Code No: RT31014 **R13** SET - 1

III B. Tech I Semester Supplementary Examinations, October/November - 2018

ENGINEERING GEOLOGY

(Civil Engineering)

Time: 3 hours Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B)**
2. Answering the question in **Part-A** is compulsory
3. Answer any **THREE** Questions from **Part-B**

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PART –A

1	a)	Define frost action? What is the role of freezing of water in weathering process?	[3M]
	b)	What is specific gravity? How can it determined for minerals?	[4M]
	c)	Discuss chevron and drag fold?	[3M]
	d)	Describe isoseismal lines and their relation to epicenter.	[4M]
	e)	Define deformability modulus and shear strength	[4M]
	f)	What are the factors affecting the water-tightness of a dam reservoir.	[4M]

PART -B

2	a)	Define hydration? Discuss geological work of rivers.	[6M]
	b)	Write short note on i) river meandering ii) escarpments	[4M]
	c)	What is the importance of engineering geology related to civil engineers in working site?	[6M]
3	a)	Write short note on i) Granulose ii) Maculose iii) Schistose	[6M]
	b)	What are igneous rocks? How they are formed?	[4M]
	c)	Describe the physical properties of i) Quartz ii) Hornblende iii) Talc	[6M]
4	a)	What are unconformities? Discuss types of unconformities, What engineering problems are created by the presence of unconformities.	[8M]
	b)	What is meant by folding of rock? How is it produced and classify types of fold?	[8M]
5	a)	Discuss and describe the causes of earthquake? What precautions are taken in building constructions in seismic zones?	[8M]
	b)	Discuss in details about resistivity survey method and applications of electrical resistivity method for ground water exploration.	[8M]
6	a)	Discuss the importance of geophysical methods, and give its significance	[8M]
	b)	Write various electrical methods of geophysical prospecting? Explain using self potential method in geophysical prospecting.	[8M]
7	a)	Write short note on i) purpose of tunnel ii) over break in tunnels.	[8M]
	b)	What are the geological conditions necessary for the stability of a dam and life of a reservoir?	[8M]

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