B.Com SEM II
18-19
Question Papers

2019

BCom Semester End Examination April 2019

ENVIRONMENTAL STUDIES

Semester:II

Duration: 1.30 Hrs.

Maximum Marks: 40

Instructions: : 1) All questions are compulsory

2) Figures to the right indicate maximum marks

3) Start each new question on a fresh page.

Q.1 A) Explain any Five of the following   (5x2=10)

   a. Water pollution

   b. AIDS

   c. Forest conservation act

   d. Hazardous waste

   e. Earthquake

   f. Human right

   g. Nuclear waste

Q.2. A) Role of seven important "R" in solid waste management   (10)

                OR

  X) Forest conservation act

                                        (10)

Q.3. A) Human Rights   (10)

            OR

  X) Rain water harvestmen

                                          (10)

Q.4. A) Field trip   (10)

            OR

  X) Disaster management   (10)

Roll No:

B.Com Semester End Examination

Mathematical Techniques II

Semester II

Duration: 2Hrs.

Maximum Mark s: 80

Instructions:

1. All questions are compulsory. However internal choice has been provided for Q.2 - Q.5
2. Figures to right indicate full marks.
3. Use of non-programmable calculators are allowed.
4. Graph paper will be provided on request.

Q1 Attempt the following. (4 x 5 = 20)

a) In how much time will Rs.5,000 at 3 % p.a. produce the same income as Rs.10,000 in 2 years at 3% p.a. simple interest?

b) Show that the points (5,4), (2,3), and (1,0) are the vertices of an isosceles triangle.

c) A function f is given as:

$$f(x) = \begin{cases} 3x + 5 & for -3 \leq x < -1 \\ 2x + 1 & for -1 \leq x < 2 \\ 2 - x & for \ 2 \leq x \leq 4 \end{cases}$$

Find f(2), f(2), f(3), f(1).

d) Find $\frac{dy}{dx}$ if

i. $y = x^2 logx$

ii. $y = (a^x - 5x + 4)^5$.

e) Find the equation of line having slope 3/4 and Y-intercept -6.

OR

p) In how many years will sum of money be doubled at 25% p.a. simple interest?

q) A(2,1) and B(4,3) are two points. If B is the mid-point of segment AC, find the co-ordinates of the point C.

r) If $f(x) = 2x^2 - 3x + 1$ for what value of x is $f(2x) = 2f(x)$?

s) Differentiate with respect to x

I. $y = \frac{3x+5}{5x-7}$

II. $y = \sqrt{3x^2 + 2} + e^x$

t) Find the equation of the line passing through the point of intersection of the lines 2x + y = 3, x -3y = 12 and through the point
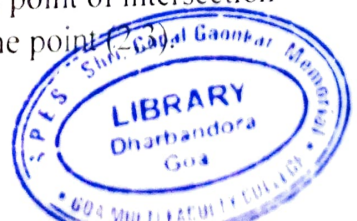
(4 x 5 = 20)

Q2 Attempt the following.

a) Find the value of x if the triangle whose vertices are A=(x,-4), B=(2,3) C=(4,-1) is right angled at C.

b) What sum of money will amount to Rs.73,502.58 in 3 years at 7% p.a. compound interest?

c) Find

  I. $\lim\limits_{x \to 2} \dfrac{x^2 - 7x + 10}{x^2 - 4}$

  II. $\lim\limits_{x \to 0} \dfrac{4^x - 3^x}{x}$

d) Evaluate the following integrals:

  I. $\int (x - 3)(x + 5)dx$

  II. $\int (3x + \dfrac{2}{x} - e^x)dx$

e) The demand function for a commodity is given by $p = 16 - \dfrac{x^2}{4}$. Find

  I. the total revenue function and

  II. marginal revenue at x=1.

OR

p) A(m,5) and B(-4,n) are the end point of a segment and C(2,-1) is the midpoint. Find m and n.

q) Find the future value of Rs.20,00,000 after 3 years if the compound interest rate is 8 % p.a.

r) Examine for continuity at x=5, the function

$$f(x) = \begin{cases} \dfrac{x^2 - 25}{x - 5} & if\ x \neq 5 \\ 15 & if\ x = 5 \end{cases}$$

s) Evaluate the following integrals:

$$\int (x^4 - 6)\, dx$$

$$\int (6x^2 - x - 12)dx$$

t) At what rate of compound interest would an amount double itself in 3years? Given that $2^{\frac{1}{3}} = 1.2611$ approximately.

Q3 Attempt the following.   **(4 x 5 = 20)**

a) Solve the following L.P.P. by graphical method.

$$Max\ z = 800x + 100y\ subject\ to,$$
$$4x + 6y \leq 120$$
$$10x + 3y \leq 180$$
$$x, y \geq 0$$

b) Find the maximum and minimum value of the function
$$f(x) = x^3 - 2x^2 + x + 10$$

c) If $D = 25 - 3p - p^2$ is a demand function, find elasticity of demand when p =3.

d) If $z = x^3 + x^2y + y^3$, prove that $x\dfrac{\delta z}{\delta x} + y\dfrac{\delta z}{\delta y} = 3z$

o) Differentiate with respect to x

I. $y = (x^3 + 4)(1 + \log x)$

II. $y = \dfrac{x^2 - 1}{2x + 1}$

OR

p) Solve the following L.P.P. by graphical method.

$$Min\ z = 25x + 40y\ subject\ to,$$
$$x + y \geq 10$$
$$6x + 4y \geq 48$$
$$x, y \geq 0$$

q) The supply function for a commodity is given by $y = 20 - 3x - 3x^2$ where y is demand and x is price. Find the price elasticity of supply when x=2.

r) If $z = 3x^2 + 2xy + 5xy^2$ find $\dfrac{\delta^2 z}{\delta x \delta y}$ and $\dfrac{\delta^2 z}{\delta y \delta x}$

s) A sum of money amounts to Rs.45,980 in 3 years and to Rs.48,640 in 4 years at a certain rate of simple interest. Find the sum and rate.

t) The demand function for a commodity is given by $p = 45 - 3x - 4x^2$. Find the consumers surplus when x=2.

Q 4 Attempt the following. (4 x 5 = 20)

a) Find the equation of the line passing through the points (1,-2) and (-3,4).

b) A sum of money is invested for 2 years at a certain rate. If it had been invested at a rate 2 % higher than the present rate, it would have given Rs.1,300 more as simple interest. Find the sum.

c) Evaluate the integral $\int_1^3 (1 - 2x)dx$.

d) Find the total revenue function and demand function, if the marginal revenue function is given as $MR = 7 - 4x$.

e) The demand function for a commodity is $p = 20 - 2D - D^2$. Find the consumers surplus when $D_1 = 3$.

OR

p) Find the equation of the line passing through (5,-1) and the sum of whose intercepts on the co-ordinate axes is 8.

q) A sum of Rs.6,55,000 is invested in a fixed deposit giving 10% p.a. compound interest. Find the interest in the 4th year.

r) Find the value of

$$\int_2^3 x(x + 1)dx$$

s) The supply function for a commodity is $p = q^2 + 10$. Find the producers surplus when the price per unit of the commodity is Rs.35.

t) The marginal cost function for producing x items is given by $MC = 3x^2 + 5x - 4$. Find the total cost function and the average cost function if the fixed cost is Rs.1000.

B.Com Semester End Examination

Practice of Insurance

Semester No: II

Duration: 02 Hrs.   **Maximum Marks: 80 Marks**

Instructions:-

1. All questions are compulsory, however internal choice is available.
2. Answer sub-questions, Question No.1 & Question No. 2 in not more than 100 words each.
3. Answer questions, from Question No. 3 to Question No. 6 each in not more than 400 words.
4. Figures to the right indicate full marks allotted to each question.
5. Start each new question on a fresh page.
6. Provide sufficient margin space in the answer book for recording marks
7. Enter the appropriate main & sub-question numbers in the answer-book.

Q.1   Answer the following (ANY FOUR)   **(4x4=16 marks)**

a) Significance of claim management in insurance

b) Nomination and paid up value

c) Claim settlement ratio

d) Insurance intermediaries

e) Third party administrator

f) · Code of conduct for agents

Q.2   Answer the following (ANY FOUR)   **(4x4=16marks)**

a) Objectives of marketing of insurance products

b) Traditional distribution channel

c) Marketing mix in insurance

d) Need of rural insurance in India

e) Double insurance

f) Unemployment Insurance

Q.3X) Explain the various grounds for repudiation of claims in Life insurance.   **(12 marks)**

<div align="center">OR</div>

Y) Explain the OECD guidelines on the best practices of insurance in claim management.   **(12 marks)**

Q.4 X) Explain the pre-requisites to become a successful insurance agent.   **(12 marks)**

<div align="center">OR</div>

Y) Explain the responsibilities of an insurance agent   **(12 marks)**

Q.5X) What is Distribution channel of insurance marketing? Explain its modern distribution channel

OR

(12 mark

Y) Explain the various marketing strategies of any <u>four</u> insurance players.

(12 mar

Q.6 X) Explain the features and legal framework of Social insurance in India.

(12 mar

OR

Y) Explain any <u>four</u> various Rural insurance policies in India.

(12 mar

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B.Com Semester End Examination

Commercial Arithmetic-II

Semester II

Duration: 2Hrs.

Maximum Marks: 80

Q1. Answer the following: (5X4=2 0)

a) Show that the points (4, 2), (7, 5) & (9, 7) are collinear.

. b) Evaluate $\lim\limits_{x\to 0} \frac{4^x-3^x}{x}$.

c) If $y = \frac{x^2+1}{x+2}$ find $\frac{dy}{dx}$.

d) If $\begin{cases} x^2 + 5x + 8 & 0 \le x \le 2 \\ 4x - 5 & 2 < x \le 4 \\ x^2 + 1 & 4 < x \le 6 \end{cases}$

Write the domain of f & find f(2), f(3) & f(8) if they exist.

OR

e) Show that A = (0, 0), (5, 5) & (-5, 5) are the vertices of a right angled triangle.

f) Given $f(x) = 1 + x - x^2$ such that $f(x + 1) = f(x + 2)$, find the value of x.

g) Check the continuity of the function at x=5

$$f(x) = \begin{cases} \dfrac{x^2 - 25}{x - 5} & if\ x \ne 5 \\ 15 & if\ x = 5 \end{cases}$$

h) Find $\frac{dy}{dx}$ if $y = e^x(x^2 - 3x + 2)$.

Q2. Answer the following: (5X4=20)

a) A company manufactures two types of lamps A & B using two machines M₁ & M₂. Lamp A requires 2 hours at machine M₁ & 1 hours at machine M₂. Lamp B requires 1 hour at machine M₁. The profit contributions from each lamp of type A is Rs.30 & of type B is Rs.20. the number of hours available per week on machine M₁ and M₂ are 40 & 50 hours respectively.

b) The total cost in thousands of rupees for the daily production of an item is $C = 40 + 10x - x^2$. Find the marginal cost and marginal cost at $x = 3$.

c) Evaluate $\int (x^6 - 5x^4 + \frac{3}{x} - \frac{2}{x}) dx$.

d) If $z = 2x^3 - 11x^2y + 3y^3$, show that $x\frac{\delta z}{\delta x} + y\frac{\delta z}{\delta y} = 3z$.

OR

e) Solve the following LPP by graphical method

$$\min z = 10x_1 + 20x_2$$

Such that,

$$2x_1 + x_2 \le 40$$
$$3x_1 + 3x_2 \ge 30$$
$$3x_1 + 4x_2 \ge 60$$
$$x_1, x_2 \ge 0$$

f) The cost of manufacturing x items is given by $c = x^2 + 6x + 8$. Find

  i.   Total cost

  ii. Average cost, also calculate both when x=10.

g) Evaluate $\int_1^2 (x^2 + x + 1)dx$.

h) If $z = f(x, y) = x^3 + 3x^2y + y^2$, then find $\frac{\delta^2 f}{\delta x^2}, \frac{\delta^2 f}{\delta y^2}$ & verify that $\frac{\delta^2 f}{\delta x \delta y} = \frac{\delta^2 f}{\delta y \delta x}$.

Q3. Answer the following:

(5X4=20)

a) Find the equation of a line having y intercept -5 and perpendicular to the line $3x - 4y + 12 = 0$.

b) Find $\frac{dy}{dx}$ if $y = (x^2 + 1)(x - 2)$.

c) The marginal cost function is given by $M = 4x + 3$ where x is the number of units produced. The fixed cost of production is Rs.12. Find the cost function. If selling price is fixed at Rs.50 per unit, find the revenue function and hence profit function.
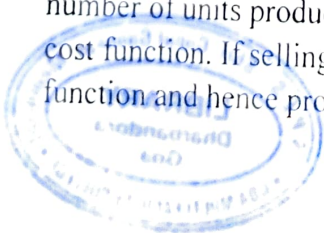
d) Two brothers have their annual incomes in the ratio of 8:5 and their spending is in the ratio 5:3. If they save Rs. 2100 and Rs. 2000 respectively, p.a. find their incomes.

OR

e) Find the equation of a line having y intercept 3 and parallel to
$3x - 2y = -4$

f) Find $\frac{dy}{dx}$ if $y = 5x^2(logx)$.

g) The marginal revenue for a commodity is 20-2D, find the total revenue when the demand is D=4.

h) It was decided that the bill of Rs.1980 should be divided among three friends A, B & C in the ratio 2:3:4, but by mistake the distribution was made in the ratio $\frac{1}{2}:\frac{1}{3}:\frac{1}{6}$. How much does each gain or lose by error.

Q4. Answer the following: (5X4=20)

a) The centre of a circle is c=(-1, 6) and one end of the diameter is A=(5,9) find the coordinates of the other end.

b) Find the extreme values of the function $f(x) = x^5 - 5x^4 + 5x^3 - 1$. Also state the extreme values of $f(x)$ at the corresponding points.

c) A man gave 35% of his sum of money to his son and 25% to his daughter. 50% of the remaining he gave to a school and he still has Rs.2000 with him. Find the total sum.

d) After allowing 20% trade discount and 6% cash discount a dress was sold for Rs.800. Find the list price of the dress.

OR

e) Show that (8, 3), (2, -1), (0, 1) and (6, 5) are the vertices of a parallelogram.

f) If $f(x) = 15 + 12x - 3x^2$, find the value of x for which $f(x)$ is maximum.

g) If the income of Smita is 50% more than the income of Geeta, then by what percent is the income of Geeta less than the income of Smita?

h) The sale price of 40 mobile phones is equal to the total printed price of 32 mobile phones. Find the rate of trade discount.

BCom Semester End Examination April 2019

ENVIRONMENTAL STUDIES

Semester:II

Duration: 1.30 Hrs.   Maximum Marks: 40

Instructions: : 1) All questions are compulsory

2) Figures to the right indicate maximum marks

3) Start each new question on a fresh page.

Q.1 A) Explain any four of the following   (5x2=10)

a. Volcanic Eruption

b. Landslides

c. Wild life protection act

d. Post disaster measures for flood

e. Acid Rain

f. Sustainable development

g. Maher Yojana

Q.2. A) Nuclear accidents with case study   (10)

OR

X) Value education   (10)

Q.3. A) Population explosion   (10)

OR

X) Preventive measures for HIV/AIDS   (10)

Q.4. A) Environment protection act   (10)

OR

X) Solid waste   (10)

Total No. of Questions: 06

B.Com Semester End Examination (CBCS)

Total No. of pages: 05

Financial Statement Interpretation and Analysis

Semester II

Duration: 02 Hrs.

Maximum Marks: 80 Marks

Instructions:
1) Question No. 1 is Compulsory
2) Q. No. 2 to Q. No. 6 answer any three Question.
3) Figures to the right indicate maximum marks allotted.
4) Provide sufficient margin space in the answer-book for recording marks.
5) Enter the appropriate main & sub-question numbers in the answer-book.

Q1. Following is the extract of Trial Balance of Pritessh Chemical Ltd. as on 31st Dec. 2018.

Debit Balances	Rs.	Credit Balances	Rs.
Goodwill	100,000	Equity Share Capital (6,000 Shares of Rs. 100 Each)	600,000
Plant and Machinery	260,000	Security Premium	40,000
Furniture and Fixtures	35,000	6% Mortgage Debenture	200,000
Calls in Arrears	8,000	Profit and Loss (1/1/2018)	100,000
Stock in Trade (1/1/2018)	52,000	Sales	1,140,000
Land	800,000	Return Outward	4,000
Interest on Debenture	6,000	Interest on Investment	2,000
Purchases	620,000	Outstanding Expenses	20,000
Return Inward	5,000	Bank Overdraft	230,000
Investment in 4% Govt. Of India	48,000	Creditors	164,000
Tax Deducted at Sources	460		
Salaries and Wages	234,400		
Interim Dividend	29,600		
Rent	12,000		
Directors Fees	3,000		
Printing and Stationary	2,000		
Miscellaneous Expenses	24,000		
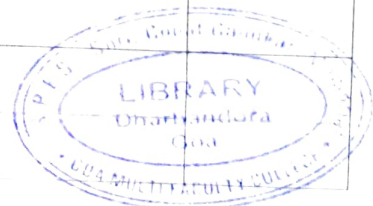
Audit Fees	5,000		
Preliminary Expenses	10,000		
Advances to Employee	4,000		
Prepaid Expenses	3,000		
Deposits with Customs Authorities	7,500		
Advanced Payment of Income Tax	120,000		
Cash in Hand	4,240		
Debtors	105,000		
Bad Debts	1,800		
	2,500,000		2,500,000

Other information and adjustment:
1. Authorized share capital was 10,000 shares of Rs. 100 each.
2. Closing stock as on 31st Dec. 2018 has been valued at Rs. 24,000.
3. Provision for doubtful debts to be maintained @ 10% on Debtors.
4. Provision for taxation is to be created for Rs. 30,000.
5. Provide Depreciation on Plant and Machinery and Furniture & Fixtures @ 10%.
Prepare Profit and Loss Account and the Balance Sheet under schedule III of Companies Act 2013 as on 31st Dec. 2018. **(20 Marks)**

Q2. You are given the following information:

Balance Sheet of Himalaya Pub. Ltd.

Liabilities	31/3/18	31/3/19	Assets	31/3/18	31/3/19
Equity Share Capital	400,000	470,000	Machinery	590,000	790,000
8% Preference Share	300,000	200,000	Goodwill	90,000	80,000
Reserve	140,000	150,000	Trade Receivable	280,000	188,000
P & L Account	250,000	390,000	Inventory	100,000	182,000
Bank Overdraft	60,000	30,000	Discount on Issue of Shares	13,000	8,000
Trade Payable	7,000	8,000	Cash at Bank	84,000	
	1,157,000	1,248,000		1,157,000	1,248,000

Additional information:
1. Income tax paid during the year was Rs. 7000.
2. Depreciation Rs. 30,000 was charged to P&L Account.

3. Bank overdraft treated as Current Liability.
You are required to prepare Cash Flow Statement under Indirect method. **(20 Marks)**

Q3. The following the balance sheet of Abhi Ltd. as on 31st Dec. 2018.

Liabilities	Rs.	Assets	Rs.
General Reserve	61,500	Cash	2,500
Overdraft From Bank Of India	26,000	Stock	42,500
8% Debentures	38,500	Plant And Machinery	105,000
13% Pref. Share Capital	50,000	Prepaid Expenses	3,500
Equity Share Capital	125,000	Furniture And Fitting	52,500
Bills Payable	10,000	Goodwill	38,500
Profit And Loss Account	65,000	Investment	24,500
Sundry Creditors	52,000	Bills Receivable	12,500
Income Received In Advance	5,000	Bank Balance	14,000
Provision For Tax	12,500	Preliminary Expenses	10,000
Accumulated Depreciation On:		Land And Building	127,000
Plant And Machinery	15,000	Sundry Debtors	55,000
Land And Building	17,500	Discount On Issue Of Shares	5,000
Furniture And Fitting	20,000	Patent	30,500
Share Premium	25,000		
	523,000		523,000

Prepare Common Size Statement of Balance Sheet and comment under Schedule III of Companies Act 2013. **(20 Marks)**

Q4. Following is the Revenue Account of Colgate Ltd. Trading, Profit & Loss Account for the year ended on 31st March. 2018.

Particular	Amount	Assets	Amount
To Opening Stock	27,150	By sales	2,55,000
To Purchases	1,63,575	By closing stock	42,000
To Carriage Inward	4,275	By interest received	4,200
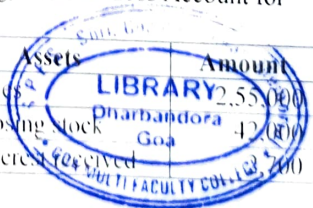
To Office Expenses	45,000		
To Sales Expenses	13,500		
To Loss on Sale of Fixed Assets	1,200		
To Net Profit C/d	45,000		
	2,99,700		**2,99,700**

You are required to compute the following ratio and give your comment on each Ratio with reference to standard ratio.

1. Gross Profit Ratio.
2. Operating Ratio.
3. Stock Turnover Ratio.
4. Office Expenses Ratio.
5. Net Profit before Tax Ratio.

(15 Marks)

Q4. B) Explain importance of Economic Value added (any 5 points)   **(05 Marks)**

Q5. From the Following figures relating to Priyadarshani Carbon Ltd. prepare a Comparative Statement under Schedule III of Companies Act 2013 and give your comment.

Particular	2017	2018
Sales	12,00,000	15,00,000
Net Block	5,00,000	8,00,000
Debtors	2,00,000	2,95,000
Creditors	1,00,000	2,00,000
Bank Balance	50,000	20,000
Closing Stock	2,00,000	4,00,000
Bank Overdraft	1,00,000	2,50,000
Purchases	9,00,000	12,00,000
Depreciation	75,000	1,20,000
Expenses	1,00,000	1,50,000
Interest on Overdraft	15,000	40,000
Loan	----	2,00,000
Interest on Loan	----	35,000
Share Capital	4,00,000	4,00,000
Reserve and Surplus	1,90,000	2,07,500
Provision for Tax	1,20,000	1,97,500
Propose Dividend	40,000	60,000
Stock On 1st January 2017	1,80,000	----

Q6. Schinke Ltd. furnishes you their Balance Sheet as n 31st March, 2018 with some additional information:

Balance Sheet as on 31st March, 2018

Liabilities	Amount	Assets	Amount
Equity Share Capital	2,00,000	Goodwill	85,000
10% Preference Share Capital	2,00,000	Building (at Cost)	2,00,000
Reserves	30,000	Machinery (at Cost)	1,00,000
Profit and Loss Account	25,000	Furniture (at cost)	75,000

|			
12% Debenture	1,50,000	Vehicles (at Cost)	1,75,000
15% Public Deposits	1,00,000	Debtors (last year Rs. 80,000)	1,10,000
Creditors (Last year Rs. 30,000)	40,000	Bills Receivable (last year Rs. 65,000)	95,000
Bills Payable (Last year Rs. 25,000)	35,000	Inventories (last year Rs. 70,000)	50,000
Bank overdraft	10,000	Cash and Bank Balance	60,000
Depreciation provision	1,00,000	Prepaid Insurance	5,000
Provision for Income Tax	50,000	Advanced Income Tax	40,000
Expenses Payable	60,000	Preliminary Expenses	5,000
	10,00,000		10,00,000

Further Information:

a) Total sales or the year Rs. 24,00,000 (70% on Credit)
b) Gross Profit Rate is 25%
c) Profit before Tax Rs. 1,40,000

Prepare the above Balance Sheet in Vertical Statement and calculate the following Ratio:

1. Current Ratio
2. Proprietary Ratio
3. Return on Capital Employed
4. Capital Gearing Ratio
5. Debt service Ratio.

(20 Marks)
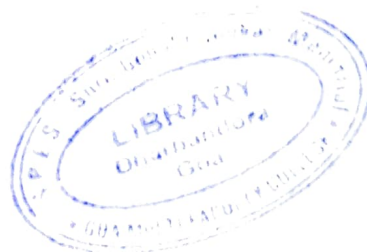
B.Com Semester End Examination

Managerial Economics

Semester: II

Duration: 2 Hrs.

Maximum Marks: 80

Q.1) Answer any FOUR questions

(4x4 =16 marks)

i. Explain the strategy of Marginal Cost Pricing.

ii. State the advantages and disadvantages of Cost Based Pricing.

iii. What do you understand by Competition Based Pricing?

iv. Explain the concept and role of Profit.

v. State the assumptions of Break-Even Analysis.

vi. Comment on Profit Volume Analysis.

Q.2) Answer any FOUR questions

(4x4 = 16 marks)

i. State the approaches to determine the size of Capital Budget.

ii. Explain Cost of Preferred Stock.

iii. State and explain the sources of funds for long term financing.

iv. What do you understand by Risk and Certainty?

v. Elaborate on sources of business risks.

vi. Define Risk Premiums.

Q.3) Answer any ONE question (1x12 = 12 marks)

i. Write a note on Penetration Pricing and Going Rate Pricing.

or

ii. Explain the strategy of Product Life Cycle based pricing.

Q.4) Answer any ONE question (1x12 = 12 marks)

i. What are the Profit Limiting factors? What is the Role of Profit?

or

ii. Write a note on Break-Even Analysis.

Q.5) Answer any ONE question (1x12 = 12 marks)

i. Write a note on Social Cost Benefit Analysis.

or

ii. Elaborate on the steps involved in Capital Project Evaluation.

Q.6) Answer any ONE question (1x12 = 12 marks)

i. Write a note on the steps involved in the analysis of risky decisions

or

ii. Elaborate on Prisoner's Dilemma.

*********ALL THE BEST*********