2017-18
M.TECH. (AUTUMN SEMESTER) EXAMINATION
PETROLEUM PROCESSING AND PETROCHEMICAL ENGINEERING
PETROLEUM REFINERY ENGINEERING
PK 731 (ELECTIVE III)

Maximum Marks: 60
Credits: 04
Duration: Two Hours

Answer all questions.
Assume suitable data, if missing.
All questions, and parts thereof, be started on a fresh page of the answer book(s).

Q.No.  Question  M.M.

1. Write short notes on any four of the following:
   a) Indian refining industry
   b) Distillation fractions and their quality control tests.
   c) Blending for the production of Gasoline and Diesel fuels.
   d) Refinery furnaces.
   e) Catalysis in Petroleum Refining.
   f) Lube oil processing

2. (a) Discuss the decoking operations employed for the furnaces of thermal conversion processes.

2. (b) Describe the FCC process with special reference to feed pretreating and process variables. Also discuss DCC, RFCC and HS-FCC, in brief.

OR

2. (b') Discuss, in detail, Hydrodesulfurisation process with special focus on operational and safety aspects.

3. Write detailed notes on any two of the following:
   a) Catalytic Reforming.
   b) Solvent Deasphalting
   c) Gasification