Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_



**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

**End Semester Examination – Nov/Dec – 2017**

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|  |  |  |  |
| **Code :** | **14BT2024** | **Duration :** | **3hrs** |
| **Sub. Name :** | **PLANT PHYSIOLOGY AND CROP IMPROVEMENT** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. |  | Explain the water movement mechanisms in plants. | CO1 | 20 |
| (OR) | | | | |
| 2. | a. | Infer directions of translocation. | CO1 | 10 |
|  | b. | List the external factors affecting absorption of water. | CO1 | 10 |
|  |  |  |  |  |
| 3. | a. | What is photosynthesis ? | CO1 | 5 |
|  | b. | Recall Hill’s reaction and its significance. | CO1 | 15 |
| (OR) | | | | |
| 4. |  | Explain the mineral nutrition in plants. | CO1 | 20 |
|  |  |  |  |  |
| 5. |  | Describe the mechanism of xylem transport. | CO1 | 20 |
| (OR) | | | | |
| 6. |  | Discuss the concept of soil-water-plant relationships. | CO1 | 20 |
|  |  |  |  |  |
| 7. |  | Explain the concept of genetic engineering in detail. | CO2 | 20 |
| (OR) | | | | |
| 8. |  | Discuss the various methods involved in genetic engineering. | CO2 | 20 |
|  |  |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. |  | Discuss the significance of genetically modified crop plants in current day agriculture scenario. | CO2 | 20 |

ALL THE BEST