

# MT

2017 \_\_\_ \_\_\_ 1100

Seat No. 

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**MT - SCIENCE & TECHNOLOGY - II (72) - SEMI PRELIM - II : PAPER - 4**

**Time : 2 Hours**

**(Pages 2)**

**Max. Marks : 40**

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**Note :**

- (i) All questions are compulsory.
- (ii) All questions carry equal marks.
- (iii) Draw neat and labelled diagrams wherever necessary.

**Q.1. (A) Fill in the blanks: 3**

- (1) Lymph flows in ..... direction.
- (2) ..... do not possess a nervous system.
- (3) ..... is produced by fermentation of wheat, maize, potatoes or sugarcane.

**Q.1. (B) State whether the following statements are true or false 2 and if false, write the correct statement:**

- (1) Plasma is called the tissue fluid.
- (2) Afferent nerves carry impulses from the brain to the sensory organs.

**Q.2. Rewrite the following statements by selecting the correct alternative: 5**

- (1) While preparing a temporary stained mount of leaf epidermal peel, the extra stain is removed by ..... .
  - (a) washing with water
  - (b) washing with calcium chloride
  - (c) soaking with filter paper
  - (d) absorbing with cotton wool
- (2) Ankita bought glucose powder. She felt it was adulterated with starch powder. How should she test it ?
  - (a) by sieving
  - (b) by dissolving in water
  - (c) by iodine test
  - (d) all of these

- (3) ..... hormones help in the growth of the stem.  
(a) Auxins (b) Abscissic acid  
(c) Gibberellins (d) Cytokinins
- (4) Human heart weighs about .....  
(a) 500 gm (b) 360 gm  
(c) 1000 gm (d) 250 gm
- (5) Loss of water in the form of water vapour from aerial parts of plants is known as .....  
(a) translocation (b) transpiration  
(c) transportation (d) transformation

**Q.3. Answer the following in short : (Any 5) 10**

- (1) Explain the process of digestion of food in the mouth.  
(2) Draw neat and labelled diagram Vertical section of kidney.  
(3) Write a short note on Autotrophic nutrition.  
(4) Distinguish between Growth dependent movements and Growth independent movements.  
(5) Give scientific reason :  
Hormones secreted by the endocrine glands are present everywhere in the body.  
(6) State two functions of MPCB for prevention of water pollution.  
(7) Write a note on E-waste.

**Q.4. Answer the following in brief : (Any 5) 15**

- (1) Write the objectives of The Water Act.  
(2) Write the salient features of The Biomedical Waste Rules.  
(3) Which are the different parts of the human nervous system?  
(4) Mention the functions of the forebrain.  
(5) How do plants get rid of their excretory products?  
(6) What is respiration ? Explain the phases of respiration.  
(7) Explain Haemodialysis.

**Q.5. Answer in detail : (Any 1) 5**

- (1) What is meant by internal respiration and how does it take place?  
(2) Describe the structure of the heart with the help of a diagram.

*Best Of Luck* 🍀