UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
Dehradun

End-Semester Examination – May 2017 **Semester – 1I**
Name of the Program: BBA (Aviation Operations) **Duration – 3 hours**
Course Title: Business Economics I **Max Marks – 100**
Subject Code: BBCE 111

Section A

Answer all the questions (write only a/b/c/d not the text of answers) **1 X 15 = 15 Marks**

1. In case of super-normal profit, position of AC curve is
   a. Above the price line
   b. Below the price line
   c. Tangent to price line
   d. Parallel to price line

2. Should there be increase in the low cost airline ticket prices on festive or long weekends? The statement would be included as subject matter of study under

a. Positive economics b. Normative economics c. Partial equilibrium d. Microeconomics

3. Economies of scale emanate from
   a. Learning by doing
   b. Production of two different products jointly
   c. Production of two complementary products separately
   d. Production in bulk

4. All of the following are in the purview of microeconomics except

a. What to produce b. how to produce c. for whom to produce d. is economy growing

5. Demand for i-phone 7 at its launch will
   a. Elastic b. Inelastic c. Unitary elastic d. Infinity

6. If by increasing the quantity of labor by one unit, a firm gives up 3 units of capital and yet produces the same level of output, then the $MRTS_{LK}$ is equal to

a. 1/3 b. 3 c. 1 d. 6

7. Marginal rate of neutral technical progress is:
   a. Increasing b. Decreasing c. Zero d. Constant

8. Cross elasticity between Car and Tea would be

a. Zero b. One c. Negative d. Positive

9. Elasticity of products under monopolistic competition is

a. One b. >1 c. <1 d. Zero

10. Analyzing the effect of change in petrol prices on its demand keeping other things constant, falls under the study of

a. Partial equilibrium analysis
b. General equilibrium analysis
c. Positive economics
d. Normative economics

11. Which of the following explains an exception to the law of demand?

a. High value of a commodity in the consumption basket
b. High utility of a commodity
c. Uncertainty about change in future prices
d. Availability of the substitutes

12. If demand equation is given by D= 1000-P, and the supply equation is given by S= 100 + 4P, price would be

a. 160 b. 180 c. 170 d. 200

13. In a perfectly competitive market a firm in the long run operates at

a. P= AR = MR = MC = AC b. AC=MC c. AR=MR d. MR=MC

14. The ---------- the demand curve, the lower is price elasticity

a. Steeper b. flatter c. straight d. both 'b' and 'c'

15. A firm under monopolistic competition would produce at the ---------- of the minimum point of its AC curve

a. Right b. Left c. Above d. Below

State true (T) or False (F) **1 X 5 = 5 marks**

1. Price charged by monopolistic firm is higher than the price charged by perfectly competitive firms
2. With increase in the income, consumers tend to replace inferior goods with superior goods.
3. The government sets price of the product in a perfectly competitive market.

4. A firm can generate negative social costs.
5. The marginal product of labour can never be negative.

Section B

Answer all the questions (without exceeding 4 to 5 lines) **10 X 2= 20 Marks**

1. Why it is difficult to define industry in monopolistic competition? How do we solve this problem?
2. Define 'Rational behavior'.
3. State 'unstable equilibrium'.
4. Define Marginal rate of substitution.
5. Distinguish between short run and long run time period.
6. Define 'selling costs'.
7. Can two indifference curves intersect each other? Why?
8. You have recently been selected as 'a team member' for preparing annual budget by Finance minister. What type of goods would you suggest him for taxation? Mention the reason and provide an example
9. State difference between 'implicit' and 'explicit' costs.
   $Q_s = 2P$, the equilibrium price would be ----------?
10. State law of 'diminishing marginal utility'.

Section C

Answer any five questions (without exceeding 1 or one and a half page) **5 X 6= 30 Marks**

1. Define the characteristics of perfect competition (PC). What kind of profits will a firm earn in the long run in perfect competition? Is it possible to have perfect competition in the real world?
2. State the difference between 'Microeconomics' and 'Macroeconomics'
3. Is there some difference between 'contraction in demand' and 'decrease in demand'? Explain with appropriate diagram.
4. Define cross elasticity of demand and mention how we calculate the value (with an example). On the basis of calculated value, how can we differentiate the category of product?

5. State the difference between 'production cost' and 'selling costs'.
6. State three stages of short run production function. Why it does not make sense to produce in stage 1 and stage 3.

Section D

Answer all the questions **2 X 15= 30 Marks**

Q1. **Case Study:**

DeBeers is a South Africa based company that, until the late 1990s, had a near monopoly on the sale of diamonds worldwide. DeBeers had exclusive rights to mining in Africa, producing about 80 per cent of the quantity and over 95 per cent of the dollar value of diamonds worldwide. Most diamonds were sold through its London office. By effectively managing a cartel of the major producers in Africa, DeBeers maximized profits by reducing the quantity of diamonds sold, thereby raising prices. As one might expect, as a near monopolist in the market for newly minded diamonds, DeBeers made enormous profits for many years.

New developments since that time have threatened DeBeer's monopoly. DeBeers also had the rights to sell diamonds mined in the Soviet Union. However, when the Soviet Union collapsed, DeBeers was unable to enforce those agreements. The flow of Russian diamonds increased dramatically, outside of DeBeers's control. Several jewelry companies, including Tiffany integrated backward into mining to avoid acquiring diamonds from DeBeers. In 2004 Namibia passed a law requiring miners to sell a percentage of their diamonds to local polishers, also outside of DeBeer's influence. Other African nations were increasingly challenging the dominance of DeBeers over the distribution and sale of such a valuable commodity mined in their countries. DeBeers's market share has gradually decreased over time.

A new development may be of even greater concern for DeBeers; synthetic diamonds. Natural diamonds are formed when carbon is under intense pressure under the Earth's surface of hundreds of millions of years. Recently, scientists have discovered how to create diamonds in less than a week by putting carbon under extremely high pressure in a laboratory. The first synthetic diamonds were deemed poor substitutes for natural diamonds in jewelry, but they did prove to be excellent substitutes in industrial applications (where diamonds are used for cutting because of their extremely hard surface). By 2007, synthetic diamonds had captured 90 per cent of the industrial diamond market from DeBeers. Worse still for DeBeers, makers of synthetic diamonds have improved their products to such an extent that they are now often indistinguishable from natural diamonds, even to professional jewelers.

It will be interesting to see what effects synthetic diamonds will have on the market for diamonds in jewelry. Currently, most jewelers and customers have a strong preference for natural

diamonds, even though synthetic ones are chemically identical and indistinguishable. Apparently, the 'authenticity' of natural diamonds still as sentimental value. The market price of synthetic diamonds for jewelry is about 30 per cent of the price of the natural diamonds. However, preference's may change over time as consumers become more accustomed to synthetic diamonds and see that they are functionally equivalent and much cheaper. If that happens, DeBeers will lose a large part of its market power. DeBeers still control a large fraction of the supply of natural diamonds, but it may be forced to dramatically cut prices (and increase output it is willing to sell) in order to meet the new competition.

(Microeconomics by David Besanko & Ronald Braeutigam; Chapter 11,Applications 11.1pp.443**)**

Answer the following questions based on case study:

1. In which type of market structure is DeBeers operating in the case study? Mention and define that market structure while mentioning it main characteristics. (**3 marks**)
2. How De Beers decides the quantity to be produced and priced? **(2 marks)**
3. What kind of profits DeBeers was earning in the present situation mentioned in the case before new developments in the market take place. Explain with the help of diagram. **(6 marks)**
4. Which factors are affecting market share of DeBeers? How will this effect profit of DeBeers over a period of time? **(4 marks)**

Q2. Define 'Isoquants'. State the properties of isoquants with the help of diagram. What are the necessary conditions under which 'producer equilibrium' will be attained? **(15 marks)**