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**Question Paper Code: 39613**

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2018

Elective

Instrumentation and Control Engineering

01UIC913 - INSTRUMENTATION FOR PETROCHEMICAL INDUSTRIES

(Regulation 2013)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. What is meant by petroleum exploration?
2. Mention the factors that are required to make an oil deposit.
3. Define the term fishing and mention where it can be used.
4. Define the term fishing and mention where it can be used.
5. List the chemical products of petroleum.
6. Outline the methane derivative from petroleum products.
7. What is thermo well?
8. Identify the steps to select the measuring instruments in petrochemical industry.
9. State the degree of freedom.
10. Define catalytic cracking.

PART - B (5 x 16 = 80 Marks)

11. (a) Explain how wet gases are processed in petrochemical industry. (16)

Or

(b) List the recovery technique and explain them in detail. (16)

12. (a) (i) Draw the flow diagram and explain how of Glycerine is produced from propylene in different ways. (8)

(ii) Write about UOP Butamer Isomerisation Process. (8)

Or

(b) Explain the production of acetylene and propylene from petroleum. (16)

13. (a) Write about production of propylene oxide through Daicel Process and chlorohydrin process. (16)

Or

(b) Explain the process involved in methanol production from synthetic gases with its merits and demerits. (16)

14. (a) Discuss in detail about the intrinsic safety of the instruments used in petroleum industries. (16)

Or

(b) Explain the following in detail:

(i) Lead compensation in temperature sensor. (8)

(ii) Density measurement in petroleum station. (8)

15. (a) Summarize the process of controlling the distillation column in petroleum industry. (16)

Or

(b) Exemplify the polyvinyl chloride production in petroleum industry. (16)