Syllabus defined for MAHARASHTRA MCA CET:

The MAH MCA CET Syllabus contains three sections:

1. Computer Awareness:

Computer Architecture, Computer Basics, Computer Language,

Data Representation: Flow chart and Algorithms, Operating System basics

2. Mathematics:

Algebra,

Arithmetic,

Calculus,Co-ordinate Geometry

Differential Equations

Linear Programming

Menstruation

Probability and Statistics

Trigonometry

Vector

3. General aptitude and Awareness:

Reading Comprehension

Logical Reasoning

Problem Solving

Language Vocabulary

Quantitative Reasoning

Verbal Communication Skills

Scheme of MAH MCA Online CET 2015 :

The MAH – MCA – CET 2015 will be ONLINE examination comprises of two papers (objective type) of 90 minutes duration viz. General Aptitude (GA) and Computer Concepts (CC).

The syllabus & sample question paper are available on website and also in online brochure. Each paper has 25 questions and is expected to be completed in 90 minutes.

General Aptitude:

The main objective of this paper is to assess the general aptitude of the candidate to pursue a computer applications and software profession.

The MAH MCA CET 2015 questions in this paper will cover:

Logical reasoning, quantitative reasoning, high school mathematics, vocabulary, English comprehension and verbal ability. A good grasp of the following topics of high school mathematics (up to the 12th standard) will be useful.

Algebra : Fundamental operations in Algebra,

Expansion, factorization, Quadratic equations, indices,

logarithms, arithmetic, geometric and harmonic

progressions, binomial theorem, permutations and combinations.

Co – ordinate Geometry : Rectangular Cartesian co –ordinates, equations of a line, mid point, intersections etc., equations of a circle, distance formulae, pair of straight lines, parabola, ellipse and hyperbola, simple geometric transformations such as translation, rotation, scaling.

Differential Equations : Differential equations of first order and their solutions, linear differential equations with constant coefficients, homogenous linear differential equations.

Trigonometry : Simple identities, trigonometric equations, properties of triangles, solution of triangles, height and distance, inverse function.

Probability and Statistics : Basic concepts of probability theory, Averages, Dependent and independent events, frequency distributions, and measures of dispersions, skewness and kurtosis, random variable and distribution functions, mathematical expectations, Binomial, Poisson, normal distributions, curve fitting, and principle of least squares, correlation and regression.

Arithmetic : Ratios and proportions, problems on time- work, distance – speed, percentage, etc.

Basic Set Theory and Functions : Set, relations and mappings.

Mensuration : Areas, triangles and quadrilaterals, area and circumference of circles, volumes and surface areas of simple solids such as cubes, spheres, cylinders and cones.

Computer Basics : Organization of a computer, Central Processing Unit (CPU), Structure of instructions in CPU, input / output devices, computer memory, memory organization, back – up devices.

Data Representation : Representation of characters, integers, and fractions, binary and hexadecimal representations, Binary Arithmetic: Addition, subtraction, division, multiplication, signed arithmetic and two's complement arithmetic, floating point

representation of numbers, normalized floating point representation, Boolean algebra, truth tables, Venn diagrams.

Computer Architecture : Block structure of computers, communication between processor and I / O devices, interrupts.

Computer Language : Assembly language and high level language, Multiprogramming and time sharing operating systems, Computer Programming in C.

Operating System Basics : Multiprogramming and time sharing operating systems.