Name:

Enrolment No:

Semester

Max. Marks : 100

Time

: VI

:03 Hrs.

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, July 2020

Programme Name: B.Tech APE GAS

Course Name : Unconventional Gas Resources

Course Code : CHGS 3002.

Nos. of page(s) : 01

Instructions: All questions are compulsory

ASSIGNMENT BASED EXAM

S. No.		Marks	CO
Q 1	Discuss major challenges for Indian energy security today? Can US Shale gas becomes an alternative to Russian gas in Europe?	15M	CO1
Q 2	Explain "Why foam fracturing is more popular in shale gas production systems"?. Also, mention three examples where foam fracturing is done?	15M	CO4
Q 3	What are the technologies of drilling for shale gas plays where target depth is less than 400m?	15M	CO2
Q 4	Explain the procedure for defining the hysteresis loop class for adsorption and desorption isotherms?	15M	CO3
Q 5	Share your thoughts on "Whether hydraulic fracturing underneath the ocean would pose any special environmental concerns"?	10M	CO2
Q 6	Explain different factors that to be considered in optimization of hydraulic fracturing in shale gas?	15M	CO4
Q 7	Despite gas hydrates role as a potential future energy resource, why does gas hydrate present a large threat to conventional oil and gas industry?	15 M	CO1