8. Out of 880 boys in a school, 224 played cricket, 240 played hockey and 336 played Basket ball. Of the total, 64 played both basketball and hockey; 80 played cricket and basketball and 40 played cricket and hockey. 24 played all the three games. How many did not play any of the games and how many played only one game?

9. Discuss the different methods of business forecasting.

SECTION – D (1 × 15 = 15)

(Compulsory)

10. Time taken by workers in performing a job are given below:

Method - I	20	16	26	27	23	22	
Method - II	27	33	42	35	32	34	38

Test whether there is any significant difference between the variances of time distribution.

Register Number :

Name of the Candidate :

6 6 1 7

M.B.A. DEGREE EXAMINATION, 2012

(HUMAN RESOURCE MANAGEMENT)

(FIRST YEAR)

(PAPER - VI)

160. BUSINESS MATHEMATICS AND STATISTICS

(Common with
M.B.A. [Marketing Management] &
M.B.A. [Financial Management]

December] [Time : 3 Hours

Maximum : 75 Marks

SECTION – A (5 × 3 = 15)

Answer any FIVE questions.
ALL questions carry EQUAL marks.

1. (a) What is Skew – Symmetric Matrix?

(b) Define equality of sets.

(c) State the methods of fitting a normal curve.

(d) What are the applications of addition theorem?

(e) Write a note on standard error.

(f) What do you mean by linear regression?

(g) What is Run Test?

(h) State the values required for the construction of R Chart.

SECTION – B (3 × 10 = 30)

Answer any THREE questions.
ALL questions carry EQUAL marks.

2. Narrate the steps in Decision Tree Analysis.

3. Explain the advantages of non-parametric tests.

4. Describe the procedure for testing a hypothesis.

5. Suppose that a manufactured product has 2 defects per unit of product inspected. Using Poisson distribution, calculate the probalities of finding a product without any defect, 3 defects and 4 defects (given e^{-2} 0·135).

$$\begin{bmatrix} 5 & 9 & 3 & -2 \\ 8 & 1 & 7 & 4 \end{bmatrix}$$

6. If A = $\begin{bmatrix} 2 & -1 & 0 & 5 \\ 3 & 2 & 6 & -4 \end{bmatrix}$

and B =

find 2A + 3B and 3A – 2B.

SECTION – C (1 × 15 = 15)

Answer any ONE question.

7. Fit a straight line trend for the following series. Estimate the value for 2012:

Year	2005	2006	2007	2008	2009
Production (in tones)	60	72	75	65	80

2010	2011
85	95