

Hall Ticket Number:

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Code No. : 12123 N/O

VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS), HYDERABAD

Accredited by NAAC with A++ Grade

B.E. (Civil Engg.) II-Semester Main & Backlog Examinations, August-2023

Geology

Time: 3 hours

Max. Marks: 60

Note: Answer all questions from **Part-A** and any **FIVE** from **Part-B**

Part-A (10 × 2 = 20 Marks)

Q. No.	Stem of the question	M	L	CO	PO
1.	Explain physical properties of Calcite mineral.	2	2	1	1
2.	Discuss the various agents of metamorphism.	2	1	1	1
3.	Write a detailed note on physical weathering.	2	2	2	1
4.	Discuss the effect of faulting on various engineering projects.	2	3	2	1
5.	What are surface and sub-surface water resources? Name them.	2	1	3	1
6.	Define water table.	2	1	3	1
7.	What are types of Dams?	2	2	4	1
8.	Briefly explain about water tightness	2	3	4	1
9.	What is the influence of ground water conditions for successful tunnels?	2	4	5	1
10.	What is Over Break??	2	1	5	1
Part-B (5 × 8 = 40 Marks)					
11. a)	Explain the importance of: i) Granite, ii) Quartzite, iii) slate and iv) Schist.	4	2	1	1
b)	Define the following terms: i) Hardness, ii) Luster, iii) Fracture, iv) Cleavage.	4	1	1	1
12. a)	Explain the following with neat sketches: (i) Open and closed folds, (ii) Graded Bedding, (iii) Current Bedding and (iv) Anticline and syncline.	4	2	2	1
b)	Define unconformity, explain deferent types of unconformities.	4	3	2	1
13. a)	Explain the following: i) Aquifer, ii) Aquiclude and iii) Hydrological cycle.	4	2	3	1
b)	Explain geological controls of ground water movement	4	4	3	1

Contd... 2

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14. a)	Explain silting of reservoir and its control	4	3	4	1
b)	Explain how faults and folds affect the choice of locations for dams and tunnels.	4	2	4	1
15. a)	Explain with neat diagram favorable and unfavorable dips at a Tunnel site.	5	3	5	1
b)	What are causes, effects and preventive measures of landslides?	3	2	5	1
16. a)	What do you understand by minerals? How minerals are formed?	4	4	1	1
b)	Explain with the help of neat sketch important types of folds as distinguished on the basis of a mode of occurrence.	4	2	2	1
17.	Answer any <i>two</i> of the following:				
a)	Describe various investigations in ground water exploration	4	1	3	1
b)	Explain in detail the geological investigations of a good dam site.	4	2	4	1
c)	What are Purposes of tunnels?	4	4	5	1

M : Marks; L: Bloom's Taxonomy Level; CO; Course Outcome; PO: Programme Outcome

i)	Blooms Taxonomy Level - 1	20%
ii)	Blooms Taxonomy Level - 2	36.25%
iii)	Blooms Taxonomy Level - 3 & 4	43.75%
