Exam Date & Time: 27-Nov-2019 (02:00 PM - 05:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

INTERNATIONAL CENTRE FOR APPLIED SCIENCES END SEMESTER THEORY EXAMINATION IV SEMESTER B.Sc. (Applied Sciences) in Engg. ENGINEERING ECONOMICS AND MANAGEMENT [IHS 241]

Marks: 100

Duration: 180 mins.

Answer 5 out of 8 questions. Missing data, if any, may be suitably assumed

1)	A) B)	Differentiate between Micro-Economics and Macro-Economics in Detail with examples wherever required				
		Explain 5 types of utilities with examples.	(10)			
2)		Explain Factors of Production in detail.	(10)			
	A)		(1.0)			
	В)	Explain Types of Price Elasticity of Demand.	(10)			
3)		Explain Types of Elasticity of Supply.	(10)			
	A) B)	If 2000 units of X are demanded at a price of Rs 10/unit and 2500 units of it are demanded at a price of Rs. 9/unit, determine E_p .	(4)			
	C)	A firm XYZ supplied 2000 pens at a price of Rs 8/ per pen. What price increases to Rs 10 per pen, the supply of XYZ increases to 2000 pens. Find the elasticity of supply of pens.	(6)			
4)		Explain the following terminologies (i) Straight Line Method of Depreciation with help of an example. (ii) Declining Balance Method with help of an example (iii) Law of Demand and Law of Supply (iv) Price Elasticity of Demand	(20)			
5)		Discuss which of Henry Fayol's 14 principles of administrative management are still relevant to managers today. Do any of these principles seem outdated to you? If so, which ones? Why?	(20)			
6)		Distinguish between administration and management.	(10)			
	A)					
	B)	Explain how planning is a process by itself.	(10)			
7)	A)	A person is planning for his retired life. He has 10 more years of service. He would like to deposit 20% of his salary, which is Rs 4,000, at the end of the first year, and thereafter he wishes to deposit	(10)			
		the amount with an annual increase of Rs 500 for the next 9 years with an interest rate of 15%. Find the total amount at the end of the 10th year of the above series.				
	В)	An asset costs Rs 5000, initially. Its life is 5 years and the salvage value at the end of 5 years is Rs 1000/ Calculate the depreciation charges from year 1 to year 5 using straight line method.	(10)			

(20) ⁸⁾ Explain off the job training methods. Arithmetic Gradient Uniform Payment Series **Single Payment** Sinking Capital Compound Present Gradient Gradient Compound Present Fund Worth Uniform Present Worth Recovery Amount Amount Worth Factor Factor Factor Series Factor Factor Factor Find F Find P Find A Find P Find P Find A Find A Find F Given P Given F Given F Given P Given A Given A Given G Given G

n	F/P	P/F	A/F	A/P	F/A	P/A	A/G	P/G	n
1	1.120	.8929	1.0000	1.1200	1.000	0.893	0	0	1
2	1.254	.7972	.4717	.5917	2,120	1.690	0.472	0.797	2
3	1.405	.7118	.2963	.4163	3.374	2.402	0.925	2.221	3
4	1.574	.6355	.2092	.3292	4.779	3.037	1.359	4.127	4
5	1.762	.5674	.1574	.2774	6.353	3.605	1.775	6.397	5
6	1.974	.5066	.1232	.2432	8.115	4.111	2.172	8.930	6
7	2.211	.4523	.0991	,2191	10.089	4.564	2.551	11.644	7
8	2.476	.4039	.0813	.2013	12.300	4.968	2.913	14.471	8
9	2.773	.3606	.0677	.1877	14.776	5.328	3.257	17.356	9
10	3.106	.3220	.0570	.1770	17.549	5.650	3.585	20.254	10
11	3.479	.2875	.0484	.1684	20.655	5.938	3.895	23.129	11
12	3.896	.2567	.0414	.1614	24.133	6.194	4.190	25.952	12
13	4.363	.2292	.0357	.1557	28.029	6.424	4,468	28.702	13
14	4.887	.2046	.0309	.1509	32.393	6.628	4.732	31.362	14
15	5.474	.1827	.0268	.1468	37.280	6.811	4.980	33.920	15
16	6.130	.1631	.0234	.1434	42.753	6.974	5.215	36.367	16
17	6.866	.1456	.0205	.1405	48.884	7.120	5.435	38.697	17
18	7.690	.1300	.0179	.1379	55.750	7.250	5.643	40.908	18
19	8.613	.1161	.0158	.1358	63.440	7.366	5.838	42.998	19
20	9.646	.1037	.0139	.1339	72.052	7.469	6.020	44.968	20
21	10.804	.0926	.0122	.1322	81.699	7.562	6.191	46.819	21
22	12.100	.0826	.0108	.1308	92.503	7.645	6.351	48.554	22
23	13.552	.0738	.00956	.1296	104.603	7.718	6.501	50.178	23
24	15.179	.0659	.00846	.1285	118.155	7.784	6.641	51.693	24
25	17.000	.0588	.00750	.1275	133.334	7.843	6.771	53.105	25
26	19.040	.0525	.00665	.1267	150.334	7.896	6.892	54.418	26
		m + m		10.00	1.00 0.01				

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