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B.Tech.
(SEM VIII) EVEN SEMESTER EXAMINATION, 2015-16
PETROLUUM REFINING TECHNOLOGY

[Time: 3hrs.]

[MM: 100]

NOTE: Attempt all questions.

Q.1. Explain any **four** parts of the following:-

[5x4=20]

- (a) Flash point and fire point
- (b) Octane number
- (c) Cetane number
- (d) Cloud point and pour point
- (e) Copper strip corrosion test
- (f) Conradson carbon residue

Q.2. Attempt any **two** parts of the following:-

[10x2=20]

- (a) Write a note on the composition of crude oil.
- (b) Discuss the various origin theories of petroleum.
- (c) Explain the drilling of oil and gas with neat and clean sketch.

Q.3. Attempt any **two** parts of the following:-

[10x2=20]

- (a) Give the need for desalting of crude oil. Explain electrical desalting of crude oil with neat sketch.
- (b) Explain the process of atmospheric and vacuum distillation unit of petroleum with sketch.
- (c) Write down the composition ,properties and uses of the following:
(i)LPG (ii) Naptha (iii) Kerosine (iv) Diesel fuels (v) Motor spirit

Q.4. Attempt any **two** parts of the following:-

[10x2=20]

- (a) Explain soaker visbreaking process with sketch.
- (b) With the help of a neat labeled diagram, explain the working of a fluid catalytic cracking (FCC) unit.
- (c) Discuss the catalytic reforming with chemical reactions involved.

Q.5. Attempt any **two** parts of the following:-

[10x2=20]

- (a) Explain delayed coking of residue with neat and clean sketch.
- (b) Discuss solvent deasphalting process.
- (c) Write note on solvent dewaxing process.