KERALA AGRIULTURAL UNIVERSITY

B.Tech. (FT) 2024 Admission
III Semester Final Theory Examination- February 2026

BES 2119   **Agricultural Informatics & Artificial Intelligence (2+1)**   Marks : 50

Time: 2 hours

I   Fill in the blanks   (10x1=10)

1. The operating system developed by Microsoft for personal computers is called _____.

2. The protocol used to access web pages on the Internet is called _____.

3. A high-level programming language mainly used for business and scientific applications is _____.

4. The technology used to calculate crop water and nutrient requirements using computers is called _____ technology.

5. Mobile applications that provide farmers with market prices and farm advice are known as _____ apps.

6. The technology used to calculate crop water and nutrient requirements using computers is called _____ technology.

7. A specialized computer program that provides expert advice in agriculture is called an _____ system.

8. The national initiative to promote digitalization in agriculture in India is called _____ India.

9. The algorithm that uses both cost and heuristic value for finding the optimal path is called _____ algorithm.

10. The technology that connects physical devices through the Internet for data exchange is called _____.

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

1. What is Internet? Mention any two components of the World Wide Web (WWW).

2. What is a High-Level Programming Language? Give any two examples.

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. Explain the concepts of Memory and Units of Memory in a computer system.

2. Describe the types of programming languages (Machine language, Assembly language, and High-level language) with suitable examples.

3. Discuss Expert systems in agriculture with examples and their applications.

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. Explain Geo spatial technology.