

**M.B.A. DEGREE EXAMINATION —
JANUARY 2015.**

First Year

QUANTITATIVE TECHNIQUES

Time : 3 hours

Maximum marks : 75

PART A — ($3 \times 5 = 15$ marks)

Answer any THREE questions.

All questions carry equal marks.

1. If $A = \begin{bmatrix} 1 & 2 & 3 \\ 3 & 2 & 1 \end{bmatrix}$, $B = \begin{bmatrix} 3 & 2 \\ 4 & 6 \\ 4 & 8 \end{bmatrix}$ what is $A \times B$ and $B \times A$?
2. What are the properties of binomial distribution?
3. What are the measures of central tendency?
4. What are the assumptions in Break-Even Analysis?
5. What are the applications of Integration?

PART B — ($4 \times 15 = 60$ marks)

Answer any FOUR questions.

All questions carry equal marks.

6. What are the techniques used for analysing data?
7. Calculate the Mean, Median and Mode from the following data :

Production (in tons per day):	21-22	23-24	25-26
Number of days :	7	13	22
Production (in tons per day):	27-28	29-30	
Number of days :	10	8	
8. List out the applications of Probability.
9. Explain the types of probability sampling.
10. Compute the regression coefficient for the data given below :

x :	12	13	14	15	16	17	18
y :	8	16	22	31	36	40	52
11. Discuss the applications of index numbers.
12. Explain the measures of deviation with examples.