

# **BIOLOGY**

# **BOOKS - SARAS PUBLICATION**

# **MODEL QUESTION PAPER-1**

# Exercise

- 1. Bryophyllum and Dioscorea are example for
  - A. Foliar bud, apical bud
  - B. Foliar bud, cauline bud
  - C. Cauline bud, apical bud
  - D. Cauline bud, foliar bud

## Answer:



washiyasa cabasa

watch video Solution 2. Sequences of which of the following is used to know the phylogeny A. mRNA B. rRNA C. tRNA D. hnRNA **Answer: Watch Video Solution** 3. DPD in normal cell is A. DPD=OP-TP B. DPD=TP C. DPD=OP-SP

# D. DPD=OP

## **Answer:**

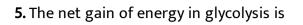


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- 4. Identify correct match.
- 1.Die back disease of citrus -(i) Mo
- 2. Whip tail disease -(ii) Zn
- 3. Brown heart of turnip (iii) Cu
- 4. Little leaf (iv) B
  - A. 1 (iii) 2 (ii) 3 (iv) 4 (i)
  - B. 1 (iii) 2 (i) 3 (iv) 4 (ii)
  - C. 1 (i) 2 (iii) 3 (ii) 4 (iv)
  - D. 1 (iii) 2 (iv) 3 (ii) 4 (i)

## **Answer:**





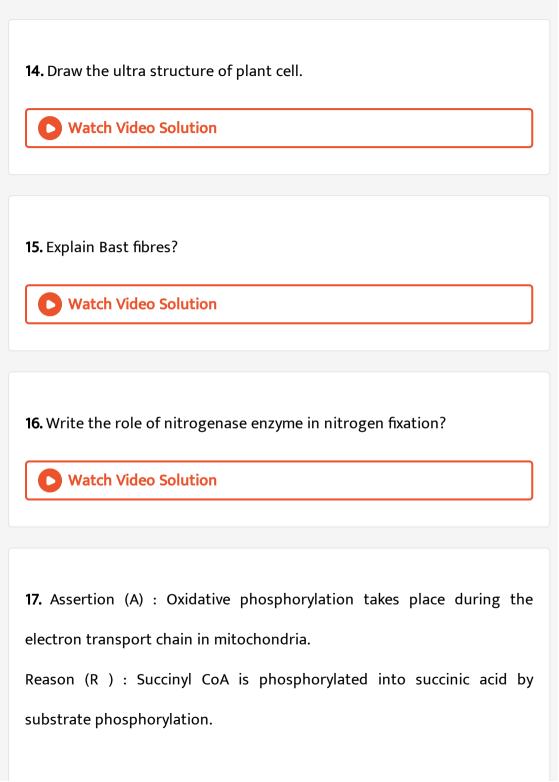
- A. 2 ATP and 2  $NADPH_2$
- B. 4 ATP and 4  $NADPH_2$
- C. 3 ATP and 2  $NADPH_2$
- D. 9 ATP and 6  $NADPH_2$

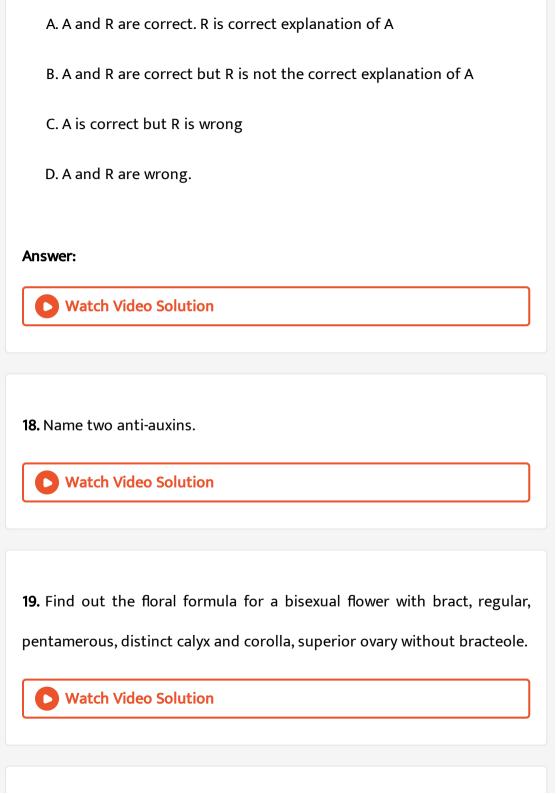


- 6. Newly formed cell increases in size by deposition of cell wall material in
  - A. Log phase
  - B. Lag phase
  - C. Decelerating phase

D. Maturation phase
Answer:
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7. How did Copeland classify the living world?
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8. Give the technical terms for the following: -
(a) A sterile stamen
(b) Stamens are united in one bunch
(c) Stamens are attached to the petals
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<b>9.</b> What are the factors affecting the rate of enzyme reaction?

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10. What are fusiform initials?
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11. A tree is believed to be releasing oxygen during night time. Do you
believe the truthfulness of this statement?
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12. What is plectostele? Give example.
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13. Define ptyxis.
Watch Video Solution





20. Where will you place the plants which contain two cotyledons with
cup shaped thalamus?
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<b>21.</b> $G_0$ phase is called a quiescent stage. Why?
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22. Define lenticel.
Watch Video Solution
23. Why plants transport sugars as sucrose and not as starch or glucose
or fructose?
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**24.** Two groups (A & B) of bean plants 450nm & Group B to light of wave of similar size and same leaf area were length of 500-550nm. Compare the placed in identical conditions. Group A photosynthetic rate of the2 groups givwas exposed to light of wavelength 400 reasons.



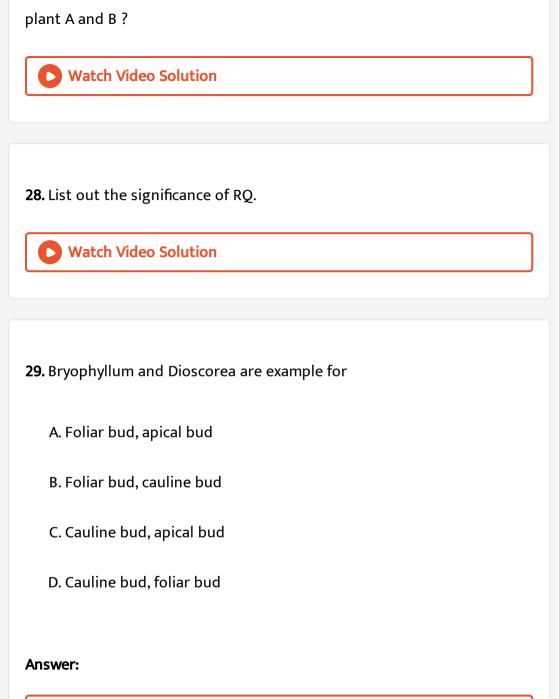
25. Give a brief account on Programmed Cell Death (PCD).



**26.** Write any three significance of mitosis .



**27.** Plant A in a nutrient medium shows whiptail disease. Plant B in a nutrient medium shows a Little leaf disease. Identify mineral deficiency of



B. Pea -ii) hesperidium
C. Orange -iii) Legume
D. Mango - iv) Pome
A. A-i, B-iii, C-iv, D-ii
B. A-iv, B-ii, C-i, D-iii
C. A-iv, B-iii, C-ii, D-i
D. A-ii, B-iii, C-i, D-iv
Answer:
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<b>31.</b> In pachytene stage of meiosis the chromosomes appear
31. In pachytene stage of meiosis the chromosomes appear  A. Single stranded

**30.** Arrange the following in correct order

A. Apple - i) drupe

- B. Double stranded

  C. Three stranded

  D. Four stranded

  Answer:

  Watch Video Solution
- **32.** Grafting is successful in dicots but not in monocots because the dicots have
  - A. Vascular bundles arranged in a ring
  - B. Cambium for secondary growth
  - C. Vessels with elements arranged end to end
  - D. Cork cambium



**33.** Consider the following statements. Organization of vascular cambium (i) The cells of vascular cambium do not fit into the usual description (ii) vascular cambium possesses Cells with large central vacuole surounded by a thin, layers of dense cytoplasm (iii) The vascular combium is the presence of three kinds of initials.

- A. (i) is correct but (ii) and (iii) are not correct
- B. (i) and (ii) are correct but (iii) is not correct
- C. (i) and (ii) are not correct but (iii) is correct
- D. (i) is not correct but (ii) and (iii) are correct

## **Answer:**



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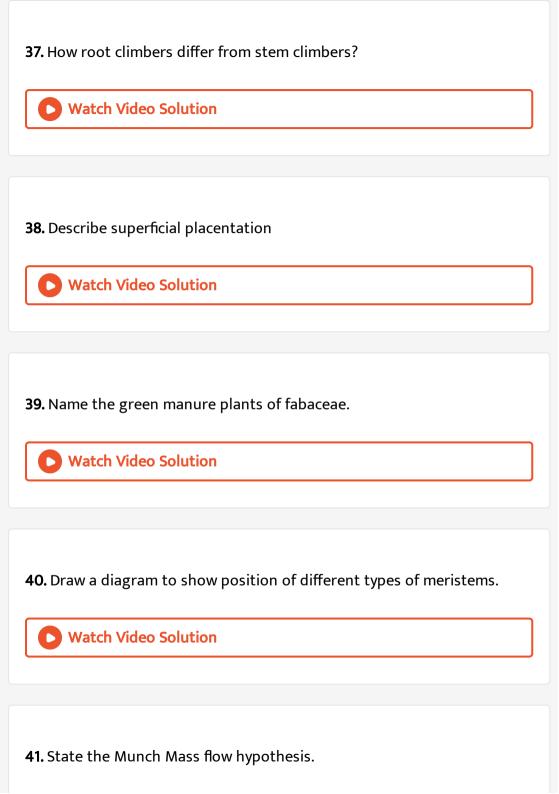
34. Identify true statement regarding light reaction of photosynthesis

- A. Splitting of water molecule is associate with PS I.
- B. PS I and PS II involved in the formation of  $NADPH+H^{\,+}.$
- C. The reaction center of PS I is Chlorophyll a with absorption peak at 680 nm.
- D. The reaction center of PS II is Chlorophyll a with absorption peak at 700 nm



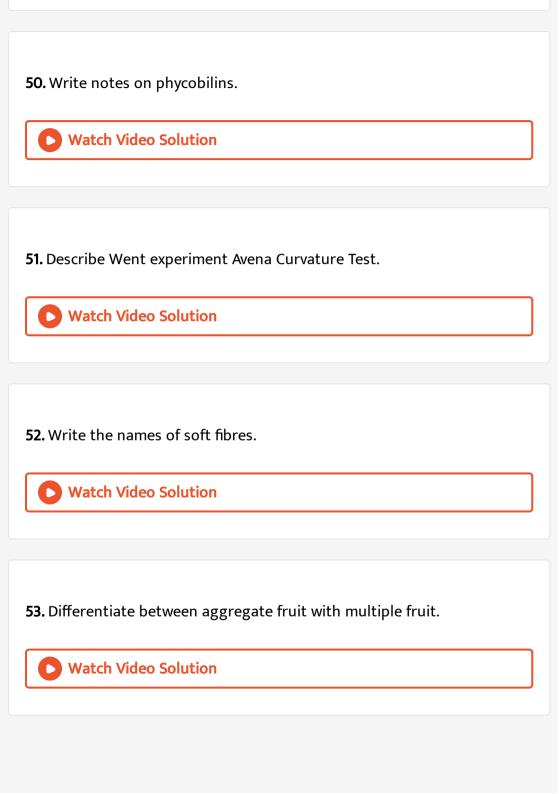
- **35.** Assertion (A): Oxidative phosphorylation takes place during the electron transport chain in mitochondria.
- Reason (R ) : Succinyl CoA is phosphorylated into succinic acid by substrate phosphorylation.
  - A. A and R are correct. R is correct explanation of A
  - B. A and R are correct but R is not the correct explanation of A

C. A is correct but R is wrong
D. A and R are wrong.
Answer:
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<b>36.</b> This is an anti auxin compound
A. 2, 4-D
B. TIBA
C. PAA
D. IBA
Answer:
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<b>42.</b> The nitrogen is present in the atmosphere in huge amount but plants
fail to utilize it . Why ?
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<b>43.</b> Differentiate between vegetative morphology & reproductive morphology.
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<b>44.</b> State Rudolf Virchow's cell theory.
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<b>45.</b> Write about pachytene of prophase I.

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<b>46.</b> Explain sclereids with their types.
Watch Video Solution
47. What are the parameters which control water potential?
Watch Video Solution
<b>48.</b> Name the common in nitro hydrogen acceptors.
Watch Video Solution
<b>49.</b> Briefly discuss on five kingdom classification. Add a note on merits and
demerits.
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Watch Video Solution 55. Do mushroom cells have cell wall? **Watch Video Solution** 56. A transverse section of the trunk of a tree shows concentric rings which are known as growth rings. How are these rings formed? What are the significance of these rings? **Watch Video Solution 57.** Who proposed five kingdom classification? Mention the five kingdoms. A. Cavalier-Smith

54. Explain the structure and function of tRNA?

B. Carl Woese C. R. H. Whittaker D. Carolus Linnaeus **Answer: Watch Video Solution** 58. Non-shivering thermogenesis in neonates produces heat through..... A. White fat B. Brown fat C. Yellow fat D. Colourless fat **Answer: Watch Video Solution** 

A.

 $Mouth 
ightarrow Oesophagus 
ightarrow Lar \geq \int \!\! est \in e 
ightarrow Small \int \!\! est \in e 
ightarrow Re$ 

В.

 $Mouth 
ightarrow Oesophagus 
ightarrow Rectum 
ightarrow Lar \geq \int \!\! est \in e 
ightarrow Small \int \!\! e$ C.

 $Mouth 
ightarrow Oesophagus 
ightarrow small iggl/ est \in e 
ightarrow lar \geq \int \!\! est \in e 
ightarrow rec$ 

D.  $Mouth 
ightarrow lar \geq \int \!\! est \in e 
ightarrow small \int \!\! est \in e 
ightarrow rectum$ 

# Answer:



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**60.** Formatin of blood corpusices is known as

A. Rouleaux

B. Haemopoiesis
C. Haemolysis
D. Phagocytosis
Answer:
Watch Video Solution
<b>61.</b> The protein present in the thin filament is
A. Myosin
B. Actin
C. Pectin
D. Leucine
Answer:
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- 1. Voltage gated channel
- 2. Ligand-gated channels 62.
  - 3. Leakage channels
  - 4. Intracellular fluids
  - A. 1-a 2-b 3-c 4-d
  - B. 1-a 2-b 3-d 4-c
  - C. 1-d 2-c 3-b 4-a
  - D. 1-b 2-c 3-a 4-d

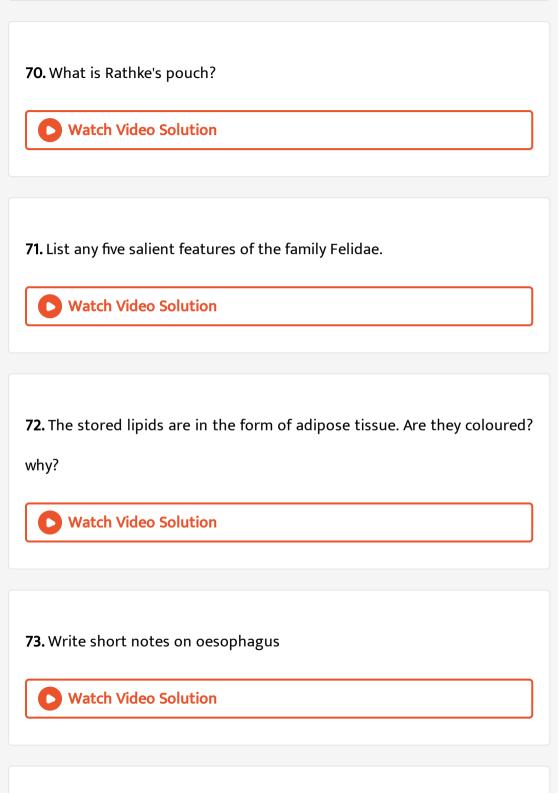
- (i) Chemically gated
- (ii) Mechanically gated channels
- (iii) Negatively charged protein
- (iv) Ionic channels



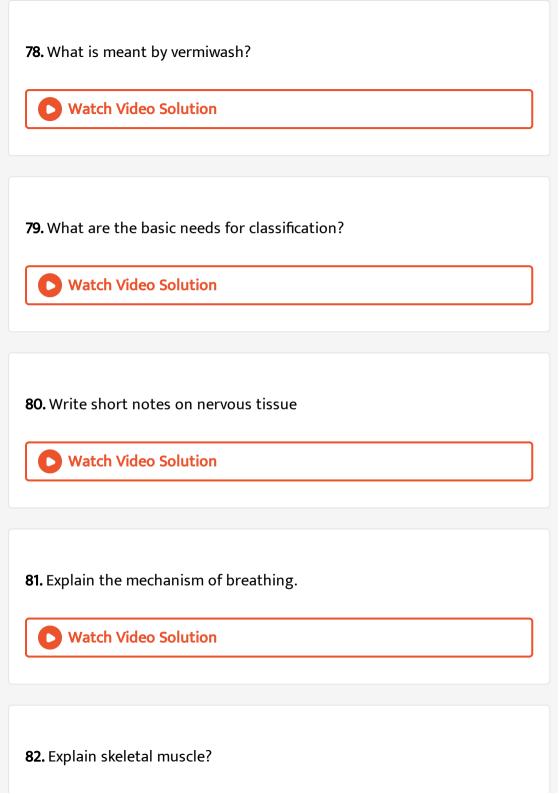
- 63. The maintenance of constant internal environment is refrred as
  - A. Regulation
  - B. Homeostasis
  - C. Co-ordination

D. Hormonal control
Answer:
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<b>64.</b> Biological indicators of soil fertility
A. Vermicast
B. Earthworm
C. Vermicompost
D. Silkworm
Answer:
Watch Video Solution
<b>65.</b> Differentiate between probiotic and pathogenic bacteria.

Watch Video Solution
<b>66.</b> What are the layers of the body wall of an earthworm?
Watch Video Solution
67. Define respiration
5.0.5 5.0.5 7.5 <b>6</b>
Watch Video Solution
<b>68.</b> Name the three main hormones are involved in the regulation of the
renal function?
Tenarianetton.
Watch Video Solution
<b>69.</b> Why is the blind spot called so ?
Watch Video Solution



<b>74.</b> Write short notes on Neutrophils.
Watch Video Solution
<b>75.</b> How does rigor mortis happen?
Watch Video Solution
76 D
<b>76.</b> Pleasant smell fo food urged Ravi to Rush into the kitchen. Name the parts of the brain involved in the identification of food and emotional
responses to odour.
Watch Video Solution
<b>77.</b> Define vermiculture.
Watch Video Solution



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83. Hormons are known as chemical messenger justify.
Watch Video Solution
84. Differentialte hyperglycemla from hypoglycemia
Watch Video Solution
85. What are the functions of neuroglia ?
Watch Video Solution
<b>86.</b> Write notes on Hind brain.
Watch Video Solution

87. Match the following columns and select the correct option.

Column - I			Column – II	
(p)	Pila	(i)	Devil fish	
(q)	Dentalium	(ii)	Chiton	
(r)	Chaetopleura	(iii)	Apple snail	
(s)	Octopus	(iv)	Tusk shell	

## **Answer:**



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**88.** The tissue present in the lining of kidney tubules ducts and secretory portions of glands.

A. Squamous epithelium

- B. Glandular epithelium

  C. Cuboidal epithelium

  D. Columnar epithelium

  Answer:

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- **89.** Buccopharyngeal respiration in frog:
  - A. Is increased when nostrils are closed
  - B. Stops when there is pulmonary respiration
  - C. Is increased when it is catching fly
  - D. Stops when mouth is opened.



90. Where does our buccal cavity open?		
A. Oesophagus		
B. Salivary gland		
C. Pharynx		
D. Stomach		
Answer:		
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91. Which of the following substances in tobacco smoke damage the ga		
exchange system?		
A. Carbon monoxide and carcinogens		
B. Carbon monoxide and nicotine		
C. Carcinogens and tar		



**92.** Match the term given under column 'A' with their functions given under column B and select the answer from the options given below.

# A. Lymphatic system (i) Carries oxygenated blood B. Pulmonary vein (ii) Immune response C. Thrombocytes (iii) To drain back the tissue fluid to the circulatory system D. Lymphocytes (iv) Coagulation of blood

A. A-ii, B-i, C-iii, D-iv

B. A-iii, B-i,C-iv, D-ii

C. A-iii, B-i, C-iii, D-iv

D. A-ii, B-i, C-iii, D-iv
nswer:
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3. Kidney stones are produced due to deposition of uric acid and
A. Silicates
B. Minerals
C. Calcium carbonate
D. Calcium oxalate
nswer:

**94.** Assertion (A): Osteoporosis occurs due to deficiency of vitamin D and hormonal imbalance

Reason (R): Osteoporosis causes rickets in children and osteomalacia in adult females.

A. (R) is correct but (A) is wrong.

B. (A) is correct but (R) is wrong.

C. (A) is correct but (R) explains (A)

D. Both (A) and (R) are correct

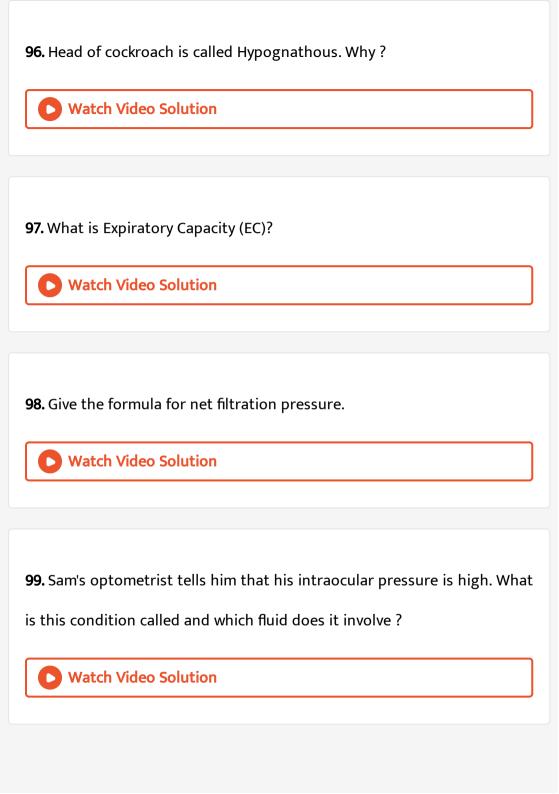
# Answer:

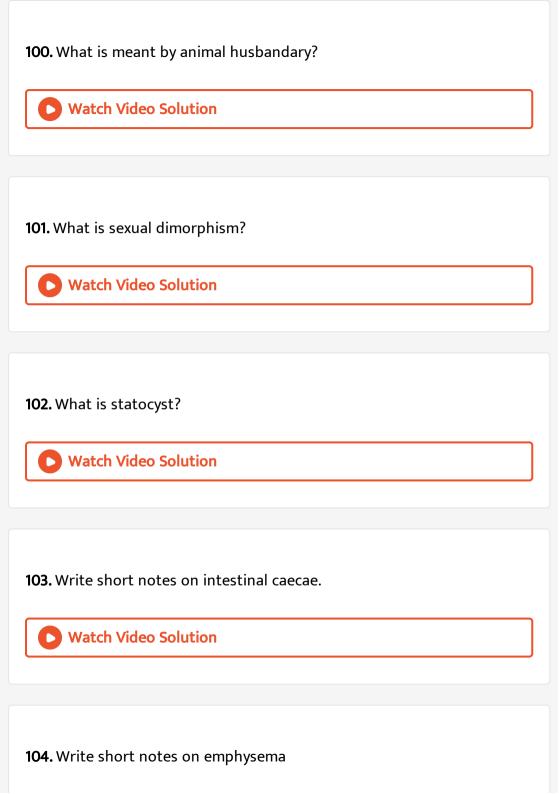


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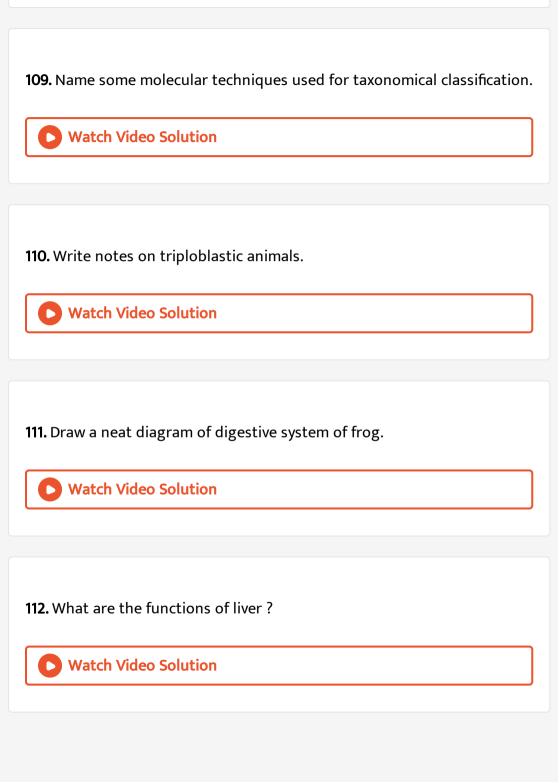
95. What is PCR?







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105. What are the different types of permanent teeth?
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<b>106.</b> How are nephrons classified based on the length of Henle's loop?
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<b>107.</b> Write notes on fibrous joints.
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108. Can you state why some areas of the brain and spinal cord are gray
and some are white?
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113. Write a short note on mechanism of hearing.
Watch Video Solution
<b>114.</b> Write short notes on lymphocytes.
Watch Video Solution
115. Give the economic importance of lac insect.
Watch Video Solution
116. Differentiate swarming in honey bee and lac insect.
Watch Video Solution