

<b>Name:</b>	
<b>Enrolment No:</b>	

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

**Course: Contract manufacturing & Outsourcing**  
**Program: BBA Core(Operations)**  
**Course code: LSCM3007**

**Semester: V**  
**Time: 3 Hours**  
**Max. Marks: 100**

**SECTION A (20 Marks)**

Attempt all of the following questions.		Marks	CO
Q 1.	Fill in the blanks		
a.	_____ is the methodology for comparing today's value of future cash flows to cost of investment.	2	CO2
b.	A competitively dominant customer experience is often called a _____	2	CO1
c.	_____ table is used to formulate the DT model of the problem.	2	CO3
d.	_____ is the process of moving some business activities to a foreign country.	2	CO2
e.	_____ criterion assumes a totally optimistic approach to decision making.	2	CO4
f.	_____ is a long term partnership and sharing of resources to operate a business jointly	2	CO2
g.	The two types of costs while analyzing break-even analysis for outsourcing are _____ and _____.	2	CO2
h.	_____ transfer-of-risk model is used for risk mitigation in outsourcing.	2	CO3
i.	_____ is an extension of PV analysis and can be used as a standalone methodology.	2	CO3
j.	LP models utilize algorithmic _____ process.	2	CO4

**SECTION B (4\* 5 Marks Each -20 Marks)**

Answer any four out of the five questions		Marks	
Ques.2	Why is it important to monitor an outsource provider once the agreement is in effect?	5	CO1
Ques.3	Why is the discount rate used in present value analysis?	5	CO3
Ques.4	Can the centroid method be used in an international outsource provider selection decision?	5	CO3
Ques.5	What are the various types of cooperative agreements?	5	CO4
Ques.6	What is the relationship between Hurwicz' coefficients of optimism and pessimism?	5	CO3

<b>SECTION-C</b>		<b>( 3* 10 Marks Each- 30 Marks)</b>																										
	Answer all three questions	<b>Marks</b>																										
Ques.7	If the opportunity cost of capital is 12 percent and the internal rate of return is 11.5% should the O-I investment be made?	<b>10</b>	<b>CO3</b>																									
Ques.8	Assume there is an uncertainty decision environment. Which outsourcer is best choice based on Laplace criterion?	<b>10</b>	<b>CO4</b>																									
Ques.9	A manufacturer wishes to use factor rating to help select an outsourcing provider of logistics services. With weights from 1-5(5 highest) and ratings 1-100(100 highest), use the following table to help the manufacturer make his decision:	<b>10</b>	<b>CO1</b>																									
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="5" style="text-align: center;">Rating of logistics providers</th> </tr> <tr> <th style="text-align: center;">Criterion</th> <th style="text-align: center;">Weight</th> <th style="text-align: center;">Overnight Shipping</th> <th style="text-align: center;">Worldwide Delivery</th> <th style="text-align: center;">United Freight</th> </tr> </thead> <tbody> <tr> <td>Quality</td> <td style="text-align: center;">4</td> <td style="text-align: center;">65</td> <td style="text-align: center;">80</td> <td style="text-align: center;">95</td> </tr> <tr> <td>Delivery</td> <td style="text-align: center;">2</td> <td style="text-align: center;">70</td> <td style="text-align: center;">90</td> <td style="text-align: center;">70</td> </tr> <tr> <td>Cost</td> <td style="text-align: center;">5</td> <td style="text-align: center;">60</td> <td style="text-align: center;">75</td> <td style="text-align: center;">100</td> </tr> </tbody> </table>			Rating of logistics providers					Criterion	Weight	Overnight Shipping	Worldwide Delivery	United Freight	Quality	4	65	80	95	Delivery	2	70	90	70	Cost	5	60	75	100
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<b>SECTION-D</b>		<b>( 2* 15 Marks Each- 30 Marks)</b>																										
	Answer both questions	<b>Marks</b>																										
Ques. 10	What is your understanding about cross function collaboration from the case study Videojet(B)? Explain in detail.	<b>15</b>	<b>CO2</b>																									
Ques. 11	A client firm must allocate production between its own internal department and two outsourcers. The primary objective is to maximize profit. The total profit possible for three sources of production are \$3 million, \$2.7 million, and \$4 million. The internal department can at maximum handle 40 percent of total production. Each outsourcer is limited at maximum of 50% of total production. There is internal department labor agreement requiring at least 15 percent of production to be handled by internal department. Formulate LP model for O-I proportional allocation problem?	<b>15</b>	<b>CO4</b>																									