

**Goa Vidyaprasarak Mandal's
GOPAL GOVIND POY RAITURCAR COLLEGE OF COMMERCE AND
ECONOMICS, PONDA-GOA
B.COM. CBCS (SEMESTER-II) EXAMINATION, APRIL 2018
MANAGERIAL ECONOMICS**

Duration : 2 hours

Marks: 80

Instructions:

- i) All questions are compulsory however internal choice is available.
- ii) Figures to the right in brackets indicate marks.
- iii) Use of non-programmable calculators is allowed.

Q.1 Answer **any 4** of the following questions in not more than 100 words: (4x4=16)

- i. Explain Cost plus pricing method of pricing.
- ii. Describe price skimming and packaging as pricing strategies.
- iii. Explain any 4 objectives of pricing policy.
- iv. Give the meaning of profit. What are accounting and economic profits?
- v. Give 4 reasons why firms limit or control their profits.
- vi. Write 4 assumptions of Break Even Analysis (BEA) theory.

Q.2 Answer **any 4** of the following questions in not more than 100 words: (4x4=16)

- i) Define capital budgeting. Give the steps involved in capital budgeting.
- ii) Short note on Social Cost Benefit Analysis (SCBA).
- iii) Describe Weighted Average Cost of capital.
- iv) Define Risk and Uncertainty. Give any 3 sources of business risk.
- v) Assumptions of Game theory (4).
- vi) From the payoff matrix given below explain the Maxmin and Minmax strategy of the 2 mobile service providers i.e JIO and IDEA.

| | | IDEA | |
|-----|------------------|--------------|------------------|
| | | To advertise | Not to advertise |
| JIO | Strategy | | |
| | To advertise | (60, 30) | (70, 20) |
| | Not to advertise | (50, 40) | (65, 35) |

Q.3 a) Explain the below pricing methods.

- i. Penetration Pricing. ii. Going rate pricing and iii. Loss leader pricing. (12)

OR

Q.3 b) Explain Transfer pricing, Sealed bid pricing and Dumping. (12)

Q.4 a) Draw and Explain a Break Even Analysis Chart. (4)

- b) For a firm, Selling Price per unit = ₹ 20, variable cost per unit = ₹4, Fixed Cost = ₹ 1,00,000, total output = 20,000 units, total Variable cost = ₹ 80,000 Sales = ₹ 4,00,000. Calculate P/V Ratio(C/S Ratio), Break even point (BEP)in units and Break even point in sales value terms. (4)
- c) Calculate safety margin of a firm when its sales is 25000 units of output and its BEP output is 15000 units. (2)
- d) 2 applications or uses of BEA. (2)

OR

- Q.4 x) For a company Asha Limited total production is 10,000 units. Selling price per unit = ₹ 20, variable cost per unit = ₹ 12, Fixed cost = ₹ 2,50,000.
- Compute the BEP in units and money terms. (4)
 - Calculate the Target Sales volume to be produced when target profit = ₹ 60,000. (2)
 - If the variable cost per unit increases from ₹ 12 to ₹ 14 then what will be the new selling price? (2)
 - Give 2 limitations of BEA. (4)

- Q.5a) Project Z requires investment of ₹ 5,00,000 and gives an annual cash flow of ₹ 90000. Calculate the payback period. (3)
- b) Cost of a machine = ₹10,00,000. Life of the machine is 5 years. Discount rate is 10%. Year wise cash flows the machine will generate and the discount factors are as follows: Find out the machine's Net Present Value (NPV). (4)

| year | Cash flows (in ₹) | Discount factor |
|------|-------------------|-----------------|
| 2011 | 2,00,000 | 0.909 |
| 2012 | 2,50,000 | 0.826 |
| 2013 | 3,10,000 | 0.751 |
| 2014 | 3,25,000 | 0.683 |
| 2015 | 3,50,000 | 0.621 |

- c) Average income of a firm B is ₹ 45,000 and average investment is ₹ 9,00,000. Find out accounting rate of return. (2)
- d) Write a short note on cost of equity capital. (3)

OR

- Q.5x) A project Q requires an investment of ₹ 3,00,000 and it will generate cash flows of ₹ 80,000, ₹ 70,000, ₹ 90,000 and ₹ 1,50,000 in the next 4 years. Find its payback period. (4)
- y) Following data of company is given:

| Type of capital | Amount in ₹ | Cost of capital |
|--------------------|-------------|-----------------|
| Equity capital | 6,70,000/- | 18% |
| Retained earnings | 2,35,000/- | 15% |
| Preference capital | 1,50,000/- | 11% |
| Debentures | 3,50,000/- | 10% |

Find the weighted average cost of capital to the company. (4)

- z) A firm is interested in buying a machine costing ₹ 2,00,000 /- . Life of the machine is 4 years . cash flow it will generate is ₹ 80,000 per year. The discount rate =10%. Calculate Net Present Value of the machine and decide whether to accept or reject the machine. (4)

Q.6 A) There are 2 projects A and B. Given below are their annual cash flows and probability of getting those cash flows. Calculate each project's standard deviation and find out if project A or B is more risky. (8)

| Project A | | Project B | |
|--------------------------|---------------|--------------------------|---------------|
| Cashflows (in ₹ lakhs) X | Probability P | Cashflows (in ₹ lakhs) X | Probability P |
| 3 | 0.10 | 2 | 0.10 |
| 4 | 0.20 | 3 | 0.25 |
| 5 | 0.40 | 5 | 0.30 |
| 6 | 0.20 | 6 | 0.25 |
| 8 | 0.10 | 8 | 0.10 |

B) Explain in brief Decision Tree approach under risk. (4)

OR

Q.6X) Answer any 2 of the following: (2 x 6=12)

1. Define Nash Equilibrium. Explain Nash Equilibrium in the following example.

Suppose Mobile Service Operators Vodafone and BSNL are 2 competitors who are competing for getting highest market share in the mobile service market. Below is the payoff (market share) matrix for both the firms. Assuming that when each player (firm) advertises it expects the rival firm to advertise, Explain the strategy and payoff of Vodafone as well as BSNL and following which strategy will they reach Nash equilibrium.

| | | BSNL | |
|----------|------------------|--------------|------------------|
| | | To advertise | Not to advertise |
| VODAFONE | To advertise | (40, 25) | (50, 08) |
| | Not to advertise | (30, 20) | (55, 10) |

2. Write a short note on (a) Risk adjusted rate of return (2) Certainty Equivalent factor.

3. Explain Nash Equilibrium in the following example of Prisoner's Dilemma. Suppose there are 2 Prisoners A and B caught by Police for a bank robbery. But the police do not have sufficient evidence to prove their theft. So police keeps each prisoner in separate cells in the jail and questions each one separately. From the Matrix below explain the punishment faced by each prisoner and who losses and wins in each case. And under which strategy Nash Equilibrium is reached?

Prisoner's Dilemma

| Strategy | Prisoner B Stays Silent | Prisoner B admits to his crime |
|--------------------------------|---|--|
| Prisoner A Stays Silent | <i>Both get 2 years in jail</i> | <i>B gets 1 year in jail A gets 10 years in jail</i> |
| Prisoner A admits to his crime | <i>A gets 1 year in in jail B gets 10 years in jail</i> | <i>Both get 5 years in jail</i> |