**2018 III 08** **1000** **Seat No. :** | | | | | |

**Time : 2 Hours** **BIOLOGY (Vocational)**
**(New Pattern)**

**Subject Code**

| V | 2 | 9 | 2 |
|---|---|---|---|

**Total No. of Questions : 5** **(Printed Pages : 2)** **Maximum Marks : 50**

***INSTRUCTIONS***: *i)* ***All*** *questions are* ***compulsory****.*
*ii) Figures to the right indicate full marks.*
*iii) Solve new question on fresh page.*
*iv) Draw diagrams wherever specified.*

1. A) Define the term adaptation. **[1]**

   B) Live leeches were used to prevent clotting of blood in post operation cases. Why ? **[1]**

   C) A fruit seller wants to ripen the banana bunches. Name the growth regulator he can use. **[1]**

   D) How do auxin promote plant growth and development ? **[2]**

   E) Give an account of various leaf modifications. **[5]**

   OR

   E) Describe the various tap root modifications with one example each. **[5]**

2. A) A small palm like tree with cones is seen growing in school premise. Identify the species. **[1]**

   B) Write two points of differences between gymnosperms and angiosperms. **[1]**

   C) Explain how light and wind affect the rate of transpiration. **[3]**

   D) State the distinguishing features of order 'Lepidoptera'. **[5]**

   OR

   D) State the distinguishing features of order 'Coleoptera'. **[5]**

3. A) What is 'geitonogamy' ? **[1]**

B) The scientific name of mango is Mangifera indica. What does the first word Mangifera and second word indica denote ? **[1]**

C) How do zoological parks help in preserving animals facing threat of extinction ? **[1]**

D) Draw a neat diagram of "vertical section of epigynous" flower. **[2]**

E) Describe the distinguishing features of molluscs. **[5]**

OR

E) Describe the distinguishing features of class 'insecta'. **[5]**

4. A) Explain the term 'scavenging'. **[1]**

B) Construct the terrestrial food chain using any four organisms given below. **[1]**

Algae, Paddy Plant, Kingfisher, Snake, Falcon, Rat.

C) On a newly exposed sea floor, only few simple and very hardy organisms are surviving, what is it called as ? **[1]**

D) Draw a neat diagram of 'moss plant'. **[2]**

E) Why is it advisable to plant different plant species while reforestration of a area ? **[2]**

F) Explain the role of minerals and humidity in ecosystem. **[3]**

5. A) Name the bacteria that reduce nitrate to molecular nitrogen. **[1]**

B) Draw a neat diagram of 'chloroplast'. **[1]**

C) Write the deficiency symptoms of zinc. **[1]**

D) Nepenthis plant growing in nutrient deficient soil without showing any deficiency symptom. Why ? **[2]**

E) Distinguish between cyclic photophosphorylation and non cyclic photophosphorylation. **[2]**

F) Explain how carbon is exchanged between living organisms and non living world. **[3]**

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