

# Pre-board Examination - 2024

**Subject: ECO 206: Economics for Business FM: 100**

**Semester: BIM 4th Semester Time: 3 hrs**

**Group "A"**

**Brief Answer Questions** **10\*2 =20**

1. What is the effect of a leftward shift in the supply curve in equilibrium price and quantity?
2. Differentiate between price ceiling and flooring?
3. Why isoquants never intersect each other?
4. Mention any two uses of advertisement elasticity of demand.
5. What is economic cost?
6. Mention any four properties of labour.
7. Prove MPC + MPS = 1
8. What is ex-ante and ex- post investment?
9. Give any four examples of oligopoly market
10. What is disposable income?

**Group "B"**

**Short Answer Questions (Attempt any six Questions) 6\*5 = 30**

1. Describe the scope of microeconomics.
2. Explain the equilibrium of a producer in the case of output maximization subjected to cost constraint.
3. Explain the difference between demand-pull and cost-push inflation.
4. Explain the concept of cost-plus pricing with an example
5. Based on the following table, answer the questions

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Quantity of output | 0 | 1 | 2 | 3 | 4 | 5 |
| Total cost | 30 | 50 | 60 | 78 | 120 | 200 |

1. Calculate TFC, TVC
2. Plot TFC, TVC and TC curve
3. Explain the psychological law of consumption.
4. Describe the shift of the supply curve with the factors causing it.

**Group "C"**

**Long Answer Questions (Attempt any three Questions) 3\*10 =30**

1. Explain the method of calculating NI by expenditure method. Calculate GDP at MP and GNP at MP from following hypothetical national income data by both income and expenditure method. (5+5)

|  |  |
| --- | --- |
| ITEMS | Rs.in millions |
| Rent  Private final consumption expenditure  Interest  Dividend  Undistributed profit  Government final consumption expenditure  Net domestic capital formation  Compensation of employee  Depreciation  Net indirect Tax  NFIA  Net export | 20  400  30  45  5  100  50  400  10  50  -10  10 |

1. Given the production function be

Q = 20L - + 12LK – 0.5

Per unit cost of labor (w) = Rs 4000 and per unit cost of capital (r) = Rs 2000 respectively. If the company is constrained by RS 28000 to spend on capital and labour inputs, find the optimal employment of inputs. If price of the product is Rs 100, find the profit or loss of the firm.

1. Explain the profit maximization goal of a firm. If the cost function of a firm is C = 10+0.5 and demand function is P = 90-2Q, find the price and profit at the equilibrium condition.
2. Explain the relation between price elasticity of demand and revenue.

**Group "D"**

**Comprehensive Answer /Case/Situation Analysis Questions 20**

1. Read the questions carefully and answers the question that follows.

Average cost of solar energy has been decreasing continuously for past decades in the world market Comparing the cost of electricity from new power plants in 2009 and 2019, the cost of solar electricity (from photovoltaic module) fell from Rs. 44,875 per megawatt hour to Rs. 5,000 per megawatt hour.

The cost reduction is possible because larger, more efficient factories are producing the modules; technological advances increase the efficiency of the panels; engineering advances improve the production processes of the silicon ingots and wafers; the mining and processing of the raw materials extends in scale and becomes cheaper, operational experience accumulates by "learning by doing"; the modules are more durable and live longer, market competition ensures that profits are low and capital costs for the production decline. Once solar hit scale, it started having its own supply chain and the module itself got a lot cheaper and with that scale there was more research and development. In 2010, fewer than 50,000 megawatts of solar installed but in 2019 with more than 500,000 megawatts installed.

In contrast to this steady decline in renewable energy generation costs, prices of natural gas and coal have sharply increased. The fossil fuel sector is becoming more volatile and riskier. For coal, gas, and nuclear power plants, there are two factors that affect price: the current cost of that fuel, and the plant's operating costs. Renewables like wind and solar don't need to pay for fuel, so the only cost is in building and maintaining the technology. All power plants that rely on nonrenewable sources of energy will have this continual expense, even if the technology to build the plants gets cheaper.

Solar energy in Nepal is abundant and cheap. The solar potential in Nepal is 50,000 terawatt- hours per year, which is 100 times larger than its hydro resource. The cost of solar electricity in Nepal is NRs 5,000 per megawatt hour. Once the solar industry becomes mature it will be falling to below NRs 3,750 per megawatt hour in 2030. In the future, the Nepali people can expect to achieve a much higher living standard. When Nepal catches up with the developed countries, each person will consume about 15 megawatt- hours per person per year of electricity, which is 70 times larger than today. Clean solar electricity can be used in lightening and heating homes, cooking food, charging electric vehicles, driving industry, computing, using telecommunications, pumping water, grinding grain and refrigerating.

**Questions:**

a. Draw long run average cost curve of solar electricity and nonrenewable sources of energy.

b. What types of economies of scale does the solar electricity enjoy during the decades?

1. Describe the factors determining the supply of solar energy.
2. Describe the factors determining the demand for solar electricity in Nepal.