



Name:
Enrolment No:

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
Online End Semester Examination- May, 2021

Course: Oil Field Asset management
 Semester : VIII
 Program: B. Tech. APE UPSTREAM
 Course Code : CHCE 4004P
 Nos. of page(s) : 4

Time : 03 hrs.
 Max. Marks : 100

Instructions: All Questions are Mandatory.
Section- A. MCQ, T/F and Fill in the Blanks.
Section- B. All questions are compulsory. 1 question has internal choice
Section- C. 1 Question compulsory with internal choice.

Sl. No.	Statement of question	Marks
SECTION A		
Q 1	<p><u>Tick the correct answer. Each MCQ carries ONE marks.</u></p> <p>i) What is risk? a) Negative consequence that could occur b) Negative consequence that will occur c) Negative consequence that must occur d) Negative consequence that shall occur</p> <p>ii) Who is responsible for Risk management a) Senior Management b) Chief Information officer c) Systems and Information Owners d) All of above</p> <p>iii) Which of the following technique will ensure that impact of risk will be less? a) Risk avoidance technique b) Risk Mitigation technique c) Risk contingency technique d) All of the above</p> <p>iv) The regulator for gas transportation in India is a) Directorate General of Hydrocarbons b) Petroleum and Natural Gas Regulatory Board</p>	<p>CO1 5</p>

	<p>c) Ministry of Petroleum and Natural Gas d) None of these</p> <p>v) Uncertainty means that a single value exists for a given quantity and risk means the possibility of no gain loss due to uncertainty. a) True b) False</p>	
Q 2	<p><u>FIB question a) carries ONE marks and b) carries FOUR marks.</u></p> <p>a) ----- look at how a specific organization could maximize its production and capacity, minimize its operating cost so it could lower prices, and better compete in its industry.</p> <p>b) The Process of ----- Identification, ----- Analysis, ----- Analysis, -----, Communication, Decision, and Action are involved in ----- Risk Analysis.</p>	CO1 5
Q 3	<p>a) ----- entity,----- Measurement/stable monetary unit, ----- Concern, - ----- Cost -----/conservatism and ----- are few constituents of - -----</p> <p>b) From-----, Government decided to use -----mechanism where in the price will be fixed as -----ratio i.e. 80% -----and 20% -----(which is almost equal to the respective percentages of ----- and -----).</p>	CO2 5
Q 4	<p><u>FIB question a) carries Three marks and b) carries Two marks.</u></p> <p>a) -----or 4-D technology is the name given to repeatedly shooting -----surveys in the field at different ----- after significant volume of hydrocarbons have been produced in an attempt to detect the movement of hydrocarbon through the-----.</p> <p>b) In the approach to -----, we focus on interdependencies among -----in the -----to develop strategies that improve the performance of the -----as a whole</p>	CO3 5
Q 5	<p><u>Tick the correct answer. Each True/False carries ONE marks.</u></p> <p>a) Risk analysis will eliminate risk in the decision making process (True/ False)</p>	CO3 5

	<p>(b) Post Drill assessments, performance tracking is a part of Exploration Evaluation Process (True/False)</p> <p>(c) P90 is the value on the distribution for which there is a 90% probability (True/False)</p> <p>(d) Containment is not an independent chance factor multiplied together to yield Pg. (True/False)</p> <p>(e) P 50 reserve is also known in the industry as 3P. (True/False)</p>	
Q 6	<p>Tick the correct answer. Each True/False carries ONE marks.</p> <p>a) In India, as a result of National Exploration Licensing Policy (NELP) rounds of bidding, the participation of private players in the exploration and production activities had increased. (True/False)</p> <p>b) Analysis of series of connected decisions is called Sensitivity Analysis (True/False)</p> <p>(c) Under the Open Acreage Licensing Policy, any exploration and production company can bid for an exploration block of its own choice round the year (True/False)</p> <p>(d) Oil and Natural Gas Corporation Limited is listed on the New York Stock Exchange. (True/False)</p> <p>(e) Reorder Point(ROP) is the level of inventory which triggers an action to replenish that inventory stock (True/False)</p>	CO4 5
Q 7	<p>a)What are the factors related with estimation of HC resource (3Marks)</p> <p>b)How an Asset Management Plan helps in optimization of an oil & gas asset (3Marks)</p> <p>c) Discuss Categories of Risk (4Marks)</p>	CO1 10
Q 8	<p>a) Why need of decision analysis in petroleum industry? (2 Marks)</p> <p>b) What are the parameters on which investment decision in Upstream Oil & gas is based? (3 Marks)</p> <p>c) What decision should be taken by an Oil & Gas exploration company under the given scenario Probability of a successful well is 0.6.</p>	CO1 10

	<p>Two decision alternatives: Farm out: Producer's return is worth \$50,000, a dry hole causes no profit or loss. Drilling the well: A dry hole costs \$200,000, a hit brings (after all costs) \$600,000 (All outcomes in \$)</p> <p style="text-align: right;">(5Marks)</p>	
Q 9	<p>Write short notes on any two (5 Marks each)</p> <p>a) Knowledge Management in Oil & Gas Industry b) How can you utilize Big Data Analysis in Upstream activities c) How the SCADA system improves efficiency in upstream activities</p> <p style="text-align: center;">OR</p> <p>a) Discuss in detail about Smart Well Technology with its component and applications. b) Describe the role of technologies in petroleum exploration and exploitation</p>	CO2 10
Q 10	<p>(a) Discuss in detail the Accounting Concepts for petroleum industry (5 Marks) (b) Describe EOQ model of Inventory Control. (5 Marks)</p>	CO2 10
Q 11	<p>(a) Types & elements of Fiscal Systems (4Marks) (b) Petroleum Licensing system in India (3Marks) (c) Joint Venture and its characteristics (3Marks)</p>	CO3 10
Q 12	<p>(a) How the digital transformation within upstream Oil & Gas activities will benefit in oil field asset management? (10Marks) (b) How the current crude oil price volatility impact economy of India (10Marks)</p> <p style="text-align: center;">OR</p> <p>a) Describe the fundamental well costing in Upstream Petroleum Industry (10 M) b) What is the current price structure of petrol and diesel in India (10M)</p>	CO4 20