CBSE | DEPARTMENT OF SKILL EDUCATION

GEO SPATIAL (SUBJECT CODE 818)

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. No.	QUESTION	Source Material (NCERT/PSSCIVE/ CBSE Study Material)	Unit/ Chap. No.	Page no. of source material	Marks
Q. 1	**Answer any 4 out of the given 6 questions on Employability Skills (1 x 4 = 4 marks)**				
i.	Confidence	NCERT textbook	Unit 1	16	1
ii.	team	NCERT textbook	Unit 2	85	1
iii.	Welcome them, introduce your family and thank them for coming	NCERT textbook	Unit 2	91	1
iv.	ctrl+F12	NCERT textbook	Unit 3	129	1
v.	business	NCERT textbook	Unit 4	167	1
vi.	all of the above	NCERT textbook	Unit 5	189	1
Q. 2	**Answer any 5 out of the given 7 questions (1 x 5 = 5 marks)**				
i.	Natural and Man Made	CBSE Textbook	1	1	1
ii.	all three	CBSE Textbook	1	1	1
iii.	Man Made Feature	CBSE Textbook	1	2	1
iv.	Spatial and Non -Spatial,	CBSE Textbook	1	4	1
v.	Remote sensing, GIS & GPS,	CBSE Textbook	1	4	1
vi.	false,	CBSE Textbook	1	8	1
vii.	Both A and B are Correct and B represent the A correctly	CBSE Textbook	2	10	1
Q. 3	**Answer any 6 out of the given 7 questions (1 x 6 = 6 marks)**				
i.	False	CBSE Textbook	2	17	1
ii.	all above three	CBSE Textbook	2	19	1
iii.	small-scale and large-scale maps.	CBSE Textbook	2	17	1

iv.	equator line	CBSE Textbook	2	27	1
v.	Two--dimensionally	CBSE Textbook	2	27	1
vi.	Sun,	CBSE Textbook	3	35	1
vii.	number of crests per second	CBSE Textbook	3	38	1
Q. 4	**Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**				
i.	It is approximately 0.4 to 0.7 micrometre	CBSE Textbook	3	39	1
ii.	No	CBSE Textbook	3	38	1
iii.	the altitude of remote sensing satellites is around 700-800 kilometres.	CBSE Textbook	3	50	1
iv.	Passive and Active sensors	CBSE Textbook	3	46	1
v.	Both A & B	CBSE Textbook	3	47	1
vi.	Sensor	CBSE Textbook	3	48	1
Q. 5	**Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**				
i.	both A and B	CBSE Textbook	4	59-60	1
ii.	true	CBSE Textbook	4	65	1
iii.	False	CBSE Textbook	4	67	1
iv.	Point features, Line features and Polygon features	CBSE Textbook	4	67	1
v.	24 satellites	CBSE Textbook	5	73	1
vi.	From GPS we can get information of location on land sea and in air.	CBSE Textbook	5	73	1
Q. 6	**Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**				
i.	US Space Command or Colorado springs	CBSE Textbook	5	76	1
ii.	DoD US Department of Defense	CBSE Textbook	5	76	1
iii.	GPS receiver	CBSE Textbook	5	77	1
iv.	Cartography	CBSE Textbook	2	15	1
v.	All three	CBSE Textbook	4	65	1
vi.	GIS, Remote Sensing, & GPS	CBSE Textbook	1	4	1

SECTION B: SUBJECTIVE TYPE QUESTIONS

Q. No.	QUESTION	Source Material (NCERT/PSSCIVE/ CBSE Study Material)	Unit/ Chap. No.	Page no. of source material	Marks
Answer any 3 out of the given 5 questions on Employability Skills in 20 – 30 words each (2 x 3 = 6 marks)					
Q. 7	To indicate pause Comma is used for separate items.	NCERT textbook	Unit 1	33	2
Q. 8	a. Organize b. Prioritize c. Control Track (any two)	NCERT textbook	Unit 2	103	2
Q. 9	The red wavy lines shows that the word is not spelt correctly.	NCERT textbook	Unit 3	122	2
Q. 10	A trading business does not manufacture goods or product, brings the finished goods from manufacturing units and sells them and earn revenue.	NCERT textbook	Unit 4	140	2

Q. 11	**Sustainable Development:** sustainable means what is good for the economy as well as the future of the environment.	NCERT textbook	Unit 5	172	2

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

Q. 12	The various elements of Maps are mentioned below- 1. Heading 2. Scale 3. North Arrow 4. Legend 5. Source/ citation 6. Grids 7. Mapped Areas 8. Credits 9. Map Symbols 10. Graticule 11. Border and Neat lines	CBSE Textbook	2	25	2
Q. 13	The differences between point, line, and Polygon are- 1) Polygon is two-dimensional whereas point and line are one-dimensional. 2) Point is used to show a location of a particular object (like-school, building), 3) Lines show linear features, such as streets, rivers, and roads etc. 4) whereas a Polygon composed of bounding arcs and label points shows the boundary of a city, forest, lake.	CBSE Textbook	2	13	2
Q. 14	The data sources used for GIS are:- • Remote Sensing Data • Global Positioning System Data • Paper Maps • Scanned Drawings • Existing Digital Data • Statistical Data	CBSE Textbook	4	61	2
Q. 15	Attribute information and how is it used in GIS can be understood as follows: • Attribute data is another name of non spatial data. • This data refers to the properties of spatial data and is in the form of quantitative or qualitative characteristics of spatial features. • Attribute data is stored in tables. Row represents map feature while column represents a characteristic.	CBSE Textbook	4	67-68	2
Q. 16	1) A globe depicts the earth in three dimensions, whereas a map depicts the earth in two dimensions. 2) On the globe, longitudes and latitudes are drawn as a circle or semicircle,	CBSE Textbook	2	10	2

	whereas on a map, they are drawn as a line. 3) A globe is created using a small scale map, whereas a map is created using a large scale map. 4) A globe is used to gain a broad image, whereas maps are used to get particular information about a specific area. 5) Maps are used for navigating, however a globe cannot be utilised for that purpose. 6) A globe is constructed of a hard material and is difficult to transport, whereas a map may be taken anywhere.				

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

Q. 17	The names of types of remote sensing platforms are enlisted below: 1. Ground based platforms- Used to collect detailed information of the surface of the earth. 2. Airborne platforms- Used to collect detailed photographs of the target area. 3. Space borne platforms- Used to obtain pictorial data with the help of satellites.	CBSE Textbook	3	44	3
Q. 18	Pixel and Resolution can be defined as: • **Pixel** (picture element) is the smallest feature that the sensor or digital camera can detect which is used to determine the resolution of the data. • When pixels arranged into a matrix form, it will give the complete image of a particular location. • **Resolution** is the total number of the count of pixels in a digital image. • Resolution is used to count the pixels in digital imaging. • Bothe pixel and resolution are interrelated with each other.	CBSE Textbook	3	48-49	3
Q. 19	GIS is used to locate Place of Interest in the following way: • Spatial and non-spatial data are stored in GIS. • Spatial data shows information related to the location while non-spatial data shows characteristics of the objects. • These data are fed from remote sensing, global positioning system, etc in the form of latitude	CBSE Textbook	4	68	3

		and longitude.				
		• This data enables a user to locate the place of interest via GIS.				

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

Q. 20	The Indian remote sensing system can be summarized as: • Indian Remote Sensing System was designed to accomplish these achievements: to style, build and launch satellites to a sun-synchronous orbit. • Satellite Observations throughout natural and human-induced hazards became crucial for shielding the worldwide atmosphere, reducing disaster losses, and achieving property development. • Remote sensing is employed to ascertain and operate ground stations for artificial satellite management, knowledge transfer alongside processing and repository. • Remote sensing is employed to use the information obtained for varied applications on the bottom.	CBSE Textbook	3	50	4
Q. 21	The processes involved in Remote sensing can be described as: The process involved in remote sensing is 7 steps elaborate process which helps in land use mapping, environmental study, weather forecasting, resource exploration, and a better understanding of the earth's topography. Below are the 7 steps and a picture explaining the steps: • The energy source (A) • Radiation and atmosphere (B) • Interaction with the target (C) • Recording by the sensor (D) • Transmission, reception, and processing (E) • Interpret and Analyse (F) • Application (G)	CBSE Textbook	3	42	4
Q. 22	1. Utility services • Utility service providers use this technology for managing utility network. • Important information like location of new service, shortest path to provide the service, way to collect service charges, etc is	CBSE Textbook	4	70	4

	provided by this technology.
	2. Infrastructure planning
	   • Integration of inherently geographical and non geographical information is the primary task while planning infrastructure services.
	   • Village location, transport and irrigation work, topographical information is needed to integrate the information which is provided by this technology.				

Q. 23	The benefits of the Topographic map are given as below:
	• A topographic map is a type of map used for understanding spatial patterns.
	• They are prepared based on topographical surveys performed at large scales.
	• Topographic maps provide a wide range of data which is used for the following -
	   a. residential and commercial planning
	   b. engineering
	   c. energy exploration
	   d. environmental management
	   e. public works design
	   f. natural resource conservation
	   g. outdoor activities such as fishing, camping, hiking. etc.
			2	18	4

Q. 24	The use of a geographic information system (GIS) is essential for the following reasons:
	   • Paper maps come in a variety of scales and projections. The maps must be converted to the same scale and cover the same area in order to create a single integrated map.
	   • Detailed information on each feature can be recorded in GIS. GIS can also adapt a map of any scale to a different scale.
	   • GIS applications include tools that allow users to create their own searches, do spatial data analysis, and change data, among other things.
	   • As a result, it is required since it gives a user-friendly experience.
		CBSE Textbook	4	59	4