Name:

Enrolment No:

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

END Semester Examination, March 2019

Programme Name: B. Tech ET-LLB-IPR | **Semester : VIII**

Course Name : Project and Financial Management in Energy sector | **Time : 03 hrs**

Course Code : BBCF 134 | **Max. Marks : 100**

Nos. of page(s) : 2

SECTION A

S. No.		Marks	CO
Q 1	Discuss the characteristics of project.	4	CO1
Q 2	Illustrate a) project family tree b) classification of projects.	4	CO1
Q 3	Narrate the formula for calculating the Cost of Equity using the CAPM Approach.	4	CO1
Q 4	Elucidate the investment need, appraisal and criteria in financial management.	4	CO2
Q 5	Explain the limitation of payback period and ROI method.	4	CO1

SECTION B

Q 6	Discuss the Financial analysis techniques in details.	10	CO2
Q 7	Explain the Features of Capital Budgeting Decisions and capital budgeting difficulties.	10	CO2
Q 8	Mr. Raju aspires to buy a house at Bangalore after five years from now, at an expected cost of Rs. 40 Lakhs. Determine the annual savings should Raju make, if his savings earn 11% compound Interest.	10	CO2
Q9	A company borrows Rs.3,00,00,00 to finance a new boiler installation. If the interest rate is 10% per annum and the repayment period is 5 years. Calculate the value of the total repayment and the monthly repayment value, assuming (i) simple interest and (ii) compound interest. **(OR)** Using the *net present value* analysis technique, Evaluate the financial merits of the proposed project with capital investment of Rs. 30000/- and net annual saving of Rs. 6000/- upto 10 years. Total net saving at end of 10^{th} year is Rs.60000/-, and annual discount rate is 8% for proposed project.	10	CO3

SECTION-C

Q 10	Skylax Co is contemplating the following Projects A & B as detailed below. Calculate the NPV assuming at 8% discount rate, and IRR of both the projects and suggest which project is more feasible?	20	CO3

Year ->	0	1st year	2nd year	3rd year
Project - A	Rs. 40,000	Rs. 17,000	Rs. 17,000	Rs. 41,000

	Project - B	Rs. 48,000	Rs. 22,000	Rs. 22,000	Rs. 23,000		
Q 11	A proposed project requires an initial capital investment of Rs.20000. The cash flows generated by the project are shown in the table below: Year | Cash flow (Rs.) 0 | -20000 1 | +6000 2 | +5500 3 | +5000 4 | +4500 5 | +4000 6 | +4000 Given the above cash flow data, calculate the internal rate of return for the project. (OR) It is proposed to install a heat recovery equipment in a factory. The capital cost of installing the equipment is Rs.20,000 and after 5 years its salvage value is Rs.1500. If the savings accrued by the heat recovery device are as shown below, we have to find out the net present value after 5 years. Discount rate is assumed to be 8%. Year | 0 | 1 | 2 | 3 | 4 | 5 Expenditure/saving | -20000 | 7000 | 6000 | 6000 | 5000 | 5000		**20**	**CO3**

Name: Enrolment No:	UPES

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SECTION A

S. No.		Marks	CO
Q 1	List out any four key functional areas of Financial Management	4	CO1
Q 2	Illustrate the Present Value (PV) of a Single Cash Flow	4	CO1
Q 3	Differentiate an Operating Leverage (OL) from Financial Leverage (FL)?	4	CO1
Q 4	Explain IRR and list the uses of IRR in Project Management?	4	CO2
Q 5	Differentiate 'Preference' Shares from 'Equity' Shares.	4	CO1
	SECTION B		
Q 6	Explain the stages & steps involved in the modern approaches to Financial Management.	10	CO2
Q 7	Explain the various types of Risks that prevail, while making Financial decisions by Firms.	10	CO2
Q 8	M/S. Rudra 2001 was issued in January 2014, with a maturity period of 5 years. With a Coupon payment of 8.2% per annum made every 9 months with Face value of Rs.100. calculate the YTM for the bond, if the prevailing market price was Rs. 84 as at January 2014.	10	CO2
Q9	A company borrows Rs.1,00,00,00 to finance a new heat exchanger installation. If the interest rate is 8% per annum and the repayment period is 8 years. Calculate the value of the total repayment and the monthly repayment value, assuming (i) simple interest and (ii) compound interest. **(OR)** Using the *net present value* analysis technique, Evaluate the financial merits of the proposed project with capital investment of Rs. 100000/- and net annual saving of Rs. 8000/- upto 10 years. Total net saving at end of 10^{th} year is Rs.90000/-, and annual discount rate is 8.1% for proposed project.	10	CO3
	SECTION-C		
Q 10	M/S Food supplier is contemplating the following Projects A & B as detailed below. Calculate the NPV assuming at 5% discount rate, and IRR of both the projects and suggest which project is more feasible?	20	CO3

Year ->	0	1st year	2nd year	3rd year

	Project - A	Rs. 45,000	Rs. 17,000	Rs. 17,000	Rs. 40,000		
	Project - B	Rs. 45,000	Rs. 22,000	Rs. 22,000	Rs. 20,000		

Q 11

A proposed project requires an initial capital investment of Rs.100000. The cash flows generated by the project are shown in the table below:

Year	Cash flow (Rs.)
0	-100000
1	+10000
2	+15500
3	+12000
4	+12500
5	+10000
6	+10000

Given the above cash flow data, calculate the internal rate of return for the project.

20 **CO3**

(OR)

It is proposed to install a heat recovery equipment in a factory. The capital cost of installing the equipment is Rs.10,000 and after 6 years its salvage value is Rs.2500. If the savings accrued by the boiler are as shown below, we have to find out the net present value after 8 years. Discount rate is assumed to be 10%.

Year	0	1	2	3	4	5
Expenditure/saving	-22000	8000	7000	7000	4000	4000