Roll No: --------------------------

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Term Examinations – August, 2020

Program/course: B.Tech: APE (Gas) **Semester : VIII**
Subject: Petroleum Engineering Economics **Max. Marks : 100**
Code : PEEO 404 **Duration : 3 Hrs**
No. of page/s: 3

Note: Assume Suitable and necessary data if required and Justify

Section-A (Marks: 30)

Answer ***all*** the questions

1. Comparison of financial statements indicates ______of the business

a. Performance b. Profitability c. Financial Position d. All the above [5] [CO1]

2. Which of the following is not a cash inflow

a. Issue of Shares
b. Decrease in Creditors
c. Sale of Fixed Asset
d. Decrease in Debtors [5] [CO2]

3. Which of the following is not the responsibility of logistics manager [5] [CO4]

a. Marketing b. Inventory c. Purchasing d. Warehousing

4. Buffer Stock is _______ [5] [CO4]

a. At which ordering process should start
b. Minimum stock level below which actual stock should not fall
c. Half the actual stock
d. Maximum stock in inventory

5. How Refinery complexity factor is determined [5] [CO3]

6. What are the drawbacks of NPV [5] [CO3]

Section-B (Marks: 50)

Answer ***all*** the questions and ***any one*** in question ***no: 11***

7. A natural gas pipeline transports 120 MMSCFD (millions standard cubic feet per day) at a load factor of 95%. The capital cost is estimated at, $60 million, and the annual operating cost is $6 million. Amortizing the capital at 10% for a project life of 30 years, determine the cost of service and transportation tariff for this pipeline. [10][CO2]

8. Show how $100,000 received by an oil company today can be translated into equivalent alternatives. Assume money is worth 8%. [10] [CO1]

9. Give an account of the following methods used for profitability evaluation [10] [CO3]

a. Discounted Cash Flow b. Net Present Worth
c. Capitalized Cost d. Rate of Return on Investment

10. Explain various factors affecting Drilling Costs. [10] [CO1]

11. Discuss the issues in supply-chain management involving configuration, coordination and improvement in petroleum industry.

OR

Explain in detail Wheel of Retailing [10] [CO4]

Section-C (Marks: 20)

12. During field operations, the manager in charge is considering the purchase and installation of a new pump that will deliver crude oil at a faster rate than the existing one. The purchase and the installation of the new pump will require an immediate layout of $15,000. This pump however, will recover the costs by the end of one year. The relevant cash flows is as follows.

	Year		
	0	1	2
New Pump	-15,000	19,000	0
Old Pump	0	95,000	95,000

If the oil company requires 10% minimum annual rate of return on money invested, which alternative should be chosen? Explain the reasons [20] [CO3]