20P253		P253 (Pages: 2)	Name
SECOND SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2021			
		(CUCSS - PG)	
(Regular/Supplementary/Improvement)
CC19P GEL2 C07 - HYDROGEOLOGY			
		(Applied Geology)	
(2019 Admission onwards)			
Time: Three Hours		: Three Hours	Maximum: 30 Weightage
I.	Sh	hort answer type questions. Answer any <i>four</i> questions.	
	1.	Hydrographs.	
	2.	Artesian aquifer.	
	3.	Barometric efficiency.	
	4.	Jacob's straight line method.	
	5.	Stiff's diagram.	
	6.	Recharge pits.	
	7.	Cable tool drilling.	
			$(4 \times 2 = 8 \text{ Weightage})$
II.	Sh	hort essay questions. Answer any four questions.	
	8.	Saline water intrusion and its prevention.	
	9.	Darcy's law and its applications.	
	10.	0. Well logging methods.	
	11.	1. Rain water harvesting methods.	
	12.	2. Arsenic in ground water.	
	13	3. Ground water problems related to foundation work	

III. Long essay. Answer any *two* questions.

14. Hydrogeomorphic mapping.

- 15. Describe various physical and chemical properties of ground water.
- 16. Describe electrical resistivity methods of ground water exploration.
- 17. Explain various types of wells, their design and construction methods.
- 18. Describe unsteady radial flow in confined and unconfined aquifers.

 $(2 \times 5 = 10 \text{ Weightage})$

 $(4 \times 3 = 12 \text{ Weightage})$
