(3 hours) **(Total marks 80)**

NB: **(1) Question No 1 is compulsory**

(2) Attempt any three questions from remaining five questions

(3) Figures to the right indicates full marks

(4) Draw neat sketches whenever necessary

1.	**(a)**	Write identifying properties and use of following minerals	05
	(i)	Talc	
	(ii)	Diamond	
	(iii)	Gypsum	
	(iv)	Corundum	
	(v)	Pyrite	
	(b)	Explain following terms in short	05
	(i)	Erosion	
	(ii)	Dyke	
	(iii)	Epicentre	
	(iv)	Talus slope	
	(v)	Cross bedding	
	(c)	Explain with the help of diagram	10
	(i)	Anticline and syncline	
	(ii)	Hanging valley	
	(iii)	Alluvial Fan	
	(iv)	Asthenosphere and lithosphere	
	(v)	Crag and tail	
2.	**(a)**	Describe erosional features of river and wind.	10
	(b)	Give structure and texture of Igneous rocks with suitable example.	10

3.	**(a)**	What are the different types of folds?	05
	(b)	Give classification of fault. What are the engineering considerations of fault at the site of construction?	10
	(c)	What is stratigraphy? Explain lows of stratigraphy.	05
4.	**(a)**	Give classification and economic importance of Deccan traps.	06
	(b)	What are joints? Explain different types of joints in igneous rocks	04
	(c)	What are the various forces acting on a dam? Explain suitability of various rocks as foundation on dam site.	10
5.	**(a)**	What are the indirect methods of geological investigations? Explain electric resistivity method of geophysical exploration.	10
	(b)	What is an aquifer? Explain necessary condition for artesian aquifer.	10
6.		Write short notes on **(any five)**	20
	(a)	Richter scale	
	(b)	Influent and effluent stream	
	(c)	Central and fissure type eruption	
	(d)	Properties of building stone	
	(e)	Earthquakes zones of India	
	(f)	Causes of mass movement	
