

GEOLOGY

*Define weathering. Discuss the various factors which influence weathering.08,09,07,05,02,01

*Explain how you can determine the unknown hardness of a material.09,07,02,01

*What factors should be considered for the design of a building structure in seismic areas?09

*What is landslide? Describe the various causes of landslide.09,04,01

*What are the differences between landslides and land subsidence?09,08,07,06,04

*What are the different kinds of waves that are produced during an earthquake? Discuss in brief.09,08,06,05

*What is meant by rock cycle? Explain with diagrammatic sketch.09,04,03,02

*Define sedimentary rock. Discuss the process of formation of sedimentary rock. 09,08,06,05,04

*What are primary and secondary structures?09,08,06

*Explain the requirements of a stone should fulfill so that it can be suitably used as 1)Railway ballast 2)Concrete aggregate09,08,07,02,01

3)Rip-rap material02,01

*Define the following terms with neat sketches 1)Overlap08,02 ,01
2)Sand dunes



080063

3)Unconformities05 4)Reverse fault08,07,06,05,03,02,01 and
5)Intrusive rocks09,01

*What is meant by geology? Discuss branches of geology08,06,05,04,02

*Why should a civil engineering study geology?08,07,02

*Define 1)sand dunes04,03,01 2)Deserts05 and
3)Scree08,05,03

*Define epicenter and seismic coefficient 04,03.,01

*Explain dip and strike with neat sketches.08

*Define structural geology.08,06

*Define overturned fold.08,07,06

*Define metamorphism. Describe different types of
metamorphormism07,06,04

*Define isoclinic fold and anticline01,07

*Describe the geological work of stream as an agent of
erosion07,06,04,02

*What type of structure do you suggest for earthquake07,06,02

*Write down the causes of earthquake01.....

*Define recumbent fault.07,05

*Define main factors, which influence the erosion done by wind.06

*Write short notes on: 1)Sand dunes05 2)Intrusive rocks08

*Explain dip and strike with neat sketches.06,04



*Define horst06,05

*What are the preventive measures that can be taken against land slides05

*What is land subsidence? What are the different causes of it?05

*Discuss the causes of earthquake.08,05

*Define Nappe. 05

*What are different causes of folding?05,03

*Define rock.04

*Define 1)seismogram 2)Tsunamis04

*Define Loess.04

*Classify the folds on the basis of intensity of deformation and of position of the axial plane.04

*Write the name of any ten common forming minerals.04,03

*Do mechanical and chemical weathering operate independently of each other? Why is mechanical weathering so important to chemical weathering?03

*Joints or cracks in rocks are natural passageways for air and water. What should happen to joints with time?03

*What is spheroidal weathering? 03

*What are dip and strike of strata? How are they expressed?03

*Describe different parts of fold with sketch.03

*Discuss with sketch 1)Parallel fold 2)Angular unconformity03



080063

- *Write short notes on dressing of stones.03,02
- *Define progressive and retrogressive metamorphism.02
- *Define Normal fault,Monocline&Anticlinorium.02
- *What is landslide? Describe different types of landslides.02
- *Define metamorphism. What are the agents of metamorphism and how do they play their works?01
- *Classify the igneous rock on the basis of depth of origin and chemical composition. 01



080063

GEOMORPHOLOGY

- *Discuss the different of drainage network development with neat sketches.09
- *Describe the following drainage pattern 1)Dendritic
2)Radial.0309,08,05 3)Barbed 03
3)parallel 05
- *Find out the total number of stream segments in a 5th order drainage basin whose bifurcation ratio 4. 09
- *What do you mean by river capture? 05Write down the conditions on which river capture occurs?09,08
- *Describe the process of valley lengthening.09
- *Distinguish between the followings 1)Sinuosity and toruosity 2)Pools & riffles 3)Neck cutoff & chute cutoff.09

*Define regular 05,irregular and compound meander.09,07,04,01Simple04

*Explain dominant discharge in river flow.09,06,01

*Describe the autogenic causes of river instability.09,08,07,06,04,01

*Distinguish between competence and capacity of a river.09,08,07,06

*What are the characteristics of a mature stream?09,07,06,05,03,02,01

*Discuss the methods of transportation work of rivers.09,08

*Write short notes on 1)Alluvial fans08,07,06,05,04,03,02,012)Natural levees.05,09

*Discuss the salient features of 1)Bed rock channels 2)Alluvial channels.08

*Describe on what factors the deepening of a river valley depends upon.08,03

*Discuss the characteristics of a braided pattern.08,04,01

* Define mature stream. 08,07,06,03,02,01

*What is cut off ratio? Write down the procedure which should be considered for the design and execution of artificial cutoff efficiently.08,07,03,02,01

*Write down the ideal favorable conditions for the formation and growth of delta.08,05,03,02,01

*Draw a typical cross-section of a typical flood-plain.07,06,04,03,02

*Discuss the effect of degradation of a river.07,06,04,01



080063

*Write short notes on 1)Thalweg length 2)Dominant discharge
3)Degradating river.07

*Distinguish between braided and distributary channels.07,06,04,03,02

*Differentiate between 1)Sediment yield and Sediment load 05
2)Drainage density and stream frequency.07

*Explain the term bed generative discharge introduced by
schaffernak.07,04How to determine the bed generative discharge04

*Describe with neat sketches orders of stream channels
suggested by Horton.07,05,04,03,01

*Write short notes on 1)Loop cutoff 2)Chute cutoff.07,05

*What do you mean by drainage basin05? Discuss

*Differentiate between 1)Thalweg length and valley length 2)Regular
meander and irregular meander

*Describe the different catagories of river on the basis of the type of
material exposed on the channel bed and banks.05

*What major features are found on a flood plain?05

* Adequate flood protection for a valley downstream cannot be achived
by construction even of a very large number of damns on small upstream
tributaries.Explain 04,03

*Write short notes on 1)Water shed02 2)Aggrading river.04,02

*Describe the causes of instability in river morphology.03

*What are the variables that are necessary to know while studying the
behavior of alluvial streams?02

*Explain the effect of amp scale on the definition of stream order.01



080063

*Write short notes on 1)Drainage net 2)Flashy rivers 3)Sinuosity.01



080063