

Enrolment Number: _____

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
B.TECH MIDSEM EXAMINATION
6th SEMESTER

ACY-2022-23 (January)

Subject Name:-Surface Production Operations (Code :203120451)

Branch: Petroleum

Date: 20.1.2024 Time: 12:30 -2 PM

Total Marks: 40

Sr.No.		Marks
Q.1	<p>1. Which of the following theory is used to understand the separation of oil and gas in a separator?</p> <p>A. Dalton's theory B. Droplet settling theory C. Bohr's theory D. None of the above</p> <p>2.A separator is basically a -</p> <p>A. Pressure vessel B. Temperature vessel C. Flow rate vessel D. Level vessel</p> <p>3.It is the part of the separator which prevents formation of waves in the separator</p> <p>A. Inlet device B. Mist extractor C. Coalescer D. Wave breaker</p> <p>4.The process of referencing signals to a standard value in order the suit the required range of measurement is called :</p> <p>A. Correction B. Calibration C. Regulation D. Orientation</p> <p>5. Demulsifiers are generally</p> <p>A. Anionic in nature B. Cationic in nature C. Non-ionic in nature D. None of the above</p>	05
	<p>(B) Compulsory Question</p> <p>1. Size of vertical separator 2. ESD means 3. Full form of FWKD</p>	05

	<p>4. Foaming can be better controlled in which separator</p> <p>5. Biggest public sector oil refinery of India is owned by which Company ?</p>	
Q.2	<p>Attempt any four (Short Questions)</p> <ol style="list-style-type: none"> 1. Explain Separator .Write the different names of Separator. 2. Explain the basic components of Separator. 3. Define the mechanism of Separator operation. 4. Define Test Separator 5. Explain three phase Separator. 	12
Q.3	<p>Attempt any two</p> <ol style="list-style-type: none"> 1. Draw Schematic diagram of Oil, Water & Gas Separation through Horizontal Separator . 2. Define Emulsions found in Petroleum Industry 3. Define methods used in Petroleum Industry for Demulsification. 	08
Q.4	<p>(A) Compulsory Question: Define or Explain</p> <ol style="list-style-type: none"> 1. Flocculation 2. Coalescence 3. Effluent 4. Desalter 5. Desalting 	05
	<p>(B)</p> <ol style="list-style-type: none"> 1. Mechanism of Demulsifier 2. Demulsification process 3. Classification of Tank. 4. Define Fixed Roof tanks 5. Define Floating Roof tanks 	05
	OR	
	<ol style="list-style-type: none"> 1. Describe Liquid Metering System Applications 2. What are Flow meters. How they are useful in Petroleum Industry. 3. Describe different Flow meters used in Petroleum Industry. 4. Name the meter used extensively in the oilfield on separators for Gas. 5. On what basis Flow meters are selected in Petroleum Industry 	10