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UNIVERSITY OF PETROLEUM AND ENERGY
STUDIES



End-term Examination – April, 2018

Program/course: PORT & SHIPPING MANAGEMENT

Subject: MARITIME HSE MANAGEMENT

Code : MBSG 944

No. of page/s: 2

Semester – End

Max. Marks : 100

Duration : 3 Hrs.

Q1. Please answer all questions (each carries two marks)

Marks 20

- a) Why are loose gears essential for port working?
- b) What is safety?
- c) Write full form: DGFASLI
- d) Why is safety important for a port / terminal?
- e) Explain EIA & EMP.
- f) Why do we use loading arms in a liquid terminal?
- g) Explain “hazard”.
- h) Why is “industrial safety” important.
- i) Elaborate on Personal Protective Equipment.
- j) Explain the need for lashing equipment on container ship. Name one.

Q2. Please answer 5 questions out of 7 questions (each carries 4 mark)
Marks 20

- a) What precautions do you take in a ‘closed space working’?
- b) Give 5 important safety measures that are considered in RORO operations.
- c) Spreaders have made the job of container operations safer and faster – examine.
- d) What safety measures are to be implemented while working “on shore”.
- e) Does a signalman provide useful support to the cargo handling operations? Examine and comment.
- f) Identify sources of “marine pollution” and recommend specific measures to contain / reduce these. ?
- g) Discuss the role of port safety regulations in Indian Ports’ context. Assess the structure against the provisions of the Factories Act as applicable in India.

Note: From the following questions (3/4/5/6) please answer **any three. 10 Marks has been allotted against each question – thus total 30 marks.**

Q3. Describe in detail - the comprehensive safety measures that are to be taken in an on-board ship operations. Identify three critical areas.

Q4. How do port operations impact the environment? Examine the most important provisions of ISO 14000 and relate these to any bulk operation.

Q5. What specific measures will you take in handling project cargo in a port? Write a circular showing each detail; as to how the project cargo will be handled safely and without loss of productivity.

Q6. Describe the functions that are common between the Ship-yard safety and Port-Terminal safety. Elaborate how these aspects are managed in both the areas mentioned.

Compulsory question:

Q7. You are the safety officer in a port. The Director has asked you to do risk assessment of a Mobile Harbor Crane operation that involves handling of steel coils. Please describe in details how you should go ahead. 10

What is a risk matrix? 05

Draw a Risk Matrix indicating your assessment results. 10

Give a list with 6/7 points (both hard and soft) through which the workers and supervisors can be guided for safe operation. 05

Without detailed explanation of these concepts paragraph-wise ---- marks are likely to be deducted.

Q7 total Marks: 30
