Name:

**Enrolment No:** 



## UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

**End Semester Examination, December 2018** 

**Course: Financing Infrastructure Projects** 

**Program: MBA-General Management** 

Time: 03 hrs.

**Semester: III** Code:FINC 8012

Max. Marks: 100

Instructions: This question paper is divided into four sections A, B, C and D. Section A; Section B has 20 marks each, and Section C and Section D are of 30 marks each.

## **SECTION A**

S. No.		Marks	CO1
Q 1	Explain the following concepts related with infrastructure financing in India:		
a.	Cross ownership in airport bidding	02	
b	Name some of the community centered social development projects in India	02	
c.	Explain in brief the KRCL model	02	
d.	Concept of Termination cost	02	
e.	Characteristics of Infrastructure Sector as Rangarajan Committee	02	
f.	Two Price Setting Approaches	02	
g.	Public Utilities consist of two characteristics	02	
h.	Non-Recourse Financing	02	
i.	Risk Identification techniques	02	
j.	Concept of Risk Response for Risk Analysis	02	
	SECTION B		
Q.2	Short Answer Questions. Attempt Any Four Questions	Marks	CO2
a.	Explain the key transaction objectives of GoI in relation to the airport bidding.	05	
b.	A machine can reduce annual cost by \$40,000. The cost of the machine is 223,000 and the useful life is 15 years with zero residual value.  Required:  1. Compute internal rate of return of the machine.  2. Is it an acceptable investment if cost of capital is 16%? (Please use Present Value of an Annuity table)	05	
c.	Discuss the different phases of Life Cycle Cost Model.	05	
d.	Difference between corporate finance and project finance.	05	
e.	Draw and discuss briefly the project finance structure.	05	
f.	What are the methods of project finance for infrastructure projects.	05	
	SECTION-C		

	Long i mswer questions.	Attempt Any Two Questio	ns.	M	larks	CO <sub>3</sub>
۸.	Your company is consider offer from a government of project. The company has  tender for MS1 or  tender for MS2 or  tender for both M  If tenders are to be submit to be entirely recouped from the company  The cost of tendering for off is successful would be £18. The cost of tendering for off tenderi	ing whether it should tender for department for supply compothree options: ally; or ally; or S1 and MS2.  Itted the company will incur acom the contract price. The risk will have made a loss.  Contract MS1 only is £50,000.  Contract MS2 only is £14,000.	for two contracts (MS1 and nents for the development dditional costs. These costs k, of course, is that if a tend	MS2) on of road will have ler is	Iarks	CO3
	successful would be £12,000.					
	The cost of tendering for lifthe tender is successful	ooth contract MS1 and contra	ct MS2 is £55,000. The proj	ect cost		
		would be £24,000. e tender prices have been det	ermined. In addition, subie	ctive		
		ade of the probability of getti	•			
	-	ow. Note here that the compa	-			
	cannot, for example, subn	nit two tenders (at different p	rices) for the same contract			
	Option	Possible Tender Prices	Probability of getting	1 I		
	op.i.e		, , ,			
	MS1 Only	(£) 130,000	contract 0.20			
	·	(£)	contract			
	·	(£) 130,000	contract 0.20	-		
	MS1 Only	(£) 130,000 115,000	contract 0.20 0.85			
	MS1 Only	(£) 130,000 115,000 70,000	contract 0.20 0.85 0.15			
	MS1 Only	(£) 130,000 115,000 70,000 65,000	0.20 0.85 0.15 0.80			
	MS1 Only  MS2 Only	(£) 130,000 115,000 70,000 65,000 60,000	contract 0.20 0.85 0.15 0.80 0.95			
	MS1 Only  MS2 Only  MS1 & MS2  In the event that the comp	(£) 130,000 115,000 70,000 65,000 60,000 190,000 140,000  pany tenders for both MS1 an	contract 0.20 0.85 0.15 0.80 0.95 0.05 0.65	h		
	MS1 Only  MS2 Only  MS1 & MS2  In the event that the compontracts (at the price shows	(f) 130,000 115,000 70,000 65,000 60,000 190,000 140,000 coany tenders for both MS1 and own above) or no contract at a	contract 0.20 0.85 0.15 0.80 0.95 0.05 0.65  d MS2 it will either win both ll.	h		
	MS1 Only  MS2 Only  MS1 & MS2  In the event that the component contracts (at the price shows what do you suggested)	(£)  130,000  115,000  70,000  65,000  60,000  190,000  140,000  pany tenders for both MS1 and two above) or no contract at a dest the company should do are	contract 0.20 0.85 0.15 0.80 0.95 0.05 0.65  d MS2 it will either win both lll. and why?		05	
	MS1 Only  MS2 Only  MS1 & MS2  In the event that the component of the price shows that the down suggest what are the down that are the down that the down that are the down that the dow	(f) 130,000 115,000 70,000 65,000 60,000 190,000 140,000 coany tenders for both MS1 and when above) or no contract at a dest the company should do arouside and the upside of your statements.	contract 0.20 0.85 0.15 0.80 0.95 0.05 0.65  d MS2 it will either win both ll. and why? suggested course of action?	)	05 05	
	MS1 Only  MS2 Only  MS1 & MS2  In the event that the component (at the price shown with the component of the price shown with the component of the price shown with the component of the price shown with the consultant has a sin cash she will en	(£)  130,000  115,000  70,000  65,000  60,000  190,000  140,000  Dany tenders for both MS1 and when above) or no contract at a sest the company should do are reside and the upside of your supproached your company with sure that if you tender £60,000	contract  0.20  0.85  0.15  0.80  0.95  0.05  0.65  d MS2 it will either win both ll.  and why?  suggested course of action? th an offer that in return for 00 for contract MS2 only you	£20,000 ur tender		
	MS1 Only  MS2 Only  MS1 & MS2  In the event that the components (at the price shown of th	(f) 130,000 115,000 70,000 65,000 60,000 190,000 140,000 coany tenders for both MS1 and the upside of your supproached your company with a process of the co	contract  0.20  0.85  0.15  0.80  0.95  0.05  0.65  d MS2 it will either win both lill.  and why?  suggested course of action?  than offer that in return for contract MS2 only you pt her offer or not and why become standard features ibility, cost-plus contracts	f£20,000 ur tender ? of public may be	05	

	(ii) Discuss the economics of discriminatory charging (Drising) for infractructure project and		
	(ii) Discuss the economics of discriminatory charging (Pricing) for infrastructure project and explain that how does this concept help in price setting for bidding the infrastructure project.		
C.	"With reference to the IL&FS Crisis, it is suggested the new team has to look for longer-		
C.	term solutions. Insurers and pension funds with long-term money could provide steady		
	flow of capital" With respect to the given statement explain the following:		
	a. The IL&FS Crisis	05	
	b. Various sources of finance and their role in solving the IL&FS Crisis.	05	
	c. Highlight the fundamental issues in the project financing of infrastructure projects	05	
	in India and the way forward.	0.0	
D.	Discuss and explain various risk analysis methods involved in Infrastructure projects	15	
	financing.	13	
	SECTION-D		
Q	Read the case carefully and Answer the questions that follow:	Marks	CO4
	Indian Railways Catering and Tourism Corporation		
	IRCTC was created in 1999 with a paid up capital of Rs. 200 million for developing the		
	hospitality sector in IR through the involvement of the private sector. It has since		
	diversified its business in Internet ticketing, commercial exploitation of space at		
	stations and establishing a chain of budget hotels on railway land. Earlier,		
	departmental catering services were running at a loss and fresh investments were		
	required for modernization. IRCTC uses various models of private partnerships such		
	as outsourcing, O&M contracting, business contracts, licensing and commercial		
	leasing. It is also mandated to market the existing Yatri Niwas railway hotels, hill		
	railways and other isolated lines with tourism potential, and to conserve Rail		
	Heritage.		
	In all the above-mentioned business activities, IRCTC is adopting PPP as primary		
	strategy. It has established packaged water brand 'Rail Neer' with the state of art		
	plants at Nangloi in Delhi and Danapur in Bihar. The plants are owned by IRCTC with		
	the investments of Rs. 40 million per plant. They are being operated and maintained		
	by O&M contractor, Ion Exchange Ltd. The Transport Corporation of India does		
	transportation and distribution. All its investments are funded through equity funds,		
	surplus generation and private partners. The business model of the business risk is		
	borne by the private partners. The business model of IRCTC carries no market risk as		
	IR provides the captive market and most of the business risk is borne by the private		
	partners. The Railway Board issues all the licensing policy and guidelines. It is the first		
	Public Sector Undertaking to pay a dividend in the very first year of commercial		
	operation. Its turnover is increasing with an average growth rate of about 100% from		
	2003-04 till 2005-06 and earned Rs. 19.78 crores of net profit in 2005-06. It has taken		
	over the loss making catering services of Indian Railways along with its staff and is		
	now earning a profit out of it. All initiatives taken by IRCTC so far have been highly		
	, , ,		
	profitable. It has succeeded in expanding the usage of information technology in		
	ticketing. IRCTC represents the largest e-commerce business in India. It has enabled		
	business tie-ups with banks, mobile phone services, credit card and cash card		
	companies etc. which could not have been possible in a monolith IR organization.		

	IRCTC's success establishes that the captive market for peripheral services provided by IR is a low risk high return business opportunity for PPP. Privatization and		
	outsourcing through an intermediate PSU is politically more acceptable than if done directly. PSUs are also better suited to carry out the large number of tie-ups involved.		
	Evaluate the above case-let on the basis of following:		
a.	Type of project	05	
b.	Need for PPP	05	
c.	Form and structure PPP	05	
d.	Nature of funding	05	
f.	Success and Failures	05	
g.	Lessons learnt	05	