Contents:-

### A) Logical / Abstract Reasoning.

This shall include the questions to measures how quickly and accurately you can think. This test may have questions based on figures and diagrams and also questions on verbal reasoning.

### B) Quantitative Aptitude.

This shall include the questions to know how fast and accurate you can work with numbers, do numerical calculations understand various arithmetic problems involving ratio and proportion, percentage, etc. This test also helps to measure your power of quantitative reasoning, interpretation of tables, common graphs and charts.

### C) Verbal Ability and Reading Comprehension

This shall include passages with questions based on their contents to test your comprehension. Your English Language ability would be tested through questions on grammar, vocabulary, sentence completion, synonyms, antonyms, comprehension of passages etc. Your English language ability would be tested through questions on (1) understanding of the contents of the passage and (2) choice of appropriate words, phrases, expressions and similar language skills.

| Sr. | Topics                                   | No of     | Mark per       | Maximum           | Total |
|-----|--|-----------|----------------|-------------------|-------|
|     |  | Questions | Question       | Marks             | Marks |
| 1!  | Logical Reasoning                        | 75        | I              | 75                |       |
| 2   | Abstract Reasoning                       | 25        | 1              | 25                |       |
| 3   | Quantitative Aptitude                    | 50        | 1              | 50                | 200   |
| 4   | Verbal Ability / Readin<br>Comprehension | g 50      | 1              | 50                |       |
| 1   |  | 1         | and the second | The second second |       |

The test will comprise of multiple choice objective type questions (Five Options)

There is no negative marking System for this test.

Test Duration: 150 Minutes

Medium of CET: English

Mode of Examination - Online

(Dr. Suchash Mahajan)

Director

Technical Education, (M.S), Mumbai

D:\Budage\?o90-9\CET Dates and syllabus.docx

# Syllabus and Marking Scheme for Master of Computer Applications (MCA) CET for Academic Year 2017-18

The Online CET would be comprised of two online papers viz. General Aptitude (GA) and Computer Concepts (CC) of 100 marks each, with composite time of 90 minutes duration. Each paper shall have 25 questions Contents:-

, 1. 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.

Syllabus

The 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.

### 2. Computer Concepts

#### Syllabus

- 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 timesharing operating systems.

| 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | TOPICS   | No of Questions                              | Mark/s per<br>Question                 | Maximum<br>Marks  | Total<br>Marks |
|---------------------------------------|--|--|--|-------------------|----------------|
| General Ap                            | otitude  | 25   | 4                                      | 001               | (              |
| Computer                              | and the second second                                    | 25   | 4                                      | 100               | 200            |
| Computer Language.                    | Architecture, Computer Operating System Basics           |  |  |                   |                |
| The fest wi                           | Il comprise of multiple cho                              | ice objective type qu                        | estions (Four Option                   | ns)               | <u> </u>       |
| There is no will carry                | egative marking System for<br>1 negative mark. Unanswere | r this CET. Each co<br>ed questions will car | rrect answer will ca<br>ry zero marks. | rry 4 marks: Each | wrong answer   |
|                                       | ion: 90 minutes  |  |  |                   |                |
| Medium of                             | f CET: English   |  |  |                   |                |
| Mode of E                             | xamination - Online                                      | ~  |  |                   |                |

(DrtSubhash Mahajan)
Director, Technical Education, (M.S), Mumbai

D:\Budage\?o96-96\CET Dates and syllabus.docx

# Syllabus and Marking Scheme for Master of Hotel Management and Catering Technology.

# (M. HMCT) CET for Academic Year 2017-18

### Contents:-

| Sr.        | Topics   | No of<br>Questions                      | Mark/s per<br>Question | Maximum<br>Marks | Total<br>Marks |
|------------|--|---|------------------------|------------------|----------------|
| 1          | Food and Beverage Operation  |   |                        |                  |                |
|            | Food and Beverage Service Operations, related terminology, Inventory control, Food & Beverage equipment and infrastructure   | 10                                      | 02                     | 20               |                |
| 2          | Food Production  |   |                        |                  | •              |
|            | Food Production operations, Indian & International cuisines and related terminology, Bakery and Confectionary, Hygiene and Safety standards, Kitchen equipments and Infrastructure.        | 10                                      | 02                     | 20               |                |
| 3          | Rooms division Housekeeping and front office operations and related terminology, fabrics & textiles, Planning & designing of hospitality organisations, Laundry operations and procedures. | 10                                      | 02                     | 20               | 100            |
| 4          | English (Word meaning, comprehension, autonyms and synonyms, idioms and phrases, word spellings)   | 10                                      | 02                     | 20               |                |
| 5          | Hospitality Industry related (Types of tourism, hotel and restaurant brands and segments, Airlines, hospitality terms, hospitality related organizations and regulatory bodies)            | 10                                      | 02                     | 20               |                |
| The test v | vill comprise of multiple choice objective type  | pe questions (F                         | our Options)           |                  | -              |
|            | no negative marking System for this test.  | *************************************** |                        |                  |                |
|            | ation: 60 minutes  | - Turk again                            |                        |                  |                |
| Medium o   | of CET: English  |   |                        |                  |                |

Medium of CET: English

Mode of Examination - Online or Offline as the case may be

(Dr.Subhash Mahajan)

Director

Technical Education, (M.S), Mumbai

D:\Budage\?o9to-9
 OET Dates and syllabus.docx

# for Academic Year 2017-18

### Contents:-

| Sr.      | Topics   | No of<br>Questions | Mark/s per<br>Question | Maximum<br>Marks | Total<br>Marks                             |
|----------|--|--------------------|------------------------|------------------|--|
| 1 .      | Building Technology Building systems, Building Science and services, concept of green building, construction materials.  | 10                 | 2 marks                | 20 Marks         | ,  |
| 2        | Environment Concept and Ecology and landscape design, Environment laws and regulations, Environment design strategies w.r.t site.  | 10                 | 2 marks                | 20 Marks         |  |
| 3        | Architecture History and humanities Awareness of Art and culture and architectural theory, major architecture movements in the world and in India.   | 10                 | 2 marks                | 20 Marks         | 100  |
| 4        | Settlement, design and planning Urbanization, Urbanism, Urban and rural system, Infrastructure planning theory and history.  | 10                 | 2 marks                | 20 Marks         |  |
| 5        | Current Architecture Practice Awareness of National building code. Town planning laws and development control regulation, knowledge of Regulatory and professional bodies on architecture. | 10                 | 2 marks                | 20 Marks         |  |
| There is | t will comprise of multiple cho<br>s no negative marking System<br>tration: 60 minutes   |                    | questions(Four C       | options)         | 150 mg |
| Mediun   | n of CET: English  |                    |                        |                  | - Indiana (Parister VIII)                  |

(Silahapin

(Dr.Subhash-Mahajan)

Director

Technical Education, (M.S), Mumbai

Mode of Examination - Online or Offline as the case may be

Syllabus and Marking Scheme for Bachelor of Hotel Management and Catering Technology (B. HMCT) CET for Academic Year 2017-18

### Contents :-

The On Line test will have 100 Questions based on Reasoning (Verbal as well as Arithmetic), English Language & General Awareness including questions on culture, current national, international affairs, trade & commerce, sports, scientific inventions and discoveries, travel/tourism etc.

| Topics                                      |   | No of Questions  | Mark/s per<br>Question | Maximum<br>Marks                | Total<br>Marks |  |  |
|---|---|------------------|------------------------|---------------------------------|----------------|--|--|
| English Language                            |   | 40               |                        | 40                              |                |  |  |
| Reasoning (Verb<br>Arithmetic)              | al and  | 30               |                        | 30                              |                |  |  |
| General Knowle                              |   |                  |                        |                                 | 14 T 14 H      |  |  |
| Awareness including on current national, in | nternational  |                  |                        |                                 | 100            |  |  |
| affairs, culture, commerce, sports,         |   | 30               | 1                      | 30                              | . 1            |  |  |
|   | discoveries,  |                  | . 131<br>1             | , , , , , , , , , , , , , , , , | ,              |  |  |
| travel/ tourism etc.                        |   |                  |                        |                                 |                |  |  |
| The test will comprise                      | The test will comprise of multiple choice objective type questions (Four Options) |                  |                        |                                 |                |  |  |
| There is no negative m                      | arking Syste  | m for this test. |                        | • .                             |                |  |  |
| Test Duration: 90 min                       | utes  | 1                |                        |                                 |                |  |  |
| Medium of CET: Engl                         | ish   |                  |                        |                                 |                |  |  |
| Mode of Examination                         | - Online  |                  |                        |                                 |                |  |  |

(Dr. Subhash Mahajan)

Director

Technical Education, (M.S), Mumbai