

Name:  
Enrolment No:



**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**  
**End Term Examination – May 2023**

**Program: B.Tech APE (UP)**  
**Course: Developing LNG Production & Handling**  
**Code: PEAU 4012P**

**Semester: V**  
**Time: 03 hrs.**  
**Max Marks :100**

**SECTION A (5\*4=20)**

1	List advantages & disadvantages of Nitrogen BHP process.	04	CO2
2	Categorize the types of vaporizers.	04	CO4
3	Sketch double containment tank.	04	CO3
4	List the coverage points of OISD 194?	04	CO1
5	Reframe reliable natural gas price benchmark.	04	CO5

**SECTION B (4\*10=20 Marks)**

6	Illustrate the aspects of LNG safety. Describe LNG leak prevention methods.	10	CO2
7	Evaluate the methods of power generation by CULNG with neat sketch.	10	CO4
8	Summarize LNG marine facilities & explain in brief.	10	CO4
9	i) A LNG tanker, DISHA (Hull No. 2210) was delivered on 20th January 2023 from Ras Laffon, Qatar to LNG terminal Dahej, India for transporting 8 MMT of LNG which corresponds to 2,50,000 Cubic Meter at 1 atm . The tanker reached its destination on 27th January 2023. Estimate the quantity of boil-off gas produced during the transportation, for a boil-off, 0.1 and 0.05% (by wt) per day respectively. ii) Analyze the selection criteria for LNG storage tanks.	05 05	CO3 CO3

**SECTION-C (20\*2=20)**

10	With the help of neat sketch describe cascade liquefaction process.	20	CO2
11	Discuss parameters for negotiations for LNG Trade.	20	CO5