

6. SEXUAL REPRODUCTION

TEACHING TASK

Page No 89

Multiple Choice Questions

1. Which of these things will affect the way a foetus grows?

Options:

- A) Chemicals in cigarette smoke
- B) Alcohol
- C) Drugs
- D) All the above

Correct Answer: D) All the above

Explanation: All these substances can cross the placenta and negatively impact foetal development, potentially causing birth defects or developmental issues.

2. In males, production of sperms begins from the age of:

Options:

- A) 13 or 14 years
- B) 14 or 15 years
- C) 15 or 16 years
- D) 12 or 13 years

Correct Answer: A) 13 or 14 years

Explanation: Spermatogenesis typically begins during puberty, which usually starts between 12-14 years in boys.

3. Umbilical cord develops from:

Options:

- A) Chorion
- B) Allantois
- C) Amnion
- D) All

Correct Answer: B) Allantois

Explanation: The umbilical cord develops from the embryonic allantois, which connects to the placenta for nutrient/waste exchange.

4. Flowers that contain both stamen and carpel are:

Options:

- A) Bisexual
- B) Unisexual
- C) Hermaphrodite

D) Multi sexual

Correct Answer: A) Bisexual

Explanation: Bisexual (perfect) flowers contain both male (stamen) and female (carpel) reproductive parts.

5. Foetus is attached to the uterine wall by:

Options:

A) Umbilical cord

B) Amnion

C) Placenta

D) Chorion

Correct Answer: C) Placenta

Explanation: The placenta attaches to the uterine wall and connects to the foetus via the umbilical cord.

6. Accessory glands in male reproductive system secrete semen which helps in:

Options:

A) Provide nutrients to sperms

B) Medium for sperm movement

C) Secreting testosterone

D) A and B only

Correct Answer: D) A and B only

Explanation: Semen provides nutrients and medium, but testosterone is secreted by testes, not accessory glands.

7. Watery lymph-like fluid that accumulates in mammary glands during late pregnancy:

Options:

A) Amniotic fluid

B) Colostrum

C) Allantoic fluid

D) None

Correct Answer: B) Colostrum

Explanation: Colostrum is the nutrient-rich first milk produced before true milk secretion.

8. Reproductive parts of flower:

Options:

A) Calyx, corolla

B) Stamens, carpels

C) Calyx, stamens

D) Carpels, corolla

Correct Answer: B) Stamens, carpels

Explanation: Stamens (male) and carpels (female) are the reproductive parts.

9. Breast feeding is beneficial because it:

Options:

A) Enhances immunity

B) Protects against allergies

C) Reduces pregnancy chances

D) All the above

Correct Answer: D) All the above

Explanation: Breast milk provides antibodies, reduces allergies, and suppresses ovulation.

10. The end products begin their life from a single cell called:

Options: A) Male gamete

B) Female gamete

C) Zygote

D) Microscope

Correct Answer: C) Zygote

Explanation: All multicellular organisms develop from a single fertilized cell (zygote).

LEARNERS TASK

NEET LEVEL QUESTIONS

1. Sexual reproduction takes place by the combination of sexual reproductive cells called:

A) Gametes

B) Sexual

C) Reproductive

D) Cells

Correct Answer: A) Gametes

Explanation: Gametes (pollen and ovules) are the specialized reproductive cells that fuse during fertilization.

2. Fruit is formed from:

A) Stamen

B) Stigma

C) Ovary

D) Ovule

Correct Answer: C) Ovary

Explanation: After fertilization occurs, the ovary of the flower develops into a fruit

that contains seeds.

3. The female reproductive part of the flower consists of:

- A) Stigma, anther, filament
- B) Style, ovary, stigma
- C) Stigma, ovary, thalamus
- D) Anther, corolla, filament

Correct Answer: B) Style, ovary, stigma

Explanation: These three parts (stigma, style, ovary) make up the pistil or carpel, which is the female reproductive structure.

4. The outermost whorl of a flower is:

- A) Calyx
- B) Corolla
- C) Thalamus
- D) Pistil

Correct Answer: A) Calyx

Explanation: The calyx, composed of sepals, forms the outermost protective whorl of a flower.

5. The second whorl of a flower consists of:

- A) Sepals
- B) Stamens
- C) Petals
- D) None

Correct Answer: C) Petals

Explanation: The corolla (petals) forms the second whorl inside the calyx, often serving to attract pollinators.

6. Calyx & corolla are non-essential parts because:

- A) Involves in reproduction
- B) Not involves in reproduction
- C) Male reproductive organs
- D) Female reproductive organ

Correct Answer: B) Not involves in reproduction

Explanation: While they protect the flower and attract pollinators, they are not directly involved in the reproductive process.

7. The part of a flower which involves in photosynthesis:

- A) Calyx
- B) Corolla
- C) Androecium

D) Gynoecium

Correct Answer: B) Corolla

Explanation: Petals (corolla) may contain chloroplasts and perform photosynthesis in some flowers.

8. Portion of pistil which is feathery and sticky is:

A) Ovary

B) Style

C) Stigma

D) None

Correct Answer: C) Stigma

Explanation: The stigma is adapted to trap and recognize pollen grains.

9. Transfer of pollen grains from anther to stigma is called:

A) Pollination

B) Fusion

C) Fertilization

D) a & b

Correct Answer: A) Pollination

Explanation: Pollination is the transfer process, while fertilization occurs after pollination.

10. After fertilization ovary changes into:

A) Fruit

B) Seed

C) Seed coat

D) All

Correct Answer: A) Fruit

Explanation: The ovary wall develops into the fruit, while ovules become seeds.

11. The anther contains:

A) Sepals

B) Ovules

C) Carpel

D) Pollen grains

Correct Answer: D) Pollen grains

Explanation: Anthers produce and release pollen grains containing male gametes.

12. The length of pollen tube depends on the distance between:

A) Pollen grain & upper surface of stigma

B) Pollen grain on upper surface of stigma & ovule

C) Pollen grain in anther & upper surface of stigma

D) Upper surface of stigma & lower part of flowers

Correct Answer: B) Pollen grain on upper surface of stigma & ovule

Explanation: The pollen tube must grow through the style to reach the ovule.

13. Which statements are true for flowers? i) Flowers are always bisexual

ii) They contain sexual reproductive organs

iii) They are produced in all groups of plants

iv) After fertilization they give rise to fruits

A) i & iv

B) ii & iii

C) i & iii

D) ii & iv

Correct Answer: D) ii & iv

Explanation: Flowers contain reproductive organs (ii) and develop into fruits (iv), but not all flowers are bisexual (i) or present in all plants (iii).

14. Present in both flowering plants and humans:

A) Vas deferens

B) Anther

C) Ovary

D) Style

Correct Answer: C) Ovary

Explanation: Both plant ovaries and human ovaries produce female gametes.

15. Correct sequence of reproductive stages in flowering plants:

A) Gametes ,zygote , embryo , seed

B) Zygote , gametes , embryo , seed

C) Seed , embryo , zygote , gametes

D) Gametes , embryo , zygote , seed

Correct Answer: A) Gametes ? zygote ? embryo ? seed

Explanation: This represents the correct order of sexual reproduction in plants.

16. Male gametes are produced in:

A) Stigma & ovary

B) Anther & style

C) Ovary & testes

D) Anther & testes

Correct Answer: D) Anther & testes

Explanation: Anthers produce pollen in plants; testes produce sperm in humans.

17. Human has mode of reproduction

A) Sexual

- B) Asexual
- C) Internal
- D) a & c

Correct Answer: D) a & c

Explanation: Humans reproduce sexually with internal fertilization.

18. Sperms are formed in the

- A) Testes
- B) Penis
- C) Vas deferens
- D) Ovary

Correct Answer: A) Testes

Explanation: Spermatogenesis occurs in the seminiferous tubules of testes.

19. Which of these are the male reproductive organ in humans ?

- A) Sperms
- B) Ova
- C) Testes
- D) Ovaries

Correct Answer: C) Testes

Explanation: Testes are the primary male reproductive organs.

20. The organ that helps in releasing sperms in female body is

- A) Vas deferens
- B) Penis
- C) Testes
- D) Scrotum

Correct Answer: B) Penis

Explanation: The penis delivers sperm during ejaculation.

21. Cell formed after fertilization:

- A) Embryo
- B) Fetus
- C) Zygote
- D) None

Correct Answer: C) Zygote

Explanation: The diploid zygote forms immediately after fertilization.

22. After fertilisation the human embryo grows inside the

- A) Fallopian tubes
- B) Vagina
- C) Ovary
- D) Uterus

Correct Answer: D) Uterus

Explanation: The embryo implants and develops in the uterine wall.

23. The animals having separate male and female individual are called

- A) Bisexual
- B) Hermaphrodite
- C) Unisexual
- D) All

Correct Answer: C) Unisexual

Explanation: Unisexual species have distinct male and female individuals.

24. The fusion of male & female gametes usually takes place inside the

- A) Uterus
- B) Ovary
- C) Fallopian tube
- D) Zygote

Correct Answer: C) Fallopian tube

Explanation: Fertilization typically occurs in the ampulla of the fallopian tube.

25. Which of the following consists of erectile tissue ?

- A) Testes
- B) Ovaries
- C) Sperm duct
- D) Penis

Correct Answer: D) Penis

Explanation: Erectile tissue enables penile erection during sexual arousal.

26. Sperms needed per egg:

- A) One
- B) Two
- C) More than two
- D) One million

Correct Answer: A) One

Explanation: Only one sperm successfully fertilizes an egg (monospermy).

27. Gestation not follow

- A) Egg is fertilized
- B) Egg isn't fertilized
- C) Embryo has implanted
- D) None

Correct Answer: B) Egg isn't fertilized

Explanation: Gestation requires a fertilized egg (zygote).

28. Zygote receives DNA from:

- A) Mother
- B) Father
- C) a & b
- D) None

Correct Answer: C) a & b

Explanation: The zygote contains genetic material from both parents.

29. Which of these is the male reproductive organ in humans ?

- A) Sperm
- B) Ovum
- C) Testes
- D) Ovaries

Correct Answer: C) Testes

Explanation: Testes are the primary male reproductive organs that produce sperm.

30. Primary sex organ:

- A) Penis
- B) Scrotum
- C) Testis
- D) Prostate

Correct Answer: C) Testis

Explanation: Testes are the primary sex organs (gonads) that produce gametes and hormones.

31. In human male, the testes are located in

- A) Thoracic cavity
- B) Abdominal cavity
- C) Pericardial cavity
- D) Extra-abdominal cavity

Correct Answer: D) Extra-abdominal cavity

Explanation: Testes are located in the scrotum outside the abdominal cavity for proper temperature regulation.

32. Sperms differ from ova in:

- A) Semen
- B) Plasma
- C) Seminal vesicle
- D) None

Correct Answer: D) None

Explanation: The options given don't correctly describe differences between sperm and ova.

33. Actual sperms differ from ova in:

- A) Being motile
- B) Storing food
- C) Being bigger inside
- D) Being produced only one in number

Correct Answer: A) Being motile

Explanation: Sperm are small and motile, while ova are large and non-motile.

34. In human beings, fertilization carried out side the body is called

- A) In vitro fertilization
- B) In vivo fertilization
- C) In vitro implantation
- D) In vitro gestation

Correct Answer: A) In vitro fertilization

Explanation: IVF involves fertilizing eggs outside the body in laboratory conditions.

35. Duct in males for passing both urine & semen

- A) Ureter
- B) Urethra
- C) Uterus
- D) Vas deferens

Correct Answer: B) Urethra

Explanation: The urethra carries both urine and semen (though not simultaneously).

36. When a mature egg leaves the ovary, it enters first in the

- A) Penis
- B) Uterus
- C) Vagina
- D) Oviduct

Correct Answer: D) Oviduct

Explanation: The egg first enters the fallopian tube (oviduct) after ovulation.

37. Advantage of sexual reproduction over asexual reproduction is

- A) Safer & faster
- B) Causes variations & evolution
- C) Both a & b
- D) None

Correct Answer: B) Causes variations & evolution

Explanation: Genetic variation is the key advantage, though it's not faster than asexual reproduction.

38. Attachment of embryo to the wall of the uterus is known as

- A) Fertilization
- B) Implantation
- C) Gestation
- D) Parturition

Correct Answer: B) Implantation

Explanation: The blastocyst implants in the uterine wall about 6-7 days after fertilization.

39. Gestation period in human being is

- A) 5 months
- B) 9 months
- C) 10 months
- D) 8 months

Correct Answer: B) 9 months

Explanation: Average human pregnancy lasts about 40 weeks (9 calendar

months).

40. Rupturing of follicles and discharge of ova is known as

- A) Copulation
- B) Conjugation
- C) Ovulation
- D) Oviposition

Correct Answer: C) Ovulation

Explanation: Ovulation is the release of a mature egg from the ovary.

41. The correct sequence of organs in the male reproductive system for transport sperms is

- A) Testis → vasdeferene → urethra
- B) Testis → ureter → urethra
- C) Testis → urethra → ureter
- D) Testis → vas deferens → ureter

Correct Answer: A) Testis → vasdeferene → urethra

Explanation: This is the correct route sperm travels during ejaculation.

42. Gestation period is the duration

- A) Of fertilization
- B) Between egg growth & ovulation
- C) Of implantation
- D) Between fertilization & parturition

Correct Answer: D) Between fertilization & parturition

Explanation: Gestation encompasses the entire pregnancy period.

43. The expulsion of completely developed foetus from the uterus is known as

- A) Ovulation
- B) Oviposition
- C) Gestation
- D) Parturition

Correct Answer: D) Parturition

Explanation: Parturition refers to childbirth/delivery.

44. Which of the following are the aprts of sperm

- A) Head
- B) Middle piece
- C) Tail
- D) All

Correct Answer: D) All

Explanation: A sperm consists of all three parts: head (with nucleus), middle piece (mitochondria), and tail (flagellum).

45. Primary sex organ in human female is

- A) Vagina
- B) Uterus
- C) Ovary
- D) Fallopian tube

Correct Answer: C) Ovary

Explanation: Ovaries are the primary sex organs that produce eggs and hormones.

46. Reproduction is mandatory for living organisms in order to

- A) Keep individual alive
- B) Fulfill energy needs
- C) Maintain reproductive organs
- D) Continue species

Correct Answer: D) Continue species generation after generation

Explanation: Reproduction ensures species survival, not individual survival.

47. Which of the following is not a part of the Female reproductive system in human beings.

- A) Ovary
- B) Uterus
- C) Vas deferens
- D) Fallopian tube

Correct Answer: C) Vas deferens

Explanation: Vas deferens is part of the male reproductive system.

48. Test tube baby technique is called

- A) In vitro fertilization
- B) Ex vivo fertilization
- C) In situ fertilization
- D) Ex situ fertilization

Correct Answer: A) In vitro fertilization

Explanation: IVF involves fertilizing eggs outside the body ("in glass").

49. The reproductive cells of parents produce

- A) Ovum
- B) Gametes
- C) Testis
- D) Zygote

Correct Answer: B) Gametes

Explanation: Gametes (sperm and egg) are the reproductive cells from parents.

ADVANCED LEVEL

More Than One Answer

50. Find the incorrect pairs: (i) Calyx-sepals

- (ii) Corolla-ovules
- (iii) Androecium-stamens
- (iv) Gynoecium-petals

Options:

- A) (ii) & (iv)
- B) (i) & (ii)
- C) (ii) & (iii)
- D) (i) & (iv)

Correct Answer: A) (ii) & (iv)

Explanation:

- (ii) Corolla consists of petals, not ovules (incorrect)
- (iv) Gynoecium refers to carpels/pistils, not petals (incorrect)

(i) and (iii) are correct pairs.

51. Find the parts which are included in female reproductive system of humans

(i) Ovary, fallopian tube

(ii) Testes, vas deferens

(iii) Oviduct, vagina

(iv) Uterus, cervix

Options:

A) (i), (ii), (iii)

B) (i) & (ii)

C) (i), (iii) & (iv)

D) (ii) & (iv)

Correct Answer: C) (i), (iii) & (iv)

Explanation:

(ii) Testes and vas deferens are male parts (exclude)

Oviduct = fallopian tube (both correct).

52. Which of the following is the correct sequence of steps in the human life cycle ?

Options:

A) Babyhood ? childhood ? adolescence ? adulthood

B) Childhood ? babyhood ? adulthood ? adolescence

C) Adolescence ? babyhood ? adulthood ? childhood

D) Only iv (Note: Incomplete option)

Correct Answer: A) Babyhood ? childhood ? adolescence ? adulthood

Explanation: This is the standard developmental sequence.

Assertion & Reason

53. A: Corolla is a floral part

R: It helps in pollination

Correct Option: A) Both true, R explains A

Explanation: Corolla (petals) attracts pollinators, supporting A.

54. A: One pollen mother cell forms four microspores

R: Microspores form via reduction division

Correct Option: A) Both true, R explains A

Explanation: Meiosis (reduction division) produces haploid microspores.

55. A: Double fertilization is unique to angiosperms

R: Triple fusion occurs in both fertilizations

Correct Option: C) A true, R false

Explanation: Triple fusion only occurs in second fertilization (with polar nuclei).

56. A: Ovule develops from placenta

R: Connected by funicle

Correct Option: A) Both true, R explains A

Explanation: Funicle attaches ovule to placenta.

57. A: Pollen develops in anther

R: Anther has two lobes

Correct Option: B) Both true, R doesn't explain A

Explanation: While both correct, lobe count doesn't explain pollen development.

58. A: Sepals protect the bud

R: Calyx performs photosynthesis

Correct Option: A) Both true, R explains A

Explanation: Green sepals can photosynthesize while protecting buds.

59. A: Vagina acts as copulation and fertilization canal

R: Insemination and fertilization occur in vagina

Correct Option: C) A true, R false

Explanation: Fertilization occurs in fallopian tubes, not vagina.

60. A: Space between seminiferous tubules has Sertoli cells

R: Sertoli cells secrete testosterone

Correct Option: C) A true, R false

Explanation: Leydig cells (not Sertoli) secrete testosterone.

61. A: Ovulation = egg release

R: Occurs on 14th day

Correct Option: B) Both true, R doesn't always explain A

Explanation: Day 14 is typical but varies among cycles.

62. A: Gonads have dual function

R: Gonads are primary sex organs

Correct Option: B) Both true, R doesn't explain A

Explanation: Dual function (gamete + hormone production) isn't explained by being primary organs.

63. A: Males develop secondary sexual characters at puberty

R: Testosterone secretion decreases at puberty

Correct Option: C) A true, R false

Explanation: Testosterone increases at puberty, triggering changes.

Matching Questions

64. 1) Calyx () A) Female part
2) Corolla () B) Male part
3) Androecium () C) outer most
4) Gynoecium () D) second whorl
a) 1-c, 2-b, 3-d, 4-a B) 1-c, 2-a, 3-d, 4-b
C) 1-c, 2-d, 3-b, 4-a D) 1-c, 2-d, 3-a, 4-b

Correct Answer: C) 1-c, 2-d, 3-b, 4-a

Explanation:

Calyx (sepals) is the outermost whorl (1-C)

Corolla (petals) is the second whorl (2-D)

Androecium (stamens) is the male part (3-B)

Gynoecium (carpels) is the female part (4-A)

65. 1) Sepals () A) Attracts insects

2) Petals () B) Protection

3) Placenta () C) palynology

4) Pollengrains () D) Funicle

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

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

Correct Answer: A) 1-b, 2-a, 3-d, 4-c

Explanation:

Sepals provide protection (1-B)

Petals attract insects (2-A)

Placenta connects to ovule via funicle (3-D)

Pollen grains are studied in palynology (4-C)

66. 1) Testis () A) Male gamet

2) Sperm () B) Coiled tube

3) Testosterone () C) Male reproductive organ

4) epididymis () D) Mle hormone

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

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

Correct Answer: B) 1-c, 2-a, 3-d, 4-b

Explanation:

Testis is the male reproductive organ (1-C)

Sperm is the male gamete (2-A)

Testosterone is the male hormone (3-D)

Epididymis is a coiled tube for sperm storage (4-B)

67. 1) ovary () A) fusion of male and female gametes
 2) ova () B) Birth canal
 3) vaniga () C) female reproductive organ
 4) Fertilization () D) female gamet
- A) 1-c, 2-d, 3-b, 4-a B) 1-c, 2-a, 3-d, 4-b
 C) 1-b, 2-c, 3-d, 4-a D) 1-a, 2-b, 3-c, 4-d

Correct Answer: A) 1-c, 2-d, 3-b, 4-a

Explanation:

Ovary is the female reproductive organ (1-C)

Ova are female gametes (2-D)

Vagina serves as birth canal (3-B)

Fertilization is fusion of gametes (4-A)

Archive Questions

1. Sertoli cells are found in tests. These cells are

- A) Nurse cell B) Reproductive cell C) Receptor cell D) None of these

Correct Answer: A) Nurse cells

Explanation: They support and nourish developing sperm cells in testes.

2. The cellular layer that disintegrates and regenerates again and again in human is

- A) Endometrium of uterus B) Cornea of eye
 C) Dermis of skin D) Endothelium of blood vessels

Correct Answer: A) Endometrium of uterus

Explanation: The uterine lining sheds and regrows during menstrual cycles.

3. The functional maturation of sperms takes place in

- A) Oviduct B) Epididymis C) Vagina D) All of these

Correct Answer: B) Epididymis

Explanation: Sperms gain motility and mature in the epididymis.

4. In mammals, the female secondary sexual characters are developed mainly by the hormone

- A) Relaxin B) Estrogens C) Progesterone D) Gonadotropins

Correct Answer: B) Estrogens

Explanation: Estrogens drive development of female traits like breast growth.

5. Human female reaches menopause at the age of about

- A) 25 years B) 35 years C) 50 years D) 70 years

Correct Answer: C) 50 years

Explanation: Typically occurs between 45-55 years, average ~50.

6. Glands secreting male sex hormone are

- A) Leydig cells B) Seminiferous tubules C) Vasa deferentia D) Testes

Correct Answer: A) Leydig cells

Explanation: Located in testes between seminiferous tubules, they produce testosterone.