

Integ. MSc. App Geo Semester-6 Examination

AGL 308

Engg Geology

April-2023

Time : 2-30 Hours]

[Max. Marks : 70

QUESTION -1 Write the following (7 marks each)

- (i) Define earthquake, mention its causes in brief.
- (ii) Explain seismic waves and its types

Or

- (i) Role of engineering geologists in construction of major manmade structures
- (ii) Earthquake mitigation and preventive measures.

QUESTION -2 Write the following (7 marks each)

- (iii) What is grouting and explain the process in brief.
- (iv) Define rock aggregate, its type and uses.

Or

- (iii) Explain rock bolting.
- (iv) Properties of Construction material.

QUESTION -3 Write the following(7 marks each)

- (v) Define Rock Mass Rating and explain in brief its parameters.
- (vi) Geological factors affecting dams and reservoir.

Or

- (v) Explain Gravity and Buttress dam with diagram.
- (vi) Define with labelled diagram- Crest, Spillway, Gallery, Sluiceway, Freeboard, Stilling basin.

QUESTION -4 Write the following(7 marks each)

- (vii) Define Tunnel and its parts with labelled diagram.
- (viii) Give a brief classification of landslides.

Or

- (vii) What is Cut and Cover method in tunnelling mention its pros and cons.
- (viii) Give an account of different causes of landslides.

QUESTION -5 Write the following (attempt any 7 from 12)

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1. The dam made on alternating strong and weak rocks is.....
2. is the part of the dam in contact with ground on the downstream side.

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3. The sudden movement under the influence of gravity of disintegrated, degraded rocks, rock debris and resultant soil on slopes is termed as.....
4. waves that travel through the inner of the earth.A
5. Full form of TBM
6. Full form of RMR.....
7. Difference between pervious and impervious material.
8. A soil with a high permeability allows water to flow underneath the dam.
 - a) True
 - b) False
9. Which of the following is the made made/ anthropogenic cause of earthquake.
 - a) Volcanic eruption
 - b) Meteorite
 - c) Mining
 - d) Plate tectonics
10. Is defined as the free downslope movement of loose rock material under the influence of gravity.
 - a) Debris flow
 - b) Mud flow
 - c) Slump
 - d) Rockfall
11. The free fall of loose soil material during excavation is termed as
 - a) Squeezing
 - b) Ravelling
 - c) Running
 - d) Flowing
12. The vertical irregular underground opening is called as
 - a) Shaft
 - b) Raise
 - c) Stopes
 - d) Adit

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