

Reproduction in Animals

Very Short Answer Type Questions

Question 1.

Which life process ensures that a plant or animal species will not disappear from the earth ?

Answer:

Reproduction is an important life process which ensures that a plant or animal species does not disappear from this earth.

Question 2.

What is the name of the reproductive process :

(a) Which involves two parents ?

(b) which involves only one parents ?

Answer:

(a) In sexual reproduction, two parents are involved.

(b) In asexual reproduction, only one parent is involved.

Question 3 A.

Name two animals which reproduce sexually.

Answer:

Cows and dogs reproduce sexually.

Question 3 B.

Name two animals which reproduce asexually.

Answer:

Hydra and planaria reproduce by asexually.

Question 4.

State whether human beings reproduce by sexual method or asexual method.

Answer:

Human beings reproduce by sexual method.

Question 5.

Which type of reproduction :

(a) involves gametes ?

(b) does not involve gametes ?

Answer:

(a) Sexual reproduction involves gametes.

(b) Asexual reproduction does not involve gametes.

Question 6.

Give another term for a fertilized egg.

Answer:

The another term for a fertilized egg is zygote.

Question 7.

Name the process of the fusion of gametes ?

Answer:

The process by which male and female gametes fuse to each other is called fertilization.

Question 8.

Do all animals give birth to individuals like humans ?

Answer:

No. All organisms do not give birth to individuals like humans.

Question 9.

What is the other name of sex cell ?

Answer:

Sex cells are also known as gametes.

Question 10.

What are the organs in humans which produce the gametes ?

Answer:

In humans, testes (in male) and ovaries (in female) are reproductive organs which produce the gametes.

Question 11 A.

What are the male gametes in humans called ?

Answer:

The male gametes in humans are called sperms.

Question 11 B.

Name the organ which produces male gametes.

Answer:

Testes produce male gametes called sperms.

Question 12 A.

What are the female gametes in humans called ?

Answer:

The female sex cells (gametes) in humans are called eggs.

Question 12 B.

Name the organs which produce female gametes.

Answer:

Ovary produces female sex cells called eggs.

Question 13.

Name the organs which produce sperms in humans.

Answer:

Testes produce male gametes (sperms) in humans.

Question 14.

Name the organs which produce egg (or ova) in humans.

Answer:

Ovaries produce egg (or ova) in humans.

Question 15.

What do the testes in a man produce ?

Answer:

Testes in a man produce male gametes called sperms.

Question 16.

What do the ovaries in a woman produce ?

Answer:

Ovaries in a woman produce female gametes called eggs.

Question 17.

Which organ of the human body passes sperms from a man to a woman ?

Answer:

Penis is an organ which passes the sperms from the man's body into the vagina in the woman's body during mating.

Question 18.

In which female reproductive organ does the embryo get embedded ?

Answer:

The embryo gets embedded in the wall of the uterus for further development.

Question 19.

Which stage comes earlier in the development of a human baby from zygote : foetus or embryo ?

Answer:

Embryo stage comes earlier in the development of a human baby from zygote.

Question 20.

Name the technique which is used to help a woman with blocked oviducts to have a baby.

Answer:

In vitro fertilization (IVF) technique is used to help a woman with blocked oviducts to have a baby.

Question 21.

Write the full name of IVF.

Answer:

The full name of IVF is in vitro fertilization (fertilization outside the body).

Question 22.

What is the success rate of IVF technique of reproduction in humans?

Answer:

The success rate of IVF technique is only about 30 to 40 percent.

Question 23.

What type of fertilization takes place in a hen ?

Answer:

Internal fertilization takes place in a hen.

Question 24.

What term is used for the following ?

The change from tadpole to frog.

Answer:

The transformation of the larva (tadpole) into an adult (frog) through drastic changes is called metamorphosis.

Question 25.

Name two animals which produce embryos that grow into larvae before transforming into adults.

Answer:

Frog and silk moth produce embryos that grow into larvae before transforming into adults.

Question 26.

What term is used for 'bulges' observed on the sides of the body of Hydra ?

Answer:

These bulges are the developing new individuals and they are called buds.

Question 27.

What type of fission takes place in Amoeba ?

Answer:

Binary fission takes place in Amoeba.

Question 28.

Name one animal each which reproduces :

(a) by binary fission, and

(b) by budding.

Answer:

(a) Amoeba reproduces by common asexual method called binary fission.

(b) Budding is asexual method of reproduction in hydra.

Question 29.

Name the asexual method of reproduction :

(a) in Hydra, and (b) in Amoeba.

Answer:

(a) Hydra reproduce by asexual method called budding.

(b) Amoeba reproduce by binary fission, a asexual method.

Question 30.

Name the technique which was used in producing 'Dolly' the sheep.

Answer:

Cloning is the technique which was used in producing 'Dolly' the sheep.

Question 31.

Name the parent sheep of which Dolly was a clone.

Answer:

Dolly was a healthy clone of the Finn Dorsett sheep.

Question 32.

What name is given to the following ?

An animal which is an exact copy of its parents.

Answer:

An animal which is an exact copy of its parents is called clone.

Question 33.

What are the two general methods of reproduction in organisms?

Answer:

There are two methods of reproduction:

1. Sexual reproduction
2. Asexual Reproduction

Question 34.

State whether the following statements are True or False :

- (a) Each sperm is a single cell.
- (b) A new human individual develops from a cell called gametes.
- (c) Egg laid after fertilization is made up of a single cell.
- (d) A zygote is formed as a result of fertilization.
- (e) External fertilization takes place in frog.
- (f) An embryo is made up of a single cell.
- (g) Oviparous animals give birth to young ones.
- (h) Internal fertilization takes place in hens.
- (i) The hens give birth to chicks like human beings give birth to babies.
- (j) Amoeba reproduces by budding.
- (k) Binary fission is a method of asexual reproduction.
- (l) Fertilisation is necessary even in asexual reproduction.
- (m) Cloning is a sexual reproduction method in mammals.

Answer:

- (a) True, sperm is a single cell with all the usual cell components.
- (b) False, A new human individual develops from a cell called zygote.
- (c) True, egg laid after fertilization is made up of a single cell.
- (d) True, Fertilization results in the formation of zygote which begins to develop into an Embryo.
- (e) True, External fertilization takes place in frog and fish.
- (f) False, embryo is a developing structure which is made up of group of cells.
- (g) False, those animals which lay eggs are called oviparous animals.
- (h) True, Internal fertilization takes place in hens, humans and cow.
- (i) False, Hens are oviparous animals which lay eggs.
- (j) False, Amoeba reproduce by binary fission.
- (k) True, Binary fission is a method of asexual reproduction.
- (l) False, fertilization is not necessary in asexual reproduction.
- (m) False, Cloning is the production of an exact copy of a cell, any other living part, or a complete organism.

Question 35.

Fill in the following blanks with suitable words:

- (a) The process of ensure continuity of life on earth.
- (b) The cells involved in sexual reproduction are called
- (c) Fusion of gametes gives rise to a single cell called
- (d) The process of fusion of gametes is called
- (e) The other name of egg cell is
- (f) A sperm is much than an egg cell.
- (g) In humans, one mature egg (or ovum) is released into oviduct every by one of the ovaries.
- (h) The egg laying animals are called animals.
- (i) The cow is a animal whereas ostrich is an animal.
- (j) The change of caterpillar into an adult silk moth is called
- (k) The larva of frog is called
- (l) The two common methods of asexual reproduction in animals are and
- (m) Dolly, the sheep, was produced by the technique called

Answer:

- (a) reproduction
- (b) gametes

- (c) zygote
- (d) fertilization
- (e) ovum
- (f) smaller
- (g) month
- (h) oviparous
- (i) viviparous; oviparous
- (j) metamorphosis
- (k) tadpole
- (l) binary fission; budding
- (m) cloning

Short Answer Type Questions

Question 36 A.

What is the basic difference between asexual and sexual reproduction?

Answer:

Difference between asexual and sexual reproduction:

Asexual reproduction	Sexual reproduction
In this type of reproduction, the offspring arises from a single parent.	The offspring arises from two parents of different sexes.
Example: Hydra, Amoeba, etc.	Example: Frog, human beings, etc.

Question 36 B.

Which of the following organisms reproduces by sexual and which by asexual method?

Amoeba, Cats Humans, Hydra, Birds

Answer:

Sexual method: Cats, humans, birds

Asexual method: Amoeba and Hydra

Question 37.

What is meant by the terms 'internal fertilization and 'external fertilisation'? Explain with example.

Answer:

Internal fertilization: Fertilization which takes place inside the female body is called internal fertilization.

Internal fertilization occurs in many animals including humans, cows, dogs and hens.

External fertilization: This type of fertilization in which the fusion of a male and a female gamete takes place outside the body of the female is called external fertilization. It is very common in aquatic animals such as fish, starfish, etc.

Question 38.

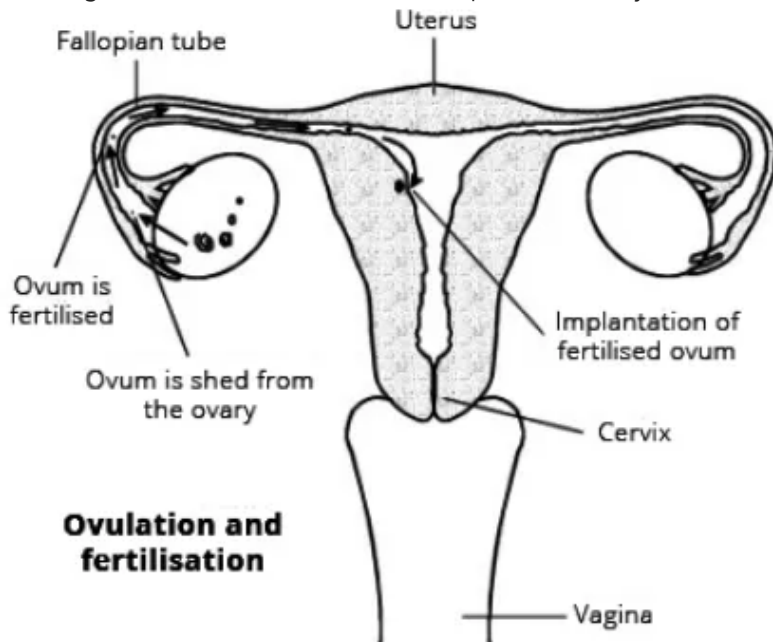
Draw a labeled diagram of the human female reproductive system.

(a) Where in the human body does an egg (or ovum) get fertilized

(b) Where does a fertilized egg (or zygote) develop into a baby in the human body?

Answer:

The diagram of the human female reproductive system is shown below:



- a) In the human body, an egg (or ovum) gets fertilized in the fallopian tubes.
- b) The fertilized egg (or zygote) develops into a baby in the uterus of the human body.

Question 39.

What types of fertilization takes place in the following?

- (a) Cow
- (b) Frog
- (c) Humans
- (d) Fish
- (e) Hen

Answer:

Internal fertilization – (a) Cows (c) Humans (e) Hen

External fertilization – (b) Frog (d) Fish

Question 40.

Why do female frogs (or female fish) lay hundreds of eggs?

Answer:

The female frogs (or female fish) lay hundreds of eggs because there are fewer chances of surviving in that environment, so from 100 even if 5-10 survive, their species will survive.

Question 41.

What is meant by an 'embryo' ? Can we identify the body features in an embryo ?

Answer:

The zygote divides repeatedly to give rise to a ball of cells. The cells then begin to form groups that develop into different tissues and organs of the body. This developing structure is termed an embryo. The stage of the embryo in which all the body parts can be identified is called a foetus.

Question 42.

Give two differences between a zygote and a foetus.

Answer:

1. Zygote is made up of a single cell while foetus is made up of many cells.

2. Zygote is formed by the fertilization of sperm and ovum, foetus is formed by the repeated divisions of the zygote.

Question 43.

Describe the various steps involved in the sexual reproduction in animals.

Answer:

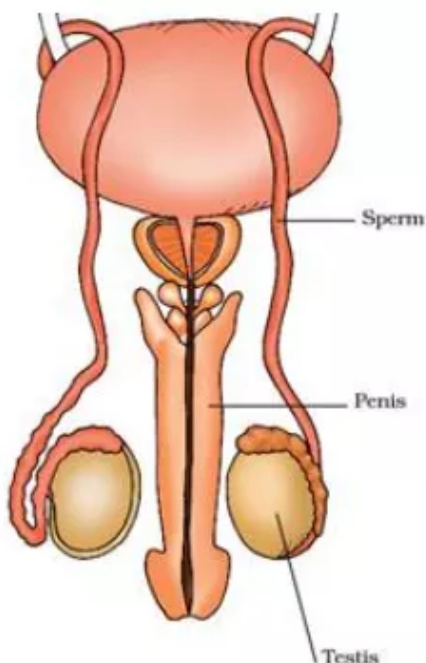
Following steps are involved in the process of sexual reproduction in an animal:

1. In the animal, male parent produces male gametes called sperms. Millions of sperms are produced by testes.
2. The female parent produces female gamete called ova (eggs). Like a sperm, an egg is also a single cell.
3. The next step is fertilization. In this step, sperm enters the ovum and fuses with it to form a new cell called zygote. The zygote is the beginning of a new individual.
4. In this step, zygote begins to develop into an embryo. The zygote divides repeatedly to form a large number of cells and ultimately the zygote grows and develops to form a baby.

Question 44.

Draw a labeled diagram of the human male reproductive system.

Answer:



Question 45.

Define foetus. After how many weeks of development, a human embryo is said to become a foetus ?

Answer:

The stage of the embryo in which all the body parts can be identified is called a foetus. A human embryo becomes a foetus after about 8 weeks of pregnancy.

Question 46.

What is metamorphosis ? Give two examples of metamorphosis.

Answer:

The transformation of the larva into an adult through drastic changes is called metamorphosis.

Metamorphosis occurs in frog and silk moth.

Question 47.

What is the difference between viviparous animals and oviparous animals ?

Answer:

Difference between viviparous animals and oviparous animals:

Viviparous animals	Oviparous animals
The animals which give birth to young ones are called viviparous animals.	The animals which lay eggs are called oviparous animals.
Examples- human, cow.	Example – Hens and frog.

Question 48.

Which of the following are oviparous animals and which are viviparous animals ?

Frog, Human being, Sparrow, Lizard, Cow, Dog, hen, Fish, Butterfly, Cat.

Answer:

Oviparous animals – Frog, sparrow, lizard, hen, fish, butterfly

Viviparous animals – Human being, dog, cat.

Question 49.

Give five example each of animals which develop :

(a) inside the mother.

(b) inside eggs which the mother lays.

Answer:

(a) The animals which give birth to young one are called viviparous animals. In such animals, the baby develops inside the body of the mother.

Examples of Viviparous animals – Human beings, cat, dog, cow, tiger.

(b) The animals that reproduce by laying eggs are called oviparous animals. In such animals, the baby develops inside eggs that the mother lays.

Examples of Oviparous animals – Frog, sparrow, lizard, hen, fish, butterfly.

Question 50.

Explain how, chicks are born. How much time does the embryo present in hen's egg take to develop into a chick (when provided sufficient warmth) ?

Answer:

In hens, internal fertilization take place but they do not give birth to chicks like human beings. After fertilization, the zygote divides repeatedly to form embryo which travels down the oviduct. As it travels down, many protective layer are formed around it.

The outermost protective layer is hard shell which we can see in a hen's egg. After the hard shell is formed around the developing embryo, the hen finally lays the egg. The hen, then sits on the egg to provide sufficient warmth to the eggs for the development of the embryo into the chicks. The embryo takes about 3 weeks to develop into a complete chick.

Question 51.

In which of the following animals the embryo develop fully inside the mother's body and in which they

develop fully in the eggs laid by mother ?

Cow, Ostrich, Frog, Lizard, Deer, Cat, Snake, Tiger, Dog, Hen

Answer:

(a) Viviparous animals – Cow, deer, cat, tiger, dog.

(b) Oviparous animals – Ostrich, frog, lizard, snake, hen.

Question 52.

Name two animals which undergo metamorphosis and two which do not.

Answer:

Frog and silk moth undergo metamorphosis whereas cow and hen do not undergo metamorphosis.

Question 53.

Which of the following animals undergo metamorphosis and which do not ?

Cow, Butterfly, Silk moth, Humans, Frog, Housefly, Sparrow, Hen, Mosquito, Money

Answer:

Butterfly, silk moth, frog, housefly and mosquito undergo metamorphosis while cow, human, hen and monkey do not undergo metamorphosis.

Question 54 A.

What are gametes ?

Answer:

The cells involved in sexual reproduction are called gametes.

Question 54 B.

In which sort of reproduction are gametes fuse ?

Answer:

Fertilization is the step of reproduction in which fusion of gametes take place.

Question 54 C.

What is formed when two gametes involved ?

Answer:

Zygote is formed when two gametes are fused together.

Question 54 D.

What is this act of fusion called ?

Answer:

The fusion of a sperm with an ovum to form a zygote during sexual reproduction is called fertilization.

Question 55.

Match the terms given in column A with those given column B :

Column A

(i) Sperm

(ii) Ovary

(iii) Oviduct

(iv) Testis

Column B

(a) Female organ

(b) Egg tube

(c) Male organ

(d) Male gamete

Answer:

- (i) (d);
- (ii) (a);
- (iii) (b);
- (iv) (c)

Question 56.

Differentiate between internal fertilization and external fertilization. What type of fertilization takes place in

(a) frog, and

(b) fox ?

Answer:

Differences between internal fertilization and external fertilization:

Internal fertilization	External fertilization
It takes place inside the female body.	It takes place outside the female body.
Example – Human being.	Example – Frog, starfish.

Question 57.

What is meant by 'cloning'? State whether gametes are involved in cloning or not. Name two animals which have been produced by cloning.

Answer:

Cloning is the production of an exact copy of a cell, any other living part, or a complete organism. Yes, gametes are involved in cloning. Dolly and noah are two cloned animals.

Question 58.

What is meant by 'reproduction' ? why is it essential ?

Answer:

Reproduction is one of the important characteristics of living things. The ability of organism to produce young ones of its own kind is called reproduction. It is essential for the continuation of a species.

Question 59.

Define asexual reproduction. Name two methods of asexual reproduction in animals. Name two animals which reproduce by these asexual reproduction methods.

Answer:

The type of reproduction in which only a single parent is involved is called asexual reproduction. Binary fission and budding are two methods of asexual reproduction in animals. Amoeba reproduce by binary fission and Hydra reproduce by budding.

Question 60.

What is a clone ? Name one famous clone.

Answer:

The organisms which are produced asexually are genetically identical to the parent and are called clones.

Dolly was born on 5th July 1996 and was the first mammal to be cloned.

Lakhmir Singh Science Class 8 Chapter 9 Long Answer Type Questions

Question 61 A.

Explain the term 'fertilization'. Describe the process of fertilization in human beings.

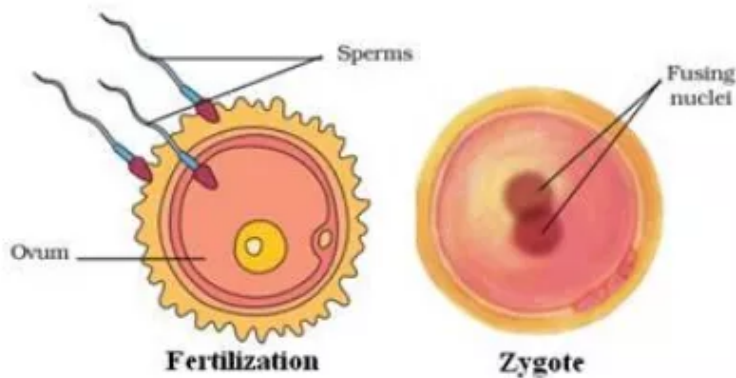
Answer:

The fusion of male and female gametes to form zygote is known as fertilization. The process of fertilization takes place in the fallopian tube (oviduct). As sperm enter into the vagina through the process of copulation; it moves upwards and enter into the oviduct. In the oviduct, ovum fuse with the sperm to form zygote.

Question 61 B.

Draw a labeled diagram to show the fertilization of a human egg by a sperm to form a zygote.

Answer:



Question 62 A.

What type of couples are helped to have babies by the in vitro fertilization technique ?

Answer:

In vitro fertilization technique is used to help those couples in having babies who can produce sperms and ovum but fertilization does not take place inside the woman's body due to blocked oviducts.

Question 62 B.

Describe the 'in vitro fertilization' technique of reproduction in humans.

Answer:

In IVF or invitro fertilization technique, is a process by which an egg is fertilised by the sperm outside the body.

The process involves monitoring and stimulating a woman's ovulatory process, removing ovum or ova (egg or eggs) from the woman's ovaries and letting sperm fertilise them in a fluid medium in a laboratory.

Question 63 A.

What are viviparous animals ? Give two examples of viviparous animals.

Answer:

The animals which give birth to young ones are called viviparous animals. Human beings and cow are examples of viviparous animals.

Question 63 B.

What are oviparous animals ? Give two examples of oviparous animals.

Answer:

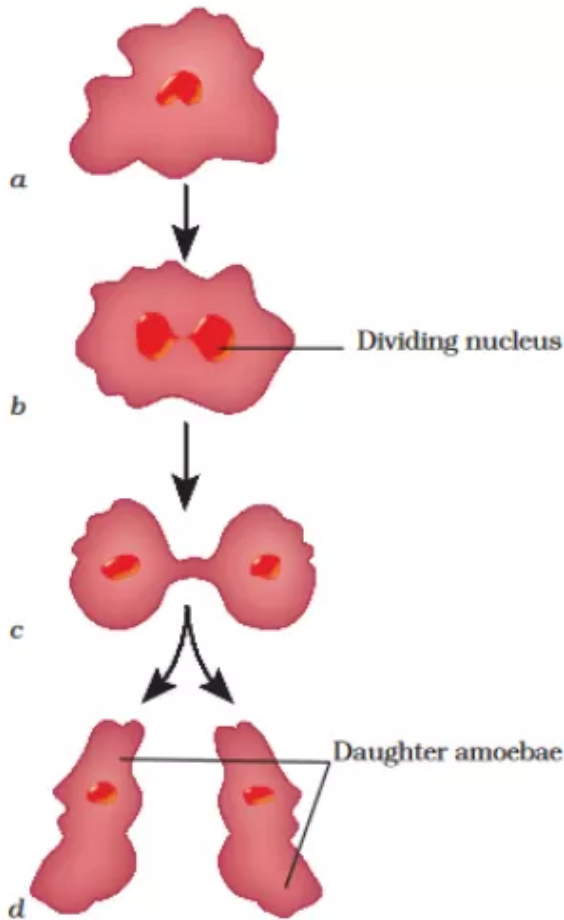
Those animals which lay eggs are called oviparous animals. Examples – Hens and frog.

Question 64.

How does an Amoeba reproduce ? Describe with the help of labeled diagram.

Answer:

Amoeba reproduces by common asexual method called binary fission. In this method, Amoeba cell divides into two equal daughter cells. The nucleus of amoeba first divides into two parts. After that the cytoplasm of amoeba divides into two parts, one part around each nucleus. This leads to the formation of the two daughter Amoebae cell having a nucleus and its own cell organelles.

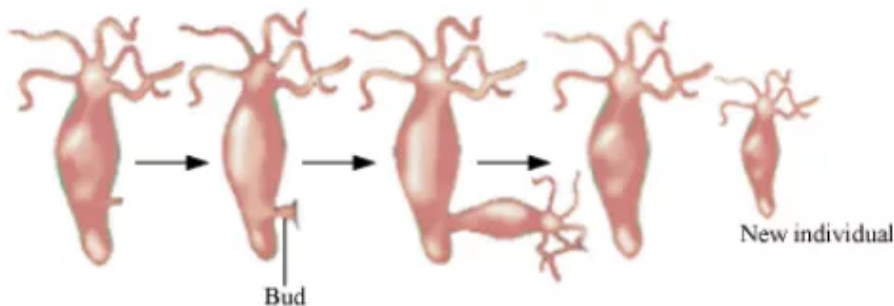


Question 65.

How does a Hydra reproduce ? Explain with the help of labeled diagrams.

Answer:

Hydra reproduces by budding. In hydra, there may be one or more bulges. These bulges are the developing new individual and they are called buds. This bud then grows gradually to form a small hydra by developing a mouth and tentacles. The tiny new hydra detaches itself from the parent body and become new independent individual.



Multiple Choice Questions (MCQs)

Question 66.

Internal fertilization occurs :

- A. in female body
- B. outside female body
- C. in male body
- D. outside male body

Answer:

- A. in female body

Fertilization which takes place inside the female body is called internal fertilization.

Question 67.

The number of nuclei present in a zygote is :

- A. none
- B. one
- C. two
- D. four

Answer:

- B. one

The correct answer is one nucleus is present in the zygote.

Explanation: Zygote is the formed due to fertilization of the gametes. During fertilization, the nuclei of the sperm and the egg fuse to form a single nucleus.

Question 68.

A tadpole develops into an adult frog by the process of :

- A. fertilization
- B. metamorphosis
- C. embedding
- D. budding

Answer:

- B. metamorphosis

The correct answer is option (b) i.e. metamorphosis

Explanation: The transformation of the larva into an adult through drastic changes is called metamorphosis. Metamorphosis occurs in frog and silk moth.

Question 69.

Fertilization results immediately in the formation of :

- A. a zygote
- B. an embryo
- C. a placenta
- D. a foetus

Answer:

- A. a zygote

The process by which male and female gametes fuse to each other is called fertilization.

Question 70.

Which of the following is not a part of the human male reproductive system ?

- A. tests
- B. oviducts
- C. seminal vesicles
- D. afoetus

Answer:

- B. oviducts

Oviducts is not a part of male reproductive system. It is a part of female reproductive system.

Question 71.

Which of the following is not a viviparous animal ?

- A. rat
- B. lizard
- C. rabbit
- D. cat

Answer:

- B. lizard

Rat, rabbit and cat are viviparous animals whereas lizard is an oviparous animal because it lays eggs.

Question 72.

The multicellular organism which reproduces by budding is :

- A. Amoeba
- B. Yeast
- C. Paramecium
- D. Hydra

Answer:

- D. Hydra

Hydra is a multicellular organism which reproduces by budding.

Question 73.

In asexual reproduction, two offsprings having the same genetic material and the same body features are called :

- A. callus
- B. twins
- C. chromosomes
- D. clones

Answer:

- D. clones

In asexual reproduction, two offsprings having the same genetic material and the same body features are called clones.

Question 74.

Which of the following animal does not show metamorphosis ?

- A. fish
- B. frog
- C. silk moth
- D. mosquito

Answer:

- A. fish

Frog, silk moth and mosquito undergo metamorphosis whereas fish does not show metamorphosis.

Question 75.

Asexual reproduction is :

- A. a fusion of specialized cells
- B. a method by which all types of organisms reproduce
- C. a method producing generally identical offsprings
- D. a method in which more than one parent are involved

Answer:

- C. a method producing generally identical offsprings

Asexual reproduction is a method producing generally identical offsprings.

Question 76.

Which of the following organisms reproduces by binary fission ?

- A. Hydra
- B. Yeast
- C. Amoeba
- D. Sea anemone

Answer:

C. Amoeba

Amoeba, a unicellular organism reproduce by binary fission.

Question 77.

Which of the following is not an oviparous animal ?

- A. snake
- B. fish
- C. rat
- D. frog

Answer:

C. rat

Snake, fish and frog are oviparous animals whereas rat is viviparous animals.

Question 78.

Tadpole is the larva of :

- A. fish
- B. frog
- C. mosquito
- D. butterfly

Answer:

B. frog

Tadpole is the larva of frog.

Question 79.

The production of an exact copy of an animal by asexual reproduction is known as :

- A. budding
- B. mating
- C. cloning
- D. hatching

Answer:

C. cloning

Cloning is the production of an animal by asexual reproduction.

Question 80.

One of the following is not a part of the human female reproductive system. This one is :

- A. ovary
- B. uterus
- C. scrotal sacs
- D. oviducts

Answer:

C. scrotal sacs

Scrotal sac is a part of the human male reproductive system.

Question 81.

Reproduction is essential for living organisms in order to :

- A. keep the individual organisms alive
- B. fulfill their energy requirements
- C. maintain growth
- D. continue the species for ever

Answer:

D. continue the species for ever

Reproduction is one of the important characteristics of living things. The ability of organism to produce young ones of its own kind is called reproduction. It is essential for the continuity of species.

Question 82.

One of the following occurs reproductive system of flowering plants well as that of humans. This is :

- A. sperm ducts
- B. anther
- C. ovary
- D. style

Answer:

C. ovary

Ovary is the structure that occurs in the reproductive system of flowering plants as well as of humans. In both of them, it produces female gametes called egg.

Question 83.

In human males, the testes lie in the scrotal sacs outside the body because it helps in the :

- A. process of mating
- B. formation of sperms
- C. easy transfer of sperms
- D. all the above

Answer:

B. formation of sperms

The testes are located outside the abdominal cavity in the scrotum because the temperature of scrotum is less than the normal body temperature which is requires for sperm formation.

Question 84.

Characterstics that are transmitted from parents to offsprings during sexual reproduction show :

- A. only similarities with parents
- B. only variations with parents
- C. both similarities and variations with parents
- D. neither similarities nor variations with parents

Answer:

C. both similarities and variations with parents

Characters that are transmitted from parents to offspring during sexual reproduction show both similarities and variations with parents.

Question 85.

The offspring formed as a result of sexual reproduction exhibits more variations because :

- A. sexual reproduction is lengthy process
- B. genetic material comes from two parents of different species
- C. genetic material comes from two parents of same species
- D. genetic material comes from many parents

Answer:

C. genetic material comes from two parents of same species

The offspring formed as a result of sexual reproduction exhibits more variations because genetic material comes from two parents of same species.

Questions Based on High Order Thinking Skills (HOTS)

Question 86.

Two very small organisms X and Y both reproduce by the method of budding. Organism X is industrially very important because it is used in making alcohol from sugar. It is also used in making bread.

Organism Y is a tiny animal having tentacles which live in water.

(a) What is organism X?

(b) Name the process in which X converts sugar into alcohol.

(c) To which class of organism does X belong?

(d) What are organism Y?

(e) Out of X and Y, which organism is multicellular and which one is unicellular?

Answer:

(a) X is Yeast.

Explanation: Yeasts are unicellular fungi which convert glucose into alcohol through the process of fermentation.

(b) The process in which X converts sugar into alcohol is called Fermentation.

Explanation: The following chemical reaction takes place:

Yeast + Glucose \rightarrow Alcohol (l) + CO₂ (g)

(c) The organism X i.e. Yeast belongs to the fungi of living organisms.

Explanation: Yeast is a single-cellular organism which divides by mitosis and shows budding. Fungi have the following characteristics:

1. They have a cell wall.
2. They have a nucleus.
3. They have no chloroplasts.

(d) Organism Y is Hydra.

Explanation: Hydra is a genus of small fresh-water animals

(e) Yeast (X) is a unicellular and Hydra (Y) is a Multicellular.

Explanation: Yeasts are unicellular organisms because they are single-celled organisms.

Hydra are multicellular organisms with complex bodies

Question 87.

A unicellular organism P lives in pond water. The organism P has no fixed shape, its shape keeps on changing. It moves and catches its prey with the help of organs Q which keep on appearing and disappearing. The organism P reproduces by a process R. Another organism S also reproduces by this process. Name P, Q, R and S.

Answer:

P is Amoeba ; Q is Pseudopodia ; R is Binary fission ; S is Paramecium.

Question 88.

The animal A which is classified as an amphibian lays eggs in pond water. The hatching of its eggs produces a tailed-form B which looks very different from the animal A. The form B then undergoes a

change C and gets converted into animal A.

- (a) Name (i) animal A and (ii) form B.
- (b) What is the change C known as ?
- (c) name the breathing organs of A.
- (d) What are the breathing organs of B?

Answer:

- (a) Animal A is Frog and form is Tadpole.
- (b) The change from Tadpole to Frog is called as Metamorphosis.
- (c) Since, A is Frog, hence the breathing organ of Frog is Lungs.
- (d) Since, B is Tadpole. The breathing organ of Tadpole is gills.

Question 89.

X and Y are the two types of animals. The animals like X undergo external fertilization whereas animals like Y undergo internal fertilization. The animals like X lay eggs from which baby animals are hatched. On the other hand, in animals like Y, the young one develops inside the uterus of mother which then gives birth to the baby.

- (a) What is the general name of animals like X ?
- (b) Give two examples of animals like X ?
- (c) What is the general name of animals like Y ?
- (d) Write the names if two animals like Y.

Answer:

(a) General Name of Animals Like X is Oviparous. Oviparous animals are those which reproduce by laying eggs. The young ones develop inside the eggs.

(b) Examples of Animals like X are Frog, Fish and Star Fish etc.

(c) General Name of Animals Like Y is Viviparous. Viviparous animals are those animals in which the young ones develop inside the uterus of the mother.

(d) Examples of Animals like Y are Human beings, cattle, etc.

Question 90.

A is an insect which breeds in ponds of stagnant water. The egg of this insect produces a worm like form B which is entirely different in appearance from the adult insects. The form B undergoes a change C and gets converted into insects A. The female of insects A is a carrier of protozoan D which spreads a disease in humans.

- (a) What are A, B, C, and D ?
- (b) Name another insect which also undergoes change C.

Answer:

- (a) A is Mosquito; B is Larva; C is Metamorphosis; D is plasmodium
- (b) Butterfly is another insect which also undergoes metamorphosis.