No. of Printed Pages: 03 Roll No.

G81

B. Tech. EXAMINATION, 2020

(Seventh Semester)

(B Scheme) (Main & Re-appear)

(CHE)

CHE401B

PETROLEUM ENGINEERING

Time: 2½ Hours] [Maximum Marks: 75]

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note: Attempt *Four* questions in all. All questions carry equal marks.

(3)M-G81

- **1.** (a) What are the pretreatment processes of crude oil ?
 - (b) Discuss the origin, composition, classification and constituents of crude oil.
- **2.** (a) What is vacuum distillation?
 - (b) What is the chain length and boiling point of the various products of refinery?
- **3.** (a) Explain in detail the delayed coking.
 - (b) What do you mean by catalytic reforming process ?
- **4.** (a) What is Pyrolysis?
 - (b) Discuss hydrocracking in detail.
- 5. Explain any two with neat diagram:
 - (a) Chilling dewaxing
 - (b) Doctor's Sweetening process
 - (c) Deasphalting.
- **6.** Discuss the importance of the following processes in short :
 - (a) Isomerization process
 - (b) Alkylation
 - (c) Polymerization.

(3)M-G81

- 7. Write short notes on any *three* of the following:
 - (a) Flash and fire point
 - (b) Cetane number
 - (c) Pour and cloud point
 - (d) Smoke point
 - (e) Viscosity index.
- **8.** Explain the following:
 - (a) Storage and handling of liquid fuel oils
 - (b) Octane number.