

Total No. of Questions : 8]

SEAT No. :

PA-1183

[Total No. of Pages : 2

[5925]-205

S.E. (Civil Engineering)

ENGINEERING GEOLOGY

(2019 Pattern) (Semester-III) (207009)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) All questions are compulsory.
- 2) Figures to the right indicate full marks.
- 3) Neat diagrams must be drawn wherever necessary.

- Q1)** a) Describe various types of unconformities with neat sketches. [6]
b) Explain sill and Dyke as igneous intrusions. [5]
c) Write short notes on: [6]
i) Symmetrical and asymmetrical folds.
ii) Strike and dip of rocks.

OR

- Q2)** a) Explain various parts Fold and any three types of fold with neat sketches. [6]
b) Write short note on plate tectonic. [5]
c) Describe the classification of fault and their engineering significance. [6]

- Q3)** a) What is the effects of faulting and their significance in civil engineering [6]
b) Describe the application of remote sensing in civil engg. [6]
c) Describe photo interpretation elements of aerial photographs. [6]

OR

- Q4)** a) Explain in detail the importance of preliminary geological exploration in civil engineering projects. [6]
b) Write an applications of GIS in civil engg. [6]
c) Explain any three methods of subsurface investigation. [6]

- Q5)** a) Discuss in detail preliminary geological investigations of tunneling. [6]
b) What are the geological requirement for the foundation of dam? [6]
c) Discuss the feasibility of dam site, with dipping and horizontal strata. [6]

OR

P.T.O.

- Q6)** a) A site is proposed for excavation of tunnel is A-B and M-N, which is passing through axis and limb region of fold respectively. Justify the suitability of tunnel in such conditions. [6]
- b) Explain with appropriate example the feasibility of dam alignment which is crossing DYKE. [6]
- c) Write a note on the dam located on folded geological structure. [6]

- Q7)** a) Describe different types of seismic waves in detail. [6]
- b) What are landslides? What are the causes of it? [5]
- c) Define Aquifers. Explain in short the types of aquifers. [6]

OR

- Q8)** a) Write a note on building stones. [6]
- b) What are the causes of an earthquakes. [5]
- c) Explain the Geological conditions favorable for natural springs and artesian wells. [6]

