

Program Name: Value Added Course

Course Code: MTVAC01

Name of the Course: Mathematics for Competitive Examinations

(Effective from the Academic Year 2020 -2021)

Subject / Paper Code	Title of the Paper	Instruction Hrs/ Week	Marks			Credits	Examination duration (Hrs)
			Examination	Internal Assessment	Total Marks		
Value Added Course							
MTVAC01	Mathematics for Competitive Examinations	2	40	10	50	2	2

Minimum Eligibility: Any PG degree pursuing / any Batcheler degree holder.

Course objectives:

- To provide awareness to the students about the various types of jobs offered both in the Central and State Government.
- To develop competitive skills through various types of objective tests.
- To train them by conducting aptitude test based on verbal and quantitative skills.
- To enhance their ability to face competitive examinations.

Course outcomes:

After successful completion of this course, student will be able to:

- The students are motivated for prospective career in government and corporate sector.
- The students are able to attempt any competitive exam as they are provided with the syllabus of the exam, review and weight age given to each subject.
- They have look into previous year's questions and create a study plan.
- They develop the habit of taking notes so as to revise easily.
- The students are trained to think positively and are encouraged to make use of mock test.

UNIT	SYLLABUS	TEACHING HOURS
UNIT - I	Numbers: Number System, Sequence & Series, LCM & HCF, Decimal & Fraction, Simplification	10 hours
UNIT - II	Arithmetic: Averages, Ratio & Proportion, Percentage, Profit & Loss, Simple Interest & Compound Interest, Time, Speed & Distance, Time & Work Algebra: Quadratic Equations, Inequalities, Logarithm	15 hours
UNIT - III	Geometry & Mensuration: Geometry, Mensuration Modern Maths: Permutation & Combination, Probability	5 hours

References:

1. R. S. Aggarwal, Quantitative Aptitude for Competitive Examinations, S Chand Publishing; Revised edition (21 February 2017)
2. Rajesh Verma, Fast Track Objective Arithmetic, Arihant Publications; Fourth edition (2018)
3. Sarvesh K Verma, Quantitative Aptitude Quantum CAT 2019 Arihant Publications; Tenth edition (10 June 2019)
4. Rajesh Verma, Fast Track Objective Arithmetic, Arihant Publications; Fourth edition (2018)
5. KJS Khurana , Rajeev Markanday, Maths 30 Days Wonder, S Chand Publishing; third edition (01, Jan-2020)

Internal Assessment Test (IAT): Test Will carry a maximum of 20% Weightage (10 marks) of total marks of a course, under this component, two tests will be conducted in a semester for 20 marks each and scale down to 4 marks each.

Semester End Examination – Question Paper Pattern:

Value Added Course Examination 2020-21

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Time: 2 Hours

Max. Marks: 40

Note: Part-A is compulsory, three full questions from Part-B and two full questions from Part-C

PART – A

1. Answer **any five** of the following:

(1×5 = 5)

- a)
- b)
- c)
- d)
- e)

PART – B

(5×3 = 15)

- 2.
- 3.
- 4.
- 5.
- 6.

PART – C

(10×2 = 20)

- 8.
- 9.
- 10.