

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL

Paper Code: CE(PE)701C Hydraulic Structure

Time Allotted: 3 Hours

Full Marks:70

The Figures in the margin Indicate full marks. Candidate are required to give their answers in their own words as far as practicable

Group-A (Very Short Answer Type Question)

Which boundations are suitable for earthen and rock-fill dams? What is the auts of a gravity dam? Which dam is suitable for narrow valleys? The general bed level at the dam site should preferably be lower than that of the river basin. Is the statement correct? Which the acts as a dividing line between dry (or molist) and submerged line? Which the percentage of energy dissipation in a hydraulic jump increases with the increase in the Froude number. Is the statement bur or laise? Which statement the or laise? Which foundation is not fit for concrete gravity dam or for rock-fill dams? Which faiture occurs when the net honzontal force above any plane in the gravity dam or at the base of the dam exceeds the increasi resistance developed at that level? Which faiture occurs when the net honzontal force above any plane in the gravity dam or at the base of the dam exceeds the increasi resistance developed at that level? Which are transverse joints in concrete gravity dams? Group-8 (Short Answer Type Question) Answer any three of the following (5x 3 - 15) Classify dams according to their (i) use and (ii) hydraulic designs. (5) What are the location criena for dam site? Explain about Grout curtain and Relief wells. (5) How the upith pressure diagram will get modified under The presence of a drainage gallery it. Tension crack near the heef of the dam? Discuss energy dissipation in hydraulic jump. Group-C (Long Answer Type Question) Answer any three of the following 1(5) Quee spillway Of Trooph spillway String channel spill way. Whith the help of neat sketches illustrate: a) Quee spillway Of Side channel spill way. What are the investigations required for dam site? (6) Answer any three of the following: 1) Diversion dam and gravity dam 1) Also suggest suitable precautions that should be under taken to avoid each type of failure (6) (7) Answer are of the following: 1) Diversion dam and gravity dam 1) Presidence to the following: 1) Diversion dam and con lond dation of dams. (8) How	Answer any ten of the following :	
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