

## B.Sc. Semester-5 Examination

SE 305

Geology

March-2024

Time : 2-30 Hours]

[Max. Marks : 70]

**Instructions:** (i) Draw neat diagrams whenever necessary.  
 (ii) Write proper answer number.

**Q-1** Write a detailed note on porosity in various types of rocks. (14)  
**OR**

**Q-1** (a) Zone of subsurface water. (07)  
 (b) Leaky and perched aquifers. (07)

**Q-2** Discuss watershed management tools and benefits of watershed. (14)  
**OR**

**Q-2** (a) Hydrology and remote sensing. (07)  
 (b) Explain study of geological formations and landforms by remote sensing techniques in hydrogeology. (07)

**Q-3** Describe Metamorphic and Sedimentary rocks used as building stones. (14)  
**OR**

**Q-3** (a) Explain individual foundation. (07)  
 (b) Describe dams on unconsolidated rocks. (07)

**Q-4** Explain dams built on different types of rocks. (14)  
**OR**

**Q-4** (a) Discuss importance of geology in reservoirs. (07)  
 (b) Describe R.C.C. dams. (07)

**Q-5** **Attempt any seven questions out of twelve.** (14)

(i) Define the term specific retention.  
 (ii) Define Aquitard. Provide example.  
 (iii) Draw a figure of artesian well.  
 (iv) What do you mean by river basin?  
 (v) Provide types of land need to be conserved in a sub-watershed.  
 (vi) Differentiate between macro and micro watershed.  
 (vii) Draw a figure of stepped foundation.  
 (viii) Name the building stone used in Modhera Sun temple of Gujarat and Taj Mahal.  
 (ix) What is importance of Appearance in building stone?  
 (x) What is free board in dam?  
 (xi) Differentiate between reservoir and dam.  
 (xii) Which major dam is built on Sabarmati River? Also give its type.

