CLASS X (HOW DO ORGANISM REPRODUCE) IMPORTANT QUESTIONS

MCQs

1. The table lists some changes that occur inside the female body after fertilisation of egg with sperm.

(A) Rhythmic contractions of uterus muscle for child birth.
(B) Formation of placenta.
(C) Implantation of embryo.
(D) Development of organs in foetus.
(E) Cell division of zygote.
Which option correctly sequences these events?
(a) C→B→E→A→D (b) E→C→D→B→A
(c) E→C→B→D→A (d) C→E→A→B→D

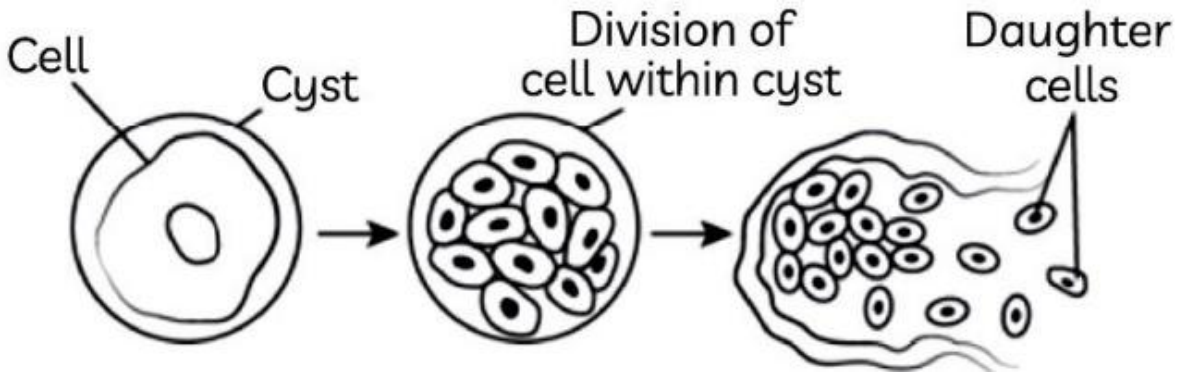
2. The image shows the production of a new sugarcane from an existing sugarcane plant. The method is called vegetative propagation. Which option supports the name of this process?

(a) It is a sexual method of producing new plants.
(b) It is an asexual method of producing new plants.
(c) It does not require a parent plant for reproduction.
(d) It involves fusion of two parts of a single parent for reproduction.

3. A farmer wants to grow banana plants genetically similar enough to the plants already available in his field. Which one of the following methods would you suggest for this purpose?

(a) Regeneration (b) Budding (c) Vegetative propagation. (d) Sexual reproduction

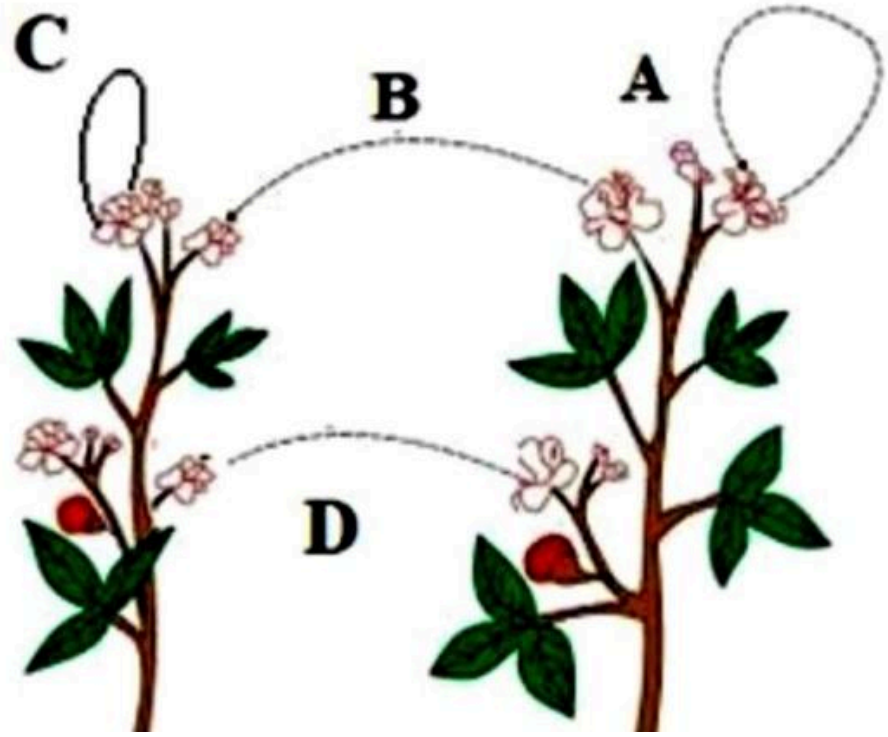
4. The image shows the process of division in Plasmodium.



What can be concluded about the division in Plasmodium?

(a) The cyst divides repeatedly to form many daughter cells.
(b) The cell divides multiple times giving rise to many daughter cells.
(c) The nucleus divides repeatedly inside the cell to form new daughter cells.
(d) Thy cyst enlarges in size and then bursts producing many new daughter cells.

5. The diagram shown below depicts pollination. Choose the options that will show a maximum variation in the offspring.



(a) A, B and C. **(b) B and D.** **(c) B, C and D.** **(d) A and C**

6. Offspring formed by asexual reproduction are genetically identical to the:

A) Grandparents
B) Siblings
C) Parent
D) Both parents

7. Fruits are formed from the:
A) Stamen
B) Stigma
C) Ovary
D) Ovule

8. The reproductive parts of a flower, the stamens, are collectively known as:
A) Androecium
B) Filament
C) Anther
D) Gynoecium

9. During favorable conditions, Amoeba reproduces by:
A) Multiple fission
B) Binary fission
C) Budding
D) Fragmentation

10. A feature of reproduction common to Amoeba, Yeast, and Spirogyra is that they reproduce:
A) Sexually only
B) Asexually
C) Both sexually and asexually
D) By budding only

11. The process of shedding of the uterine lining along with the unfertilized egg is called:
A) Ovulation
B) Menstruation
C) Fertilization
D) Implantation

12. In human beings, fertilization occurs in the:
A) Uterus
B) Ovaries
C) Fallopian tubes
D) Vagina

13. Vegetative propagation refers to formation of new plants from:

A) Stem, flowers, and fruits
B) Stem, leaves, and flowers
C) Stem, roots, and flowers
D) Stem, roots, and leaves

assertion (A) /reason (R). Mark the correct choice as:
(a) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).
(b) Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).
(c) Assertion (A) is true but reason (R) is false.
(d) Assertion (A) is false but reason (R) is true.

1. Assertion (A): Pollen grains are produced by all flowers.
Reason (R): Stamen is the male reproductive part of a flower and produces pollen grains.

2. Assertion(A) : Colonies of yeast multiply in sugar solution.
Reason (R) : Sugar is made of sucrose which provides energy for sustaining all life activities.

3. Assertion(A) : Growth hormone stimulates the growth of different body parts.
Reason (R) : Gonadotropins stimulate the production of sex hormones.

4. Assertion (A): Characteristics of parental plants can be preserved through asexual reproduction.
Reason (R): Vegetative reproduction involves only mitosis.

5. Assertion (A): At puberty, in boys, voice begins to crack and thick hair grows on face.
Reason (R): At puberty, there is decreased secretion of testosterone in boys.

6. Assertion (A): Sexual reproduction increases genetic diversities and plays a role in origin of new species.
Reason (R): Sexual reproduction involves formation of gametes and fusion of gametes.

7. Assertion: Fertilization results in formation of zygote.
Reason: Zygote divides several times to form an embryo.

8. Assertion (A): DNA copying is necessary during reproduction.
Reason (R): DNA copying leads to the transmission of characters from parents to offspring.

9. ASSERTION: Gonorrhoea is a sexually transmitted disease.

REASON: It is caused by virus.

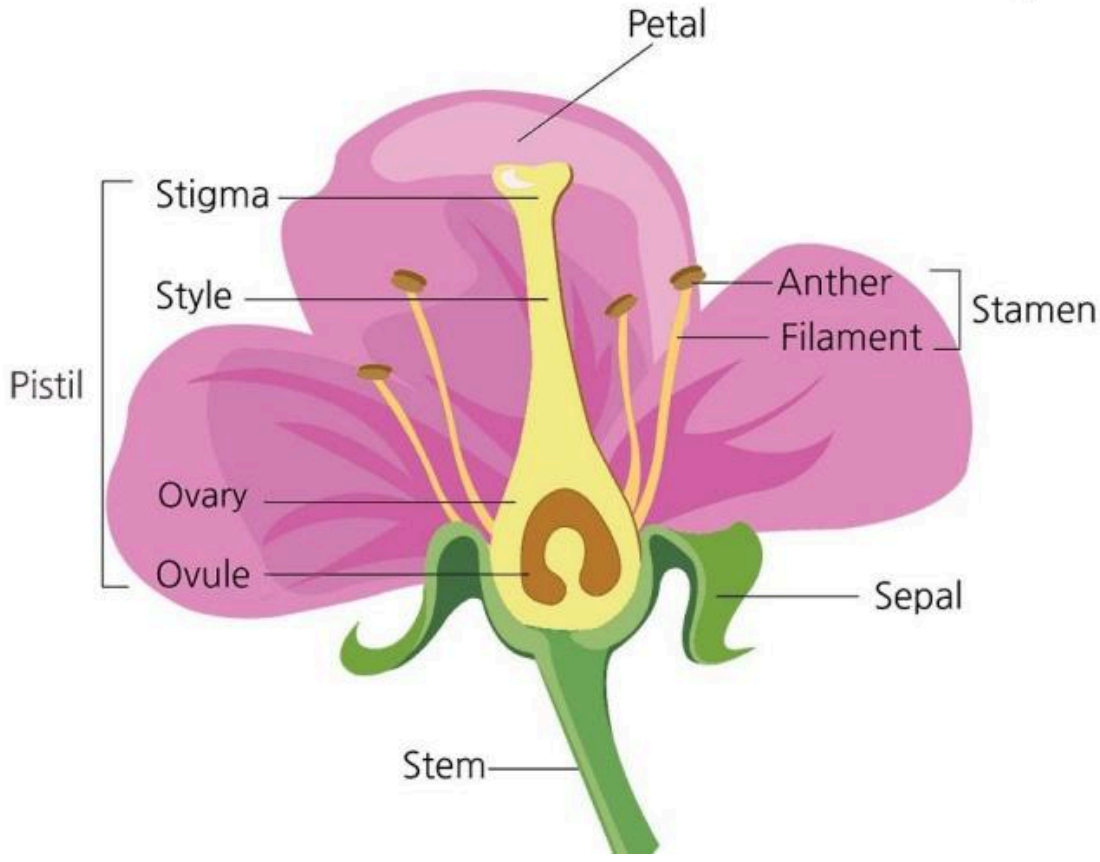
10. ASSERTION: Ovary releases one egg every month.
REASON: The lining of uterus is always thick and spongy.

11. ASSERTION: In male reproductive system, transport of sperm takes place in a fluid which also provides nutrition.
REASON: The secretions of prostate glands and seminal vesicles constitute the semen.

12. ASSERTION: Amoeba reproduces by binary fission.
REASON: All unicellular organisms reproduce by asexual method.

SECTION – C (Case Study Based Questions)

1. Read the given passage and answer the questions based on passage and related studied concepts.

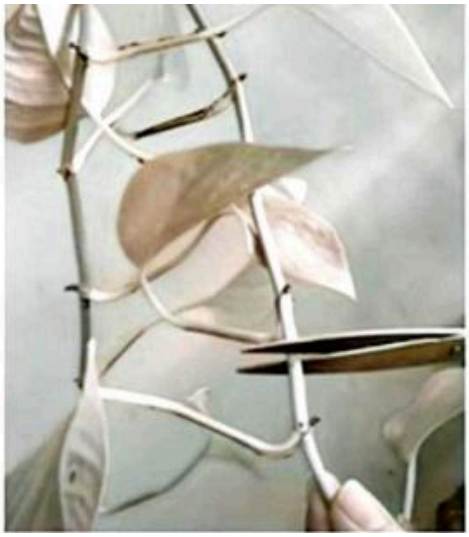


The reproductive parts of angiosperms are located in the flower. The different parts of a flower are sepals, petals, stamens and carpels. Stamens and carpels are the reproductive

parts of a flower which contain the germ cells. The flower may be unisexual (papaya, watermelon) when it
contains either stamens or carpels or bisexual (Hibiscus, mustard) when it contains both stamens and carpels. Stamen is the male reproductive part and it produces pollen grains that are yellowish
in colour. Carpel is present in the centre of a flower and is the female reproductive part.

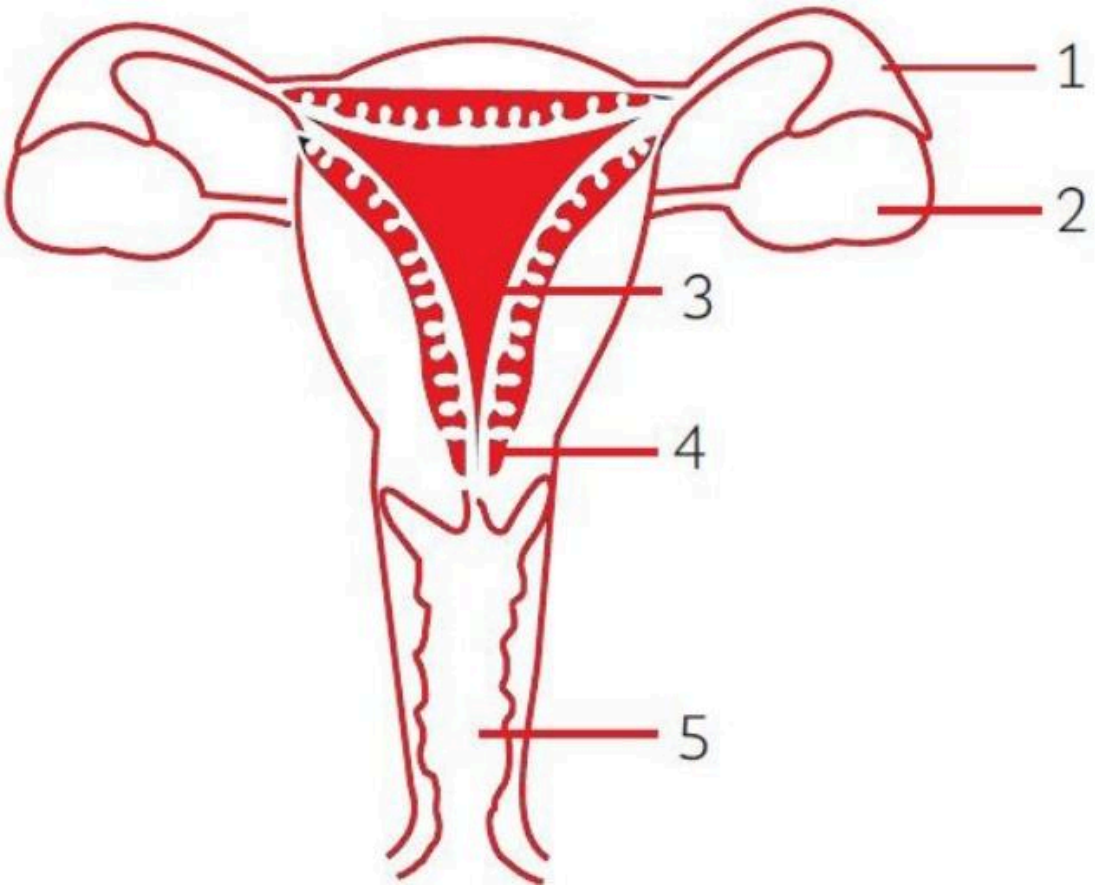
(a) (i) Where are the plant's sex organs located? (1)
(ii) What is the function of a flower? (1)
(b) Where is the male and female gametes formed in flowering plants? (1)
(c) What changes take place in the flower after fertilisation which lead to the formation of seeds
and fruit? (1)

2. An all India lockdown was announced throughout the country in March 2020 to control the spread of Corona virus. During the lockdown period, Megha developed an interest in gardening and successfully propagated several money plants through cutting.



(a) Which part of money plant did Megha use to propagate money plant? What name is given to such type of methods?
(b) Can you grow Peepal or Neem by the method which is used by Megha?
(c) Which part of the plant you would use to grow the following plants?
Bryophyllum, Potato, Dahlia, Onion, Sweet-potato, Mint
Is there any disadvantage of growing the above mentioned plants by this method?

Q. (a) Identify the given diagram. Name the parts 1 to 5.



(b) What is contraception? List three advantages of adopting contraceptive measure.