

2017

M.Sc.

2nd Semester Examination

REMOTE SENSING AND GIS

PAPER—RSG-208

(PRACTICAL)

Full Marks : 25

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

(Geodesy & GPS)

Answer all questions.

- 1. Determine the shortest distance between Islamabad (33°37' N and 73°06' E) from Kolkata (22°34' N and 88°24' E) and also the direction of Islamabad and vice-versa. Given that the radius of the earth is 6368 Km.**

2. Calculate the area between 25° N 20° S and 30° W and 40° E on Everest spheroid. Given that the semimajor axis

$$a = 6377301.243\text{m and flattening } f = \frac{1}{300.8017}$$

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3. The co-ordinate of base station is $22^{\circ}25'50.75''$ N, $87^{\circ}18'03.84''$ E. Locate the base station in the field. Find the corrected GPS observation of four corners of the University playground. Plot the playground using suitable GIS software. Tabulate the data sheet showing computation steps of base station correction.

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4. Laboratory Note Book and Viva voce.

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