United International University (UIU)

Mid Term Examination

IPE 401: Industrial Management

Summer Trimester: 2020

Total time: 1:00 hours Date: 17/08/2020 Total marks: 20

Section: A/B

There are 5 questions. You must answer question **1,2 &3**and any one of **4 &5**

1 You are an employee of a famous multinational company named "ABCD". They have various types of products in the market like different types of snacks items, Different types of condiments, Different types of Tobacco products and different types of cosmetics etc. All of their Snacks items have a brand name "W", their condiments have a brand name "X", All tobacco products have a brand name "Y" and all of their Cosmetic's brand name is "Z". So Which type of brand name they chose? Explain. **[2]** **[CO2]**

2 Mr. Sishir is an assistant manager in Anwar Steel LTD. He is a very experienced person in his field and his technical knowledge about steel machineries is also vast. But he faces problems when dealing with his subordinates. He can't motivate them enough to work their best or he can't force them enough to do the same. And for this reason he was not getting his long due promotion to be a Manager. So which type of skill he needs to get the promotion? And what level of manager he is now? Explain. **[2]** **[CO2]**

3 The demand of raw material "Quick lime" for Abul Khair Steel Mill is about 1000 bags per day. Number of working days are 200. The cost associated with each order is about \$89. The holding cost is 12%. The quantity schedule chart is given below. Determine **optimal order quantity** and **total cost** associated with it **[8]** **[CO2]**

Discount Number	Discount quantity	Discount %	Discount price\$
1	0 to4000	No discount	12
2	4001to 5000	10%	?
3	5001and over	13%	?

4 Mr. Zico invested \$25000 at a certain effective rate for about 44 years and became a millionaire. First, find out the effective rate and then find out the nominal interest rate which was compounded weekly. **[8]** **[CO1]**

5 (a) Two independent projects are given bellow: **[6]** **[CO1]**

Project "Nobel"

year	0	1	2	3	4	5
Cash flow	-15123	7458	3129	1178	6729	4397

Project "Oscars"

year	0	1	2	3	4	5
Cash flow	-17791	11856	3200	6891	4555	1710

Select the project using Discounted payback period If the discount rate is 17% compounded weekly and the authority wants pay back within 3 years

(b) If you use NPV method, will your answer be same? Show with necessary calculations. **[2]** **[CO1]**

CO1	Apply Engineering economics and simple mathematics for Solving project selection problems for choosing the best possible project
CO2	Analyze various industrial problems by using operation management, technique, operation research technique and solve it.