CBSE | DEPARTMENT OF SKILL EDUCATION

GEOSPATIAL TECHNOLOGY (SUBJECT CODE - 818)

Blue-print for Sample Question Paper for Class XI (Session 2024-2025)

Max. Time: 3 Hours   **Max. Marks: 60**

PART A - EMPLOYABILITY SKILLS (10 MARKS):

UNIT NO.	NAME OF THE UNIT	OBJECTIVE TYPE QUESTIONS	SHORT ANSWER TYPE QUESTIONS	TOTAL QUESTIONS
		1 MARK EACH	2 MARKS EACH	
1	Communication Skills – III	1	1	2
2	Self-Management Skills – III	2	1	3
3	ICT Skills – III	1	1	2
4	Entrepreneurial Skills – III	1	1	2
5	Green Skills- III	1	1	2
	TOTAL QUESTIONS	**6**	**5**	**11**
	NO. OF QUESTIONS TO BE ANSWERED	**Any 4**	**Any 3**	**07**
	TOTAL MARKS	**1 x 4 = 4**	**2 x 3 = 6**	**10 MARKS**

PART B - SUBJECT SPECIFIC SKILLS (50 MARKS):

UNIT NO.	NAME OF THE UNIT	OBJECTIVE TYPE QUESTIONS	SHORT ANS. TYPE QUES.- I	SHORT ANS. TYPE QUES.- II	DESCRIPTIVE/ LONG ANS. TYPE QUESTIONS	TOTAL QUESTIONS
		1 MARK EACH	2 MARKS EACH	3 MARKS EACH	4 MARKS EACH	
1	Geospatial Overview	5	1	–	1	7
2	Maps and Cartography	5	1	–	1	7
3	Remote Sensing	8	1	1	1	11
4	Geographic Information System	8	1	1	1	11
5	Global Positioning System	6	1	1	1	9
	TOTAL QUESTIONS	**32**	**5**	**3**	**5**	**45**
	NO. OF QUESTIONS TO BE ANSWERED	**26**	**Any 3**	**Any 2**	**Any 3**	**34**
	TOTAL MARKS	**1 x 26= 26**	**2 x 3 = 6**	**3 x 2 = 6**	**4 x 3 = 12**	**50 MARKS**

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Sample Question Paper for Class XI (Session 2024-2025)

Max. Time: 3 Hours   **Max. Marks: 60**

General Instructions:

1. Please read the instructions carefully.

2. This Question Paper consists of **24 questions** in two sections – Section A & Section B.

3. Section A has Objective type questions whereas Section B contains Subjective type questions.

4. **Out of the given (6 + 18 =) 24 questions, a candidate has to answer (6 + 11 =) 17 questions in the allotted (maximum) time of 3 hours.**

5. All questions of a particular section must be attempted in the correct order.

6. **SECTION A - OBJECTIVE TYPE QUESTIONS (30 MARKS):**

    i.   This section has 06 questions.

    ii. There is no negative marking.

    iii. Do as per the instructions given.

    iv. Marks allotted are mentioned against each question/part.

7. **SECTION B – SUBJECTIVE TYPE QUESTIONS (30 MARKS):**

    i.   This section contains 18 questions.

    ii. A candidate has to do 11 questions.

    iii. Do as per the instructions given.

    iv. Marks allotted are mentioned against each question/part.

SECTION A: OBJECTIVE TYPE QUESTIONS

Q. 1	**Answer any 4 out of the given 6 questions on Employability Skills (1 x 4 = 4marks)**	
i.	What is the purpose of communication? (a) Inform (tell someone about something) (b) Influence (get someone to do something you want) (c) Share thoughts, ideas, feelings (d) All of the above	1
ii.	Grooming is important because it helps us to. (a) feel confident about ourselves (b) make a bad impression on others (c) not keep us clean and tidy (d) All of the above	1
iii.	Which of the following is a good choice of clothes when you go out to meet friends socially? (a) School uniform (b) Formal shirt and pants (c) Casual shirt and jeans (d) T-Shirt and Shorts	1
iv.	Which shortcut key is used to create a new document? (a) Ctrl+ C (b) Ctrl + N (c) Ctrl + M (d) Ctrl + D	1
v.	Which of the following actions would not help a green agriculture sector? (a) Using chemical fertilizers (b) Using organic manure (c) Growing vegetables using vermicompost (d) Buying or selling organic potatoes	1
vi.	Which of the following is not a quality of an entrepreneur? (a) Judgmental (b) Perseverance (c) Independent (d) Confident	1
Q. 2	**Answer any 5 out of the given 7 questions (1 x 5 = 5 marks)**	
i.	Which of the following are appropriate definitions of scale? (a) A conversion factor used to transform map projections. (b) The lines on a map representing north-south and east-west directions. (c) An indication of how big an object represented on the map is on the ground. (d) The ratio of a distance on a map to the corresponding distance on the ground.	1
ii.	Which of the following is an appropriate natural feature? (a) Tributary of a river. (b) A building collapsed during a cyclone. (c) Reservoir on the river. (d) Roads.	1
iii.	Which of the following is an example of spatial data? (a) coordinates showing location of discrete objects. (b) Map scale. (c) Area represented by a polygon. (d) Lines showing the road network.	1
iv.	Which of the following lists the three pillars of Geospatial Technology? (a) Geo-informatics, RS, GPS.	1

	(b) GPS, GIS, Geography. (c) GPS, RS, GIS. (d) RS, Geography, Geo-informatics	
v.	Where is the Master Control Station situated? (a) Colorado Springs (b) New Jersey (c) Diego Garcia (d) Kwajalein	1
vi.	The spatial resolution of Cartosat-1 is- (a) 4m (b) 30m (c) 72.5m (d) 2.5m	1
vii.	Pick up the incorrect statement from the following: (a) In remote sensing technique, the device used to capture data, is called a sensor (b) Sensors may be either stationary or mobile (c) Clarity of the image does not change with time of the day (d) None of these	

Q. 3	**Answer any 6 out of the given 7 questions (1 x 6 = 6 marks)**	
i.	Red colour is used for showing . (a) Vegetation (b) Fire (c) Mountains (d) Water	1
ii.	A _____map is used to show small areas like cinema hall, school or a temple on a paper. (a) Small scale map (b) Large scale map (c) Globe (d) None of the above	1
iii.	The elements of Vector data are: (a) Point (b) Line (c) Polygon (d) All of the above	1
iv.	Which of the following statements is incorrect? (a) GIS technology is the same as traditional mapping. (b) GIS technology contains analytic capabilities for overlaying maps. (c) GIS technology is capable of studying the environmental surroundings. (d) All of the above	1
v.	Which kind of waves can travel through empty space? (a) Water waves (b) Sound waves (c) Spring waves (d) Electromagnetic waves	1
vi.	For which purpose can GIS not be used? (a) Placement of satellite in orbit (b) Flood management. (c) Afforestation (d) Utility management	1
vii.	The system designed to find out locations in the form of latitudes and longitudes can be termed as	

(a) Geographical Information system (b) Global Positioning System (c) Contours (d) Topography	

Q. 4	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)	
i.	Which of the following are appropriate definitions of scale? (a) A conversion factor used to transform map projections. (b) The lines on a map representing north-south and east-west directions. (c) An indication of how big an object represented on the map is on the ground. (d) The ratio of a distance on a map to the corresponding distance on the ground.	1
ii.	Wavelength of Electromagnetic waves can be defined as the distance between (a) two successive crests (b) two successive troughs (c) Both a and b (d) None of the above	1
iii.	It is easy to integrate GIS, Remote Sensing and GPS technologies because these are: (a) Digital, special, and generic (b) Digital, analogue, and manual (c) Digital, spatial, and generic (d) Negative, positive, and neutral	1
iv.	GIS is an emerging tool where the focus is not on which of the following components? (a) Designing (b) Spatial analysis (c) Mapping skill (d) RS technology	1
v.	The visible wavelength of the Electromagnetic spectrum covers a range of (a) 0.35 – 0.65 μm (b) 0.45 – 0.55 μm (c) 0.40 – 0.70 μm (d) 0.65 – 0.85 μm	1
vi.	A receiver of GPS calculates the time and position based on the received data from the different _____ (a) Radio Waves (b) Satellites (c) Atomic Clocks (d) All of the above	1

Q. 5	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)	
i.	Digital data in GIS is represented using _____ data creation methods. (a) Analog (b) Digital (c) Both a and b (d) None of the above	1
ii.	Which of the following is not an example of spatial data? (a) Polygons showing the area occupied by a particular land use or variable. (b) Lines showing the route of linear objects. (c) Points showing location of discrete objects. (d) Times of particular events.	1
iii.	The first age of navigation is known as	1

		(a) Star age (b) Radio age (c) Satellite age (d) Radar age	
iv.		A combination of different type of dataset and overlaid over other is known as (a) Map data layer (b) Non-spatial data (c) Spatial Dataset (d) All of the above	1
v.		Among the following, which do not come under the components of GIS? (a) Hardware (b) Software (c) Compiler (d) Data	1
vi.		A topographic map usually includes: (a) Contour lines (b) relief (c) Geographical features (d) All of the above	1

Q. 6	**Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**	
i.	The EMR interacts with the rough surface to show one of the following interactions: (a) Reflection (b) Scattering (c) Absorption (d) Transmission	1
ii.	Among the following _____ can be expressed as an example of hardware component. (a) Keyboard (b) Arc GIS (c) Auto CAD (d) Digitalization	1
iii.	GIS has the facility to create maps: (a) of different scales and projections (b) different types (c) Both a and b (d) None of the above	1
iv.	An error introduced intentionally by the Department of Defence, USA is known as: (a) Multipath (b) Orbital Error (c) Selective Availability (d) None of the above	1
v.	An application that allows users to create interactive queries, analyze spatial information, edit data, maps is _____ (a) Remote Sensing (b) Global Positioning System (c) Geographic Information System (d) None of the above	1
vi.	The elements of a map do not include one of the following: (a) Source (b) Title (c) Soil (d) North Arrow	1

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks)

Answer each question in 20 – 30 words.

Q. 7	What characters should the password have in email address ,to make it more secure?	2
Q. 8	Explain the importance of Personal Hygiene.	2
Q. 9	Name any one of the sectors of Green Economy. Suggest one way to help it become environment friendly?	2
Q. 10	Explain the importance of Non-Verbal Communication.	2
Q. 11	What are beliefs and values? Give examples to justify your answer.	2

Answer any 3 out of the given 5 questions in 20 – 30 words each (2 x 3 = 6 marks)

Q. 12	What is Geographic coordinate system? Explain.	2
Q. 13	Define spatial resolution with example.	2
Q. 14	Differentiate between political map and physical map.	2
Q. 15	How would you represent man-made and natural features? Give examples	2
Q. 16	How do atmospheric conditions affect the accuracy of GPS?	2

Answer any 2 out of the given 3 questions in 30– 50 words each (3 x 2 = 6 marks)

Q. 17	What is a sensor? Explain the different types of sensors.	3
Q. 18	What is GIS Data Acquisition? What are the major sources of data for GIS?	3
Q. 19	Explain the function of GPS. Briefly explain the Control Segment of GPS.	3

Answer any 3 out of the given 5 questions in 50– 80 words each (4 x 3 = 12 marks)

Q. 20	What are the different processes involved in Remote Sensing?	4
Q. 21	Explain the data types for the data stored in GIS. Explain the two formats in which the spatial data is stored.	4
Q. 22	Explain the different factors affecting the GPS data.	4
Q. 23	Write about the advantages of Geospatial Technology. Explain giving two examples for each.	4
Q. 24	Differentiate between (a) Cadastral map and Thematic map. (b) Large scale map and Small scale map.	4