

2025

M.Sc. 1st Semester Examination

GEOGRAPHY

Paper : GEOC405X8

(Sedimentology)

(Practical)

Full Marks : 15

Time : One Hour

The figures in the margin indicate full marks.

Answer any two questions :

1. Using the provided sieve analysis data, calculate the percentage of sand retained on each sieve. Draw Ogives and determine the median value of grain size distribution. Interpret the same. 4+1

Sieve Number	Mesh Size (mm)	Sand Retained (g)
1	0.60	3.0
2	0.40	4.5
3	0.30	6.5
4	0.25	4.0
5	0.20	20
6	0.15	65

P.T.O.

Sieve Number	Mesh Size (mm)	Sand Retained (g)
7	0.14	80
8	0.12	95
9	0.10	65
10	0.08	40
Pan	N/A	32
Total weight :		415

2. Using the five provided pebble samples, measure the necessary parameters with a vernier caliper. Then, calculate the Roundness index, and interpret the results.

3+2

3. See the provided sedimentary facies structure data. Draw the facies log using SedLog software, then manually draw the same facies log on your examination sheet and interpret it.

4+1

Beds	1 (Bottom)	2	3	4	5 (Top)
Thickness	55	15	80	25	15
Base Boundary	Sharp	Erosional	Sharp	Sharp	Erosional
Dip (deg)	15	0	7	10	12
Paleocurrent	130	0	100	100	130
Grain Size	Top	c	m	m	f
	Base	vc	c	m	f
Lithology type	Sandstone	Sandstone	Sandstone	Siltstone	Siltstone
Structural type	ST	SH	ST	SP	SR

4. Laboratory Notebook and Viva-voce.

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