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| Name: |  |
| Enrolment No: | |

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2018

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| Course: ECONOMICS 1 Semester: I Programme: BA PPA Time: 03 hrs. Instructions: | CC: Economics I Max. Marks: 100 |
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SECTION A

| S. No. | Section A In this section all, the TEN questions are compulsory. | 2*10 | Marks | CO |
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| I | 1. What do we call a good whose income elasticity of demand is less than zero? (Inferior/ Giffen/substitute/compliment) 2. Are ethical or value judgements involved in positive economics? (Always/ Never/ Rarely/ Mostly) 3. If the price elasticity of demand for coffee is estimated to be minus 0.25 in the short-run, which is the most likely value of the long-run elasticity? (Minus 0.10/ minus 0.25/ minus 0.40/ minus infinity) 4. Amar (a student in UPES) cannot tell the difference between Diet Coke and Diet Pepsi. For him, these goods are: (perfect substitutes/ perfect compliments/ intransitive/ necessities) 5. Which assumption about preferences tells us that a consumer's most preferred market basket will lie on the budget line, rather than below the budget line? (Completeness/Transitivity/More is better/ Diminishing marginal rate of substitution) 6. Amar chooses to spend his entire income on food and buys no clothing, His indifference curves must therefore: (be vertical/ be horizontal/ have a MRS greater than the price ratio where his budget line intersects the food axis/ have a MRS less than the price ratio where his budget line intersects the food axis) 7. (Consumer surplus/ producer surplus/ revenue / profit) is the area above the market price and below the demand curve but only up to the quantity demanded at that price. 8. If a firm using only capital and labour doubles its labour input and output increases by less than 100% then: (production exhibits decreasing returns to scale/production exhibits increasing returns to scale/ production exhibits diminishing marginal returns/ production exhibits increasing marginal returns) 9. The price elasticity of the demand curve faced by a perfectly competitive firm is (zero/ minus one/ minus infinity/ the price elasticity of the market demand curve) | 20 | 20 | CO1 |

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| | 10. For a natural monopoly, the optimal policy for a regulator is to set a price such that ($P = MC / P = AVC / P = ATC$, but $P > MC / P < MC$, but $P > ATC$) | | |
| SECTION B | | | |
| Q II | Section B-Short answer questions-20 marks Answer any Four Give brief description/Write short notes on the following | 5x4 | |
| 11 | 1. Pharmaceutical drugs have an inelastic demand, and computers have an elastic demand. Suppose that technological advance doubles the supply of both products (that is, the quantity supplied at each price is twice what it was). a) What happens to the equilibrium price and quantity in each market? b) Which product experiences a larger change in price? Also, which product experiences a larger change in quantity? c) What happens to total consumer spending on each product? | 5 | CO1, CO3 |
| 12 | If the government places a tax of Rs 1 lakh on luxury cars, will the price paid by consumers rise by more than Rs 1 lakh, less than Rs 1 lakh, or exactly Rs 1 lakh? Explain. (Assume that customer demand is highly elastic) | 5 | CO1 CO2 CO3 |
| 13 | The demand schedule of chocolate bars can be represented by the equation $Q_d = 500 - 5P$, where Q_d is the quantity demanded and P is the price. The supply schedule can be represented by the equation $Q_s = 5P - 100$, where Q_s is the quantity supplied. Calculate the equilibrium price and quantity in the market for chocolate bars. What are demand elasticity and supply elasticity at the equilibrium point? | 5 | CO1, CO2, CO3 |
| 14 | Define the terms <i>total cost</i> , <i>fixed cost</i> , <i>marginal cost</i> , <i>variable cost</i> , <i>average fixed cost</i> , <i>average variable cost</i> and <i>average total cost</i> . Draw the typical shape for the average and marginal cost curves. How are various cost factors related? | 5 | CO1 CO2 CO3 |
| 15 | What is meant by a competitive firm? Explain the difference between a firm's revenue and its profit. Which do firms maximize? Also, under what conditions will a firm shut down temporarily? | 5 | CO1, CO2, |
| 16 | Draw a consumer's indifference curve for pizza and movie. Describe four properties of these indifference curves. Explain why convex preferences means that "averages are preferred over extremes". | 5 | CO1, CO2, |

| SECTION-C | | | |
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| Q III | Descriptive type questions-30 marks Answer any Two | 15x2 | |
| 17 | <p>In three parts: What are the characteristics of a monopolistically competitive market? What happens to the equilibrium price and quantity in such a market if one firm introduces a new, improved product?</p> <p style="padding-left: 40px;">b) Suppose all firms in a monopolistically competitive industry were merged into a single firm. Would that new firm produce as many different brands? Would it produce only a single brand? Explain.</p> <p style="padding-left: 40px;">c) Some experts have argued that too many brands of toothpastes are on the market. Give an argument to support this view. Also, give an argument against it.</p> | 15 | CO1, CO2, CO3 |
| 18 | <p>Three parts: What is a dominant strategy in a Game Theory? Why is an equilibrium stable in dominant strategies?</p> <p style="padding-left: 40px;">b) Explain the meaning of a Nash equilibrium. How does it differ from an equilibrium in dominant strategies?</p> <p style="padding-left: 40px;">c) What is an empty threat? How do you make a threat credible?</p> | 15 | CO1, CO2, CO3 |
| 19 | <p>In 3 parts: a) On a single set of axes, draw a straight-line supply curve which is elastic, one that is inelastic, one that has unitary elasticity, one that has negative elasticity, one that has zero elasticity and one that has infinite elasticity.</p> <p style="padding-left: 40px;">b) Define the terms isocost and marginal rate of technical substitution. What are the characteristics of isoquants? Explain how a producer realizes his/her equilibrium.</p> <p style="padding-left: 40px;">c) Define marginal utility. State equimarginal principle.</p> | 15 | CO1, CO2, CO3 |
| SECTION-D | | | |
| Q | Analytical / Case Study-30 marks Answer any Two | 15x2 | |
| 20 | <p>Two questions: A firm has marginal cost given by $MC = 10 + q$ and average variable cost $AVC = 10 + q/2$. If fixed costs are 5,000 and the market price is 100, find the firm's maximum profit. Will the firm operate in the short-run? In the long-run? Explain.</p> <p style="padding-left: 40px;">b) If $MC = 50 + 6q$ and $ATC = 50 + 3q + 675/q$, and if the current price is $P = 140$, then the firm should produce how much quantity in the short-run and in the long-run?</p> | 15 | CO1, CO2, CO3 CO4 |

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| 21 | <p>In three parts: a) A monopolist with the demand curve $P = 300 - 4Q$ has constant average variable cost (AVC) equal to 100 and fixed cost equal to 50. What is profit maximizing price and output? b) If fixed costs were equal to 2,600, what is the profit maximizing price and output? c) If $AVC = 200$ and $FC = 50$, what is the profit-maximizing output?</p> | 15 | CO1, CO2, CO3 CO4 |
| 22 | <p>In three parts: What is the net present value (NPV) criterion for investment decisions? How does one calculate the NPV of an investment project? If all the cash flows for a project are certain, what discount rate should be used to calculate NPV? b) What is a perpetuity? How much worth is a perpetuity that pays Rs 10,000 per year, with an interest rate of 8 % per annum? c) Suppose the interest rate is 10%. If Rs 1 lakh is invested at this rate, how much will it be worth after one year? After two years? After 5 years? What is the value today of Rs 1 lakh paid one year from now? Paid 2 years from now? Paid 5 years from now?</p> | 15 | CO1, CO2, CO3 CO4 |