Post Graduate Department of Computer Sciences

University of Kashmir, Srinagar-190006

Entrance Examination Syllabus for the 5-Year Integrated Master's Program in Data Science & Artificial Intelligence for the year 2024

The objective of this entrance exam is to assess the general aptitude of candidates to pursue a career in Data Science and Artificial Intelligence. There will be 60 questions, each carrying one mark. Weightage for each section is provided in parentheses. **Each Unit shall carry 6 marks.** Multiple choice questions will be set with one correct or most appropriate answer, covering the following topics:

Unit 1: Vocabulary and Word Usage (6)

- Vocabulary: Synonyms & Antonyms
- One Word Substitution
- Idioms and Phrases
- Analogies
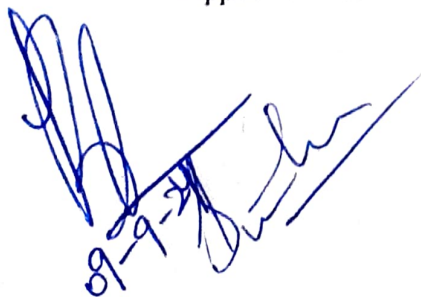- Fill in the Blanks

Unit 2: Reading and Comprehension (6)

- English Comprehensions
- Rearrangement of Words in Sentences
- Rearrangement of Sentences in a Paragraph
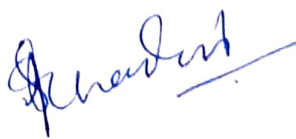
Unit 3: English Proficiency and Grammar (6)

- English Proficiency
- English Usage Errors
- Common Errors
- Spotting Errors
- Inappropriate Usage of Words

Unit 4: Basic Mathematics (Number Theory and Arithmetic) (6)

- Number Theory
- Square Roots
- HCF and LCM
- Surds and Indices
- Simplification
- Approximation

Unit 5: Commercial and Applied Math (6)

- Logarithms
- Profit and Loss
- Compound and Simple Interest
- Ratio and Proportion
- Percentage
- Partnership

Unit 6: Data Analysis and Interpretation (6)

- Data Sufficiency Test
- Data Interpretation
- Quantitative Comparison
- Data Comparison
- Average
- Volume and Mensuration
- Discounts

Unit 7: Logical Reasoning (Verbal and Non-Verbal) (6)

- Number Test
- Venn Diagram
- Analogy Test
- Classification (Odd Man Out) Test
- Direction and Distance Test
- Insert Missing Sequence Test

Unit 8: Logical and Analytical Skills (6)

- Alpha Numeric Symbol Sequence
- Alphabet Test
- Logical Word Sequence Test
- Time Sequence Test
- Coding and Decoding Test
- Series Test

Unit 9: Computer Fundamentals (6)

- Application of Computer,
- Hardware, Software, Firmware,

- Central Processing Unit, Input/ Output devices,
- Secondary Storage Devices,
- Introduction to internet and e-mail,
- Functions of Operating System,
- Viruses- Types and Control measures,
- Basic Logic gates, truth Table,

Unit 10: General Awareness and Current Affairs (6)

- General Awareness, current affairs
- Science
- Computer Science
- Sports