovary
(4) Transfer of sperms of a healthy donor to a test tube containing ova

47. The shared terminal duct of the reproductive and urinary system in the human male is: **(NEET-2013)**
(1) Urethra (2) Ureter (3) Vas deferens (4) Vasa efferentia

48. The main function of mammalian corpus luteum is to produce **(AIPMT-2014)**
(1) Oestrogen only (2) progesterone
(3) human chorionic gonadotropin (4) relaxin only

49. Select the correct option describing gonadotropin activity in a normal pregnant female **(AIPMT-2014)**
(1) High level of FSH and LH stimulates the thickening of endometrium
(2) High level of FSH and LH facilitate implantation of the embryo
(3) high level of hCG stimulates the synthesize of Oestrogen and progesterone
(4) High level of hCG stimulates the thickening of endometrium

50. Tubectomy is method of sterilization in which **(AIPMT-2014)**
(1) small part of the fallopian tube is removed or tied up
(2) ovaries are removed surgically
(3) small part of vas deferens is removed or tied up
(4) uterus is removed surgically

51. Which of the following is a hormone releasing Intra Uterine Device (IUD)? **(AIPMT-2014)**
(1) Multiload 375 (2) LNG - 20 (3) Cervical cap (4) Vault

52. Assisted reproductive technology, IVF (Invitro fertilization) involves transfer of **(AIPMT-2014)**
(1) Ovum into the fallopian tube
(2) Zygote into the fallopian tube
(3) Zygote into the uterus
(4) Embryo with 16 blastomeres into the fallopian tube

53. Which of the following is **not** a sexually transmitted disease? **(AIPMT-2015)**
(1) Acquired Immuno Deficiency Syndrome (AIDS)
(2) Trichomoniasis
(3) Encephalitis
(4) Syphilis

54. Capacitation refers to changes in the – **(AIPMT-2015)**
(1) ovum before fertilization (2) ovum after fertilization
(3) sperm after fertilization (4) sperm before fertilization

55. Hysterectomy is surgical removal of: **(AIPMT-2015)**
(1) Prostate gland (2) Vas-deference (3) Mammary glands (4) Uterus

56. Which of the following cells during gametogenesis is normally diploid? **(AIPMT-2015)**
(1) Spermatid (2) Spermatogonia
(3) Secondary polar body (4) Primary polar body

57. Which of the following viruses is not transferred through semen of an infected male **(AIPMT-2015)**
(1) Human immunodeficiency virus (2) Chikungunya virus
(3) Ebola virus (4) Hepatitis B virus

58. Which of the following immunoglobulins does constitute the largest percentage in human milk? **(Re-AIPMT-2015)**
(1) Ig M (2) Ig A (3) Ig G (4) Ig D

59. Which of the following events is not associated with ovulation in human female? **(Re-AIPMT-2015)**
(1) Full development of Graafian follicle (2) Release of secondary oocyte
(3) LH surge (4) Decrease in estradiol

60. Ectopic pregnancies are referred to as: **(Re-AIPMT-2015)**
(1) Implantation of embryo at site other than uterus.
(2) Implantation of defective embryo in the uterus
(3) Pregnancies terminated due to hormonal imbalance.
(4) Pregnancies with genetic abnormality.

61. A childless couple can be assisted to have a child through a technique called GIFT. The full form of this technique is **(Re-AIPMT-2015)**
(1) Gamete intra fallopian transfer (2) Gamete internal fertillization and transfer
(3) Germ cell internal fallopian transfer (4) Gemete inseminated fallopian transfer

62. Which of the following layers in an antral follicle is acelluar? **(Re-AIPMT-2015)**
(1) Theca interna (2) Stroma (3) Zona pellucida (4) Granulosa

63. Fertilization in humans is practically feasible only if: **(NEET-I-2016)**
(1) the sperms are transported into cervix within 48 hrs of release of ovum in uterus.
(2) the sperms are transported into vagina just after the release of ovum in fallopian tube.
(3) the ovum and sperms are transported simultaneously to ampullary – isthmic junction of the fallopian tube.
(4) the ovum and sperms are transported simultaneously to ampullary – isthmic junction of the cervix.

64. Changes in GnRH pulse frequency in females is controlled by circulating levels of: **(NEET-I-2016)**
(1) progesterone and inhibin (2) estrogen and progesterone
(3) estrogen and inhibin (4) progesterone only

65. Select the incorrect statement: **(NEET-I-2016)**
(1) LH triggers secretion of androgens from the Leydig cells
(2) FSH stimulates the sertoli cells which help in spermiogenesis
(3) LH triggers ovulation in ovary.
(4) LH and FSH decrease gradually during the follicular phase

66. Which of the following approaches does not give the defined action of contraceptive? **(NEET-I-2016)**

(1)	Vasectomy	prevents spermatogenesis
(2)	Barrier methods	prevent fertilization
(3)	Intra uterine devices	increase phagocytosis of sperms, suppress sperm motility and fertilizing capacity of sperms
(4)	Hormonal Contraceptives	Prevent/retard entry of sperms, prevent ovulation and fertilization

67. Which of the following is hormone releasing IUD? **(NEET-II-2016)**
(1) Cu7 (2) LNG-20 (3) Multilpad 375 (4) Lippes loop

68. Which of the following is **incorrect** .regarding vasectomy? **(NEET-II-2016)**
(1) Irreversible sterility (2) No sperm occurs in seminal fluid
(3) No sperm occurs in epididymis (4) Vasa deferentia is cut and tied

69. Embryo with more than 16 blastomeres formed due to *in vitro* fertilization is transferred into **(NEET-II-2016)**
(1) cervix (2) uterus (3) fallopian tube (4) fimbriae

70. Which of the following depicts the **correct** pathway of transport of sperms? **(NEET-II-2016)**
(1) Efferent ductules → Rete testis → Vas deferens → Epididymis
(2) Rete testis → Efferent ductules → Epididymis → Vas deferens
(3) Rete testis → Epididymis → Efferent ductules → Vas deferens
(4) Rete testis → Vas deferens → Efferent ductules → Epididymis

71. Match **Column-I** with **Column-II** and select the correct option using the codes given below: **(NEET-II-2016)**

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

Codes:

	a	**b**	**c**	**d**
(1)	(i)	(iv)	(iii)	(ii)
(2)	(iii)	(iv)	(ii)	(i)
(3)	(iii)	(iv)	(i)	(ii)
(4)	(iii)	(i)	(iv)	(ii)

72. Several hormones like hCG, hPL, estrogen, progesterone are produced by **(NEET-II-2016)**
(1) pituitary (2) ovary (3) placenta (4) fallopian tube

73. The function of copper ions in copper releasing IUD's is **(NEET-2017)**
(1) They suppress sperm motility and fertilizing capacity of sperms
(2) They inhibit gametogenesis
(3) They make uterus unsuitable for implantation
(4) They inhibit ovulation

74. Capacitation occurs in **(NEET-2017)**
(1) Rete testis (2) Epididymis (3) Vas deferens (4) Female Reproductive tract

75. In case of a couple where the male is having a very low sperm count, which technique will be suitable for fertilisation **(NEET-2017)**

(1) Intrauterine transfer
(2) Gamete intracytoplasmic fallopian transfer
(3) Artificial Insemination
(4) Intracytoplasmic sperm injection

76._ The amnion of mammalian embryo is derived from **(NEET-2018)**

(1) ectoderm and mesoderm (2) ectoderm and endoderm
(3) mesoderm and trophoblast (4) endoderm and mesoderm

77._ Hormones secreted by the placenta to maintain pregnancy are **(NEET-2018)**

(1) hCG, hPL, progestogens, prolactin (2) hCG, progestogens, estrogens, glucocorticoids
(3) hCG, hPL, progestogens, estrogens (4) hCG, hPL, estrogens, relaxin, oxytocin

78._ The contraceptive 'SAHELI' **(NEET-2018)**

(1) blocks estrogen receptors in the uterus, preventing 'eggs from getting implanted.
(2) is a post-coital contraceptive.
(3) is an IUD.
(4) increases the concentration of estrogen and prevents ovulation in females.

79._ The difference between spermiogenesis and spermiation is. **(NEET-2018)**

(1) In spermiogenesis spermatids are formed, while in spermiation spermatozoa are formed.
(2) In spermiogenesis spermatozoa are formed, while in spermiation spermatozoa are released 'from sertoli cells into the cavity of seminiferous tubules:
(3) In spermiogenesis spermatozoa from sertoli cells are released into the cavity of seminiferous tubules, while in spermiation spermatozoa are formed.
(4) In spermiogenesis spermatozoa are formed, while in spermiation spermatids are formed.

80._ Match the items given in Column I with those in Column II and select the *correct* option given below: **(NEET-2018)**

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
(1)	iii	ii	i
(2)	iii	i	ii
(3)	ii	iii	i
(4)	i	iii	ii

81. Extrusion of second polar body from egg occurs: **(NEET-1-2019)**

(1) simultaneously with first cleavage (2) after entry of sperm but before fertilization
(3) after fertilization (4) before entry of sperm into ovum

82. Which of the following contraceptive methods involve a role of horrnone? **(NEET-1-2019)**

(1) Pills, Emergency contraceptives, Barrier methods
(2) Lactational amenorrhea, Pills, Emergency contraceptives
(3) Barrier method, Lactational amenorrhoea, Pills
(4) CuT, Pills, Emergency contraceptives

83. Select the correct sequence for transport of sperm cells in male reproductive system. **(NEET-1-2019)**

(1) Testis →t Epididymis → Vasa efferentia → Vas deferens → Ejaculatory duct → Inguinal canal →Urethra → Urethral meatus
(2) testis → Epididymis → Vasa efferentia →Rete testis-tInguinal canal→ Urethra
(3) Seminiferous tubules → Rete testis → Vasa efferentia → Epididymis → Vas deferens → Ejaculatory duct → Urethra → Urethral meatus
(4) Seminiferous tubules →Vasa efferentia → Epididymis → Inguinal canal →Urethra

84. Colostrum, the yellowish fluid, secreted bymother during the initial days of lactation is very essential to impart immunity to the new born infants because it contains: **(NEET-1-2019)**
(1) Immunoglobulin A (2) Natural killer cells
(3) Monocytes (4) Macrophages

85. Select the hormone-releasing Intra-Uterine Devices. **(NEET-1-2019)**
(1) Lippes Loop, Multiload 375 (2) Vaults, LNG-20
(3) Multiload 375, Progestasert (4) Progestasert, LNG-20

86. Which of the following sexually transmitted diseases is not completely curable? **(NEET-1-2019)**
(1) Chlamydiasis (2) Gonorrhoea (3) Genital warts (4) Genital herpes

87. Select the correct sequence of events. **(NEET-2-2019)**
(1) Gametogenesis → Gamete transfer → Syngamy → Zygote → Cell division (Cleavage) → Cell differentiation → Organogenesis
(2) Gametogenesis → Gamete transfer → Syngamy → Zygote → Cell division (Cleavage) → Organogenesis → Cell differentiation
(3) Gametogenesis → Syngamy → Gamete transfer → Zygote → Cell division (Cleavage) → Cell differentiation → Organogenesis
(4) Gametogenesis → Gamete transfer → Syngamy → Zygote → Cell differentiation → Cell division (Cleavage) → Organogenesis

88. Which of the following hormones is responsible for both the milk ejection reflex and the foetal ejection reflex? **(NEET-2-2019)**
(1) Estrogen (2) Prolactin (3) Oxytocin (4) Relaxin

89. No new follicles develop in the luteal phase of the menstrual cycle because : **(NEET-2-2019)**
(1) Follicles do not remain in the ovary after ovulation.
(2) FSH levels are high in the luteal phase
(3) LH levels are high in the luteal phase
(4) Both FSH and LH levels are low in the luteal phase

90. Which of the following is a correct statement? **(NEET-2-2019)**
(1) IUDs once inserted need not be replaced.
(2) IUDs are generally inserted by the user herself.
(3) IUDs increase phagocytosis of sperms in the uterus.
(4) IUDs suppress gametogenesis.

PART - II : AIIMS QUESTION (PREVIOUS YEARS)

1. The middle piece of a mammalian sperm contains **(AIIMS 1998)**

(1) Nucleus (2) Acrosome (3) Centrioles (4) Mitochondria

2. Both corpus luteum and macula lutea are **(AIIMS-2003)**

(1) Found in human ovaries (2) A source of hormones

(3) Characterised by yellow colour (4) Contributory in maintaining pregnancy

3. The phase of menstrual cycle in humans that lasts for 7-8 days is **(AIIMS-2003)**

(1) Luteal phase (2) Menstruation (3) Follicular phase (4) Ovulatory phase

4. A cross section at the midpoint of the middle piece of a human sperm will show **(AIIMS-2005)**

(1) Centriole, mitochondria and 9 + 2 arrangement of microtubules

(2) Centriole and mitochondria

(3) Mitochondria and 9 + 2 arrangement of microtubules

(4) Only 9 + 2 arrangement of microtubules

5. Which one of the following events is correctly matched with the time period in a normal menstrual cycle? **(AIIMS-2005)**

(1) Release of egg : 5^{th} day

(2) Endometrium regenerates : 5^{th}-10^{th} days

(3) Endometrium secretes nutrients for implantation : 11^{th}-18^{th} days

(4) Rise in progesterone level : 1^{st}-15^{th} days

6. Which of the following is true regarding sperm? **(AIIMS-2007)**

(1) Fertilizin: For penetrating egg membrane

(2) Hyalourodinase : For penetrating egg membrane

(3) Acrosin : Dissolves radiata

(4) Capacitation : Takes place in penis

7. Both corpus luteum and macula lutea are **(AIIMS-2008)**

(1) found in human ovaries (2) a source of hormones

(3) characterized by a yellow colour (4) contributory in maintaining pregnancy

8. GIFT is **(AIIMS-2009)**

(1) Transfer of a zygote in fallopian tube of a female with the help of injections.

(2) Transfer of a zygote fertilized in a vitro in the fallopian tube of female incapable to conceive.

(3) Transfer of an ovum collected from a donor into another female's fallopian tube who can't produce an ovum but can provide a good environment for further development.

(4) Embryo is developed in vitro and then transferred into female's tract.

9. Which reproductive adaptation is characteristic of most terrestrial vertebrates but not a most aquatic vertebrates? **(AIIMS-2009)**

(1) External fertilization (2) Internal fertilization

(3) Motile gametes (4) External development

10. In humans, what is the ratio of the number of gametes produced from one male primary sex cell to the number of gametes produced from one female primary sex cell? **(AIIMS-2009)**

(1) 1:3 (2) 1:4 (3) 3:1 (4) 4:1

11. Corpus luteum is a mass of cells found in **(AIIMS-2010]**

(1) brain (2) ovary (3) pancreas (4) spleen

12. Cells of leydig are found in **(AIIMS-2011)**

(1) Testes of frog (2) Testes of rabbit (3) Kidney of frog (4) Kidney of rabbit

13. Meroblastic cleavage refers to which type of division of egg **(AIIMS-2011)**

(1) Complete (2) Spiral (3) Incomplete (4) Horizontal

14. Which part of ovary in mammals acts as an endocrine gland after ovulation? **(AIIMS-2017)**

(1) Graafian follicle (2) Vitelline membrane

(3) Germinal epithelium (4) Chorion

15. Spermatozoa receive nutrition from – **(AIIMS-2018-I)**

(1) Nurse glands (2) Interstitial cells (3) Epididymis (4) Germ cells

16. Most important hormone in post ovulatory phase: **(AIIMS-2018-II)**

(1) Progesterone (2) estrogen (3) HCG (4) FSH

17. Which of the following condition is true at the time just after ovulation? **(AIIMS-2018-III)**

(1) High estrogen, low progesterone (2) Low estrogen, low progesterone

(3) High estrogen, high progesterone (4) Low estrogen, high progesterone

18. Which hormone helps in detection of pregnancy? **(AIIMS-2018-IV)**

(1) hCG (2) hPL (3) Prolactin (4) Progesterone

19. Which among the following hormone initiate development of secondary sexual characters in female? **(AIIMS-2018-IV)**

(1) GnRH (2) Estradiol (3) Estriol (4) Progesterone

Answers

EXERCISE - 1

SECTION - A

1.	(1)	**2.**	(4)	**3.**	(1)	**4.**	(4)	**5.**	(1)	**6.**	(3)	**7.**	(3)
8.	(4)	**9.**	(4)	**10.**	(2)	**11.**	(1)	**12.**	(3)	**13.**	(2)	**14.**	(1)
15.	(1)	**16.**	(1)										

SECTION - B

1.	(1)	**2.**	(2)	**3.**	(1)	**4.**	(3)	**5.**	(1)	**6.**	(4)	**7.**	(2)
8.	(2)	**9.**	(4)	**10.**	(2)	**11.**	(4)	**12.**	(3)				

SECTION - C

1.	(3)	**2.**	(2)	**3.**	(4)	**4.**	(2)	**5.**	(4)	**6.**	(3)	**7.**	(2)
8.	(4)	**9.**	(4)	**10.**	(1)	**11.**	(3)	**12.**	(2)	**13.**	(1)	**14.**	(3)
15.	(4)	**16.**	(1)	**17.**	(4)	**18.**	(2)	**19.**	(4)	**20.**	(1)	**21.**	(1)
22.	(4)	**23.**	(2)	**24.**	(4)	**25.**	(3)	**26.**	(3)	**27.**	(4)	**28.**	(4)
29.	(1)	**30.**	(3)	**31.**	(4)	**32.**	(2)	**33.**	(3)	**34.**	(2)	**35.**	(1)
36.	(3)	**37.**	(2)	**38.**	(3)	**39.**	(3)	**40.**	(2)	**41.**	(1)	**42.**	(1)
43.	(2)	**44.**	(3)	**45.**	(4)	**46.**	(2)	**47.**	(4)	**48.**	(3)	**49.**	(3)
50.	(1)	**51.**	(2)	**52.**	(3)	**53.**	(1)	**54.**	(1)	**55.**	(1)	**56.**	(1)
57.	(1)												

SECTION - D

1.	(3)	**2.**	(4)	**3.**	(2)	**4.**	(2)	**5.**	(3)	**6.**	(2)	**7.**	(3)
8.	(2)	**9.**	(2)	**10.**	(4)	**11.**	(3)	**12.**	(2)	**13.**	(3)	**14.**	(3)
15.	(1)	**16.**	(1)	**17.**	(2)	**18.**	(1)	**19.**	(1)	**20.**	(2)	**21.**	(3)
22.	(2)												

SECTION - E

1.	(3)	**2.**	(1)	**3.**	(4)								

EXERCISE - 2

1.	(1)	**2.**	(2)	**3.**	(4)	**4.**	(2)	**5.**	(4)	**6.**	(4)	**7.**	(1)

EXERCISE - 3

PART- I

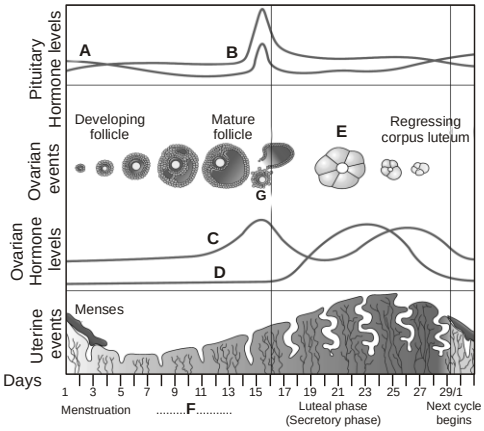
8.	(2)	**9.**	(3)	**10.**	(4)	**11.**	(2)	**12.**	(3)	**13.**	(1)	**14.**	(1)
15.	(1)	**16.**	(1)	**17.**	(1)	**18.**	(1)	**19.**	(2)	**20.**	(4)	**21.**	(2)
22.	(1)	**23.**	(1)	**24.**	(3)	**25.**	(3)	**26.**	(1)	**27.**	(4)	**28.**	(1)
29.	(2)	**30.**	(1)	**31.**	(1)	**32.**	(1)	**33.**	(1)	**34.**	(1)	**35.**	(3)
36.	(4)	**37.**	(4)	**38.**	(4)	**39.**	(3)	**40.**	(3)	**41.**	(3)	**42.**	(4)
43.	(3)	**44.**	(1)	**45.**	(3)	**46.**	(2)	**47.**	(1)	**48.**	(2)	**49.**	(3)
50.	(1)	**51.**	(2)	**52.**	(2)	**53.**	(3)	**54.**	(4)	**55.**	(4)	**56.**	(2)
57.	(2)	**58.**	(2)	**59.**	(4)	**60.**	(1)	**61.**	(1)	**62.**	(3)	**63.**	(2,3)
64.	(2)	**65.**	(4)	**66.**	(1)	**67.**	(2)	**68.**	(3)	**69.**	(2)	**70.**	(2)
71.	(3)	**72.**	(3)	**73.**	(1)	**74.**	(4)	**75.**	(3)	**76.**	(1)	**77.**	(3)
78.	(1)	**79.**	(2)	**80.**	(3)	**81.**	(2)	**82.**	(2)	**83.**	(3)	**84.**	(1)
85.	(4)	**86.**	(4)	**87.**	(1)	**88.**	(3)	**89.**	(4)	**90.**	(3)		

PART- II

1.	(4)	**2.**	(3)	**3.**	(3)	**4.**	(3)	**5.**	(2)	**6.**	(2)	**7.**	(3)
8.	(3)	**9.**	(2)	**10.**	(4)	**11.**	(2)	**12.**	(2)	**13.**	(3)	**14.**	(1)
15.	(3)	**16.**	(1)	**17.**	(1)	**18.**	(1)	**19.**	(2)				

Self Practice Paper (SPP)

1. #



Match the letters A up to G with the following aspects:–

i. Progesterone	ii FSH	iii. Follicular phase
iv. Oestrogen	v. LH	vi. Developing Corpus Luteum
vii. Ovulation	viii. Ovum	

(1) A→v, B→ii, C→i, D→iv, E→vi, F→iii, G→vii

(2) A→v, B→ii, C→iv, D→i, E→vi, F→iii, G→viii

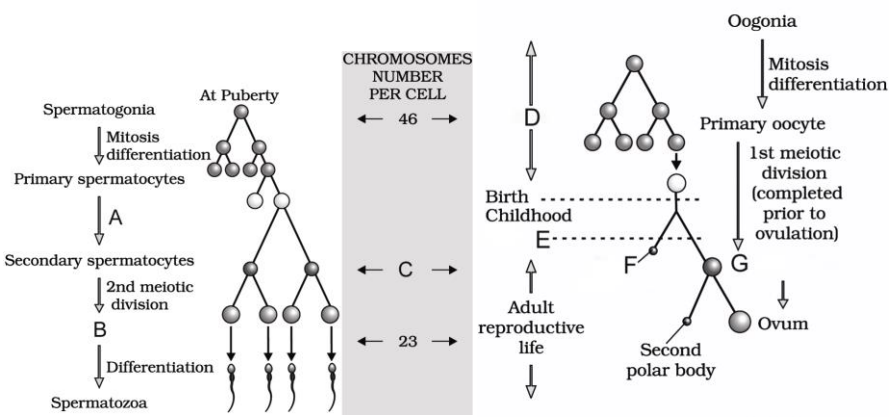
(3) A→ii, B→v, C→iv, D→i, E→vi, F→iii, G→vii

(4) A→ii, B→v, C→iv, D→i, E→iii, F→vi, G→viii

2. Androgens acts on the _____and influence the male sexual behaviour (libido)

(1) CNS (2) PNS (3) ANS (4) SNS

3. #



Observe the above diagrammatic representation. Identify A to G with the following aspects

i. Growth	ii. Ist Meiotic division	iii. Ootid	iv. Spermatid
v. Secondary oocyte	vi. Puberty	vii. First polar body	viii. n
ix. 2n	x. Foetal life		

(1) A→i, B→iv, C→ix, D→x, E→vi, F→vii, G→iii

(2) A→ii, B→iv, C→viii, D→vi, E→ix, F→vii, G→iii

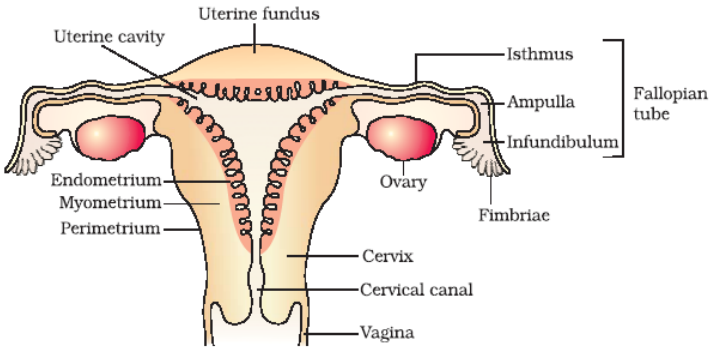
(3) A→i, B→iv, C→viii, D→x, E→vi, F→vii, G→iii

(4) A→ii, B→iv, C→viii, D→x, E→vi, F→vii, G→v

4. Inability to conceive or produce children even after 2 years of unprotected sexual cohabitation is called infertility. Which methods are now available to help such couples?
(1) In vitro fertilization (2) In-vivo fertilization
(3) Test tube baby programme (4) Assisted reproductive technologies (ART)

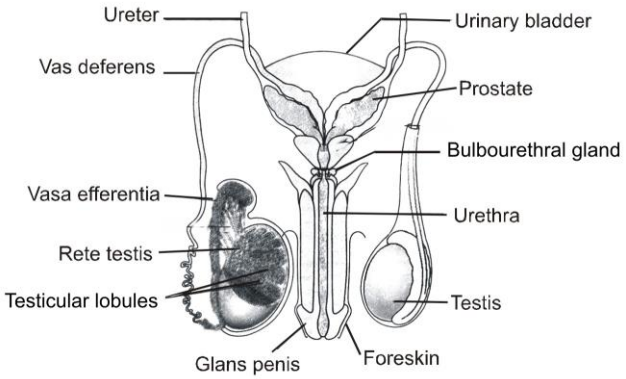
5. The method of directly injecting a sperm into ovum, assisted by reproductive technolgy is called
(1) GIFT (2) ZIFT (3) ICSI (4) ET

6. # Below is given a labelled sectional view of human female reproductive system. After the diagram, four options are given regarding the organ and its function.



Options
i. Fimbrae- Collect ovum after ovulation.
ii. Ampulla- Site of fertilisation.
iii Ovary- Site of oogenesis and follicular developement
iv. Endometrium- Site of implanatation.
How many matchings are correct-
(1) One (2) Two (3) Three (4) Four

7. # Below is given a diagram of male reproductive system. In this diagram two labellings are wrong. Column-I contains two wrongly labelled organs and column-II with their correct labellings.You have to select the right option-



Diagrammatic view of male reproductive system

	Column - I	Column - II
(1)	Vasa efferentia and prostate gland	Epididymis and seminal vesicles
(2)	Retetestis and urinary bladder	Vasa efferentia and seminal vesicles
(3)	Bulbourethral gland prostate	Cowpers gland and seminal vesicles
(4)	Testicular lobule and glans penis	Seminiferous tubule and fore skin

8. The correct sequence of male reproductive structures through which sperms pass out is

(a) Rete testis (b) Vasa efferentia (c) Epididymis (d) Vasa deferentia

(1) a,b,c,d (2) b,c,d,a (3) b,c,a,d (4) a,c,b,d

9. Correct statement with reference to a test tube baby is

(1) The fertilized egg is placed in the fallopian tube of the mother.

(2) Unfertilized egg is placed in the womb and allowed to grow parthenogenetically.

(3) A prematurely born baby is reared in an incubator

(4) Fertilized egg is taken out and grown in a large test tube

10. Foetal ejection reflex in human females is induced by

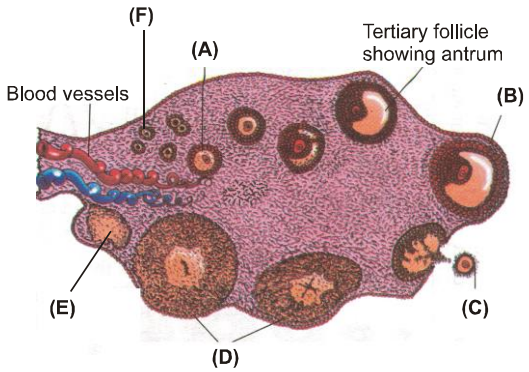
(1) Release of oxytocin from pituitary gland

(2) Pressure exerted by amniotic fluid.

(3) Differentiation of mammary glands

(4) Fully developed foetus and placenta.

11. # Here is an internal structure of reproductive organ showing a continous events of its reproductive function. Choose the correct option, regarding event and the part or structure indicated by A, B, C, D, E, F.



(1) A - Secondary follicle, B - Graafian follicle, C - Ovulation and Secondary oocyte, D - Corpus luteum, E - Corpus albicans

(2) A - Secondary follicle, B - Graafian follicle, C - Ovulation, D - Corpus luteum, E - Corpus albicans, F – Ovum.

(3) A - Primary follicle, B - Theca of Graafian follicle, C - Primary oocyte, D - Corpus luteum, E - Corpus albicans, F - oogonia

(4) A - Oogonia , B - Theca of Graafian follicle, C - Ovum, D - Corpus luteum, E - Corpus albicans, F-Primary follicle

12. In male the sperms are stored and nourished in

(1) vasa deferens (2) epididymis

(3) Both 1 and 2 (4) spermatic cord

13. Urethral meatus refers to the

(1) urinogenital duct

(2) opening of vas deferens into urethra

(3) external opening of the Urinogenital duct

(4) muscles surrounding the urinogenial duct

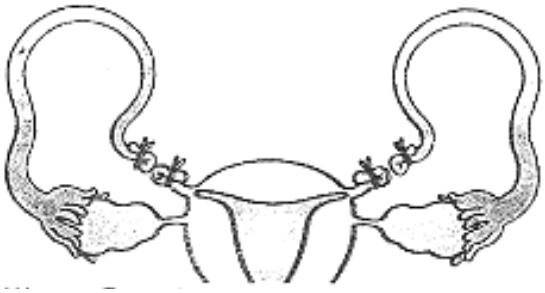
14. A baby born to a diabetic mother sometimes shows signs of hypoglycemia for some period just after birth. This is due to
(1) continued maternal insulin activity
(2) utilization of sugar from baby's blood for its activities after birth
(3) increased foetal insulin level to counter excess sugar from mother
(4) reduced production of maternal insulin as a result of diabetes

15. Cu^{+2} released from copper-releasing Intra Uterine Devices (IUDs)
(1) Increase phagocytosis of sperms (2) Suppress sperm motility
(3) Prevent ovulation (4) Make uterus unsuitable for implantation

16. Type of immunoglobulin present in colostrum/mother's milk is-
(1) IgA (2) IgG (3) IgD (4) IgE

17. Couple unable to produce children inspite of unprotected sexual co-habitation is termed as:
(1) Impotency (2) Infertility (3) STD (4) PID

18. # What is the figure given below showing in particular?



(1) Ovarian cancer (2) Uterine cancer (3) Tubectomy (4) Vasectomy

19. Seminal plasma in human males is rich in
(1) glucose and calcium (2) DNA and testosterone
(3) ribose and potassium (4) fructose and calcium

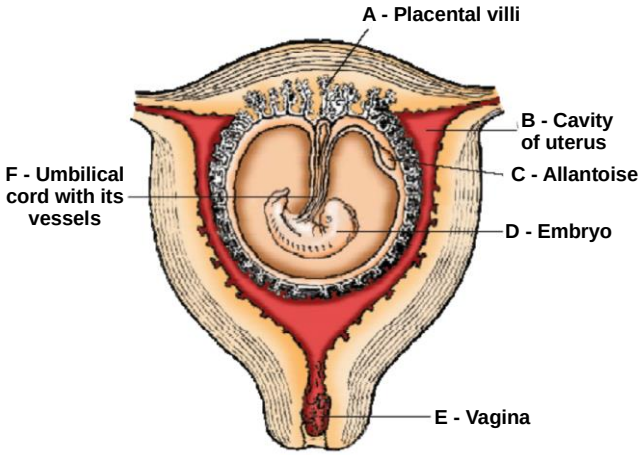
20. Which of the following can be used as an emergency contraceptive to avoid possible pregnancy:
(1) Lactational Amenorrhea (2) IUD, within 72 hours
(3) Diaphrams (4) 1 and 2

21. In which of the following methods zygotes or early embryo upto 8 blastomeres could be transferred into the fallopian tube?
(1) GIFT (2) IUT (3) ZIFT (4) ICSI

22. Which of the following are included in barrier method
(1) Condoms (2) Diaphrams
(3) Cervical caps and vault (4) All of these

23. Intra testicular genital duct system includes
(1) Tubuli recti, rete testis and ductuli efferentes
(2) Tubuli recti, vas deferens and ejaculatory duct
(3) Urethra, epididymis and Tubuli recti
(4) Seminal vesicle, ejaculatory duct and ampulla

24. Here is a labelled diagram of implanted embryo. Two labelling are wrong and you have to find them–



Wrong	Right
(1) C-Allantois, E-Vagina	C-Yolk sac, E-Cervix with mucus plug
(2) C-Allantois, D-Embryo	C-Yolk sac, D-Foetus
(3) B-Cavity of Uterus, F-Umbilical cord	B-Amniotic cavity, F-Placenta
(4) A-placental villi, D-Embryo	A-Placenta,D-Gastrula

25. The level of which group of hormones increased several fold in to female during pregnancy-
(1) Thyroxin, Cortisol, Oestrogen and Thymosin
(2) Prolactin, Progesterone, Oestrogen, Cortisol, Thyroxine
(3) F.S.H. and LH, Thyroxin, Prolactin, Aldosterone
(4) Gonadotropin, Thyroxine

26. A woman is said to be pregnant or which stage of a woman is called pregnancy
(1) After ovulation and fertilization of ovum
(2) After cleavage in zygote
(3) After implantation of Blastocyst
(4) After placenta formation and secretion of hCG

27. Here is given a list of few **hormones**
(i) Oestrogen and progesterone
(ii) Thyroxin
(iii) Cortisol
(iv) prolactin
(v) Gonadotropins
Which one match is **not** true about a **hormone** and its **function** during pregnancy?
(1) Except Gonadotropin, the level of all above hormones is increased several folds to increase metabolism
(2) Thyroxin is principal hormone to increase BMR of mother.
(3) Progesterone neutralize the action of oxytocin and prevent uterine contraction
(4) Oestrogen regulates sexual behaviour of female and milk synthesis also

28. Parturition is triggered by
(1) Foetus
(2) Fully developed foetus
(3) Fully developed foetus and placenta that trigger the secretion of oxytocin
(4) All

29. The process of childbirth is called parturition which is induced by a complex neuroendocrine mechanism involving (main hormones)

(1) Oxytocin - Relaxin (2) Oxytocin - Cortisol
(3) Oxytocin - Oestrogen (4) Oxytocin - Progesterone

30. In later stage of pregnancy Relaxin is secreted from
(1) Ovary (2) Placenta (3) Umbilical cord (4) Corpus luteum

31. Hormone/group of hormones secreted form pregnant women only, is/are
(1) hCG and Relaxin (2) hPL and Relaxin (3) hCG and hPL (4) All

32. Which statement is not true for **placenta**?
(1) It develops after implantation
(2) Chorionic villi of trophoblast and uterine tissue integrated with each other and jointly form structural and functional unit between foetus and mother's body
(3) Placenta is connected to the embryo through an umbilical cord which helps in exchange of material between foetus and mother
(4) Placenta act as endocrine gland and produces hCG, hPL, Progesterons, Cortisol

33. Listed below, are the female hormones
(i) Relaxin
(ii) hCG and hPL
(iii) Oestrogen
(iv) Progesterone
(v) Oxytocin
The hormones produced in women only during pregnancy are -
(1) (i) and (ii) (3) (i), (ii) and (v)
(3) (i), (ii), (iv) and (v) (4) (i), (ii), (iii), (iv) and (v)

34. The level of few hormones is increased in to the blood of a pregnant women. The increasing of these hormones is essential for
(1) To decrease metabolic rates only
(2) To increase metabolic rates of mother only
(3) To increase metabolic rates of foetus only
(4) To increase metabolic rates of mother and foetus both

35. Match the Items of Column-I with those of Column-II

Column-I	**Column-II**
(i) Ootid	(a) Embryo proper
(ii) Trophoblast	(b) Embryo with 8-16 blastomeres.
(iii) Morula	(c) Haploid ovum
(iv) Inner cell mass	(d) Extra-Embryonic Membranes

(1) i-c, ii-d, iii-b, iv-a (2) i-a, ii-d, iii-b, iv-c (3) i-c li-a iii~b iv-d (4) i-c, li-d, iii-a, iv-b

36. Which of the following is a Cu^{2+} releasing intra Uterine Device (IUD)?
(1) Multiload 375 (2) LNG - 20 (3) Cervical cap (4) Vault

37. In male, urethral meatus refers to the
(1) Urinogenital duct
(2) Opening of vas deferens into the urethra
(3) External opening of the urinogenital duct
(4) Muscles surrounding the urinogenital duct

38. Vasectomy is method of sterilization in which
(1) Small part of the fallopian tube is removed or tied up
(2) Ovaries are removed surgically

(3) Small part of vas deferens is removed or tied up
(4) Uterus is removed surgically

39. The main function of mammalian ovary during child birth is to produce
(1) Oestrogen only (2) progesterone
(3) human chorionic gonadotropin (4) relaxin

40. The shared terminal duct of the reproductive and urinary system in the human male is:
(1) Urogenital duct (2) Ureter
(3) Vas deferens (4) Vasa efferentia

41. Which one of the following is the function of pituitary gland during child birth?
(1) Secretes Oestrogen
(2) Facilitates removal of carbon dioxide and waste material from embryo.
(3) Secretes oxytocin during parturition
(4) Facilitates supply of oxygen and nutrients to embryo

42. The follicle that ruptures at the time of ovulation ultimately fills with blood, forming
(1) Corpus luteum (2) Corpus albicans (3) Corpus callosum (4) Corpus haemorrhagicum

43. Graafian follicles are located in the
(1) Stroma of ovaries (2) Germinal epithelium of ovaries
(3) Medulla of ovaries (4) None of these

44. The main function of corpus luteum is to
(1) Secrete progesterone (2) Facilitate ovulation
(3) Facilitate fertilization (4) Facilitate passage of ova in oviducts

45. In human the fertilization of ovum takes place in
(1) Isthmus of oviduct (2) Ampulla of Fallopian tube
(3) Cervix (4) Infundibulum of oviduct

SPP Answers

1.	(3)	**2.**	(1)	**3.**	(4)	**4.**	(4)	**5.**	(3)	**6.**	(4)	**7.**	(1)
8.	(1)	**9.**	(1)	**10.**	(4)	**11.**	(1)	**12.**	(3)	**13.**	(3)	**14.**	(3)
15.	(2)	**16.**	(1)	**17.**	(2)	**18.**	(3)	**19.**	(4)	**20.**	(2)	**21.**	(3)
22.	(4)	**23.**	(1)	**24.**	(1)	**25.**	(2)	**26.**	(3)	**27.**	(4)	**28.**	(3)
29.	(1)	**30.**	(1)	**31.**	(4)	**32.**	(4)	**33.**	(1)	**34.**	(4)	**35.**	(1)
36.	(1)	**37.**	(3)	**38.**	(3)	**39.**	(4)	**40.**	(1)	**41.**	(3)	**42.**	(4)
43.	(1)	**44.**	(1)	**45.**	(2)								