

**B.Sc. Semester-VI Examination, 2022-23****GEOLOGY [Honours]**

Course ID : 62012 Course Code : SH/GEL/602/C-14(T)

Course Title : Engineering Geology

Time : 1 Hour 15 Minutes

Full Marks : 25

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*

1. Answer any **five** questions of the following:  $1 \times 5 = 5$ 
  - a) Mention one major application of the study of Rock Mass Rating.
  - b) Name the roof-support system essentially used for underground mining.
  - c) Mention two major objectives of geological investigation for an engineering project.
  - d) Mention one major utility (other than geological) of reservoir.
  - e) Which rock was used to build Qutub Minar?
  - f) Define the axis of a dam.

g) Which one between gneiss and schist, is the most desirable rock type for a dam site?

h) Mention two slope failure indicators.

2. Answer any **two** questions of the following:  $5 \times 2 = 10$

a) What are the geological conditions for tunneling?

b) With sketches compare between translational and rotational landslide.

c) Briefly discuss the major factors of mass movement.

d) Write a short note on different foundation treatment methods.

3. Answer any **one** question of the following:  $10 \times 1 = 10$

a) Briefly discuss different types of grouting and their applications. 10

b) Briefly discuss different types of dams with the help of neat labelled sketches. 10

-----