

1. Question number **one** is compulsory.
2. Attempt any three of the remaining questions.
3. Each question carries equal marks.
4. Figures to the right indicate marks.
5. Make suitable assumptions when required.

Q1	Answer any four of the following	20
(a)	Write short notes on ASME B 31.3	
(b)	Classify the piping materials and describe them.	
(c)	What kind of stresses occur in piping system?	
(d)	Explain the responsibilities of piping engineer.	
(e)	How to calculate thickness of pipe.	
(f)	Explain vent and drain.	
Q2	(a) Explain with figure IRON –CARBIDE phase diagram.	10
	(b) Explain Piping system corrosion.	10
Q3	(a) Explain classification of MoC for piping .	10
	(b) Explain with neat diagram steam trap and its types.	
Q4	(a) Explain with neat diagram Gate valve.	10
	(b) Explain equation to calculate pressure drop	
Q5	(a) Explain different piping supports.	10
	(b) Explain any one type of valve in detail.	10
Q6	(a) Explain PFD in detail.	10
	(b) Explain Any one NDT method in detail	10
