



BBO-003-1074007 Seat No. \_\_\_\_\_

M. C. A. (Sem. IV) (CBCS) Examination

July - 2021

E - 4053 : GIS, GPS & Remote Sensing

Faculty Code : 003

Subject Code : 1074007

Time : 2 1/2 Hours]

[Total Marks : 70

Q. 1	(a)	Attempt the following	04
	(1)	Spatial data are of four types vector and raster? True / False	
	(2)	In GIS, spatial data is split into 5 types? True/ False	
	(3)	_____ Data is used to represent linear features?	
	(4)	Write down the full form of GIS	
	(b)	What is GIS?	02
	(c)	Explain type of information in detail	03
	(d)	Write down the steps to display and query GIS data	05
Q. 2	(a)	Attempt the following	04
	(1)	GPS can be used for land detection system? True / False	
	(2)	The space segment is composed of orbiting GPS satellite ?True/ False	
	(3)	User segment is one of the segment in GPS? True / False	
	(4)	Write down the full form of GPS	
	(b)	Explain Spatial in GIS	02
	(c)	Explain 3D Analysis. Give example	03
	(d)	Give suitable steps or example to use GIS in population prediction and analysis	05
Q. 3	(a)	Attempt the following	04
	(1)	The information in GIS is entered and stored as _____ ?	
	(2)	The area imaged on surface, can be referred to as _____	
	(3)	_____ is the first step of supervised classification?	
	(4)	_____ measures the surface temperature and thermal properties of target	
	(b)	Name the two categories of vector data structure?	02
	(c)	What is Kinematics GPS?	03
	(d)	List and explain component of GPS with diagram	05
Q. 4	(a)	Attempt the following	04
	(1)	The user can use GIS to make _____ ?	
	(2)	_____ describes how much detail in a photographic image is visible to the human eye	
	(3)	Remote sensing path is called orbit? True / False	
	(4)	Write down the full form of DEM	
	(b)	What is relative positioning in GPS?	02
	(c)	Explain the mechanism in detail how GPS works?	03
	(d)	List out types of GPS and explain any one	05

<b>Q. 5</b>	<b>(a)</b>	<b>Attempt the following</b>	04
	(1)	In the process of GIS, digitalization is done for better output. True/False	
	(2)	How many minimum number of satellites are required to calculate 3D Positions?	
	(3)	Image transformation typically involves multiple data? True /False	
	(4)	Remote sensing can be used for land detection system? True / False	
	<b>(b)</b>	Write down the scope of GIS/GPS technology	02
	<b>(c)</b>	What is Lidar? Explain its types based on physical process.	03
	<b>(d)</b>	What is coordinates in GPS? How to compute coordinates in GPS	05
<b>Q. 6</b>	<b>(a)</b>	<b>Attempt the following</b>	04
	(1)	Write down the full form of DTM	
	(2)	A person who prepare maps is known as _____	
	(3)	GIS uses the information from which source _____ ?	
	(4)	_____ Formats can be used for GIS output?	
	<b>(b)</b>	What is the use of surveying receiver?	02
	<b>(c)</b>	Write a detail note on different application of GPS	03
	<b>(d)</b>	Draw a block diagram of GPS receiver and explain	05
<b>Q. 7</b>	<b>(a)</b>	<b>Attempt the following</b>	04
	(1)	Data can be shared in the process of GIS. True/False	
	(2)	By using pseudo ranging method, two dimensional and three dimensional GPS positions can be located. True/False?	
	(3)	_____ error occurs due to atmospheric conditions in GPS Tracking?	
	(4)	Kinematic positioning technique considered as modern GPS technology? True/False	
	<b>(b)</b>	What is remote sensing?	02
	<b>(c)</b>	Explain in detail temporal resolution	03
	<b>(d)</b>	Write a note on radiometric resolution and spectral resolution	05
<b>Q. 8</b>	<b>(a)</b>	<b>Attempt the following</b>	04
	(1)	It is easy to integrate GIS, Remote Sensing and GPS technologies because these are Digital, spatial and generic? True/False	
	(2)	Remote Sensing is unique because it provides Special information? True /False	
	(3)	Census? Is an area of Remote Sensing application? True/False	
	(4)	The purpose of georeferencing is to detect object? True/False	
	<b>(b)</b>	What is electromagnetic radiation?	02
	<b>(c)</b>	Write down the difference between Active vs. Passive sensing	03
	<b>(d)</b>	Explain remote sensing working with diagram	05
<b>Q. 9</b>	<b>(a)</b>	<b>Attempt the following</b>	04
	(1)	What is the number of GPS satellites used?	
	(2)	What type of antenna is used in GPS systems?	
	(3)	IIF latest block of GPS satellites? True/False	
	(4)	Write one application example of GIS/GPS	
	<b>(b)</b>	What is supervised classification?	02
	<b>(c)</b>	What is Image enhancement? Explain in detail	03
	<b>(d)</b>	How remote sensing is useful for agriculture sector ? Write a note	05

<b>Q. 10</b>	<b>(a)</b>	<b>Attempt the following</b>	<b>04</b>
	<b>(1)</b>	Spatial? Is an area of Remote Sensing application? True/False	
	<b>(2)</b>	GPS is an active system? True/False	
	<b>(3)</b>	What is the approximate time taken by the GPS for one complete orbit?	
	<b>(4)</b>	Precise position service position services provided by the GPS require crypto keys? True/False	
	<b>(b)</b>	What is data integration in GIS-GPS?	<b>02</b>
	<b>(c)</b>	List out elements of visual interpretation and explain any one in detail	<b>03</b>
	<b>(d)</b>	What is digital image processing? Explain in detail	<b>05</b>