

Name:  
Enrolment No:



**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**  
**End Semester Examination, December 2019**

**Course: Supply Chain & Logistics for Port and Shipping**  
**Program: MBA PSM**  
**Course code: LSCM 8014**  
**Instructions:**

**Semester: III**  
**Time: 03 Hours**  
**Max. Marks: 100**

S. No.	Section A	Marks	CO																																				
Q 1	<b>Attempt all the questions. Each question is compulsory.</b>																																						
a)	Differentiate Operations Management from SCM	2	3																																				
b)	Enumerate factors affecting the location decision for a Ship Building Plant	2	3																																				
c)	Discuss the significance of KPIs in case of a major port.	2	4																																				
d)	Differentiate Push Approach from Pull Approach.	2	1																																				
d)	Critically evaluate NWCM of Transportation Model.	2	2																																				
e)	What logistics challenges a shipping company faces at ports?	2	1																																				
f)	Enumerate any four MHEs used for ports.	2	2																																				
g)	Discuss the significance of shipping route in case of export of coal/iron ore.	2	2																																				
h)	How Porter's Value Chain Model is applicable in shipping industry?	2	4																																				
i)	Discuss KPIs practiced in case of shipping agencies.	2	4																																				
j)	How shipping agencies can optimize the shipping cost?	2	2																																				
	<b>Section B</b>																																						
	<b>Attempt any four questions.</b>																																						
Q 2	Differentiate Factor Rating Method from Break-even Method.	5	3																																				
Q 3	<b>Destinations</b>																																						
	<table border="1"> <thead> <tr> <th>Factory</th> <th>I</th> <th>II</th> <th>III</th> <th>IV</th> <th></th> </tr> </thead> <tbody> <tr> <td align="center" colspan="6"><b>Supply</b></td> </tr> <tr> <td><b>F1</b></td> <td align="center">3</td> <td align="center">7</td> <td align="center">6</td> <td align="center">4</td> <td align="center">5</td> </tr> <tr> <td><b>F2</b></td> <td align="center">2</td> <td align="center">4</td> <td align="center">7</td> <td align="center">5</td> <td align="center">2</td> </tr> <tr> <td><b>F3</b></td> <td align="center">4</td> <td align="center">5</td> <td align="center">8</td> <td align="center">8</td> <td align="center">3</td> </tr> <tr> <td><b>Demand</b></td> <td align="center">3</td> <td align="center">3</td> <td align="center">2</td> <td align="center">2</td> <td></td> </tr> </tbody> </table>	Factory	I	II	III	IV		<b>Supply</b>						<b>F1</b>	3	7	6	4	5	<b>F2</b>	2	4	7	5	2	<b>F3</b>	4	5	8	8	3	<b>Demand</b>	3	3	2	2		5	2
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	Determine the initial basic feasible of the following T.P. by using matrix minima method.		
Q 4	<p>For a specific MHE at port, a part 'P' is to be ordered by a 3 PL company, following data is available:</p> <p>Monthly Demand= 500 units</p> <p>Purchase cost/unit = Rs. 650/unit</p> <p>Ordering costs= Rs. 800/ order</p> <p>Holding costs (Ch) = Rs. 250/unit/year, fire insurance = 5% of the unit cost, 5% other overheads.</p> <p>Determine optimal order quantity of 'P' items and how frequently the order should be placed?</p>	5	2
Q 5	Discuss various factors affecting the efficiency of a port.	5	2
Q 6	Discuss the role of CHA for cargo operations.	5	2
	<b>Section C</b>		
	<b>Attempt any two questions.</b>		
Q 7	<p>Attempt the short notes on the following:</p> <p>a) Challenges in designing Route/network for vessels/ships</p> <p>b) Rationalization Vs Innovation strategy</p> <p>c) Green Supply Chain in shipping sector</p>	2x7.5=15	3 3 3
Q 8	How Pricing strategies are vital for any shipping agency? Explain the current pricing strategies of any shipping agency and what changes you suggest to make it more profitable?	15	3
Q 9	Discuss the role of CHA/Port Operators/Sea Farers/Chartering Services in shipping sector. How 3 PL companies can make use of these services more efficient and effective using KPIs?	15	3,4
Q 10	<b>Section D</b>		
	<b>Attempt the following case study.</b>	10x3=30	
	<b>Refer to 300cubits.tech: Block Chain Innovation for Shipping Industry case by Johnson and Jonathan and attempt the following questions:</b>	10	
	Q 1. Discuss the problems faced by Container Shipping Companies and what solutions authors have suggested in the case?	10	1
	Q 2. How Shipper and Shipping Agencies can integrate the token system in existing IT System?	10	3

	Q 3. How Shippers and Shipping companies should use Block chain technology to create smart contracts?		<b>3</b>
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