

M.Sc. 1st Semester Examination, 2011

REMOTE SENSING AND GIS

PAPER—RSG-105

(Practical)

Full Marks : 25

Time : 1 hour

Answer any **two** questions

The figures in the right-hand margin indicate marks

1. Calculate the discharge of a river when the cross sectional areas at stn. $A = 3.4 \text{ m}^2$, stn. $B = 2.4 \text{ m}^2$ and stn. $C = 3.6 \text{ m}^2$; distance between the stn. A and stn. C is 15 m; and the mean time taken for a floating ball to travel the distance between A to $C = 24$ seconds.

10

(Turn Over)

2. Prepare a geomorphological map from 5 minute/5 minute grid cell of S.O.I. Toposheet with delineation of different features by a tracing paper. Mention the linear scale, title of the map and legend of the prepared map. 10
 3. Draw a cylindrical Equal Area Projection on the graticules extending from 20° North latitude to 60° South latitude and 20° East longitude to 80° East longitude when the RF is 1 : 100,000,000. 10
 4. Compare the properties between Marcator projection and UTM projection. 5 + 5
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