PART-B: Descriptive

Time: 2 hrs. 40 min. Marks: 50

[Answer question no.1 & any four (4) from the rest]

1. What is map projection? Classify map projections based on developable 10 surfaces. 2. a. Describe the shape and size of the earth with an illustration and 5+5=10highlight the concept of flattening. b. How would you locate yourself on the earth's surface? 3. a. What is geodetic surveying? 4+6=10b. Describe the basic principles of Prismatic Compass surveying. Draw illustration in this regard. 4. a. Describe how the graticules on Simple Conical Projection with one 6+4=10standard parallel are developed. b. Write down the common properties of all conical projections. 5. a. What are the elements of map layout? 5+5=10b. Prepare a map layout of a hypothetical area with a theme of your own choice. 6. a. Write a short note on triangulation by theodolite. 6+4=10b. How would you determine the height of an object by using theodolite. 7. a. Write down the common properties of all Zenithal projections. 5+5=10**b.** What are the uses and limitations of Polar Zenithal Stereographic Projection? 8. a. What is digital cartography? What are the basic data structures of 3+3+4 digital cartography? =10**b.** Write very briefly on the data sources of digital cartography.

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REV-00 MGE/64/71

2018/06

MA/M Sc GEOGRAPHY SECOND SEMESTER CARTOGRAPHY MGE-204

(Use separate answer scripts for Objective & Descriptive)

Duration: 3 hrs. Full Marks: 70

(PART-A: Objective)

Time: 20 min. Marks: 20

Choose the correct answer from the following:

 $1 \times 20 = 20$

1. What is the average radius of the earth?

2. What is name of mathematical model of the earth?

a. Geoidb. Globec. Ellipsoidd. Sphere

3. To which category soil map of India belongs?

a. Qualitative thematic map b. Quantitative thematic map

c. Cadastral map d. Topographic map

4. Who is regarded as the father of Cartography?

a. Herodotus b. Eratosthenes

c. Mercator d. Mollweide

5. Which of the following is the largest scale?

a. 1:1,000,000 **b.** 1:250,000 **c.** 1:50,000 **d.** 1:10,000

6. Which one of following is **not** a component of map layout?

a. North Arrow b. Scale bar

c. Magnetic Compass d. Longitude – latitude grids

7. Name an instrument that measures the altitude of an object?

a. Prismatic Compass b. Transit Theodolite

c. Rotameter d. Plane Table

8. Which instrument helps us to prepare contour map?

a. Transit Theodolite b. Plane Table

c. Dumpy Level d. Abney Level

Which instrument is used for the purpose of triangulation?	
a. Transit Theodolite	b. Dumpy Level
c. Prismatic Compass	d. Plane Table
Which of the following agency prepares Indian topographic maps?	
a. NATMO	b. NRSC
c. Survey of India	d. Geological Survey of India
The direction of the line AB is 60°, what is the direction of BA?	
a. 360°	b. 180°
c. 120°	d. 240°
2. For what purpose the Plane Table is used?	
a. Primary survey	b. Secondary survey
c. Tertiary survey	d. Levelling
3. From which cardinal point the Whole Circle Bearing (WCB) of a line is measured in clockwise direction?	
a. West	b. East
c. South	d. North
In designing graticules in some map projections, we take the help of light source. To which category such map projections belong?	
a. Conventional	b. Nonperspective
c. Perspective	d. Zenthal
Where is the source of light in Polar Zenithal Gnomonic Projection?	
a. At pole	b. At the centre of the globe
c. At equatord. Diametrically opposite point of the tange	nt plane
What is radius to draw the standard parallel standard parallel, when radius of the reduce	
a. R sin Ø	b. R cos Ø
c. R cot Ø	d. R tan Ø
7. Given that the radius of the reduced globe is R. What is the distance of Ø⁰ parallel from	
the equator in Cylindrical Equal Area Projection?	
a. R sin Ø	b. R cos Ø
c. R cot Ø	d. R tan Ø

18. Which of the following map projection is the best for a map of India? a. Bonne's Projection b. Conical Projection with one standard parallel d. Cylindrical Equal Area Projection c. Sinusoidal Projection 19. Which of the following is not an isopleth? a. Contour b. Isobar c. Isotherm d. Isoheight 20. In digital cartography, what is the meaning of spatial data? a. Numeric data b. Text data c. Graphic data d. Attribute data