

# **BIOLOGY**

# **BOOKS - VGS BRILLIANT BIOLOGY (TELUGU ENGLISH)**

# REPRODUCTION THE GENERATING SYSTEM

# **Texual Lesson Part**

1. Do you think reproduction occurs only for continuation of life?



**Watch Video Solution** 

**2.** How does an organism grow ? How does repair of worn out parts take place ? Is there any form of reproduction involved in the process ?



# **Improve Your Learning Conceptual Understanding** 1. Why do fish and frog produce a huge number of eggs each year? **Watch Video Solution** 2. Give examples and explain what is meant by external fertilisation. **Watch Video Solution** 3. Write differences between **Grafting** -Layering **Watch Video Solution 4.** Explain the process of fertilization in plants. **Watch Video Solution**

<b>5.</b> Explain the process of fertilization in plants.
Watch Video Solution
<b>6.</b> Double fertilization is wonderful phenomenon in flowering plants. Explain double fertilization in flowering plant with the help of a diagram.
Watch Video Solution
7. Name the mode of asexual reproduction in yeast.
Watch Video Solution
8. Plants propagate normally through seeds. What are other ways that
plans propagte through ? Give examples.
Watch Video Solution

<b>9.</b> What are the advantages of sexual reproduction over asexual reproduction?
Watch Video Solution
10. How are sperms cells adapted for their function?
Watch Video Solution
11. The menstrual cycle prepares the uterus for a fertilised egg. How long
is an average menstrual cycle from start to finish?
Watch Video Solution
12. When the foetus is growing inside the uterus it needs nutrients. What
provides these nutrients ?
Watch Video Solution

13. Which type of substances are absorbed by foetus from the mother?  Watch Video Solution
<b>14.</b> What is the job of the amniotic sac ?
Watch Video Solution
<b>15.</b> What are the advantages of sexual reproduction ?
Watch Video Solution
<b>16.</b> How does reproduction help in providing stability to population of the of species ?
Watch Video Solution

17. List the main differences between mitosis and meiosis.
Watch Video Solution
18. What happens to the wall of the uterus during menstruation?
Watch Video Solution
<b>19.</b> What changes occur in the wall of the uterus during menstruation?
Watch Video Solution
Improve Your Learning Asking Questions And Making Hypothesis
1. 'All unicellular organisms undergo only mitotic cell division during
favourable conditions" - Do you support this statement ? Why ?
Watch Video Solution

**2.** What would be the consequences if there is no meiosis in organisms that reproduce sexually?



3. What happens if meiosis does not take place in reproductive cells?



# Improve Your Learning Experimentation And Field Investigation

1. Vicky's father wants to grow a single plant having two desirable characters colourful flowers and big fruits. What method will you suggest him and why?



**2.** What procedure you will follow to observe stages of mitosis in onion root tip?



**3.** Uproot an onion plant and take a thin section of its root tip. Stain it and observe under microscope. Draw as you see and identify the stages of the cell division.



# Improve Your Learning Information Skills And Projects

1. Visit a nearby village and collect information how farmers grow sugarcane, flowering plants like chrysanthemum, prime rose and vegetables like stem tubers, plump gourd (dondakaya) etc. Make a report and submit in class.

# Improve Your Learning Communication Through Drawing Model Making

1. Collect information from school library or using internet what vegetative methods are followed in your district as well as in your state to propagate various plants of economic importance.



Watch Video Solution

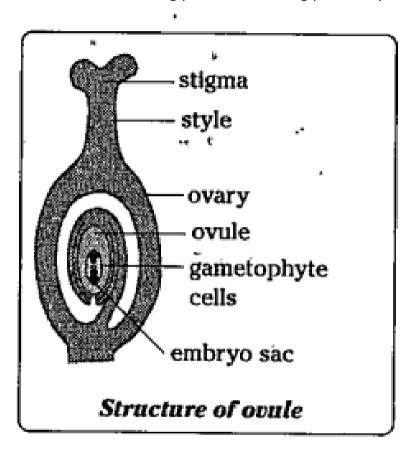
2. Make a flow chart to show the cell cycle and explain cell division describing different stages of mitosis.



**3.** Draw neat labelled diagrams of male and female reproductive system of plant.



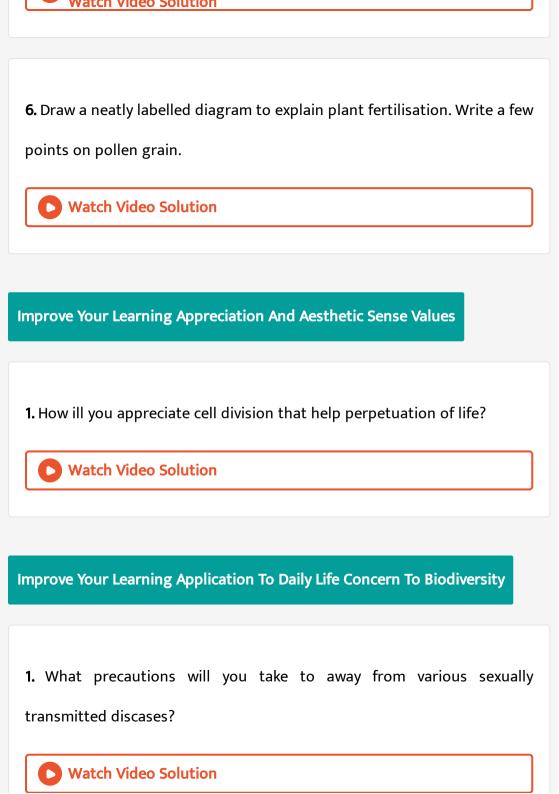
**4.** Observe the following part of a flowering plant. Prepare a note.

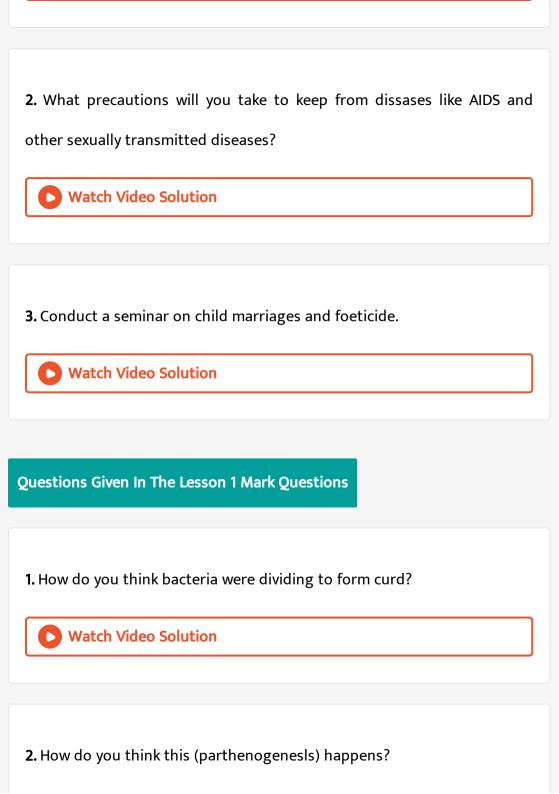


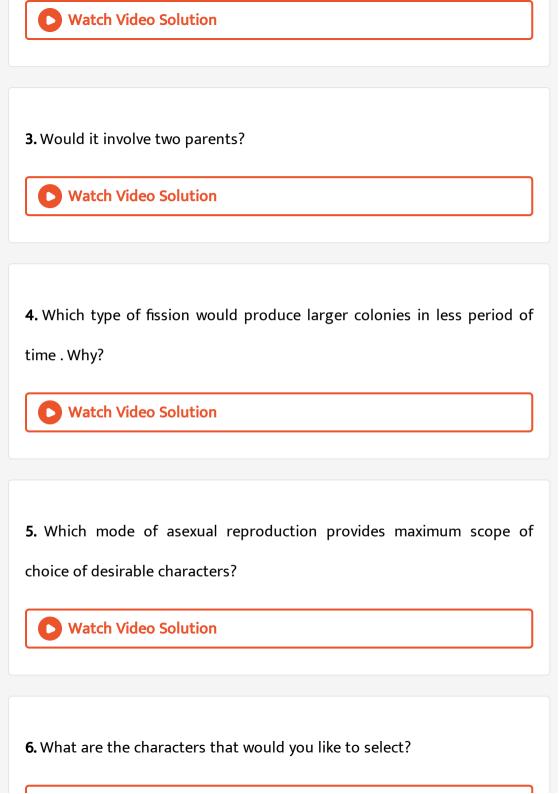


**5.** Prepare a flow to explain the process of sexual reproduction in plants.

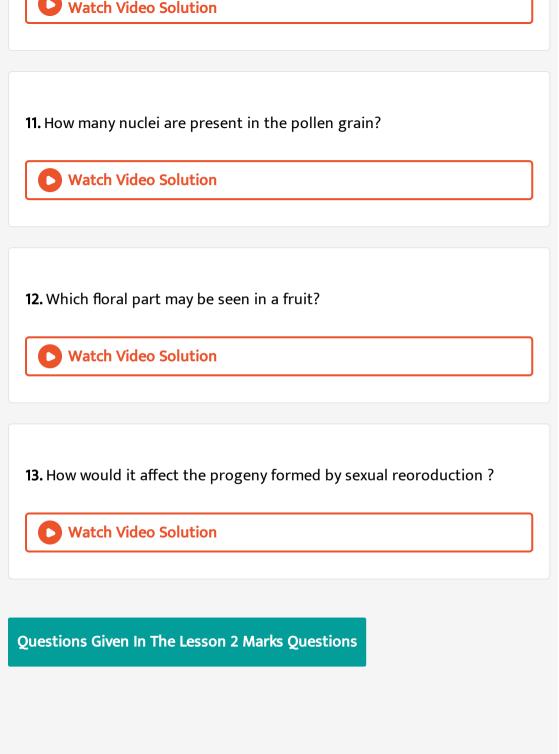








Watch Video Solution
7. What mode of propagation would help you to produce the plants with desirable characters?
Watch Video Solution
8. Do you find any similarities between rhizopus and fern spores and sporangia?
Watch Video Solution
9. Think why testis are located outside the abdominal cavity?  Watch Video Solution
Watch video Solution
10. What function do you think is served by petals and sepals?



1. Is regeneration can also be known as a type of fragmentation? Do you
agree ? Why or why not?
Watch Video Solution
2. In what way is the anomalous behaviour of water advantageous to



aquatic animals?

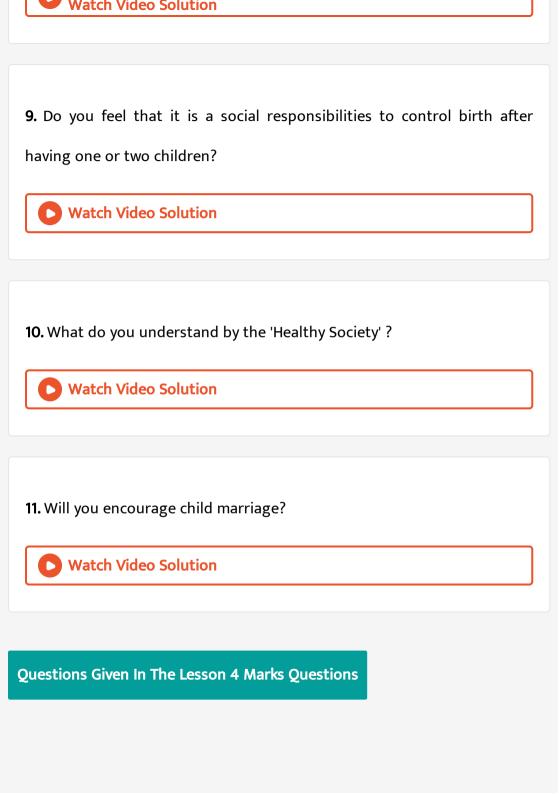
**3.** Whether they reproduce by budding, fission or fragmentation? Organisms formed are the exact copies of their parents. Is it true? Why?



**4.** What about mushrooms, how do they grow? Discuss in your class.



5. How does the male reproductive cells reach the female reproductive cells in flowers of such plants (pea plants)? **Watch Video Solution 6.** How are cotyledons useful for the plant? **Watch Video Solution** 7. What would happen if the gametes do not have half the choromosome number as the skin parent? **Watch Video Solution** 8. Why did the government of india fix the marriage age of boys (21 years) and girls (18 years)?



**1.** Draw the diagram of the flower that you collect and parts shown and write their functions.



**2.** Social discrimination against AIDS patient is also a social evil . Can you support this Why?



**3.** Why doctors are prohibited to do sex determination through ultrasound scanning for pregnant women?



Objective Assignment

1. The part of the female reproductive system that produces the eggs
A. Ovary
B. Epididymis
C. Cervix
D. Fallopian tube
Answer:
Watch Video Solution
2. The term that we use to describe a sperm cell fusing with an egg cell
A. Fragmentation
B. Fermentation
C. Fertilisation
D. Fusion

# Answer: Watch Video Solution

**3.** Which part of the male reprodutive system produces (human) the sperm cell?

A. Vas deference

B. Epididymis

C. Seminiferous tubules

D. Scrotum

# **Answer:**



Watch Video Solution

**4.** How does the sperm break throughthe egg cell membrance? Choose the option you think is right.

- A. Tears a hole in the membrane B. Dissolves the membrane with chemicals C. Bites through the membrane with teeth D. Squeezes through gaps in the memberane **Answer: Watch Video Solution**
- **5.** Why are egg cells large than sperm cells? Choose the option you think is right.
  - A. Egg cells have more cells in them
  - B. Have food store to help growth after fertilisation
  - C. Have thicker cell membranes
  - D. Have larger nuclei

# Answer:

**6.** Which of these things will affect the way a foetus grows? Choose the option you think is right.

A. Chemicals in cigarette smoke

B. Alcohol

C. Drugs

D. All of the above

# **Answer:**



**Watch Video Solution** 

**7.** Which of the following is the correct squence of steps in the human life cycle? Choose the right option.

A. Babyhood, childhood, adolescence, adulthood

- B. Childhood, babyhood, adulthood, adolescence
- C. Adolescence, babyhood, adulthood, childhood
- D. None of above

### Answer:



**Watch Video Solution** 

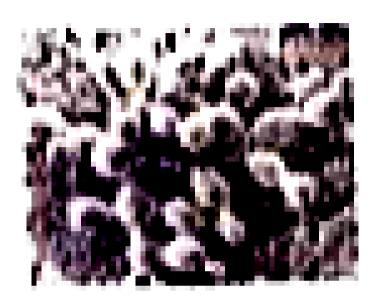
# Creative Questions For New Model Paper 1 2 Mark Questions



Name the asexual reproduction shown in the above figure.

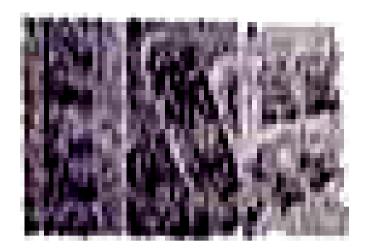
**O**.........

1.



Name the asexual reproduction shown in the above picture.





Name the mode of reproduction shown in the above figure.





Though which process, the above shown seedless fruits formed?





Name the above method of reproduction.





Name the plant shown in the above figure which propagate though epiphyllous buds.

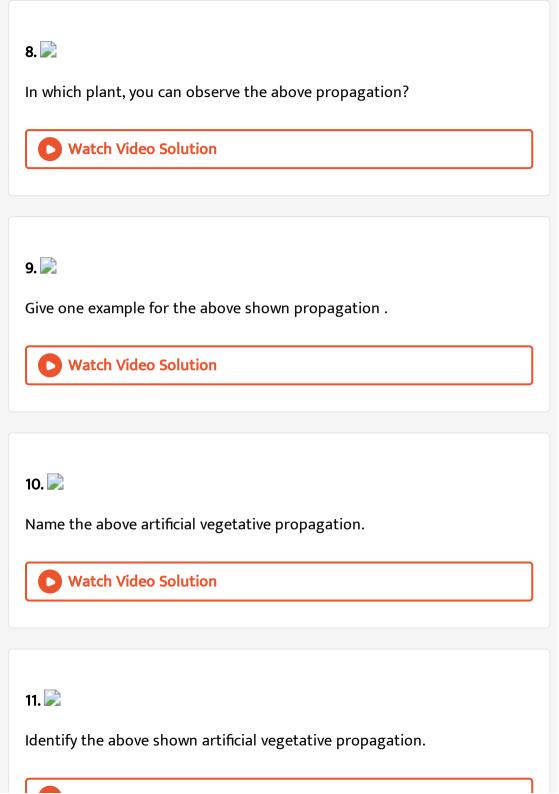


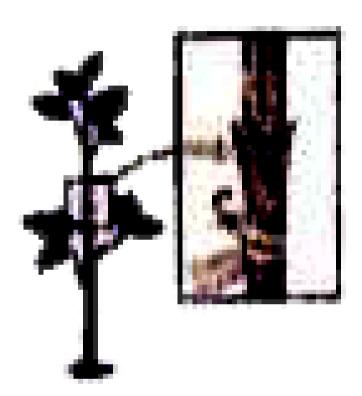
Watch Video Solution



In which plant, you can see the above propagation?







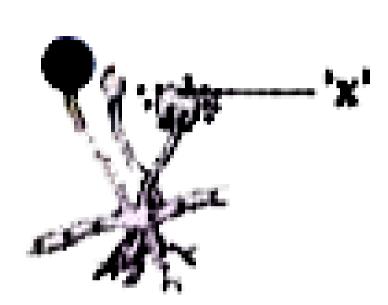
Can you identity the above shown artificial vegetative propagation?



**Watch Video Solution** 

13. 🔀

Can you identify the above fungus?



Name the labelled part 'x' in the above figure.



**Watch Video Solution** 

15. 📝

Can you identify the structure shown in the above figure?





To which system the above figure is associated with?



Watch Video Solution

17. 📝

Identify the labelled part 'x' in the above figure.

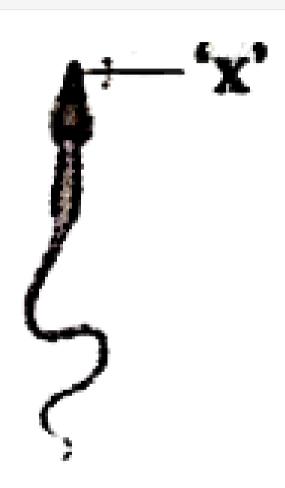




realine the above structure shown in the above figure.



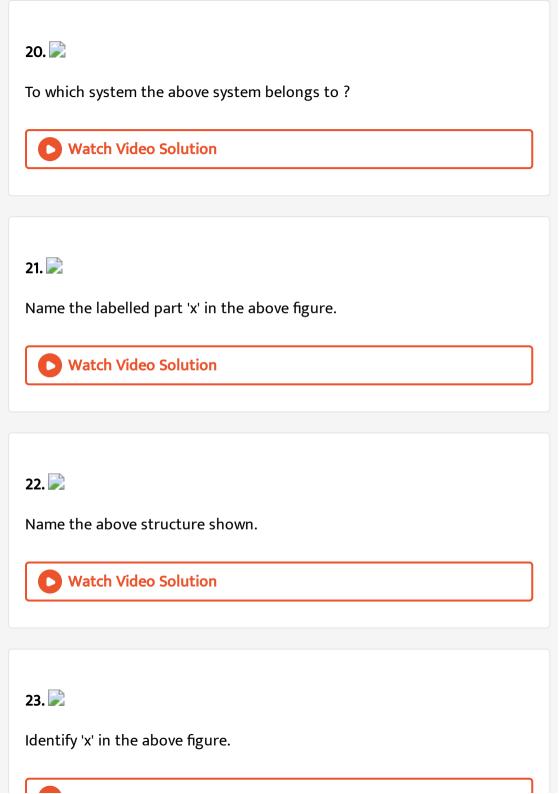
**Watch Video Solution** 

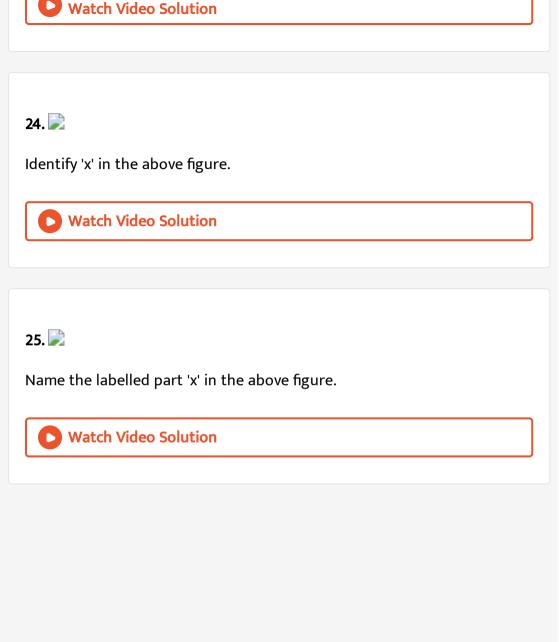


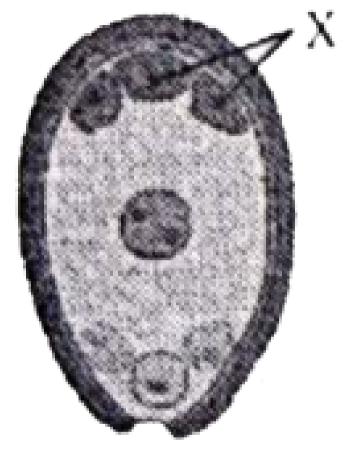
Name the labelled part 'x' in the above figure.



19.







26.

Name the labelled part 'x' in the above figure.



Watch Video Solution

27. 📄

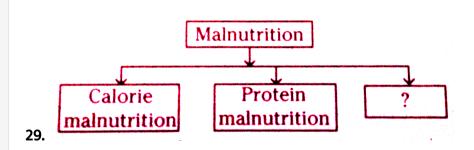
Name the labelled 'x' in the above figure.



28. 📄

Name the labelled part 'x' in the above figure.







30. 📝

Name the labelled part 'x' in the above figure.







**32.** Identify the scientist with the help of the paragraph.

In the year 1879, he examined many kinds of animal and plant cells and identified mitotic cell division.



**33.** Name the scientist with help of the following paragraph.

He hypothesised that in successive cell division the number of chromosomes always remain constant. He hypothesised meiosis.



**34.** Complete the following blanks.

In skin cells ......(1) division takes place, whereas in reproductive cells

.....(2) division takes place.



**35.** Complete the blanks.

Union of one male nucleus with the egg cell, forms ............ (1) and the second male nucleus with the fusion nucleus forms .............. (2)



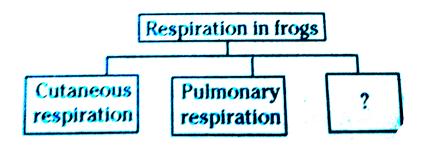
**36.** Complete the blanks.

The sperms are produced by .....(1).

The tail of the sperm helps in .....(2).

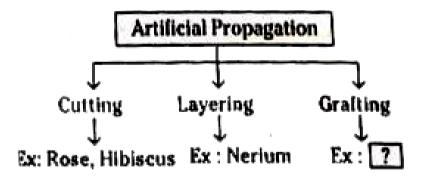


37. Observe the flow chart and complete the blanks.





38. Fill the missing options





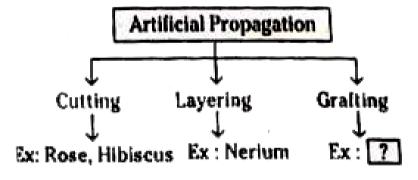
mg

width="80%">



**Watch Video Solution** 

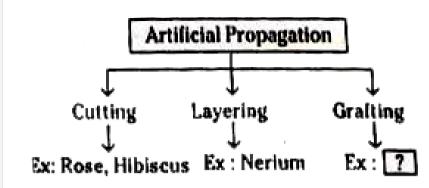
40. Fill the missing options



src="https://d10lpgp6xz60nq.cloudfront.net/physics images/BRS QB BIO X CC



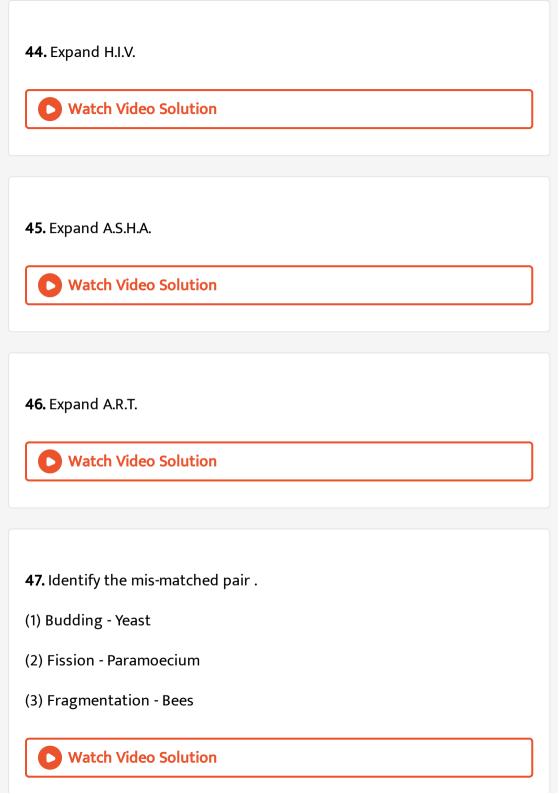
**Watch Video Solution** 



Watch Video Solution

- **42.** Expand A.I.D.S.
  - Watch Video Solution

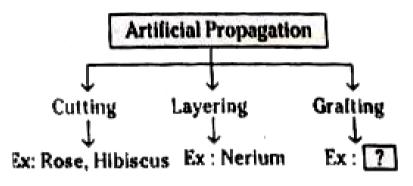
- 43. Expand STD.
  - Watch Video Solution



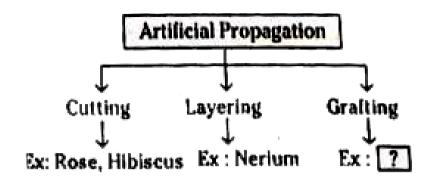
<b>48.</b> Identify the mis-matched pairs.		
(1) Stolon - Mango		
(2) Bulb - Onion		
(3) Root- Raddish		
Watch Video Solution		
<b>49.</b> Identify the mis- matched pair.		
(1) Plumule - Stem		
(2) Radicle -Flower		
(3) Endosperm - Nutrition		
Watch Video Solution		
<b>50.</b> Identify the mismatched pair.		
(1) Marriage age for men - 18		

- (2) Marriage age for women 21
- (3) AIDS- HIV











**53.** Observe the following placards. Suggest one occasion, to use them in your school.





**54.** Which of the following group does not constitute vegetative propagation methods?

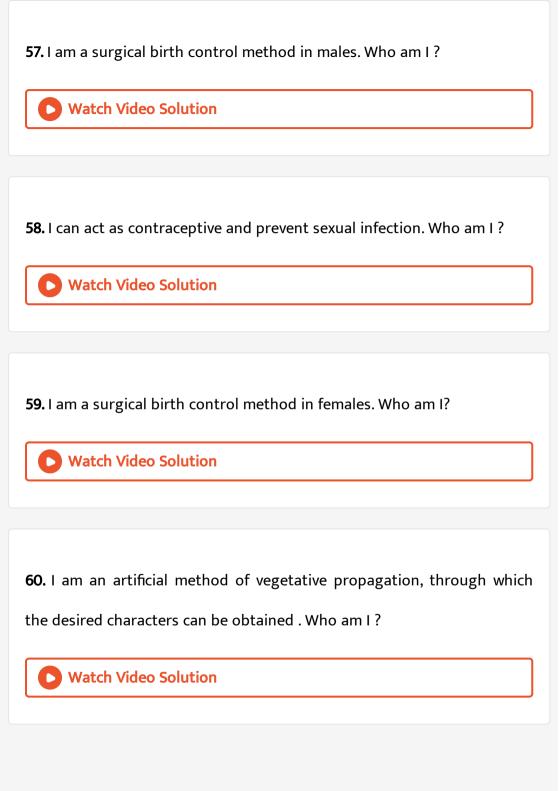
- A. fission, Budding, Fragmentation, Regeneration
- B. Stolons, Suckers, Runners, Bulbs, Corns



- **55.** Which of the following group represent STDs?
- A. Typhoid, Dengue,T.B, Malaria
- B. AIDS, Syphilis, Gonorrhoea



- **56.** Which of the following group represent the parts of female reproductive system?
- A. Seminal vasicles, cowper gland , prostrate gland
- B. Fallopian tube, verus, vagina, ovary, funnel
  - Watch Video Solution



**61.** I am one type of cell division . I can repair the wounds and help in the process of growth . Who am I ?



**62.** Which of the following group represents make reproductive parts?

A. Anther, Pollen grain, Stamen

B. Ovary, Corolla, Stigma, Ovule, Ovary



**63.** I Formed due to the fusion of second male gamete with fusion nucleus. I am in '3n' condition . Who am I?



**64.** I am a fungus. I reproduce asexually through by sporulation. I am also known as bread mould. Who am I?



**Watch Video Solution** 

**65.** Read the following lines, find the error and rewrite it.

Majority of flowering plants have an embryosac consisting of eight cells and nine nuclei.



Watch Video Solution

**66.** Read the following lines, find the error and rewrite it.

Pollen grain may have a pollen tube and one nucleus. It germinates only on the style.



**Watch Video Solution** 

67. Read the lines, find the error and rewrite it.

One of the two sperms fuses with the egg to form a zygote. By the time the egg cell gas been fertilized, the two polar nuclei to form a single endo sperm nucleus.



**68.** Read the following lines, find the error and rewrite it.

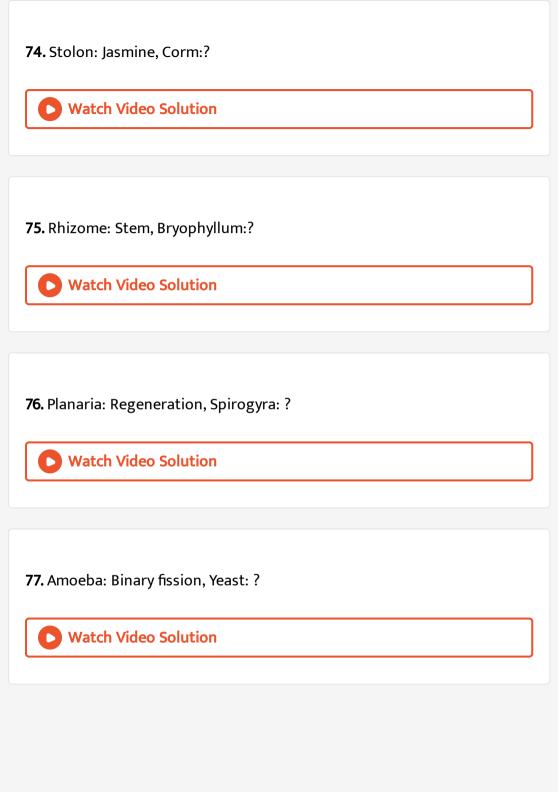
Zygote is in '3n' condition and endosperm nucleus is in '2n' condition.



**69.** I am a special tissue formed after double fertilization. I store food materials for the nourishment of the embryo. Who am I?



70. We digest and obsorb the endosperm and make the stored food for
the growth of epicotyl and hypocotyl. Can you name us?
Watch Video Solution
71. Rhizopus: Sporangium, Aspergillus: ?
Watch Video Solution
72. Mango: Grafting: Nerium:?
Watch Video Solution
<b>73.</b> Bulb : Onion: Tuber:?
Watch Video Solution



**78.** Name the scientist with the help of the following paragraph. He proposed the cell the theory. He proposed that "Omnis cellula de cellula." **Watch Video Solution** 79. Name the scientist with help of the paragraph. He proposed that chromosomes carried a different set heritable elements. **Watch Video Solution** 80. Expand D.N.A. **Watch Video Solution** 81. Expand R.N.A.



**82.** Name the scientist with the help of this paragraph.

In 1904, he proposed the scheme of mitotic division. It was consider as the mile stone in the history of cell biology.



**83.** Name the scientist , with the help of the following lines.

In 1953, they discovered the structurte of DNA and they declared that it was double helix. They were honoured with the Nobel prize for their work.



- **84.** Identify the mis-matched pair.
- (1) Would AIDS Day -June, 5
- (2) STD-Gonorrhoea
- (3) ASHA- HIV patients



**85.** Name the scientist with the help of the following lines.

In 1876, he showed that plants when isolated had the greatest tendency to self-fertilize while when surrounded by variety of the same flowers,

they radify cross fertilize.



**86.** I originate from the digestive canal of the embryo. I am a tube like structure I have very important blood vassels that connect the embryo with the placenta. Who am I?



- **87.** Identify the correct sequence.
- (A) Prophase  $\, \rightarrow \,$  Anaphase  $\, \rightarrow \,$  Telophase  $\, \rightarrow \,$  Metaphase
- (B) Prophase ightarrow Metaphase ightarrow Anaphase ightarrow Telophase

- (C) Metaphase o Telophase o Prophase o Anaphase (D) Prophase o Anaphase o Metaphase o Telophase
  - Watch Video Solution

**88.** In the diagram, 'X' denotes.....



89.



List- A List-B

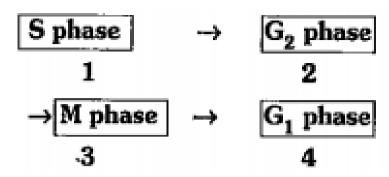
- 1. Fragmentation -Fungi
  - 2. Budding —Paramoecium

Write the mis-matched pairs.

3. Binary fission -Flatworm



90. Arrange the stages of cellll-cycle of mitosis in correct order:





**91.** Arrange the sequence of steps of human life cycle.

- 1. Adolescence
- 2. Babyhood
- 3. Adulthood
- 4. Childhood

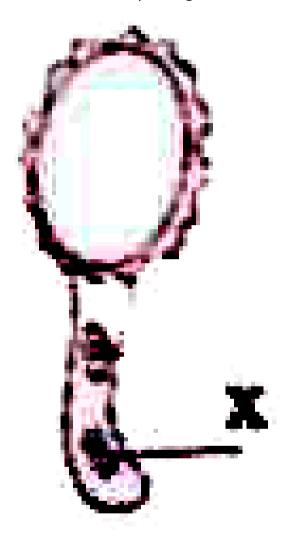


# **92.** This symbol denotes......





93. The student observes pollen grains under nicroscope.



It appears as below. 'X' indicates.....

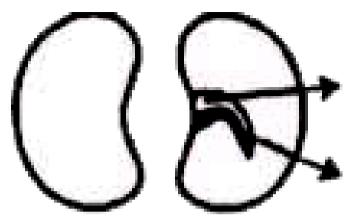


# **94.** Write the stage of cell division .





**95.** Name the structures found in a bean seed shown in the figure.





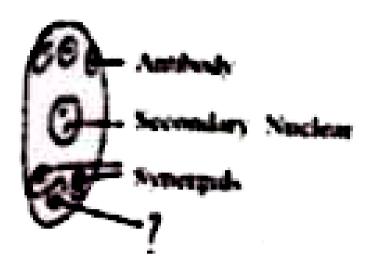
Watch Video Solution

**96.** The Pollen grain has 2 Nuclei. Whenever the pollen tube enters the Embryo soon after the tip of the pollen tube enters the embryo sec, the end of the tube ruptures and releases the two sperms into the embryo sac. One of the two sperms fuses with the egg to form 'X' and another sperm fuses with polar nuclei and form Y. What are X and Y in the above para?



**Watch Video Solution** 

97. Name the part which is asked as a question mark?





**98.** Who stated that binary fission of cells was the means of reproduction of animals cells?



**99.** Who hypothesised that individuals of the same species have the same number of chromosomes ?



**100.** Identify the mismatched pair.

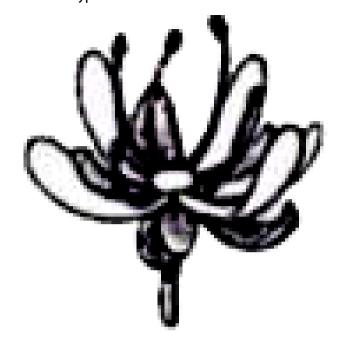
- (a) Runner Grass
- (b) Tuber Potato
- (c) Bulb Carrot



**101.** Surgical method: Tubectomy:: Barrier method:.....?...



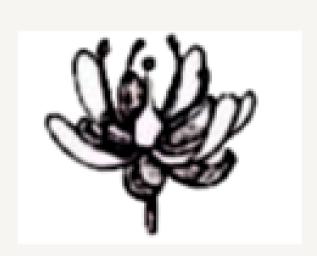
# **102.** Which type of flower is this?





Watch Video Solution

103. This is an example for .....



A. Bisexual flower

B. unisexual flower

C. sterile flower

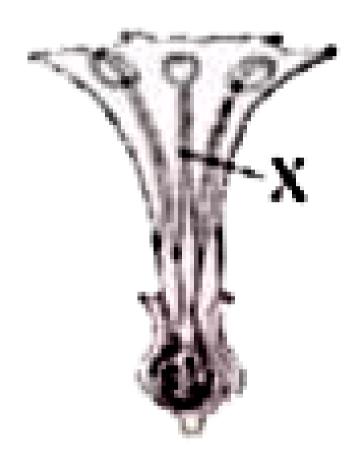
D. none of these

#### **Answer:**



**View Text Solution** 

#### **104.** In this diagram, X represents



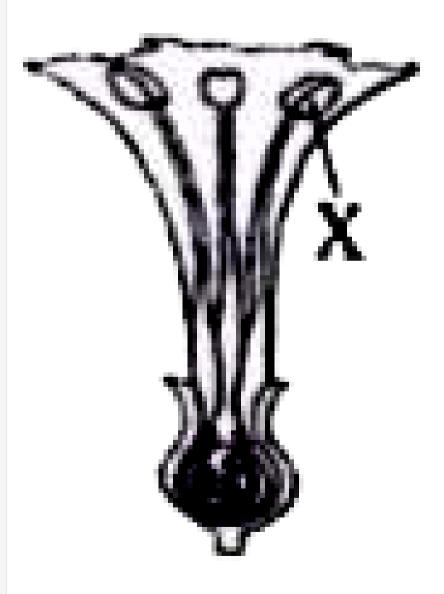


Watch Video Solution

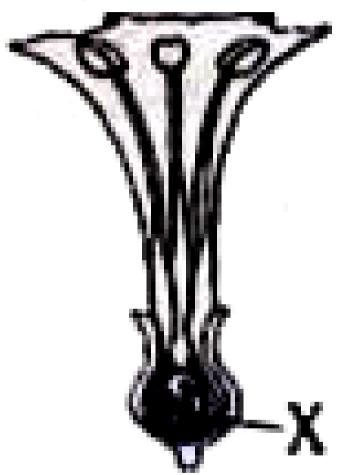
**105.** In this diagram, X represents



**106.** In this diagram, X denotes



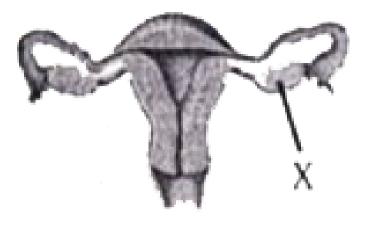
**107.** In this diagram, X represents





Watch Video Solution

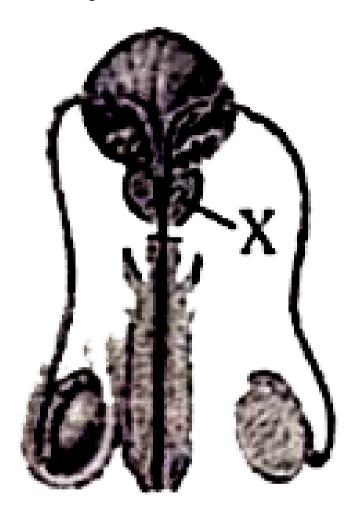
## **108.** In this diagram X represents





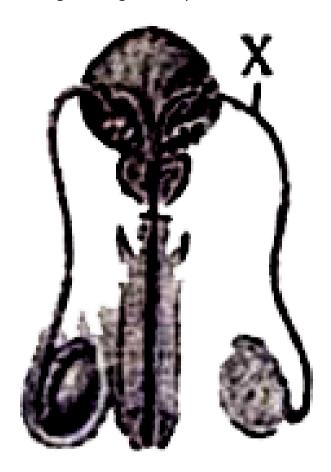
Watch Video Solution

109. In this diagram X denotes.....





## 110. In the given diagram X represents





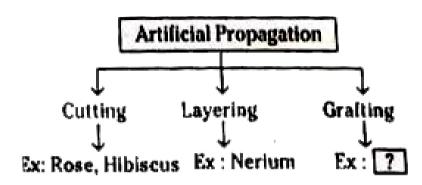
Watch Video Solution

111. Name the structure that denotes 'X' in the given diagram.





112. Fill the missing options





113. Identify the mismatched pair

- (1) Tuber Potato
- (2) Corn Colocasia
- (3) Bulb Ginger



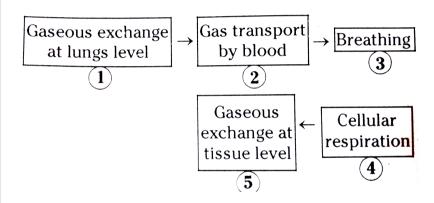
**Watch Video Solution** 

**114.** Can you identify this phase of mitosis?



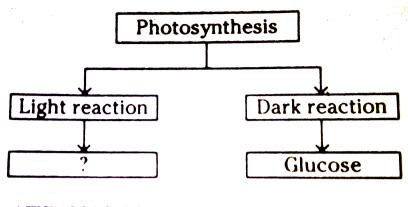


115. Arrange the flow chart in correct order.





**116.** Complete this flow chart.



ATP, NADPH

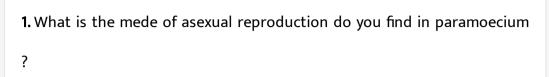


117. Complete this table.

Enzyme	Location of release
1) Pepsin	Stomach
2) Trypsin	?



Creative	Questions	For	New	Model	Paper	Preparation	Questions	For	The
Examinat	tion Purpos	e							





2. Name the mode of asexual reproduction in yeast.



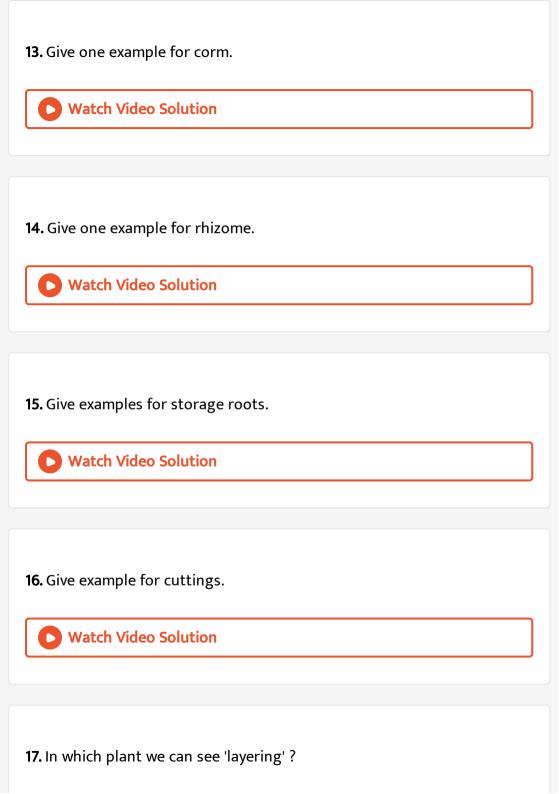
Watch Video Solution

**4.** In which process, the female gametes develop into zygote without fertilization?

3. Where do you observe 'fragmentation' mode of asexual reproduction?

Watch Video Solution
5. Name the process of development of young ones from unfertilized
ovum.
Watch Video Solution
<b>6.</b> What is the cause for formation of seedless fruits ?
Watch Video Solution
7. What kind of reproduction do you observe in bees, wasps and ants?
Watch Video Solution
8. Where do you observe "regeneration" ?
Watch Video Solution

9. In which plant te vegetative propagation occurs through leaves ?  Watch Video Solution
<b>10.</b> Give an example for bulbs.
Watch Video Solution
<b>11.</b> Give an example for tubers.
Watch Video Solution
<b>12.</b> Give two example for stolon.
Watch Video Solution



Watch Video Solution
<b>18.</b> What is the best method to obtain desirable characters in a plants?
Watch Video Solution
<b>19.</b> What are the traditional methods of artificial propagation ?
Watch Video Solution
20. Name the process in which thousands of plants can be grown in very short interval of time.
Watch Video Solution
21. Suggest the artificial method of propagation best for commercial
propagation of plants.

Watch Video Solution
22. What is "bread mould" ?
Watch Video Solution
23. What is the process of reproduction in Rhizopus ?
Watch Video Solution
<b>24.</b> What is the reproductive structure of Rhizopus ?
Watch Video Solution
25. In which plant do you observe "sporophyll" ?
Watch Video Solution

**26.** On the lower side of the leaf of Fern, the cluster of dot like structures are seen. Can you name these structures ?



**27.** Name the part that produces the sperm cells or male reproductive cells in the male reproductive system?

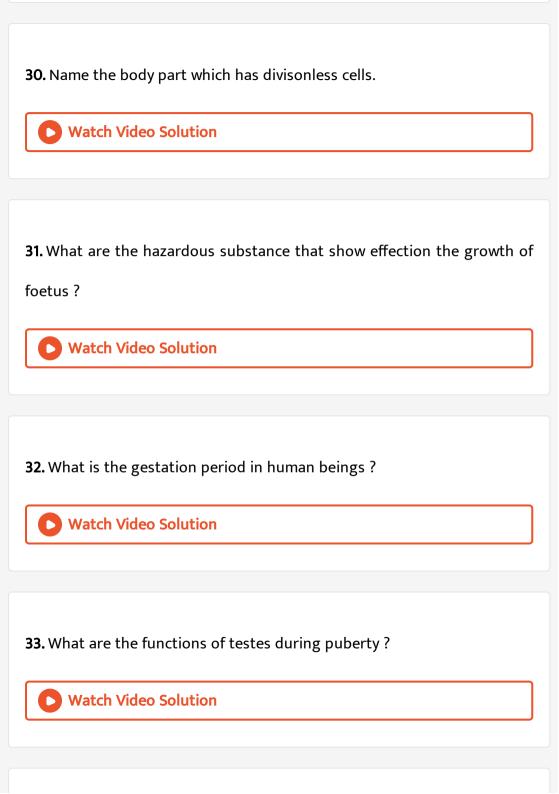


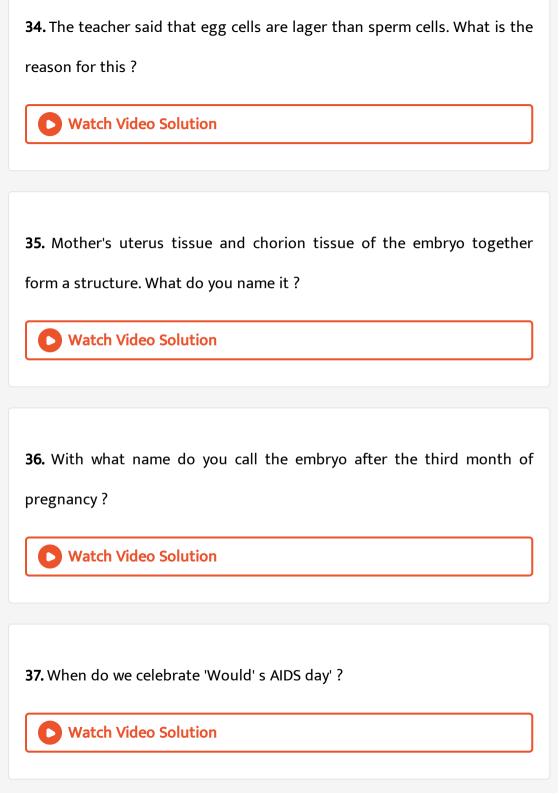
**28.** In plants, the fusion of male gamete with secondary nucleus results is ?



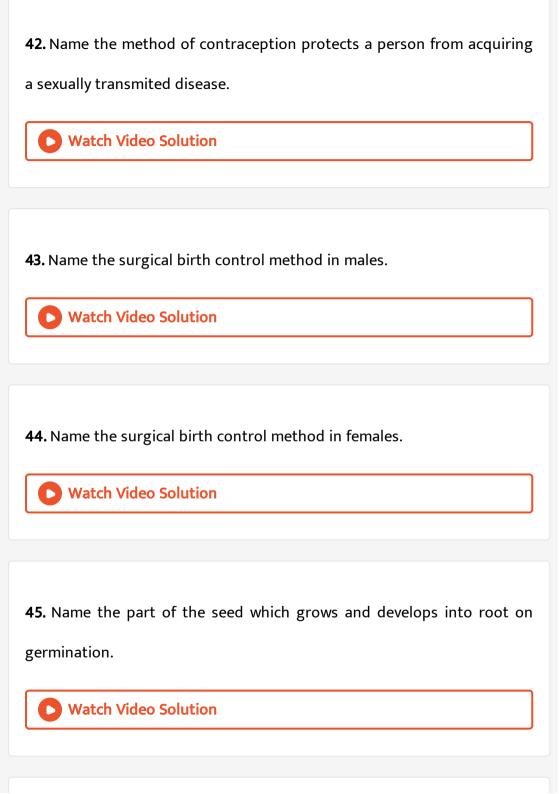
29. Where can you observe double fertilization and triple fusion?

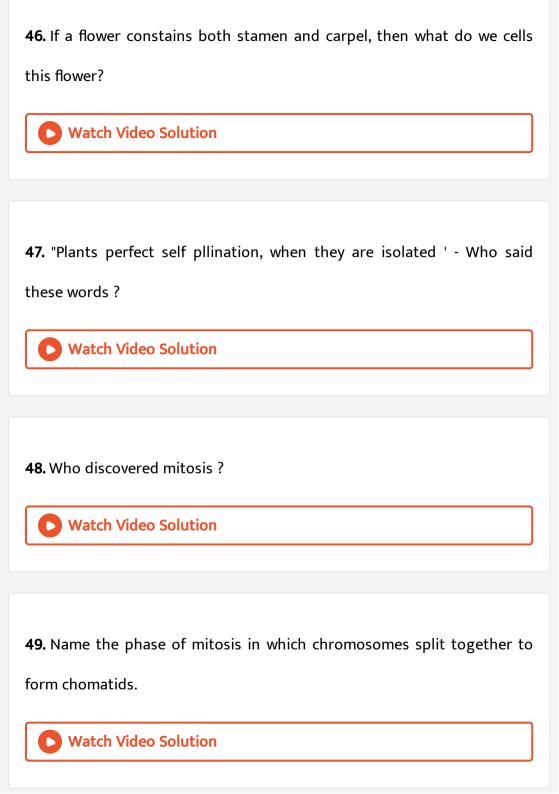




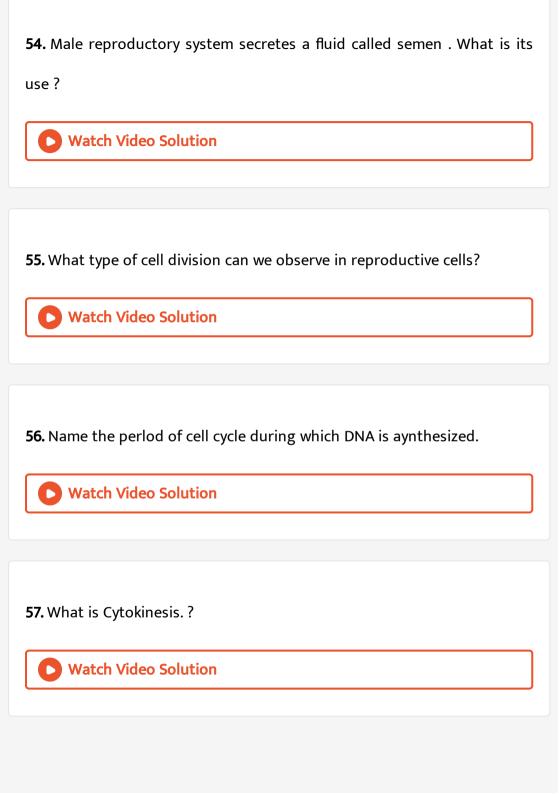


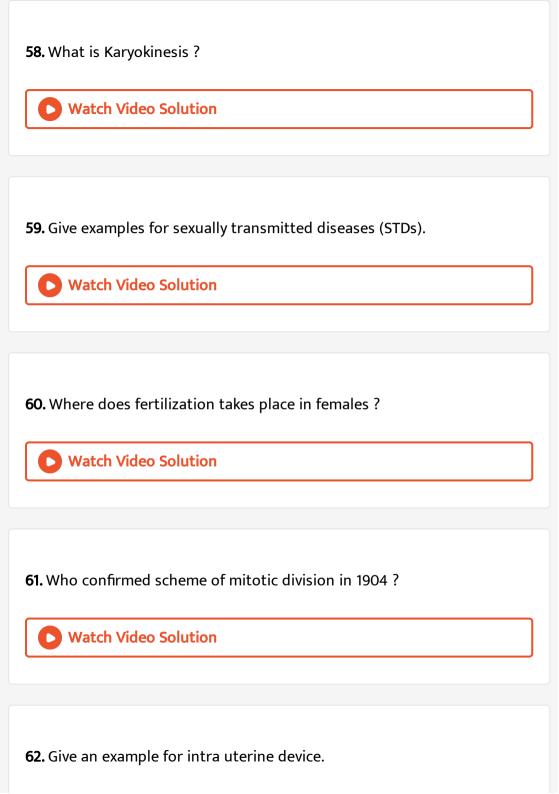
38. What are the most important floral organs required for sexual
reproduction ?
Watch Video Solution
<b>39.</b> Where do you observe diploid condition in the embryo sac at the time
of fertilization ?
Watch Video Solution
<b>40.</b> In which organisms do you observe external fertilization ?
Watch Video Solution
<b>41.</b> Name the STD which is used by bacteria.
Watch Video Solution



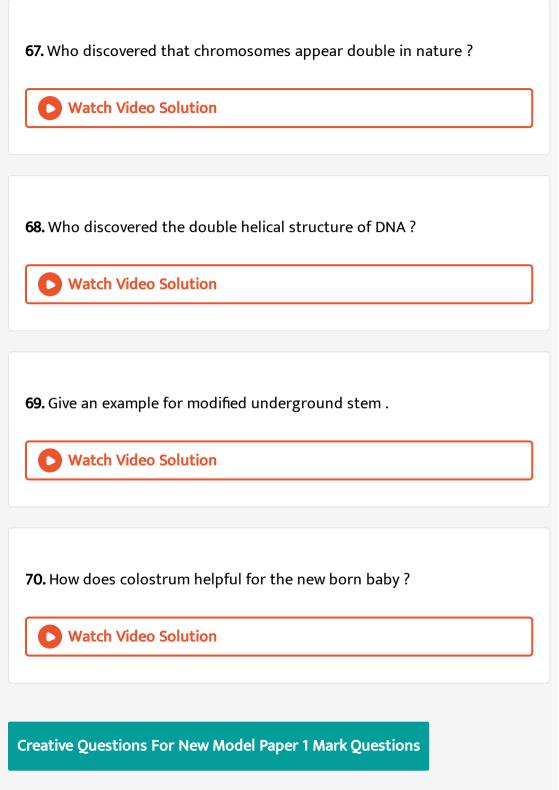


<b>50.</b> What are the programmes implimenting to control AIDS in our state ?
Watch Video Solution
<b>51.</b> Where do you observe epiphyllous buds?
Watch Video Solution
<b>52.</b> What is the first cells formed after the union of male gametes will egg ?
Watch Video Solution
53. Name the watery lymph like fluid that accumulates in the mammary
glands during the last part of pregnancy.
Watch Video Solution





Watch Video Solution
<b>63.</b> What is the statutory marriageable age for men and women in India?
Watch Video Solution
<b>64.</b> Where is the egg apparatus is placed in the embryo sac?
Watch Video Solution
65. What do anthers contain ?
Watch Video Solution
<b>66.</b> What are responsible- inheritance of characters ?
Watch Video Solution



1. In what way does mitotic division help the living organism?
Watch Video Solution
2. What questions you ask the doctor, who visited your school on world AIDS day ?
Watch Video Solution
3. What is colostrum?
3. What is colostrum?  Watch Video Solution
Watch Video Solution

**5.** Write two precautions you take , while observing Rhizopus in the laboratory.



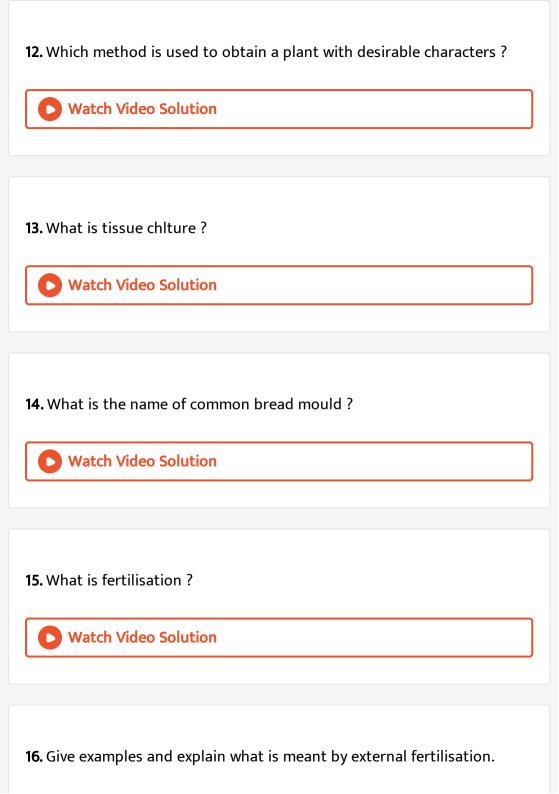
- **6.** Name the types of asexual reproduction in the following organisms:
- (a) Paramoecium
- (b) Yeast



**7.** Apparao and Ramulamma are a newly married illiterate couple. They don't want children for few years. Suggest some birth control methods for them.

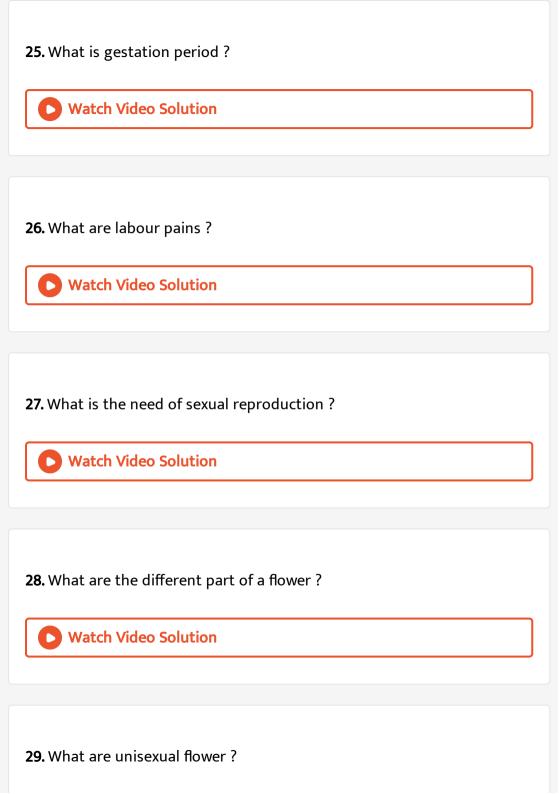


8. During favourable conditions paramoecium reproduce by ?
Watch Video Solution
9. In which organisms fragmentation is a common mode of reproduction ?
Watch Video Solution
10. What is parthenogenesis? Give example.
Watch Video Solution
11. What are the methods of artificial propagation ?
Watch Video Solution

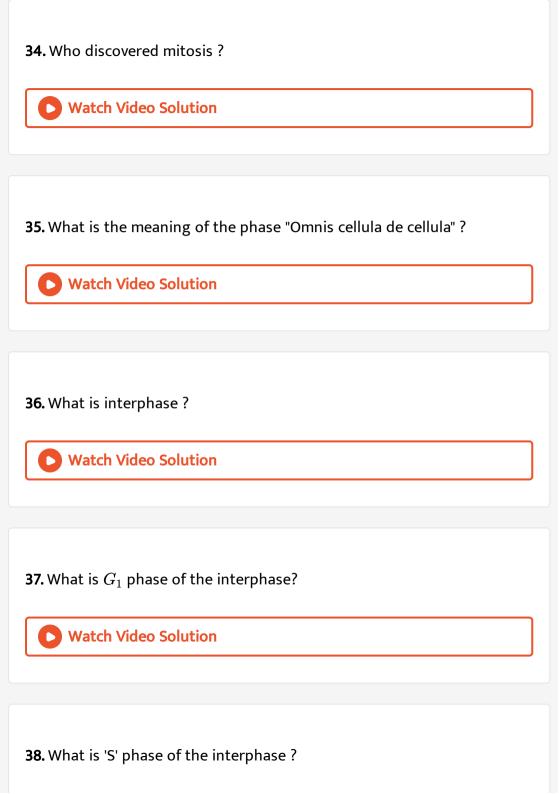


Watch Video Solution
17. What is internal fertilisation ?
Watch Video Solution
18. What are the parts that present in male reproductive sysytem of man
?
Watch Video Solution
19. What are the accessory glands present in male reproductive system?
Watch Video Solution
20. What is ovulation ? How it occurs ?
Watch Video Solution

21. Which one of the following is not the function of placenta? It  Watch Video Solution
22. When did the placenta is formed in the period of pregnency ?
Watch Video Solution
23. What is umblical cord?How does it form?
Watch Video Solution
<b>24.</b> What is foetus ?
Watch Video Solution

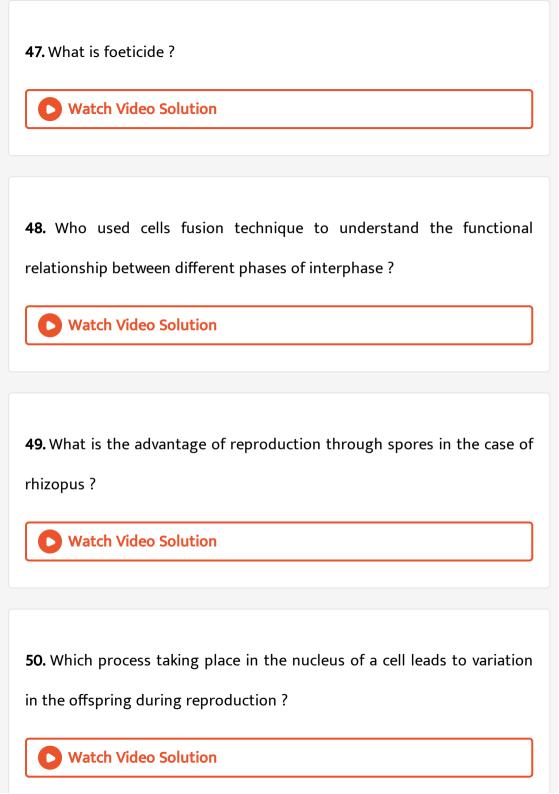


Watch Video Solution
<b>30.</b> What are the three parts of carpel ?
Watch Video Solution
31. What is self pollination ?
Watch Video Solution
<b>32.</b> What is cross pollination ?
Watch Video Solution
<b>33.</b> What is double fertilisation ?
Watch Video Solution



Watch Video Solution
<b>39.</b> What is $G_2$ phase of the interphase ?
Watch Video Solution
<b>40.</b> What are the different stages present in mitosis?
Watch Video Solution
<b>41.</b> When does meiosis occur ?
Watch Video Solution
<b>42.</b> What is the virus that causes AIDS ?
Watch Video Solution

<b>43.</b> How does AIDS spread from one person to another ?
Watch Video Solution
<b>44.</b> What are the factors that contribute to the spread of HIV in the state?
Watch Video Solution
45. What is contraception ?
Watch Video Solution
<b>46.</b> What are the surgical methods to prevent fertilisation ?
Watch Video Solution



**51.** Why it is said that sexual reproduction promotes diversity of characters in the offspring ?



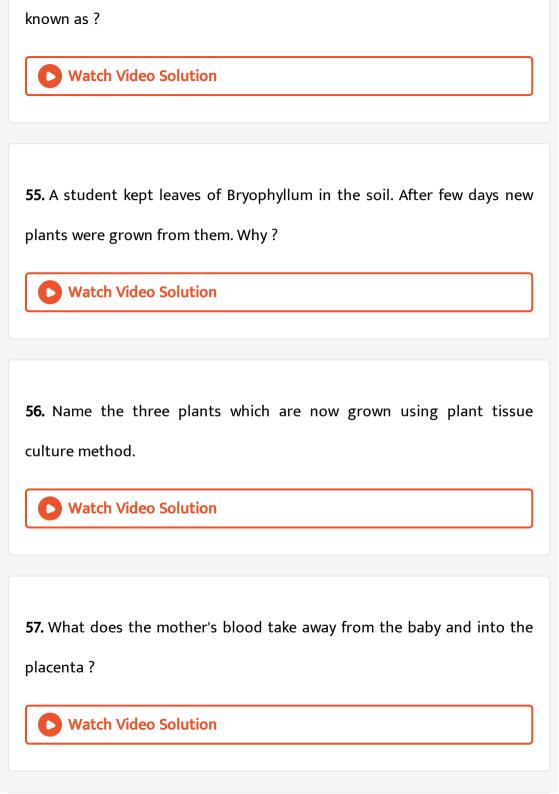
**52.** Name the causative organism of syphilis and gonorrhoea .



**53.** Why are variation possible in progeny of sexually reproductive individuals?



**54.** The simple animals such as planarism can be cut number of pieces and each piece grows into a complex organism. What is this process



**58.** What happens if the fallopian tubes are partially blocked and the ovulated eggs are prevented from reaching the uterus ?



**59.** What will happen if there is no mitosis at all in living organisms?



**60.** How will you stain a microscopic slide showing mitosis in onion roots

?

Watch Video Solution

**61.** What happens if the fallopian tubes are partially blocked and the ovulated eggs are prevented from reaching the uterus?



62. What will happen if there is no mitosis at all in living organisms?



**Watch Video Solution** 

63. Identify the given picture. What is the message given by it?





64. How will you stain a microscopic slide showing mitosis in onion roots

?



# Creative Questions For New Model Paper 2 Mark Questions

1. Accourding to weismann prediction, every organism undergoes two kinds of cell divisions. In mitosis, there is no change in chromosomal number (2n) and in Meiosis, chromosomal number is reduced to half (n).

(ii) In which cells, Meiosis takes place?



**Watch Video Solution** 

2. In Meiosis, the chromosome number in the daughter cells are reduced to half that of their parent cells. Guess, what would happen, if the reduction of chromosome number is not done.



Watch Video Solution
3. What are the questions you asked the doctor who visited your school
to know "the ways of transmission of HIV" ?
Watch Video Solution
4. Identify the flower parts a,b,c,d and write their main function.
" racifely the nower parts a,s,e,a and write their main ranction.
Watch Video Solution
Watch video Solution
5. Draw a labelled diagram of sperm.
<b>▶</b> Watch Video Solution
6 How we will get the desired useful triats with the help of two selected
<b>6.</b> How we will get the desired useful triats with the help of two selected
triats by using grafting method ?
Watch Video Solution

7. Draw the labelled diagram of Embryo-sac.



Watch Video Solution

8. What questions do you ask a doctor to know about different birth control methods?



Watch Video Solution

9.

(గూపు సంఖ్య	మూలక కుటుంబం పేరు	, మూలకాలు		వేలన్సీస్థాయి	వేలన్స్	సంయోజకత
		నుండి	వరకు	విన్యాసం	ఎలక్ష్మాన్లు	<b>వేలస్సీ</b>
1 (IA)	క్షార లోహాలు	Li	Fr	ns¹	1	, 1
2 (IIA)	క్షార మృత్తిక లోహాలు	100	Contract of the second		The same	Mary 1
13 (IIIA)	బోరాన్ కుటుంబం	To a large of the	11.7	TOTAL DESIGNATION OF THE PARTY	1000	The state of
14 (IVA)	కార్బన్ కుటుంబం	11.5	277		13.7	EET II
15 (VA)	నైట్రోజన్ కుటుంబం	Salt Co	1 2 A	12000		
16 (VIA)	ఆక్సిజన్ కుటుంబం లేదా చాల్కోజన్ కుటుంబం					
17 (VIIA)	హాలోజన్ కుటుంబం	S. Course		- 1976		ALC: ( )
18 (VIIIA)	ఉత్మష్ట వాయువులు		PP		Us Dixus	A STORY

#### 10.

గ్రూపు సంఖ్య	మూలక కుటుంబం పేరు	, మూలకాలు		వేలన్సీస్థాయి	వేలన్స్	సంయోజకత
		నుండి	వరకు	విన్యాసం	ఎలక్ర్టాన్లు	వేలస్సీ
1 (IA)	క్షార లోహాలు	Li	Fr	ns¹	1	, 1
2 (IIA)	క్షార మృత్తిక లోహాలు	1000	O CONT		N. WEND	
13 (IIIA)	బోరాన్ కుటుంబం			- PERSONAL PROPERTY.	To State	
14 (IVA)	కార్బన్ కుటుంబం	11.5	2			
15 (VA)	నైట్రోజన్ కుటుంబం	1000	F 24	1200,073	THE STATE OF	Min. Ve
16 (VIA)	ఆక్సిజన్ కుటుంబం లేదా చాల్కోజన్ కుటుంబం					
17 (VIIA)	హాలోజన్ కుటుంబం	S. Marie				Ale de Carl
18 (VIIIA)	ఉత్మృష్ట వాయువులు		FIE	170 2 3 3 5	A STATE	



### Watch Video Solution

11. Write the process involved in seedless fruit development with two suitable examples .



**12.** What precautions will you take to keep away from diseases like AIDS and othersexually transmitted diseases ?



- 13. Observe the diagram and answer the following questions.
- (I) Name male and female reproductive parts of the above figure.



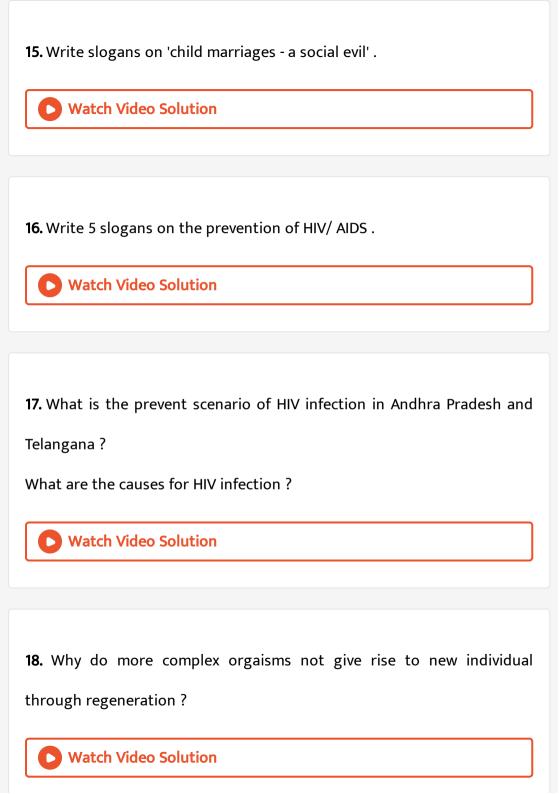


**14.** Observe the diagram and answer the following questions.

(II)Write the names of (1) and (2) in the diagram.







19. What are the advantages of vegetative propagation?

Watch Video Solution

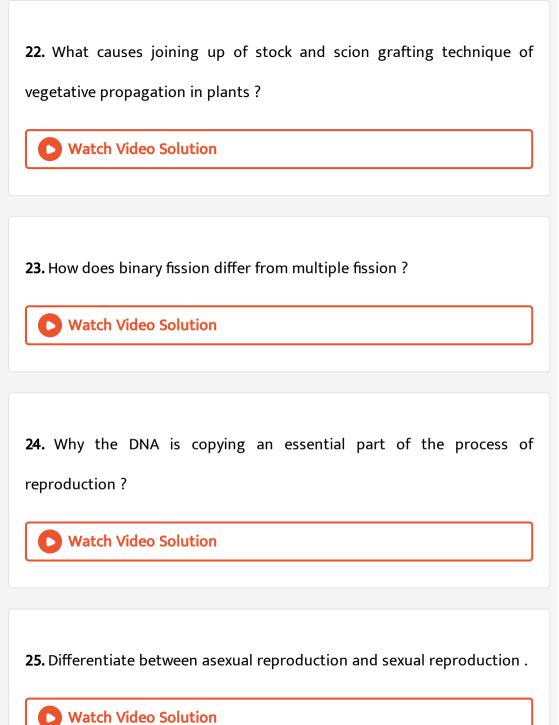
**20.** How will an organism be benefited if it reproduces through spores ?



**21.** Write the information you got from your teacher about role of different parts in development of embryo.

Chorion,placenta,amnion,alantois are the embryonic membranes.Write their functions in a tabular form.





**26.** Differentiate between unisexual and bisexual flower. Give two examples of each .



27. How is the process of pollination different from fertilisation?

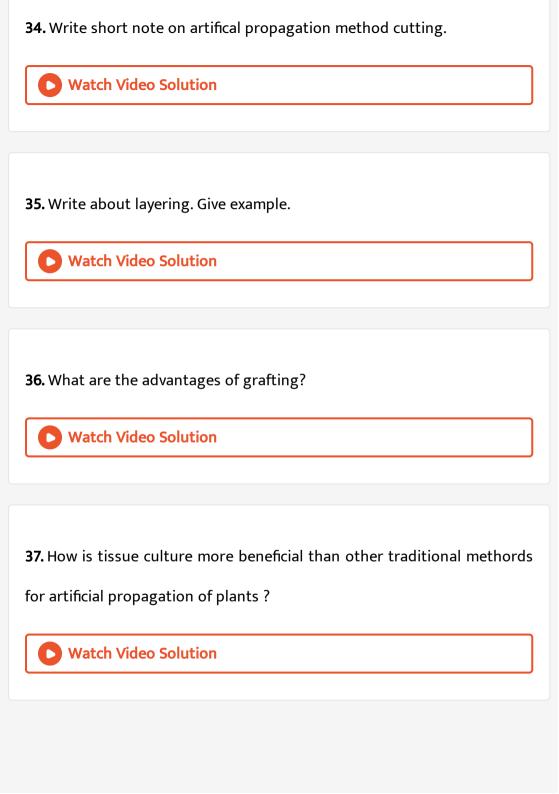


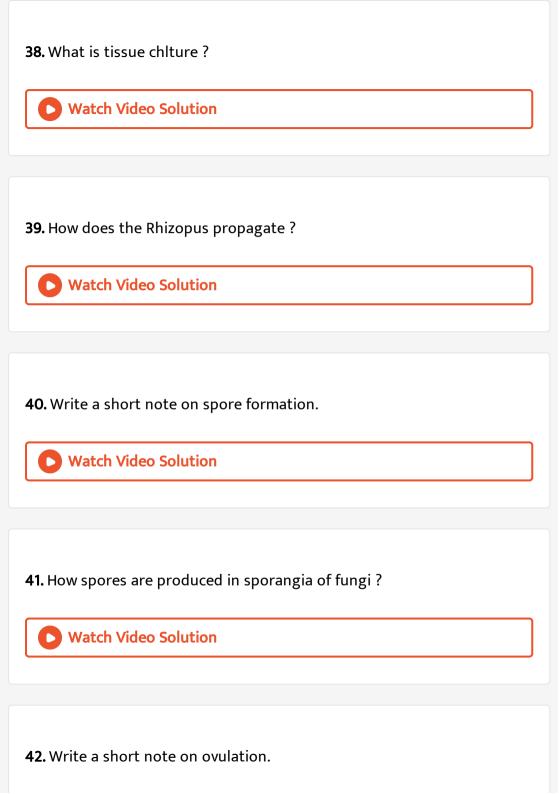
**28.** If a woman is using a copper-T, will it help in protecting her from Sexuallu transmitted diseases?

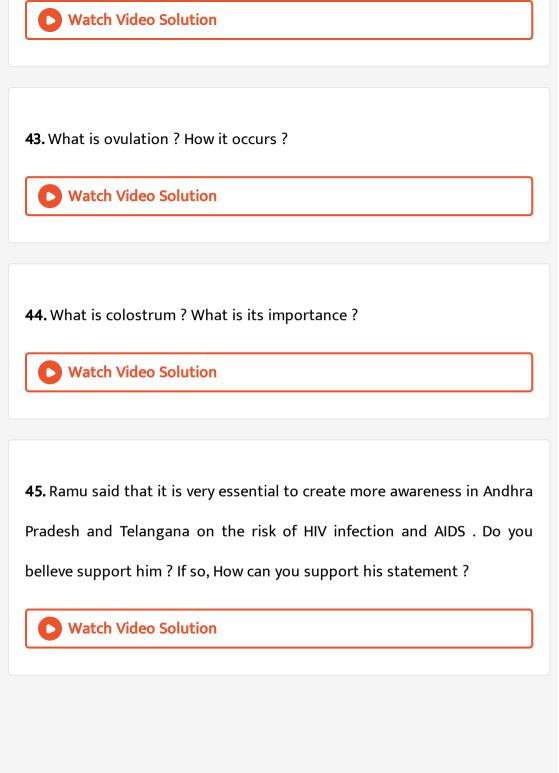


**29.** Arjun Tendulkar injured his knees while fielding at ground. The injury was headed after some days. Arjun was eager to know the process behind it. Describe the process involved in wound healing.

Watch Video Solution
<b>30.</b> Write some slogans against female foeticide.
Watch Video Solution
<b>31.</b> What is fission? Give examples.
Watch Video Solution
<b>32.</b> Write a short notes on fragmentation.
Watch Video Solution
Water video solution
<b>33.</b> What is parthenogenesis ? Give example.
Watch Video Solution







**46.** What happens is flowering plant if single fertilization only takes place ?



# Creative Questions For New Model Paper 4 Mark Questions

1. Observe the given diagram and answer the following questions.

What are the four main parts of a flower?





2. Observe the given diagram and answer the following questions .

(ii)Which parts of the flower produces gametes?



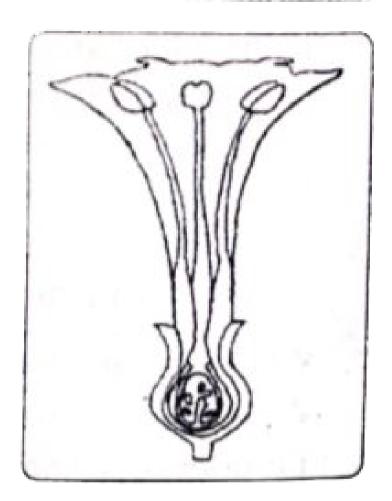


- **3.** Observe the given diagram and answer the following questions .
- (iii) Which parts of the flower help in pollination?





- **4.** Observe the given diagram and answer the following questions .
- (iv) Which part protect the flower during its bud stage?

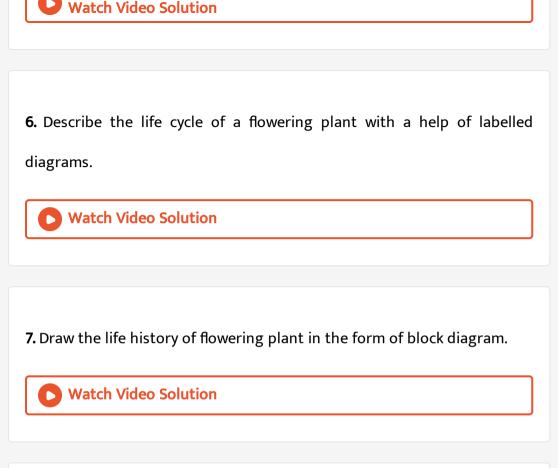




- 5. Observe the given diagram and answer the following questions .
- (v) Which part of the flower with turn into a fruit in the future?





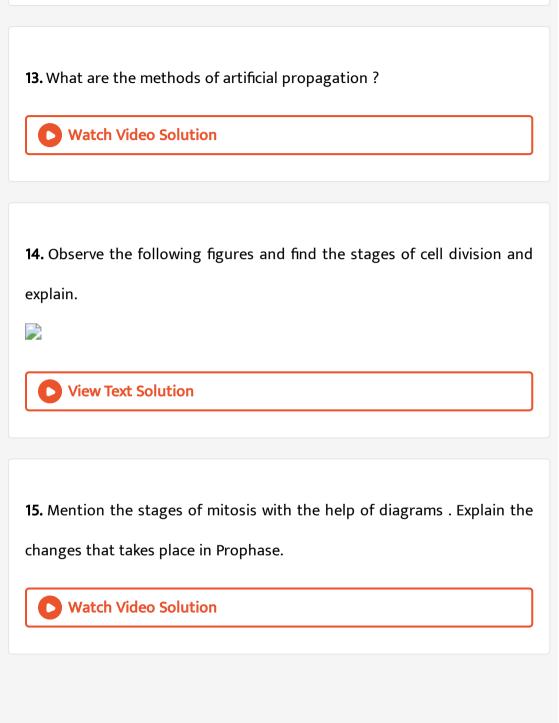


8. Analyze the following information and answer the following questions .

(i) What do you call the give reproduction methods?

**View Text Solution** 

9. What is the major difference between sexual reproduction and
vegetative reproduction in plants ?
Watch Video Solution
<b>10.</b> Potato plants do not produce seeds. How can you propagation this plant ?
Watch Video Solution
11. What are the advantages of propagating plants with the above methods?
Watch Video Solution
<b>12.</b> Explain the formation of fruits and seeds in plants.



16. Organisms reproduce asexually in many ways. Some of the organisms are given below. Fill the below table based on the collected information about the organism and mode of asexual reproduction in it.

(a) Onion (b) Spirogyra (c) Strawberry (d) Ginger (e) Honey-bee (f)

Paramoecium (g) Planaria (h) Yeast





17. Draw a near labelled diagram of L.S. of flower.



**Watch Video Solution** 

**18.** What are the sexual parts in the flower?



19. What procedure do you follow to understand the effect of plant growth hormones (in agar medium) in the terminal portion of the tip of stem (coleoptile)?



**Watch Video Solution** 

20. What are the materials required to prepare and test the hydrogen gas in the lab by using acid and metal? Where do you observe the evolved hydrogen gas?



**Watch Video Solution** 

21. The role of double fertilization in angiosperms is to produce



22. Observe the diagram and answer the following .

(1) which part produce the female gamets

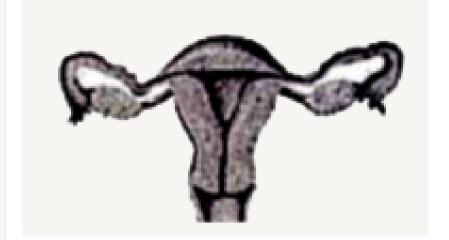




**Watch Video Solution** 

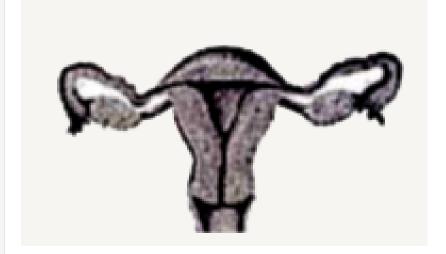
23. Observe the diagram and answer the following .

(2) where does the fertilizatoin takes place in femal





- 24. Observe the diagram and answer the following .
- (3) Where does the embryo develops until is the ready to born?



- 25. Observe the diagram and answer the following .
- (4) in some case doctors' cut and tie the cut ends of the follopians tubes.

What is the name of surgery?





**Watch Video Solution** 

**26.** Read the following table and answer the following questions.

Si. No. No.	Structure	Location
1.	Tricuspid valve	Right auriculo-ventricular aperture
2.	Guard cells	Epidermis of leaves
3.	Glomerulus	Nephron
4.	Alveoli	Lungs
5.	Acrosome	Above the head of a sperm.

(i) Name the structure concerned to the heart.



27. Read the fllowing table and answer the fllowing questions.

Si. No. No.	Structure	Location
I.	Tricuspid valve	Right auriculo-ventricular aperture
2.	Guard cells	Epidermis of leaves
3.	Glomerulus	Nephron
4.	Alveoli	Lungs
5.	Acrosome	Above the head of a sperm.

(ii) What is the function of acrosome.



28. Read the fllowing table and answer the fllowing questions.

SI. No. No.	Structure	Location
1.	Tricuspid valve	Right auriculo-ventricular aperture
2.	Guard cells	Epidermis of leaves
3.	Glomerulus	Nephron
4.	Alveoli	Lungs
5.	Acrosome	Above the head of a sperm.

(iii) Name the structures which are helpful for gaseous exchange.



**29.** Accourding to weismann prediction, every organism undergoes two kinds of cell divisions. In mitosis, there is no change in chromosomal number (2n) and in Meiosis, chromosomal number is reduced to half (n).

(i) What does 'n' and '2n' indicate?



**30.** Accourding to weismann prediction, every organism undergoes two kinds of cell divisions. In mitosis, there is no change in chromosomal number (2n) and in Meiosis, chromosomal number is reduced to half (n). (ii) In which cells, Meiosis takes place?



**31.** Accourding to weismann prediction, every organism undergoes two kinds of cell divisions. In mitosis, there is no change in chromosomal number (2n) and in Meiosis, chromosomal number is reduced to half (n). (iii) What happens, if chromosomal number is not reduced in meiosis?

**32.** Accourding to weismann prediction, every organism undergoes two kinds of cell divisions. In mitosis, there is no change in chromosomal number (2n) and in Meiosis, chromosomal number is reduced to half (n). (iv) Which type of cell division occurs in the skin cells?



**33.** Describe different artificial vegetative methods to produce large scale production plants.



**34.** Draw a labelled diagram of female reproductive system.



**35.** Draw a labelled diagram of female reproductive system.

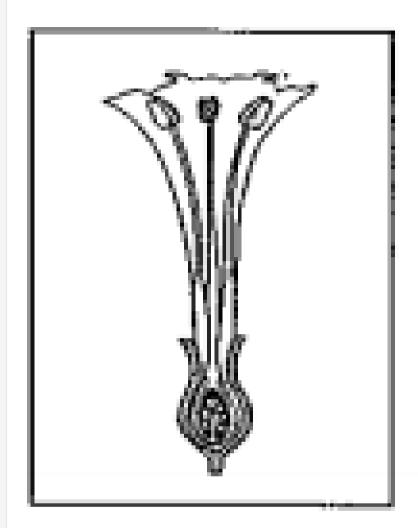


**36.** Among the following organisms can we see asexual reproduction . Write about the method of asexual reproduction in any of the two organisms.

(a) Paramoecium (b) Yeast (c) Spirogyra (d) Amoeba (e) Planaria



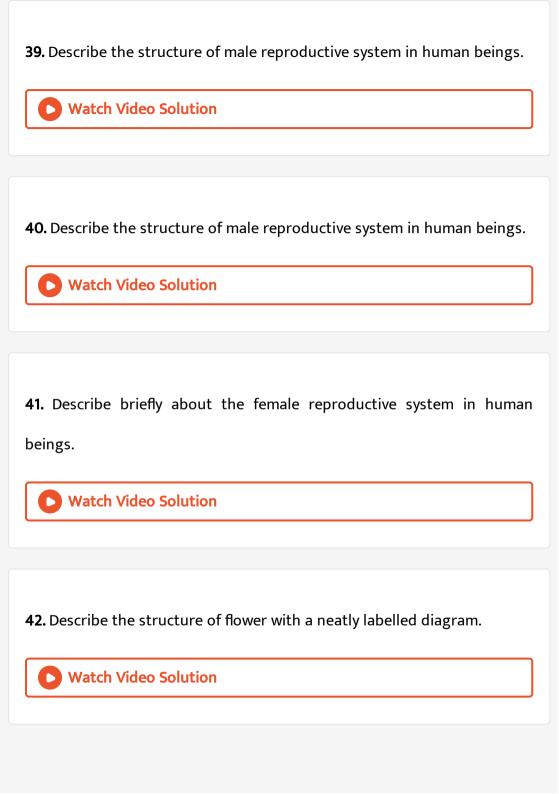
**37.** See the adjacent picture. Which type of pollination will occur in this? Why do you think so?





**38.** Write slogans on 'child marriages - a social evil' .





<b>43.</b> Why meiosis is called reduction division?
Watch Video Solution
44. What is contraception ?
Watch Video Solution
<b>45.</b> Describe the developmental stages of human embryo after fertilization with the help of neatly labelled diagrams.
Watch Video Solution
<b>46.</b> What is the significance of meiosis?
Watch Video Solution

47. Illustrate the process of regeneration in planaria with the help of suitable diagram. **Watch Video Solution** 48. What are the consequences if meiosis not happen in the body cells of the organism.? **Watch Video Solution** 49. Ravi's father wants to cultivate potato in his field. He wants to clarify some doubts with the agriculturals officer. Prepare a list of doubts in form of questions for him. **Watch Video Solution** 

**50.** What procedure do you adopt to see pollen grain with tube?



51. Observe the following mitotic cell division diagram and answer the questions given below.



(i) How much time required for  $G_1$  phase?



52. Observe the following mitotic cell division diagram and answer the questions given below.



(ii) What is 'S' phase?



**View Text Solution** 

53. Observe the following mitotic cell division diagram and answer the questions given below.



(iii) What is  $G_2$  phase? What change occur during this phase?



**View Text Solution** 

**54.** Observe the following mitotic cell division diagram and answer the questions given below.



(iv) What is 'M' phase? How much time it required?



**View Text Solution** 

**55.** Observe the following mitotic cell division diagram and answer the questions given below.



(v) How much time required to complete mitotic cell cycles?



**View Text Solution** 

**56.** Draw a labelled diagram of male reproductive system.

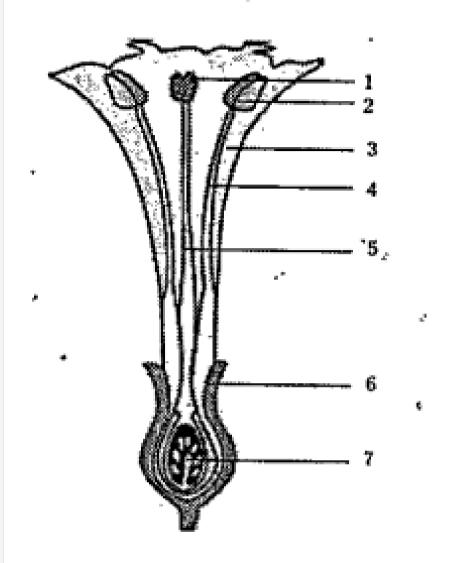


**57.** Draw the life history of flowering plant in the form of block diagram.



**58.** Label the parts for given diagram and write functions of labelled parts

1,2,6 and 7.





**59.** A person injured, after several days his wound completely healed.

What type of process took place at the injured part ? Represent these

