Enrollment No......................................

Faculty of Agriculture
End Sem Examination Dec 2024
AG3AE13 Agri-Informatics
Programme: B.Sc. (Hons.)   Branch/Specialisation: Agriculture

Duration: 3 Hrs.   **Maximum Marks: 50**

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d. Assume suitable data if necessary. Notations and symbols have their usual meaning.

			Marks	BL	PO	CO	PSO
Q.1	i.	Which of the following is not a type of operating system?	1	1	1	1	
		(a) Real-time OS (b) Batch OS					
		(c) Management OS (d) Time-sharing OS					
	ii.	What is the purpose of MS Excel in data presentation?	1	1	1	1	
		(a) Editing documents					
		(b) Graph creation and statistical analysis					
		(c) Writing mathematical expressions					
		(d) Operating the database					
	iii.	What does WWW stand for?	1	1	1	1	
		(a) World Wide Web					
		(b) World Wide Win					
		(c) Web Wide World					
		(d) Web Win World					
	iv.	Which of the following is a computer programming language?	1	2	1	1	
		(a) HTML (b) Python					
		(c) CSS (d) Both (a) and (b)					
	v.	Which computer model is used to calculate crop water requirements?	1	3	2	3	
		(a) Soil model (b) Plant process model					
		(c) Weather model (d) Crop model					

vi. What is the use of automated systems in agriculture? **1**   3   2   3
   (a) Plant growth simulation
   (b) Agri-input management
   (c) Soil erosion control
   (d) Pest control

vii. Which of the following smartphone apps assists in market price updates? **1**   3   2   4
   (a) e-Market   (b) Kisan Suvidha
   (c) Agri-Price   (d) Crop King

viii. What is geospatial technology mainly used in agriculture? **1**   3   2   4
   (a) Pest identification
   (b) Generating agri-information
   (c) Machinery repair
   (d) Seed storage

ix. Which IT tool is used for preparing contingent crop planning? **1**   3   3   5
   (a) MS Office
   (b) Decision Support System
   (c) Weather App
   (d) GIS

x. What does an expert system in agriculture do? **1**   3   3   5
   (a) Provides pest control solutions
   (b) Makes decisions based on soil and crop data
   (c) Designs crop rotation strategies
   (d) All of these

Q.2 i. What are the applications of MS Office in data interpretation? **1**   1   1   1

ii. Define operating systems and explain their types. **2**   3   2   1

iii. Explain the role of databases in agriculture with examples. **5**   3   2   1

OR iv. Explain how statistical analysis is useful for agricultural data interpretation. **5**   3   2   1

Q.3 i. Define WWW and its components. **1**   1   1   1

ii. List standard input/output operations in programming. **3**   3   2   1

iii. What is e-agriculture? Describe its role in modern farming. **4**   3   2   2

OR iv. Explain how ICT can transform agricultural practices. **4**   3   2   2

Q.4 i. Enlist computer models used to simulate plant processes. **2**   3   2   3

ii. Explain the application of IT for computing water and nutrient requirements in crops. **6**   3   2   3

OR iii. Describe the use of automated systems in agriculture with examples. **6**   3   2   3

Q.5 i. Mention two smartphone apps for agriculture and their uses. **2**   3   2   4

ii. What is geospatial technology? How does it help in generating agricultural information? **2**   3   3   4

iii. Describe the applications of smartphone apps in post-harvest management. **4**   3   2   4

OR iv. Discuss the importance of smartphone apps in farm advisory services with examples. **4**   3   3   4

Q.6 Attempt any two:

i. What is DSS? Explain its components and applications in agriculture. **4**   3   3   5

ii. Write a note on soil information systems and their role in farm decision-making. **4**   3   3   5

iii. Explain the steps involved in preparing contingent crop planning using IT tools. **4**   3   3   5

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Marking Scheme

AG3AE13 - Agri- Informatics

Q.1   i)   **(c) Management OS**   1

     ii)   **(b) Graph creation and statistical analysis**   1

     iii)   **(a) World Wide Web**   1

     iv)   **(d) Both (a) and (b)**   1

     v)   **(d) Crop model**   1

     vi)   What is the use of automated systems in agriculture?   1

         (a) Plant growth simulation

         (b) Agri-input management

         (c) Soil erosion control

         (d) Pest control

     vii)   **(b) Kisan Suvidha**   1

     viii)   **(b) Generating agri-information**   1

     ix)   Which IT tool is used for preparing contingent crop planning?   1

         (b) Decision Support System

         (c) Weather App

         (d) GIS

     x)   **(d) All of the above**   1

Q.2   i.   What are the applications of MS Office in data interpretation?   1

     ii.   Define operating systems and, **1M**   2

         Explain their types. **1M**

     iii.   Explain the role of databases in agriculture with examples.   5

OR   iv.   Explain how statistical analysis is useful for agricultural data interpretation?   5

Q.3   i.   Define WWW and its components.   1

     ii.   List standard input/output operations in programming.   3

     iii.   What is e-agriculture? **1M**   4

         Describe its role in modern farming. **3M**

OR   iv.   Explain how ICT can transform agricultural practices.   4

Q.4   i.   Enlist computer models used to simulate plant processes.   2

     ii.   Explain the application of IT for computing water and nutrient requirements in crops.   6

OR   iii.   Describe the use of automated systems in agriculture with examples.   6

Q.5   i.   Mention two smartphone apps for agriculture and their uses.   2

     ii.   What is geospatial technology? **1M**   2

         How does it help in generating agricultural information? **1M**

     iii.   Describe the applications of smartphone apps in post-harvest management.   4

OR   iv.   Discuss the importance of smartphone apps in farm advisory services with examples.   4

Q.6   Attempt any two:

     i.   What is DSS? **1M**   4

         Explain its components and applications in agriculture. **3M**

     ii.   Write a note on soil information systems and their role in farm decision-making.   4

     iii.   Explain the steps involved in preparing contingent crop planning using IT tools.   4