CBSE – DEPARTMENT OF SKILL EDUCATION

GEOSPATIAL TECHNOLOGY (SUBJECT CODE 818)

Sample Question Paper

Class XII (Session 2019–2020)

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

General Instructions:

1. *This Question Paper consists of two parts viz. Part A: Employability Skills and Part B: Subject Skills.*
2. ***Part A: Employability Skills (10 Marks)***
    i. *Answer any 4 questions out of the given 6 questions of 1 mark each.*
    ii. *Answer any 3 questions out of the given 5 questions of 2 marks each.*
3. ***Part B: Subject Skills (40 Marks):***
    i. *Answer any 10 questions out of the given 12 questions of 1 mark each.*
    ii. *Answer any 5 questions from the given 7 questions of 2 marks each.*
    iii. *Answer any 5 questions from the given 7 questions of 3 marks each.*
    iv. *Answer any 3 questions from the given 5 questions of 5 marks each.*
4. ***This question paper contains 42 questions out of which 30 questions are to be answered.***
5. *All questions of a particular part/section must be attempted in the correct order.*
6. *The maximum time allowed is 3 hrs.*

PART A: EMPLOYABILITY SKILLS (10 MARKS)

Answer any 4 questions out of the given 6 questions of 1 mark each:

1.	What is the secondstep of active listening?
	    A. Remembering
	    B. Receiving
	    C. Understanding
	    D. evaluating
		(1)

2.	_____ motivation is ability to do what needs to be done without the influence from other people or situation.	**(1)**
3.	Name any two sources of motivation.	**(1)**
4.	List any two-software used for preparing presentations.	**(1)**
5.	What is problem-solving?	**(1)**

6.	Which of the following steps is not used for reducing greenhouse gases?
	    A. Afforestation
	    B. Deforestation
	    C. Reduce
	    D. Energy efficient products
		(1)

Answer any 3 questions out of the given 5 questions of 2 marks each:

7.	What are the four basic kinds of sentences?	**(2)**
8.	What do you understand by personality? Explain.	**(2)**
9.	Mention any two benefits of spreadsheet?	**(2)**
10.	What are values? Suggest any two values of an Entrepreneur.	**(1+1=2)**
11.	Green tourism makes an optimal use of environmental resources. Justify.	**(2)**

PART B: SUBJECT SKILLS (50 MARKS)

Answer any 10 questions out of the given 12 questions:

12.	What is the use of Doppler Lidar?
	    A. To measure the distance only
	    B. To measure the velocity
	    C. To measure chemical concentrations
	    D. To create images
		(1)

13.	In which of the following part of electromagnetic spectrum Radar operates.
	    A. Visible
	    B. Infrared
	    C. Thermal
	    D. Microwave
		(1)

14.	Which is not a key of the interpretation of aerial photographs.
	    A. Shape
	    B. Location
	    C. Size
	    D. Pattern
		(1)

15.	Which is not a disadvantage of Web GIS?
	    A. Reliability
	    B. Quality
	    C. Privacy
	    D. Legality
		(1)

16.	Which spatial analysis tool uses clip?
	    A. TIN
	    B. Merge
	    C. Query
	    D. Overlay
		(1)

17.	_____ is considered as the polygon with no area information.	(1)
18.	The shift in location and change in shape of the features is called as _____.	(1)
19.	Spatial resolution of IKONOS is _____.	(1)
20.	_____ error is caused by inaccuracies of the satellite's reported location.	(1)
21.	Name the basic principle of GPS.	(1)
22.	Mention any two components of GIS.	(1)
23.	How can we derive the scale of aerial photograph?	(1)

Answer any 5 questions out of the given 7 questions of 2 marks each:

24.	How association helps in image interpretation?	(2)
25.	What is temporal resolution? Why is it an important element of remote sensing?	(1+1=2)
26.	What is data management?	(2)
27.	How does Merge work as a spatial analysis tool?	(2)
28.	Mention any two features of star age navigation.	(1+1=2)
29.	How Panchromatic images are different from Multispectral images?	(2)
30.	Which data sources are used in flood hazard mapping of river Kosi?	(2)

Answer any 5 questions out of the given 7 questions of 3 marks each:

31.	List the stages in Remote Sensing process.	(3)

32.	Distinguish between vertical and oblique aerial photographs.	**(3)**
33.	What is buffer analysis? How does buffering help in Disaster management?	**(1+2=3)**
34.	What are map projections? Discuss their importance and types.	**(3)**
35.	How DGPS is an enhancement to GPS? Explain.	**(3)**
36.	Explain any three benefits of using GPS in survey and mapping.	**(3)**
37.	What is mobile GIS? Give any two advantages of mobile GIS.	**(1+2=3)**

Answer any 3 questions out of the given 5 questions of 5 marks each:

38.	What is RADAR? Explain its functioning in detail.	**(1+4=5)**
39.	What is image classification? Explain the steps of supervised classification.	**(5)**
40.	What is Topological data model? Explain its properties.	**(5)**
41.	Spatial data analysis is an important function of GIS. Explain the working of any five spatial operation tools.	**(5)**
42.	Geomatics has become an integrated well-developed and successful tool in disaster management and mitigation. Evaluate. □	**(5)**