Hall Ticket Number :										

R-15

Code: 5G681

IV B.Tech. II Semester Advanced Supplementary Examinations October 2020

Design and Drawing of Irrigation Structures

(Civil Engineering)

Max. Marks: 70 Time: 3 Hours

Answer any one question from the following (1 x 70 = 70Marks)

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			Marks	CO	Blooms Level
1.	a)	Design size and number of notches required for a canal drop with the following particulars: Full supply discharge = 18 cumecs Bed width = 13 m F.S. depth = 2 m Assume any other data if required.	60M	1	3
	b)	Explain why trapezoidal notches are preferred to rectangular notches in the design of canal drops.	10M	5	2

OR

2.		Design a cross regulator for a channel which takes off from the parent channel with following data: Discharge of the parent channel = 105 cumecs Discharge of distributary channel = 20 cumecs FSL of the parent channel u/s = 208.5 m FSL of the parent channel d/s = 207.1 m Bed width of parent channel u/s = 43 m Bed width of parent channel d/s = 36 m Full supply water depth in the parent channel u/s = 2.5 m Full supply water depth in the parent channel d/s = 2.5 m FSL of distributary = 206 m Bed width of distributary = 14 m Permissible Khosla's safe exit gradient = 1/6 Silt factor = 0.8 m	70M	1	3

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