

Subject : Introduction to Business Mathematics

Day : Monday
Date : 02/06/2014



Time : 10.00 AM TO 1.00 PM
Max Marks : 80 Total Pages : 2

N. B. :

- 1) Attempt **ANY FIVE** questions from Section-I. Each question carries **10** marks.
- 2) Attempt **ANY TWO** questions from Section-II. Each question carries **15** marks.
- 3) Answers to both the sections should be written in the **SAME** answer book.
- 4) Use of non programmable scientific **CALCULATOR** is allowed.

SECTION - I

Q. 1 a) A horse was sold at 12 % loss for Rs. 1,20,000/-. What is its cost price?

b) Express the following as %

i) $\frac{7}{15}$

ii) $\frac{3}{25}$

Q. 2 In a company Net Pay is calculated by following formula:

Net Pay = Basic Pay + DA + H RA + Incentives – Deductions.

The DA is paid at 50 % of Basic Pay, HRA is paid at 15 % of Basic Pay and incentives are paid at 10 % of his Basic Pay. Sagar has Basic Pay of Rs. 12,000/- and he repays his loan Rs. 2,000/- per month and income tax of Rs. 800/- per month. Find his Net Pay.

Q. 3 a) Show that the sequence 9, 12, 15, 18 is an A. P. Find its 43rd term.

b) Differentiate w.r.t. x , $y = x^4 - 3x^2 - 7x + 4$.

Q. 4 a) If y varies x and $y = 40$ when $x = 16$ then find the value of y when $x = 24$.

b) If $\frac{a}{b} = \frac{5}{4}$ find the value of $\frac{3a + 7b}{3a - 7b}$.

Q. 5 a) A candidate scoring 25 % in an examination failed by 30 marks. While the other candidate who scored 50 % marks gets 20 marks more than the minimum pass marks. Find minimum pass – percentage.

b) A car was purchased on Rs. 5,80,000/- and was sold at Rs. 3,75,000/-. Find the loss percentage.

P. T. O.

- Q.6 a) Find the approximate value of $\sqrt{80}$ by using derivatives.
- b) Two numbers are in the ratio 3:5. If 7 is added to each term then the ratio becomes 11:16. Find the numbers.

- Q.7 a) What is $10\frac{1}{2}$ % of 100?
- b) Find the ratio of 3.5 kg to 6500 gms.
- c) How much is 18 % more than Rs. 5400/-
- d) Find the fourth proportional to 14, 21, 4
- e) Complete the table of inverse proportion

a	2	4
b	8	24

SECTION - II

- Q.8 Find the four numbers in AP whose sum is 20 and sum of whose squares is 120.
- Q.9 a) If $x = y + z$ and $y \propto p$ and $z \propto p^2$, $x = 16$ when $p = 2$ and $x = 33$ when $p = 3$, find x when $p = 5$.
- b) If the ratio of two numbers is 3:5 and their sum is 360. Find the numbers.
- Q.10 Solve the following Linear equations:

$$2x + 3y - 4z = -8$$

$$3x + 2y + 4z = 3$$

$$3x - 4y + 5z = 18.$$

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Subject : Business Economics

Day : Tuesday

Date : 03/06/2014

S.D.E.

18901

Time : 10.00 AM TO 1.00 PM

Max Marks : 80 Total Pages : 1

N.B.:

- 1) Attempt **ANY FIVE** questions from Section - I. Each question carries **10** marks.
- 2) Attempt **ANY TWO** questions from Section - II. Each question carries **15** marks.
- 3) Answers to both the sections should be written in the **SAME** answer book.
- 4) Draw suitable diagrams **WHEREVER** necessary.

SECTION - I

- Q.1 Explain Production Possibility Curve.
- Q.2 Describe the characteristics of Indifference Curve.
- Q.3 Explain the types of Price Elasticity of Demand.
- Q.4 What do you mean by Production Function and Producer's Equilibrium?
- Q.5 Distinguish between Fixed and Variable cost with suitable examples.
- Q.6 Explain the features of Monopoly.
- Q.7 Write short notes on **ANY TWO** of the following:
- a) Micro Economics
 - b) Meaning and types of Utility
 - c) Determinants of Demand for a factor of Production

SECTION - II

- Q.8 Point out the differences in absolute and relative factor prices.
- Q.9 Explain fully the concept of 'Supply' w.r.t. its meaning, determinants and elasticity
- Q.10 What do you mean by
- a) Price discrimination
 - b) Product differentiation

Subject : Business Organisations & Systems

Day : Wednesday
Date : 04/06/2014

S.D.E. 
18902

Time : 10.00 AM TO 1.00 PM
Max Marks : 80 Total Pages : 1

N.B.:

- 1) Attempt any **FIVE** questions from Section-I Each question carries **10** marks.
- 2) Attempt any **TWO** questions from Section- II Each question carries **15** marks.
- 3) Both the sections should be written in the **SAME** answer book.
- 4) Figures to the **RIGHT** indicate full marks.

SECTION-I

- Q.1** What is business? Explain the objectives of business. (10)
- Q.2** Discuss the management practices of modern business organisation. (10)
- Q.3** What are the factors to be considered while starting a new business? (10)
- Q.4** Explain the role and importance of support services to business. (10)
- Q.5** Define "Public Sector Enterprise" and discuss its various types. (10)
- Q.6** Write short note (ANY TWO) (10)
- a) Articles of Association.
 - b) Importance of Technology for business.
 - c) External Trade.

SECTION-II

- Q.7** There is a medium scale company manufacturing ready made garments in Mumbai. You plan to take over the firm since the manufacturer has gone bankrupt and cannot manage the show. What factors will you consider? (15)
- Q.8** "Entrepreneurs are born and not made". Explain this in the light of qualities required to be a successful entrepreneur with suitable example. (15)
- Q.9** Discuss the channel of distribution you will cater to sell milk and milk products from Gujarat to other states in India. (15)

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