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**UNIVERSITY OF PETROLEUM & ENERGY STUDIES
DEHRADUN**

Final Exam: May 2019

Program/course: MBA PSM

Subject: MARITIME HSE MANAGEMENT

Code : TRPS 8005

Semester – IV

Max. Marks- : 100

Duration: 3 Hrs.

No. of page/s: 3

Section A	
Q 1	Please answer all questions briefly (each carries two marks): Total Marks: 20

Sr.	Question	Marks	CO
a)	Why are loose gears essential for port working?	2	CO 1
b)	What is a double spreader?	2	CO 2
c)	Name three loose gears for handling steel coils	2	CO 2
d)	Gears in port operation are supplied by the Master – TRUE OR FALSE?	2	CO 1
e)	Tool box talk is a speaker – TRUE OR FALSE?	2	CO 2
f)	Safety enhances branding of a port – TRUE /FALSE?	2	CO 2
g)	Any worker can alone work in a ‘closed space’ - TRUE /FALSE?	2	CO 2
h)	What is meant by ‘working on height’?	2	CO 1
i)	Safety in a port is enhanced by constant training - TRUE /FALSE?	2	CO 1
j)	Which act is applicable for port safety in Indian Major Ports – TRUE or FALSE?	2	CO 1

Section B

Q 2. Please answer 4 questions out of 6 questions: Total Marks – 20 (4X5)

Sr.	Question	Marks	CO
a)	Working in warehouse is more difficult than working in a yard – compare.	4	CO 2
b)	Using pipes for handling liquid cargo is more dangerous than using the loading arm – examine.	4	CO 3
c)	Why do we need a signaler for handling break bulk cargo from the under-deck?	4	CO 2
d)	Why is training of workers essential for a safe port? Can you suggest a few areas where the safety training can be imparted?	4	CO 3
e)	Unless the top management shows involvement in safety the implementation is very slow. Examine with some real issues.	4	CO 4
f)	Container yards are kept free from pedestrians. Can you elaborate the reasons and dangers?	4	CO 3

Section C

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**

Sr.	Question	Marks	CO
Q 3	Planning and operation of Liquid Terminal operation is more critical than a break bulk berth – discuss especially covering the total safety point of view	10	CO 3
Q 4	Write a Standard Operating Procedure for a container handling berth in 10 lines (minimum)	10	CO 4
Q 5	These days’ ports use contractors for operation and thus it is important from the point of the operational discipline in a port. Write a management circular for safe contractor management.	10	CO 3
Q 6	Discuss the role of ILO in enhancing safety in the different ports mentioning some conventions.	10	CO 4

Section D : Compulsory question

		Marks	CO
Q 7	Answer the following questions – BOTH Q A & B - are compulsory.	15 + 15	CO 4

Questions – to the point answers will be appreciated:

- A. Write an essay on the current challenges in identifying and implementing safety in ports and terminals in India.
- B. How does a safety professional carry out “Risk assessment & risk management”? Draw the steps for the right process so that these can be implemented.

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Program/Course	:	MBA PSM					
Semester	:	SEM IV					
Name of the Subject	:	MARITIME HSE MANAGEMENT					
Subject Code	:	TRPS 8005					
Name of Question Paper Setter	:	MIHIR K DAS					
Employee Code	:	40001366					
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Note: - Pl. start your question paper from next page

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Final Exam: May 2019
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Semester – III
Max. Marks- : 100
Duration: 3 Hrs.

No. of page/s: 3

Section A	
Q 1	Please answer all questions briefly (each carries two marks): Total Marks: 20

Sr.	Question	Marks	CO
a)	Write full form of QHSSE	2	CO 1
b)	What is a safety briefing	2	CO 2
c)	Explain LTI	2	CO 1
d)	PPE-s are optional in a port – TRUE OR FALSE?	2	CO 1
e)	When can a worker refuse to work?	2	CO 2
f)	Full Body harness is used in racing – TRUE OR FALSE?	2	CO 1
g)	Forklift is a lifting equipment – TRUE OR FALSE?	2	CO 2
h)	Which act is applicable for the private ports?	2	CO 1
i)	What is a ‘RISK’?	2	CO 1
j)	Write full form of HAZMAT.	2	CO 2

Section B

Q 2. Please answer 4 questions out of 6 questions: Total Marks – 20 (4X5)

Sr.	Question	Marks	CO
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a)	Why should a port be certified under ISO 14000?	4	CO 2
b)	Port operations need strict safety measures – more than other industries - elaborate.	4	CO 3
c)	What are the different personal safety equipment used in ports?	4	CO 2
d)	The implementation of safety in ports depend on understanding different stake holders – explain.	4	CO 3
e)	Elaborate the safe procedure of working in a closed space – with reasons.	4	CO 2
f)	Analyze the importance of signaling on-board the vessel.	4	CO 3

Section C

Note: From the following questions (3/4/5/6) please answer any three. **Total 30 marks**

Sr.	Question	Marks	CO
Q 3	Identify 5 important areas where the safety of on-board operation is to be strictly maintained.	10	CO 3
Q 4	Industrial safety is the guiding light for the port safety – examine.	10	CO 4
Q 5	How can the provisions of MARPOL be implemented in a liquid terminal operations.	10	CO 4
Q 6	As a manager - make out a Standard Operating Procedure (10 lines) for handling of cargo in a port warehouse.	10	CO 3

Please see page 3

Section D : Compulsory question

		Marks	CO
Q7	Analyze the case and answer the following questions: Usage of right kind of gear for handling cargo:	30	CO 4

In a port huge number of steel plates are handled and these are first discharged from the ship and then the trailer is loaded with the 21 meter long plates (which is very long) for transportation into the yard. These plates are very sensitive as these are for the ship yard which is situated within 10 kilometers of the port. But the main issue is that the plates cannot be delivered straight to the shipyard.

Thus these are stored in three different yards of the port and when these are cleared by the Customs authorities, they are taken delivery by the trucks / trailers designated by the ship yard.

There is a steady flow of such materials as every alternate week a ship carrying 35000 tons arrive and this will continue for about two years.

The management of the ship yard is unhappy about the port's service as many a time the plates are damaged at the corners and also in the middle. The plates being very long they graze the roads when carrying them from jetty to the storage yard. Also work goes in three shifts – thus much damage could be taking place in the night. The yards are also poorly lit.

The port has been using forklifts and mobile cranes for the purpose for many years. Thus they are at a loss as to what best can be done.

But the top management has now called a meeting to finalize the proper handling method so that the port does not lose the cargo.

Questions:

1. Do you think that there is a lack of supervision? If so where should it be strengthened?
2. Do you think that the statistics of the complaints should have been kept? If so what is the technical name of the incidents that were taking place?
3. Since the port cannot buy a new equipment all the time – what more gears can be used in this case?
4. Write a brief but CONVINCING letter to the ship yard that you as a safety manager would take care of the mistakes / wrong handling.
5. What are the best practices in handling steel plates? How would you find these and implement?
6. Do you think that the shipyard can help and if so how?