RAGHUNATHPUR COLLEGE

Department of Computer Application(BCA)

NOTICE

Date: 04/03/2021

All the students of 1st Semester of Computer Application department are hereby notified that they will have to submit the internal assignment of each paper in the Department on 08/03/2021and 09/03/2021. The following pages contains the question paper for CC-I,CC-II and GE.

The following are some instructions regarding submission of assignment:

1. It should be written in a4 paper(both side)
2. There must be a front page containing student's name, paper code,paper name and department name.

INTERNAL ASSESSMENT

SEMESTER-I

Fundamentals of Computers

BBCACCHC101   F.M-20

1. <u>Answer any 4 questions:-</u>   4x5=20

a. Design your identity card using MS-Word Frame and box design utility to be used.
b. Using Power Point create a slide show presentation of 7 slides about Indian Heritage.
c. Prepare a standard routine of your institute for both 1st semester and 2nd semester in MS-Excel
d. Design a letter for five polling officer informing them for their duty regulation using mail merge.
e. Design a writing pad in MS-Word of your institution using the concept of header, footer and frame.
f. Create a table using MS-Excel for the following data:

ADMISSION

SUBJECT	NO. OF STUDENT	ADMISSION FEES	TOTAL FEES
ENG(H)	126	1500	
CHEM(H)	32	1920	
BCA	44	14000	
MATH(H)	29	1750	
BENG(H)	34	1450	
PASS	476	1150	

i)   Calculate the total fees for each subject.
ii)   Calculate the total collection of fees of the college and show it in the bottom right corner cell.
iii)   Create a column chart for the above.

INTERNAL ASSESSMENT

SEMESTER-I

Introduction to C Programming

BBCACCHC102

- Group A

(Answer any 4 questions)   5X4=20

1. Write a C Program to find out the roots of quadratic equation: ax^2+bx+c=o.

2. Write a C program to multiply of two given matrices.

3. Write a C program to find out the number of vowels, consonants, digits, space, and special character etc. present in a supplied string.

4. Write a C program for string concatenation without using library function using user defined function.

5. Write a C program to find out the GCD of two positive integers using recursive function.

- Group B

(Answer any 4 questions)   5X4=20

1. Discuss about operator precedence and associativity?

2. Discuss about different type of loops in c?

3. Write down and explain the formulae of address calculation in one dimensional and two dimensional array?

4. Discuss about different modes for file opening? What is EOF?

5. What is dynamic memory allocation? Differentiate between malloc() and calloc()?

6. Why c is a high level language? Why c is a typed language?

INTERNAL ASSESSMENT

SEMESTER-I

Mathematics - BBCAGEHT103

Full Marks : 10

1. Answer all questions:-   **1X10=10**

a) If A={1,2,3} ,B={3,4,5,6} ,then show that $(A \cap B)' = A' \cup B'$ if U={1,2,3,............10}

b) Transform to axes inclined at 30^0 to the original axes the equation $x^2 + 2\sqrt{3}xy + y^2 = 2$.

c) Find the value of λ so that the equation $6x^2 + xy + \lambda y^2 + 2x - 31y - 20 = 0$ may represent a pair of straight line.

d) Find the exponential form of $\frac{1}{2} + \frac{\sqrt{3}}{2}i$

e) Define cross product of two vectors.

f) Find the straight line perpendicular to 5x+6y=16 passing through (1,2).

g) Show that $\begin{pmatrix} 1 & 1 & 1 \\ 2 & 4 & 8 \\ 3 & 9 & 25 \end{pmatrix}$ is a non-singular matrix.

h) Show that the product of all the values of $(1 + i\sqrt{3})^{\frac{3}{4}}$ is 8

i) If $f(\theta) = cos\theta + isin\theta$ then show that $f(\alpha).f(\beta) + \frac{1}{f(\alpha).f(\beta)} = 2cos(\alpha + \beta)$

j) $\bar{A} = \hat{i} + 2\hat{j} + 4\hat{k}$ and $\bar{B} = 3\hat{i} + 5\hat{k}$, find $\bar{A}.\bar{B}$ and also find the angle between these two vector.