









AGR/Q1007 - Precision Farming Technician

Review Date - 01/06/2025

Theory:

S No.	Question Text	Choice 1	Choice 2	Choice 3	Choice 4	Correct Choice
1	Which of the given is Indian government provided application for health management of livestock?	SHC mobile app	Pashu Poshan app	Agro Advisory mobile app	National Agriculture Market (eNAM) app	Choice 2
2	Which among the given systems enable farmers to create digital maps and analyze spatial data to make informed decisions about crop management?	Global Positioning System	Livestock Monitoring System	Geographic Information System	Soil Sensor system	Choice 3
3	Alcohol based sanitizer can be applied all over the body for maintaining personal hygiene.	TRUE	FALSE			Choice 2
4	Which among the given can be used to withdraw cash ATM machine?					Choice 1
5	Which among the following symbol will be seen to be placed in label of pesticides/fumigants?					Choice 4

6	_____ is a spreadsheet software used for data entry and management of electronic records of data collected from the field.	Google drive	MS Powerpoint	MS Excel	Adobe acrobat	Choice 3
7	Which among the given are the sensors are used in precision farming for measuring soil composition in precision farming? 1. Compaction sensor 2. Organic matter sensor 3. Yield monitoring sensor 4. Variable rate application (VRA) sensor 5. Electrical conductivity (EC) sensors	1, 2 and 5 only	2, 3, 4 and 5 only	1, 3 and 4 only	2, 4 and 5 only	Choice 1
8	Kisan suvidha application provides information about which of the given critical parameters? 1. Weather 2. Input dealers 3. Crop analysis 4. Market price 5. Government loan schemes	1, 2, 3 and 5 only	1, 3 and 4 only	1, 2 and 4 only	2, 3 and 5 only	Choice 3
9	Arrange the steps to check the functioning of the Global Positioning System (GPS) on a mobile device in correct chronological sequence. 1. Move around turn by turn to check real-time updates 2. Wait for the GPS signal to lock 3. Go outside to an open area with a clear view of the sky 4. Open a GPS-based app and verify the accurate location 5. Enable GPS in device settings	5>3>2>4>1	3>4>5>1>2	3>5>1>2>4	3>1>4>2>5	Choice 1
10	Your farmer friend needs to reduce the use of chemicals and ensures that they are applied only where needed and environmental impact. Which among the given technology will you suggest to this friend?	Irrigation control system	Boomspray technology	Electrochemical soil sensor	Remote sensing imagery	Choice 2

11	Match the factor for analysis with application of the analyzed data. Choose the correct sequence.	1-A, 2-C, 3-D, 4-B	1-D, 2-A, 3-B, 4-C	1-B, 2-D, 3-A, 4-C	1-C, 2-D, 3-B, 4-A	Choice 4										
	<table border="1"> <thead> <tr> <th>Factor for analysis</th> <th>Application of the analysis</th> </tr> </thead> <tbody> <tr> <td>1. Remote sensing imagery</td> <td>A. To check production potential of soil</td> </tr> <tr> <td>2. Geospatial data</td> <td>B. To regulate the use of different pesticides</td> </tr> <tr> <td>3. Crop scouting data</td> <td>C. Identify soil quality, crop canopy densities, etc</td> </tr> <tr> <td>4. Geo-referenced zones</td> <td>D. Check insect movement and damage patterns</td> </tr> </tbody> </table>	Factor for analysis	Application of the analysis	1. Remote sensing imagery	A. To check production potential of soil	2. Geospatial data	B. To regulate the use of different pesticides	3. Crop scouting data	C. Identify soil quality, crop canopy densities, etc	4. Geo-referenced zones	D. Check insect movement and damage patterns					
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12	In a particular zone soil sampling it was found that soil of your field lacked nitrogen, copper, iron, alkaline content and immediately you started applying appropriate fertilizers. Which among the given sensor may have been used for this precise analysis?	Tensiometer sensor	Electro-Magnetic (EM) sensors	Electrochemical sensors	GPS receiver sensor	Choice 3										

Practical and Viva:

S No.	Question Type	Question Text	Suggestion Solution	Equipment Required
1	Practical	Demonstrate the steps you will take to setup automated spot spraying systems in precision agriculture.	<ol style="list-style-type: none"> 1. Calibrate the automated spot spraying system with the spraying equipment 2. Create a detailed map of the targeted area using GPS and remote sensing data 3. Upload the map to the spot spraying system over internet 4. Set the spraying parameters and press the start button 5. Monitor and make necessary adjustments during the process 6. Maintain records of spraying in an excel sheet 	Spraying equipment, GPS device, remote sensing device, internet access, computer and MS excel application.

2	Viva	Mention the various sensors that are implied for use in precision farming.	<ol style="list-style-type: none">1. Weather sensor2. Crop health sensor3. Moisture sensor4. Livestock monitoring sensor5. Weed and pest detection sensor6. Global positioning system7. Unmanned aerial vehicles (UAVs) or drones	
3	Viva	Mention the various types of data collected by remote sensing imagery that benefits in in precision farming.	<ol style="list-style-type: none">1. Temperature mapping2. Crop health monitoring3. Vegetation indices4. Soil moisture levels5. Multispectral data6. Weed detection7. Crop yield estimation	