KERALA AGRICULTURAL UNIVERSITY
B.Tech. (Ag.Engg.) 2024 Admission
I Semester Final Theory Examination- February-March 2025

BES 1102   Agricultural Informatics & Artificial Intelligence (2+1)   Marks : 50

Time: 2 hours

I   Fill in the blanks   (10x1=10)

1. Analytical Engine was invented by ……………………………… and the first electronic computer is ……………………………………
2. The unit of memory is …………………………….. and the speed of a computer is expressed in …………………………………
3. ………………. and ……………………………. are 2 examples of high level (programming) language.
4. Agribot is …………………………… …………………………. and IoT is …………………………………..
5. Expand: (i) VIRUS ………………………………………………………………..
   (ii) IDEA ………………………………………………………………….
6. Mention 2 examples of Smartphone Mobile Applications in agriculture.
   State True or False
7. Flowchart and Algorithm are the same.
8. The binary form of decimal number 5 is 101.
9. Second generation computers use IC.
10. Internet and www are the same.

II Write short notes on *ANY* FIVE of the following   (5X2=10)

1. What is DBMS? Mention their functions. Give 2 examples of DBMS.
2. What are the functions of operating systems? Write down various types of Operating Systems with two examples for each.
3. Write notes on GIS.
4. Differentiate between Compiler and Interpreter.
5. What is a Sensor? Mention 3 sensors with their uses.
6. What do you mean by Artificial Intelligence? List out 3 applications of AI in agriculture.
7. Write notes on e-Agriculture.

III Answer *ANY* FIVE of the following   (5x4=20)

1. Describe the components of a computer system with a neat block diagram.
2. Discuss Expert systems in agriculture with examples and their applications.
3. Discuss geospatial technology. Write down the application of geospatial technology in agriculture.
4. Discuss crop simulation models.
5. What do you mean by Search algorithms? Explain the use of search algorithms in AI.
6. Compare Word and Excel software based on their functions.
7. Explain different categories of computers.

IV Write an essay on *ANY ONE* of the following   (1x10=10)

1. Explain DSS and its types, components, and uses/applications in agriculture. Write down 4 examples.
2. What is automation? Discuss the areas where automation in agriculture is possible and how?