Preparatory course for MCA entrance exam

[2 Credits 30 hours]

Course Objective:

The course is intended to prepare the students for entrance examinations for post-graduation courses in Computer Science.

Learning Outcome:

The students will be able to solve logical, analytical, mathematical, reasoning, problems that are part of various competitive examinations.

Course Content

1. Analytical Geometry: Cartesian and polar coordinate, straight line, circle, ellipse, parabola, hyperbola, translation & rotation of axes. (4)

2. Algebra: Complex number, De Movier's theorem, Solution of equations , Determinants, Matrices, Summation of series, Addition of vectors, Scalar and vector products, Inequation, Sets and diagram, Union and intersection of sets, Complements, Algebra of sets, Finite sets, Class of sets, partitions, cross product, Group, Ring and Field.(5)

3. Calculus: Limit, Continuity, Differentiation, Maxima and minima; Taylor & Maclaurin's series; Definite and indefinite integrals; First and second order differential equations; Functions of several variables; partial differentiation. (4)

4. Probability & Statistics: Permutation , Combination; Probability distribution; Mean ; Median ; Mode; Standard deviation; Correlation coefficient.(5)

5. Computer Basics: Organization of a computer, Central Processing Unit (CPU), structure of instructions in CPU, input/output devices, computer memory, and back-up devices.(3)

6. Data Representation: Representation of characters, integers and fractions, binary and hexadecimal representations, binary arithmetic: addition, subtraction, multiplication, division, simple arithmetic and two's complement arithmetic, floating point representation of numbers, (6)

7. Boolean algebra, truth tables, Venn diagrams.(3)

Ms Shilpa Naik

References

1.Dr Sakti Pada Nanda, Guide to MCA Entrance

Dempo Charities Trust
Dhempe College of Arts & Science
Miramar – Goa.
Academic Year : **2015 - 16**
SHORT TERM COURCE ATTENDANCE SHEET

Name of the Course : MCA Entrance Exam Preparation   Topic : MCA Entrance Exam Preparation

Class :- **TYBSc.**   Batch:- I

Lecture No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Date	2/12	4/12	5/12	7/12	8/12	9/12	11/12	14/12	15/12	16/12	21/12	8/1	11/1	12/1	18/1	19/1	25/1	8/2	9/2	10/3	12/3									
Name of Student																														
Francis Alfonso	P	P	A	P	P	P	A	A	P	P	P	P	P	P	A	P	P	P	P	P										
Johan A Braganza	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P										
Carneiro C Dahlin	P	A	P	P	P	P		P	P	P	P	P	P	A	P	P	P	P	P	P										
Ratish Kumbharjuvenkar	P	P	P	P	P	A	P	P	P	P	P	P	P	P	A	P	P	P	P	P										
Nagekar Dattesh	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P										
Rodrigues Cassadra M.	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P										
Wagle Shrisha Sham	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P										
Silveira Darrel Mehul	P	P	P	A	A	P	P	P	P	P	P	P	P	A	A	P	P	P	P	P										
Manisha Phadte	P	P	P	P	P	A	P	A	P	P	P	P	P	A	P	P	P	A	P	P										
Nivesha Lopes	P	P	P	A	P	P	A	A	P	P	P	A	P	P	P	A	P	P	A	P										
Nikhil Mandrekar	P	P	A	P	P	P	P	A	A	P	P	P	P	A	A	P	P	P	A	P										

Ms. Dipti Nene
Name & Signature of the Teacher

In-Charge
Ms Shilpa Naik

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6. Name: **Preparatory course for MCA Entrance exam**
   Class: TYBSc Computer Science
   Number of Students: 11
   Fees charged: Rs 1000 per student
   Duration: 40 hours
   Aim: To learn to solve aptitude and computer application problems for MCA entrance exam
   Conducted from: December 2015 to MArch 2016
   Instructor: Ms Dipti Nene

The course on Android development was conducted for TYBSc Computer Science students for the academic year 2015-16. The course of 40 hour duration was conducted during the beginning of the first term from December to March 2016

The course teaches students the techniques to solve mathematical aptitude and computer application related problems that are useful for entrance examinations for MCA and MSc.

The student feedback score of the Instructor was_2.78____

2/4/16

Incharge
Comp Sci & IT