

**IMBA Sem.-1 Examination**  
**DSC-M-IMBA-113**  
**Micro Eco-I & Essential Maths-I**  
**January-2024**

Time : 2-00 Hours]

[Max. Marks : 50

**Instructions:**

1. Please read the questions carefully before writing answers.
2. Section-A Microeconomics-25 Marks and Section-B Essential Mathematics-25Marks
3. Composite Time for the both sections
4. Use of calculators is NOT allowed
5. Figures to the right indicate full marks.

**Section-A Microeconomics-I**

- Q1. Define Economics, Explain Nature and Scope of Economics in Detail [10 marks]  
 Or  
 Q1. A. Differentiate Micro Economics and Macro Economics [5marks]  
 And  
 Q1. B. What is Demand? Explain Various Determinants of Demand [5marks]
- Q2. What is Production? Explain Factors of Production in detail [10marks]  
 Or  
 Q2. A Explain: Break Even Point with diagram. [05marks]  
 And  
 Q2. B Explain Law of Variable Proportionate with diagram. [05marks]
- Q.3 Choose the following (MCQs) attempt any 5 out of 7** [5 Marks]
1. Who is known as father of Modern Economics?  
 (a). Alfred Marshal (b). Adam Smith  
 (c). Peter Drucker (d). Amartya Sen
  2. The law of demand states, with increase in price there is  
 (a) decrease in quantity demanded (b) increase in quantity demanded  
 (c) decreased demand (d) increased demand
  3. The demand curve is always  
 (a) level (b) irregular  
 (c) upward sloping (d) downward sloping
  4. When price floor is set above equilibrium price it will result in?  
 a) Shortage b) Surpluses

- c) Equilibrium d) None of the above
5. Which of the following claims about price-takers is untrue?
- Monopolistic competitors and monopolists are among them.
  - They can raise their prices at any time and still retain some customers.
  - They have the option of setting different prices in the short and long term.
  - We don't use supply and demand curve diagrams to analyze them
6. Which cost is incurred even if the company is closed?
- Sunk cost
  - Historical cost
  - Shut-down cost
  - Imputed cost
7. \_\_\_\_\_ is the sum total of total fixed cost and total variable cost.
- Variable Cost
  - Explicit cost
  - Fixed cost
  - Total cost

### Section-B Essential Mathematics

**Q1: Solve the followings**

[10 marks]

- $855-562-116 = 25\%$  of (?)
- $48\%$  of  $x - 14 * 9 = 123 + 189 \div 3$
- $x \div 15 + 32\%$  of 450 =  $14\%$  of 1500
- 2, 5, 11, 17, 23, ?, 41
- 4, 6, 16, 56, 240, ?

OR

**Q1. A Solve the followings (Any 2)**

[05marks]

- The population of a town increase every year by 4% if its present population is 50000, then after 2 year it will be?
- In a factory there are 40% male and 60% female. If the 60% of male and 40% of female are permanent employees, the percentage of temporary workers is?
- The average result of 25 students is 18. The average of first 12 of those is 14 and the average of last 12 is 17. What is the 13<sup>th</sup> result?
- A grocer has a sale of Rs 6435, Rs. 6927, Rs. 6855, Rs. 7230 and Rs. 6562 for 5 consecutive months. How much sale must he have in the sixth month so that he gets an average sale of Rs, 6500?

And

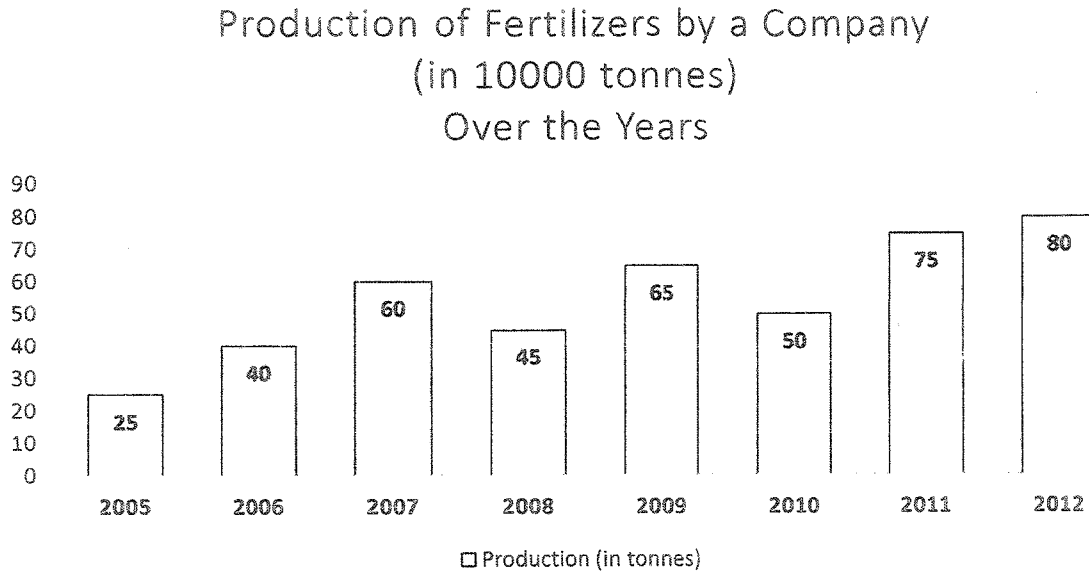
**Q1. B Solve the followings (Any 2)**

[05marks]

- When a plot is sold for Rs 18700, the owner losses 15%. At what price must that plot be sold in order to gain 15%?
- A man buys a field of agricultural land for Rs 360000 he sells  $\frac{1}{3}$  at a loss of 20% and  $\frac{2}{5}$  at a gain of 25% at what is the overall profit or loss
- A, B and C started a business by investing Rs. 1,20,000, Rs. 1,35,000 and, Rs.1,50,000 respectively. Find the share of each, out of an annual profit of Rs. 56,700.
- The monthly salary of A, B, C is in the proportion of 2:3:5 if C's salary is Rs. 1200 more than that of A then B's Annual salary is?

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**Q 2 : Study the following graph carefully and answer the questions: [10 marks]**



- In how many of the given years was the production of fertilizers more than the average production of the given years?**  
 (a) 1 (b) 2 (c) 3 (d) 4 (e) 5
- The average production of 2006 and 2007 was exactly equal to the average production of which of the following pairs of years?**  
 (a) 2010 and 2011 (d) 2005 and 2009  
 (b) 2009 and 2010 (e) 2005 and 2011  
 (c) 2008 and 2010
- What was the percentage decline in the production of fertilizers from 2007 to 2008?**  
 (a) 33.33% (b) 30% (c) 25% (d) 21% (e) 20%
- In which year was the percentage increase in production as compared to the previous year, the maximum?**  
 (a) 2012 (b) 2011 (c) 2009 (d) 2007 (e) 2006
- What was the percentage increase in production of fertilizers in 2012 compared to that in 2005?**  
 (a) 320% (b) 300% (c) 220% (d) 200% (e) 150%

**Q2. A) Marks scored out of 100 by different students in a Test of five subjects are B in the table. Use the table to answer the below questions. [5 marks]**

N1626-4

Subject	A	B	C	D	E
English	85	75	82	60	80
Mathematics	66	90	70	80	85
Hindi	82	85	80	90	88
Science	75	73	79	74	95
Computer	85	88	92	80	75

1.) Who has scored the highest marks?

- a) E                      b) A                      c) B                      d) C

2.) What are the average marks scored by B?

- a) 78.6                      b) 80.6                      c) 84                      d) 82.2

3.) What is the difference between marks scored by A and D?

- a) 15                      b) 20                      c) 8                      d) 9

4.) Who is at the third position?

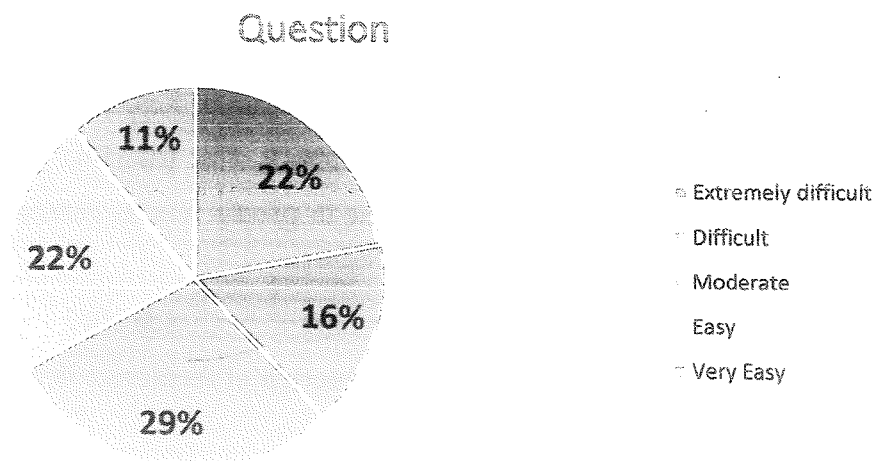
- a) D                      b) C                      c) A                      d) B

5.) If marks of mathematics are not considered, then marks scored by B are greater than marks of which student(s)?

- a) A                      b) C                      c) D                      d) E

And

**Q2. B) Directions for questions:** The 50 questions asked in a test are categorized on the basis of their Difficulty level as extremely, moderate, easy. Data on different categories is given in the pie chart given below. (in %) Answer the following question



18.) How many difficult questions were asked in the test?

- a) 7                      b) 8                      c) 6                      d) 5

N1626-5

19.) Which of the following categories has number of questions more than 12?

a)0

b)1

c)2

d)3

20.) What is the number of moderate, easy, and very easy question taken together out of the total questions?

a)31

b)26

c)30

d)32

**Q 3: Attempt any Five out of Seven**

[5 marks]

1. Formula for Percentage increase \_\_\_\_\_
2. A students get 33.33% marks in an examination if the total marks is 999, then find his marks \_\_\_\_\_
3. Formula for Average Speed \_\_\_\_\_
4. If  $a:b=5:9$  and  $b:c=4:7$  find  $a:b:c$  \_\_\_\_\_
5. Divide Rs 672 in the ratio 5:3 \_\_\_\_\_
6. Average of 80 numbers are 42. When 5 more numbers are included, the average of 85 numbers become 45. Find the average of 5 numbers?
7. A man sold two steel chairs for Rs 1200, On one, he gains 20% and on the other, he losses 20%. How much does he gain or loss on whole transactions?

—X—