



**WEST BENGAL STATE UNIVERSITY**  
B.A./B.Sc. Honours 1st Semester Supplementary Examination, 2021

**GEOACOR02T-GEOGRAPHY (CC2)**

**CARTOGRAPHIC TECHNIQUES**

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.  
Candidates should answer in their own words and adhere to the word limit as practicable.  
All symbols are of usual significance.*

**CATEGORY-I**

**Answer any one question from the following (within 600 words) 10×1 = 10**

1. Explain the basics of UTM Projection and its grid system. Mention its major limitations. 7+3
2. Make a comparative analysis between perspective and nonperspective projection. Critically evaluate the uses of Mercator's Projection. 7+3

**CATEGORY-II**

**Answer any four questions from the following (within 150 words each) 5×4 = 20**

3. If the distance between the points A (x, 2) and B (4, 7) is 9, then what would be the value of x?
4. Describe the advantages and disadvantages of Open Series Map.
5. A map is redrawn by reducing 1/3rd of the original size. If the scale of the new map is 1:120,000, what would be the scale of the original map?
6. What do you mean by radial scale factor and tangential scale factor of a projection?
7. In a UTM Zone two points P and Q are located at a distance of 400 m from the central meridian towards east and 300 m from the central meridian towards west respectively. What are the easting values of P and Q?

8. Which projection is suitable for the use of sailors and discuss the unique property which make it so useful.
9. The contour interval on a topographic map is 10 m. There are 132 contour lines between your base camp and a mountain peak 2 km away. Find out the slope of the mountain.

**CATEGORY-III**

**Answer any five questions from the following**

2×5 = 10

10. What is the concept of minimum error projection?
11. What is generating globe?
12. Classify map on the basis of scale.
13. What is vernier constant?
14. What is WGS 84 datum?
15. The diagonal distance of a square on the map is measured 14 cm. Calculate R.F. of the map when the actual length of one side of the square is 24.75 km.
16. The size of which body of water is most distorted on a Mercator projection and why?  
(a) Red Sea    (b) Arctic ocean    (c) Bay of Bengal    (d) Atlantic ocean  
(e) Mediterranean sea.
17. What is false easting and northing?
18. What is loxodrome?

**N.B. :** *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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