

## ANNEXURE-1

### M.E. (INDUSTRIAL MANAGEMENT AND ENGINEERING)

#### ELIGIBILITY

Candidates with BE/B.Tech/Equivalent Degree in any branch of engineering recognized by AICTE, New Delhi with at least 55% aggregate marks from this University or from any other University or Institute recognized as equivalent thereto are eligible for admission in ME Course 'Industrial Management and Engineering', Department of Production and Industrial Engineering.

#### SYLLABUS FOR ENTRANCE TEST

**Data Interpretation:** Data Interpretation based on text, Data Interpretation based on graphs and tables. Graphs can be Column graphs, Bar Graphs, Line charts, Pie Chart, Graphs representing Area, Venn Diagram.

**Reasoning:** Critical reasoning, Visual reasoning, Assumption-Premise-Conclusion, Assertion and reasons, Statements and assumptions, identifying valid inferences, identifying Strong arguments and Weak arguments, Statements and conclusions, Cause and Effect, Identifying Probably true, Probably false, definitely true, definitely false kind of statement, Linear arrangements, Matrix arrangements, Puzzles, Family tree problem, Symbol Based problems, Coding and decoding, Sequencing, identifying next number in series etc.

**Probability and Statistics:** Definitions of probability and sampling theorems, Conditional probability, Mean, median, mode and standard deviation, Random variables, Poisson, Normal and Binomial distributions.

**Engineering Economy and Costing:** Elementary cost accounting and methods of depreciation; break-even analysis, techniques for evaluation of capital investments, financial statements

**Work System Design:** Taylor's scientific management, Gilbreth's contributions; productivity - concepts and measurements; method study, micro-motion study, principles of motion economy; work measurement - time study, work sampling; ergonomics; job evaluation, merit rating, incentive schemes, and wage administration.

**Operations Research:** Linear programming - problem formulation, simplex method; transportation and assignment models; simple queuing models; simulation; PERT and CPM

**Quality Management:** Quality - concept and costs, quality circles, quality assurance; statistical quality control, acceptance sampling, zero defects, six sigma; total quality management; ISO 9000; design of experiments - Taguchi method.

**Industrial Management:** Management function, motivation and behavior.

#### TEST FORMAT and DURATION

The test paper will consist of **50 objective type questions** (Multiple choice, Matching type, True/False, Assertion-Reasoning type) carrying 100 marks. The duration of the test will be **one hour** and test will be held in faculty of engineering, JNV University, Jodhpur only.