Name:

Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, December 2019

Course: Financing Infrastructure Projects

Program: MBA (General Finance)

Course code: FINC 8012

Semester: III Time: 3 Hours

Max. Marks: 100

Instructions: Attempt all the questions

SECTION A (10 *	2 Marks Each -
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	SECTION A (10 * 2 Marks Each - 20 Marks - 2	arks)
1.	Choose the best answers	
a)	The span of time within which the investment made for the project will be recovered by the net returns of the project is known as a) Period of return b) Payback period c) Return on investment d) Span of return	CO2
b)	Stock selling price is \$45, an expected dividend is \$10 and an expected growth rate is 8% then cost of equity would be? a) 55 b) 53 c) 3.6 d) 0.302	CO4
c)	Project Management will also be involved in making choices that require balancing in Goals of the project as well as? a) Goals of the resources b) Goals of the firm c) Goals of the team d) Both A and B	CO1
d)	Identify the financial instruments which is not belongs to money market. a) Treasury Bills b) Certificate of deposit c) Commercial paper d) Bonds	CO2
e)	which is a long-term risk finance in high technology projects that involve risk but at same time has strong potential for growth. a) Hedge fund b) Leasing c) Venture Capital d) Debenture	CO4
f)	A^1 B^1 D^5 E^4 F^1 G^2 H^2 I^2	CO3
	What is the critical path through the network above? a) ABDEF b) ABGHIF & ABDEF c) ABCF d) ABGHIF	
	National Aluminum company Ltd. (NALCO) is an example for diversification company?	CO1

	a) Mergers and acquisitiond) Concentric diversification		or Captive use c) Forward i	ntegration				
h)	In cash flow estimation, deprec		mpany's income from		CO			
	a) Expansion b) Salvage	s c) Taxation	d) Discounts					
i)	With limited finance and a num which has a) The maximum net present				CO			
	c) Profitability index is grea	ter than unity d) Modified rate of return	-				
j)	Project Management is ideally suited for a business environment requiring all of the following except? a) Flexibility b) Innovation c) Speed d) Repetition							
		TION B		5 Marks Each -20 M	arks)			
2.	Compute Weighted Average Co XYZ Ltd.: Source of finance	ost of Capital (W. Amount (Rs.)	ACC) for the following capi	tal Structure of				
	Equity share capital	14,00,000	9					
	10%Preference share capital	8,00,000	12		CO			
	8% Debentures	9,00,000	16					
	Assuming that in order to finance an expansion plan, the company intends to borrow a fund of Rs 10,00,000 bearing 14% interest after tax, what will be the revised WACC cost of capital?							
3.	Give some reason how infrastru	acture projects are	e differed from other project	s?	CO			
4.	List the various functional struc	cture of National	Investment and Infrastructure	re Fund.	CO			
5.	Ram builders purchased an equipayable in 5 equal year end instand principal repayments.		_	_	CO ₂			

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(3* 10 Marks Each- 30 Marks)

6. ABC Ltd. Is planning to invest in project costing \$ 1,500 million. The following are the expected cash flows along with probabilities for 3 periods

Perio	od 1	Perio	d 2	Period 3		
Cash flow (\$) Probability		Cash flow (\$) Probability		Cash flow (\$)	Probability	
1,500	0.1	2,200	0.3	1,500	0.15	
1,000	0.2	2,300	0.3	2,500	0.35	
2,000	0.3	1,200	0.2	2,500	0.35	
2,200	0.4	2,100	0.2	200	0.15	

Rank the projects based on Risk and Return using co-efficient of variation

- 7. Briefly discuss the risk management process and strategies for risk mitigation?
- 8. Compare 3 mutual exclusive projects of the company which has the investable funds of Rs 10,00,000 suggest which project should select for investment using RADR.

Cash flows associated with the projects are follows:

Years	Project A	Project B	Project C
0	(5,00,000)	(5,00,000)	(5,00,000)
1	3,75,000	40,000	1,30,000
2	1,25,000	60,000	1,90,000
3	95,000	1,30,000	2,20,000
4	2,25,000	1,50,000	30,000
5	-	1,90,000	10,000

Payback period	RADR
Upto 2 years	8%
2-4 years	10%
Above 4 years	15%

SECTION-D (30 Marks)

9. Dam constructing project has a list of tasks to be performed whose time estimates are given in the Table as follows.

CO₃

CO2

CO1

CO4

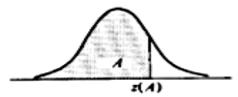
Activity i j	Activity Name	T ₀	t _m (in days)	t _p
1-2	A	4	6	8
1-3	В	2	3	10
1-4	С	6	8	16
2-4	D	1	2	3
3-4	E	6	7	8
3-5	F	6	7	14
4-6	G	3	5	7
4-7	Н	4	11	12
5-7	I	2	4	6
6-7	J	2	9	10

- a) Draw the project network and find the duration, mean, and variance.
- b) Find the critical path.
- c) Find the probability that the project will be complete in 19 days. If the probability is less than 20%, find the probability of completing it in 24 days.

Present values table

Periods					Interest	t rates (r)				
(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
3	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
4	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
5	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
6 7	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
7	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279
8	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233
9	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194
10	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162
Periods					Interest	t rates (r)				
(n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621
6	0.942	0.888	0.837	0.790	0.746	0705	0.666	0.630	0.596	0.564
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386

Entry is area A under the standard normal curve from $-\infty$ to z(A)



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2	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
.0	.5000	.5040	.5080	.5120	.5160	.5199	.5239	.5279	.5319	.5359
Ĭ.	.5398	.5438	.5478	.5517	.5557	.5596	.5636	.5675	.5714	.5753
.2	.5793	.5832	.5871	.5910	.5948	.5987	.6026	.6064	.6103	.6141
.3	.6179	.6217	.6255	.6293	.6331	.6368	.6406	.6443	.6480	.6517
.4	.6554	.6591	.6628	.6664	.6700	.6736	.6772	.6808	.6844	.6879
.5	.6915	.6950	.6985	.7019	.7054	.7088	.7123	.7157	.7190	.7224
.6	.7257	.7291	.7324	.7357	.7389	.7422	.7454	.7486	.7517	.7549
.7	.7580	.7611	.7642	.7673	.7704	.7734	.7764	.7794	.7823	.7852
.8	.7881	.7910	.7939	.7967	.7995	.8023	.8051	.8078	.8106	.8133
.9	.8159	.8186	.8212	.8238	.8264	.8289	.8315	.8340	.8365	.8389
1.0	.8413	.8438	.8461	.8485	.8508	.8531	.8554	.8577	.8599	.8621
1.1	.8643	.8665	.8686	.8708	.8729	.8749	.8770	.8790	.8810	.8830
1.2	.8849	.8869	.8888	.8907	.8925	.8944	.8962	.8980	.8997	.9015
1.3	.9032	.9049	.9066	.9082	.9099	.9115	.9131	.9147	.9162	.9177
1.4	.9192	.9207	.9222	.9236	.9251	.9265	.9279	.9292	,9306	.9319
1.5	.9332	.9345	.9357	.9370	.9382	.9394	.9406	.9418	.9429	.9441
1.6	.9452	.9463	.9474	.9484	.9495	.9505	.9515	.9525	.9535	.9545
1.7	.9554	.9564	.9573	.9582	.9591	.9599	.9608	.9616	.9625	.9633
1.8	.9641	.9649	.9656	.9664	.9671	.9678	.9686	.9693	.9699	.9706
1.9	.9713	.9719	.9726	.9732	.9738	.9744	.9750	.9756	.9761	.9767
2.0	.9772	.9778	.9783	.9788	.9793	.9798	.9803	.9808	.9812	.9817
2.1	.9821	.9826	.9830	.9834	.9838	.9842	.9846	.9850	.9854	.9857
2.2	.9861	.9864	.9868	.9871	.9875	.9878	.9881	.9884	.9887	.9890
2.3	.9893	.9896	.9898	.9901	.9904	.9906	.9909	.9911	.9913	.9916
2.4	.9918	.9920	.9922	.9925	.9927	.9929	.9931	.9932	.9934	.9930
2.5	.9938	.9940	.9941	.9943	.9945	.9946	.9948	.9949	.9951	.9952
2.6	.9953	.9955	.9956	.9957	.9959	.9960	.9961	.9962	.9963	.9964
2.7	.9965	.9966	.9967	.9968	.9969	.9970	.9971	.9972	.9973	.9974
2.8	.9974	.9975	.9976	.9977	.9977	.9978	.9979	.9979	.9980	.9981
2.9	.9981	.9982	.9982	.9983	.9984	.9984	.9985	.9985	.9986	.9986
3.0	.9987	.9987	.9987	.9988	.9988	.9989	,9989	.9989	.9990	.9990
3.1	.9990	.9991	.9991	.9991	.9992	.9992	.9992	.9992	.9993	.999
3.2	.9993	.9993	.9994	.9994	.9994	.9994	.9994	.9995	.9995	,999
3.3	.9995	.9995	.9995	.9996	.9996	.9996	.9996	.9996	.9996	,9997
3.4	.9997	.9997	.9997	.9997	.9997	.9997	.9997	.9997	.9997	.9998