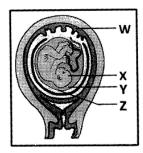
# Talent & Olympiad

## **Reproduction in Animals**

- 1. Which of the following statements is true about asexual reproduction?
  - (a) New individuals are produced without the fusion of gametes.
  - (b) New individuals involves the fusion of male and female gametes.
  - (c) It is a mode of reproduction which occurs only in plants.
  - (d) New individuals are produced by the fusion of dissimilar gametes.
- **2.** Which of the following is NOT a characteristic feature of sexual reproduction? (a) It involves the fusion of two reproductive cells.
  - (b) It is common in most organisms.
  - (c) Fertilization may take place inside or outside the body of the female.
  - (d) The offspring receives its characteristics from one parent only.
- **3.** B Which of the following is NOT an example of asexual reproduction? (a) Reproduction in hydra
  - (b) Reproduction in amoeba
  - (c) Reproduction in bacteria
  - (d) Reproduction in butterfly
- **4.** Which of the following is/are paired structure in human reproductive system? (a) Ovary (b) Testes
  - (a) Ovary(c) Fallopian tube
    - an tube (d) All of these
- 5. Which of the following statements about the human female egg cell is incorrect? (a) It is produced when a female reaches puberty.
  - (b) The two ovaries in a female alternately produce the egg cells.
  - (c) One egg cell is usually produced by a female every 28 days.
  - (d) An egg cell can live in the body of a female for about a month.
- **6.** Identify W, X, Y and Z in the given figure.



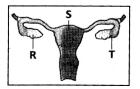
	(W)	(X)	(Y)	(Z)
(a)	Placenta	Foetus	Amniotic fluid	Foetal membrane
(b)	Umbilical cord	Embryo	Uterus	Vagina
(c)	Placenta	Foetus	Uterus	Foetal membrane
(d)	Umbilical cord	Zygote	Amniotic fluid	Cervix

- **7.** Which part within the uterus prevents the mixing of the blood of the foetus with that of the mother? (a) Umbilical cord
  - (b) Uterus wall
  - (c) Placenta
  - (d) Water sac

- **8.** Which of the following sequences is in the correct order?
  - (a) Zygote  $\rightarrow$  Embryo  $\rightarrow$  Foetus  $\rightarrow$  Baby
  - (b) Zygote  $\rightarrow$  Embryo  $\rightarrow$  Baby  $\rightarrow$  Foetus
  - (c) Embryo  $\rightarrow$  Zygote  $\rightarrow$  Baby  $\rightarrow$  Foetus
  - (d) Foetus  $\rightarrow$  Zygote  $\rightarrow$  Embryo  $\rightarrow$  Baby
- 9. Which of the following is NOT true of the process of reproduction?
  - (a) Unicellular organisms cannot reproduce.
  - (b) Reproduction is the process of producing young animals or plants.
  - (c) Reproduction is one of the life processes of living things.
  - (d) Reproduction is of two types, sexual and asexual reproduction.
- **10.** Which of these organisms reproduce in the same way as yeast?
  - (a) Hydra (b) Amoeba
  - (c) Starfish (d) Flatworm
- **11.** Which of the following is/are types of asexual reproduction?
  - (a) Budding (b) Binary fission
  - (c) Spore formation (d) All the above
- 12. Which of the following comparisons are true of sexual and asexual reproduction?

	Sexual reproduction	Asexual reproduction
(i)	Involves two individuals	Involves only one individual parent
(ii)	Involves a simple process	Involves a complex process
(iii)	Involves the union of two types of	No fusion of gametes
	gametes	

- (a) Only (i) and (ii) (b) Only (i) and (iii)
- (c) Only (ii) and (iii) (d) All the above
- **13.** How are Paramoecium and Amoeba are similar?
  - (a) Unicellular.
  - (b) Does not have a nucleus.
  - (c) Reproduces by binary fission.
  - (d) Both (A) and (C)
- 14. In which of the following parts of the female reproductive system does fertilisation occur?(a) Ovary(b) Vagina
  - (c) Uterus (d) Fallopian tube
- **15.** Identify R, S and T in the given figure.



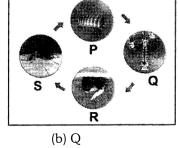
	(R)	( <b>S</b> )	(T)
(a)	Ovulation	Fertilization	Implantation
(b)	Fertilization	Ovulation	Implantation
(c)	Ovulation	Implantation	Fertilization
(d)	Implantation	Fertilization	Ovulation

- **16.** Read the given information and identify P, Q and R.
  - P An ovum is discharged by the ovary
  - Q An embryo is Implanted in the uterus

R - The fusion of mate and female gametes takes place

	( <b>P</b> )	(Q)	( <b>R</b> )
(a)	Ovulation	Implantation	Fertilization
(b)	Fertilization	Implantation	Ovulation
(c)	Ovulation	Fertilization	Implantation
(d)	Implantation	Ovulation	Fertilization

- **17.** What is the function of the amniotic fluid?
  - (a) It provides food to the foetus.
  - (b) It provides oxygen to the foetus.
  - (c) It protects the foetus from shock.
  - (d) It protects the foetus from diseases.
- **18.** The substances that are transported through umbilical cord
  - (a) Urea. (b) Antibodies.
  - (c) Carbon dioxide (d) All of these
- **19.** Which of the following labelled stages grow within a case during development?



(c) R (d) S

(a) P

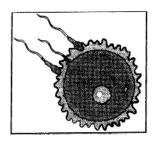
- **20.** In which of the following animals fertilisation is external?
  - (a) Birds and fish
  - (b) Amphibians and birds
  - (c) Reptiles and fish
  - (d) Fish and amphians
- **21.** How many cells are formed as a result of binary fission?
  - (a) 2 (b) 3 (c) 1 (d) 4
  - (c) 1 (d) 4
- **22.** Which of the following is called the larva of a frog?
  - (a) Nymph (b) Tadpole
  - (c) Caterpillar (d) Fry
- **23.** Which of the following processes refers to the casting away of the skin by a caterpillar to allow a larger caterpillar to emerge?
  - (a) Metamorphosis (b) Chrysalis
  - (c) Moulting (d) Development

- **24.** Which of the following shows the correct route, that the sperm takes after leaving the testis? (a) Epididymis vas deferens ejaculatory duct urethra.
  - (b) Vas deferens epididymis urethra ejaculatory duct urethra.
  - (c) Ejaculatory duct epididymis vas deferens urethra.
  - (d) Epididymis vas deferens urethra ejaculatory duct.
- **25.** Which of the following structures has an internal wall lined with fingerlike projections?
  - (a) Ovary
  - (b) Vagina
  - (c) Fallopian tube
  - (d) Uterus
  - (d) Uterus
- **26.** Which of the following organs contains seminiferous tubules?
  - (a) Kidney
  - (b) Ovary
  - (c) Testes
  - (d) Brain
- **27.** In which of the following organs sperms mature?
  - (a) Testes
  - (b) Epididymis
  - (c) Vasdeferns
  - (d) Cowper's glands

**28.** In which of the following processes is ovum released from the follicle?

- (a) Ovulation
- (b) Oogenesis
- (c) Capacitation
- (d) Menstrual cycle
- **29.** Which of the following is an unpaired structure in the human reproductive system?
  - (a) Ovary
  - (b) Testes
  - (c) Fallopiantube
  - (d) Uterus
- **30.** Which of the following is correct of implantation?
  - (a) Attachment of the blastocyst to the uterine wall
  - (b) Release of ovum from the follicle
  - (c) Development of an embryo without fertilisation
  - (d) Formation of ova from germ cells
- **31.** Which of the following is a specialized structure that provides nourishment to the foetus from the mother and collects wastes from it, passing them onto the mother?
  - (a) Fallopian tube
  - (b) Placenta
  - (c) Cowper's gland
  - (d) Blastocyst
- **32.** Which of the following are found in high concentrations in the blood that passes from the placenta to the foetus? (a) Urea and carbon dioxide
  - (b) Urea and glucose
  - (c) Carbon dioxide and antibiotics
  - (d) Oxygen and amino acids

- **33.** Which of the following is the function of substance that is secreted by cowper's gland?
  - (a) Protecting sperms
  - (b) Serving as a lubricant
  - (c) Turning the semen alkaline
  - (d) Helping the sperm in penetrating the ovum
- **34.** Which of the following organisms reproduces asexually?
  - (a) Protozoa
  - (b) Frog
  - (c) Lizard
  - (d) Housefly
- **35.** AIDS is a deadly disease which is caused by
  - (a) a protozoan.
  - (b) a fungus.
  - (c) a bacterium.
  - (d) a virus.
- **36.** Which of the following organisms contains ampluxory pads that help in copulation?
  - (a) Earthworm (b) Frog
  - (c) Fish (d) Butterfly
- **37.** Which of the following is/are present in the milt of frog?
  - (a) Embryo (b) Ovum
  - (c) Spermatozoa (d) Both (A) and (C)
- **38.** Which of the following statements are correct about menstrual cycle?
  - (a) A girl who has reached puberty will menstruate throughout her life.
    - (b) Menstruation occurs every 28 days
    - (c) During every menstrual cycle, one mature ovum will be released by the ovary.
    - (d) Both (B) and (C)
- **39.** Which part within the uterus prevents the mixing of the blood of the foetus with that of the mother? (a) Umbilical cord (b) Uterus wall
  - (c) Placenta (d) Water sac
- **40.** Which of the following is an oviparous mammal?
  - (a) Echidna (b) Kangaroo
  - (c) Rabbit (d) Bat
- **41.** Identify the process shown below.



- (a) Fission
- (b) Fertilisation
- (c) Conjugation
- (d) Ovulation

- **42.** Which of the following terms is used to describe the mass of eggs of a frog?
  - (a) Follicles
  - (b) Ostium
  - (c) Spawn
  - (d) Both (A) & (B)
- **43.** In which of the following organisms does internal fertilization occurs?
  - (a) Bird and fish
  - (b) Snake and frog
  - (c) Rabbit and frog
  - (d) Snake and Rabbit

#### **44.** Which of the following organs contain graafian follicles?

- (a) Fallopian tube
- (b) Uterus
- (c) Vagina
- (d) Ovary

### **45.** How many ova is/are released at a time in the female human being?

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

## **Answers With Solutions**

- 1. (a) Reproduction without the fusion of gametes is known as asexual reproduction. The offspring are genetically identical.
- **2.** (d) In sexual reproduction, the offspring receives characteristics from both the parents.
- **3.** (d) Butterfly undergoes sexual reproduction..
- **4.** (d) Ovaries testes and fallopian tubes are the paired structures in human reproductive system.
- **5.** (d) An egg cell can live in the body for only one day.
- **6.** (a) W is placenta, X is foetal, Y is amniotic fluid and Z is foetal membrane.
- **7.** (c) Placenta prevents the mixing of the blood of the foetus with that of the mother.
- 8. (a) The correct sequence in the formation of a baby is as follows. Zygote  $\rightarrow$  Embryo  $\rightarrow$  Foetus  $\rightarrow$  Baby
- **9.** (a) All living organisms reproduce.
- **10.** (a) Hydra reproduces by budding.
- **11.** (d) Budding, binary fission, spore formation are types of asexual reproduction.
- **12.** (b) Options I and III are true of comparison of sexual and asexual reproduction.
- 13. (d) Unicellular organisms like amoeba and paramoecium undergoes binary fission.
- **14.** (d) Fertilisation takes place in the fallopian tube.
- **15.** (c) R ovulation, S implantation and T fertilization.
- **16.** (a) P is ovulation, Q is implantation and R is fertilization.
- **17.** (c) The fluid protects the foetus from shock.

- **18.** (d) Umbilical cord transports urea, antibodies and carbon dioxide.
- **19.** (c) R represents pupa.
- **20.** (d) Fertilisation is external in fish and amphibians.
- **21.** (a) Two daughter cells are formed as result of binary fission.
- **22.** (b) The larva of a frog is tadpole.
- 23. (c) The casting off of the skin by caterpillar to allow a larger caterpillar to emerge is called moulting.
- **24.** (a) The correct route the sperm takes after leaving the testis is epididymis vas deferens ejaculatory duct urethra.
- **25.** (c) The fallopian tubes have an internal wall lined with fingerlike projections.
- **26.** (c) Testes contain seminiferous tubules
- **27.** (b) Sperms mature in epididymis.
- **28.** (a) Ovum is released during ovulation.
- **29.** (d) Uterus is an unpaired structure.
- **30.** (a) Options A is the correct statement.
- **31.** (b) Placenta is a specialised structure that provides nourishment to the foetus from the mother and collects wastes from it, passing them onto the mother.
- **32.** (d) Oxygen and amino acids are found in high concentrations in the blood that passes from the placenta to the foetus.
- **33.** (b) The function of the secretions of cowpers gland is to serve as a lubricant.
- **34.** (a) Protozoa reproduces asexually.

- **35.** (d) AIDS is a deadly disease caused by virus.
- **36.** (b) Frogs have ampluxory pads that help in copulation.
- **37.** (c) Spermatozoa are present in the mil of frog.
- **38.** (d)Statements II and III are true.

Menstruation occurs every 28 days and during every menstrual cycle, one mature ovum will be released by the ovary.

- **39.** (c) Placenta in the uterus prevents the mixing of the blood of the foetus with that of the mother.
- **40.** (a) Echidna is an oviparous mammal.
- **41.** (b) The given figure represents fertilisation.
- **42.** (c) The mass of eggs of a frog is called spawn.
- **43.** (d) Internal fertilization occurs in snakes and rabbits.
- **44.** (d) Ovary has graafian follicles.
- **45.** (d) One ova is released at a time in female human beings.