

## INDIAN INSTITUTE OF MANAGEMENT UDAIPUR

### SELECTION PROCESS FOR FELLOW PROGRAMME IN MANAGEMENT IN THE FINANCE & ACCOUNTING AREA

The selection process will consist of two components: (i) Research Aptitude Test (RAT); and (ii) Personal Interview.

The weights for the two components are indicated below.

Component	Weight
Research Aptitude Test	60
Personal Interview	40

The syllabus for the RAT and the weights for each portion are indicated below.

#### 1. Mathematics (20%)

Algebra: Arithmetic; geometric and harmonic progressions; permutations and combinations; binomial theorem; elementary set theory; functions and relations; matrix algebra; systems of linear equations; eigenvalues and eigenvectors.

Calculus: Functions of single variable; limit, continuity and differentiability; mean value theorems; evaluation of definite and improper integrals; partial derivatives; total derivatives; maxima and minima.

Differential equations: First order equations (linear and nonlinear); higher order linear differential equations with constant coefficients; Cauchy's and Euler's equations; initial and boundary value problems; Laplace transforms.

#### 2. Probability and Statistics (20%)

Descriptive statistics: Graphical representation of data (histogram, pie chart, bar chart); measures of central tendency – mean, median, mode; measures of dispersion – standard deviation, coefficient of variation.

Probability and random variables: Definitions of probability, conditional probability and Bayes theorem; random variables, Poisson, normal and binomial distributions; sampling theorems.

#### 3. Finance/ Accounting (10%)

This part would include one or more questions based on one or more fundamental concepts in finance and/ or accounting. There is no prescribed syllabus for this part.

#### 4. Research Paper Study and Analysis (50%)

Candidates shortlisted to appear for the written test and interview will get two research papers well in advance. A candidate should select one from those for study. (S)he will have to answer questions based on the chosen paper in the written test. The questions are aimed at testing the candidate's writing skill, communication skill, critical thinking ability, and overall research aptitude. The candidate will also be asked questions in the interview from his/her chosen research paper.