



	(b)	Explain the methods of reduction of uplift pressure with neat sketch.	07
<b>Q-3</b>		<b>Attempt all questions</b>	<b>(14)</b>
	(a)	Explain cracking of concrete during the construction of concrete gravity dams, and its remedial measures.	08
	(b)	What should be the maximum depth of elementary profile of a dam if the safe limit of stress on the masonry should not exceed $160 \text{ T/m}^2$ . Assume unit weight of masonry = 2.40.	06
<b>Q-4</b>		<b>Attempt all questions</b>	<b>(14)</b>
	(a)	Differentiate between low gravity dam and high gravity dam	06
	(b)	Briefly discuss the factors affecting the selection of site for a dam.	08
<b>Q-5</b>		<b>Attempt all questions</b>	<b>(14)</b>
	(a)	Describe the design feature of chute spillway.	07
	(b)	Enlist different forces that may act on a gravity dam. Indicate their magnitudes, directions and locations.	04
	(c)	Why is it necessary to provide a fall in a canal?	03
<b>Q-6</b>		<b>Attempt all questions</b>	<b>(14)</b>
	(a)	Discuss in brief the causes of failure of earthen dams.	07
	(b)	Distinguish between the Rolled-fill earth dam and Hydraulic-fill earth dam	04
	(c)	Give the classification fall.	03
<b>Q-7</b>		<b>Attempt all questions</b>	<b>(14)</b>
	(a)	Discuss step by step the analytical procedure that you will adopt for analyzing the stability of gravity dams.	07
	(b)	Explain “pore pressure” in earthen dam.	03
	(c)	Discuss the advantages of a siphon spillway.	04
<b>Q-8</b>		<b>Attempt all questions</b>	<b>(14)</b>
	(a)	Write a note on Glacis fall and Montague fall	08
	(b)	Explain the function of distributary head regulator with neat sketch.	06

