Reg. No.										

MANIPAL INSTITUTE OF TECHNOLOGY

MANIPAL

(A constituent unit of MAHE, Manipal)

VI SEMESTER B.TECH. END SEMESTER MAKE-UP EXAMINATIONS JUN 2018

SUBJECT: PETROLEUM REFINERY ENGINEERING [CHE 4004]

REVISED CREDIT SYSTEM

(22/06/2018)

Time: 3 Hours MAX. MARKS: 50

Instructions to Candidates:

☑ Answer **ALL** the questions. ☑ Draw a neat flow sheet wherever required.

1A.	Explain the origin of petroleum.	**3**
1B.	Briefly describe the process of electric desalting with a neat schematic flow diagram.	**4**
1C.	List out the tests and properties of kerosene and describe any two tests.	**3**
2A.	Describe the Dubbs thermal cracking process with a neat flow diagram.	**8**
2B.	List out the petroleum fractions withdrawn from a distillation unit along with their boiling range.	**2**
3A.	How do you remove the coke, which formed during the delayed coking process?	**2**
3B.	Describe the delayed coking process with a neat flow diagram.	**8**
4A.	Write short notes on OPEC and WPC.	**4**
4B.	Discuss the various types of refluxes carried out in atmospheric distillation unit with neat sketches.	**6**
5A.	Define Octane and Cetane Number.	**3**
5B.	Describe the process of semi-regenerative catalytic reforming with a neat flow sheet and mention the byproducts of the reforming process.	**7**

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