INTERNAL ASSIGNMENT QUESTIONS

P.G. Diploma in Computer Applications

(2016)

PROF. G. RAM REDDY CENTRE FOR DISTANCE EDUCATION
(RECOGNISED BY THE DISTANCE EDUCATION BUREAU, UGC, NEW DELHI)
OSMANIA UNIVERSITY
(A University with Potential for Excellence and Re-Accredited by NAAC with "A" Grade)

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Dear Students,

All the I semester students of PG Diploma in Computer Application has to write 2 Assignments for each paper and submit **Assignment** for each paper compulsorily. Each assignment carries **20 marks.** University Examinations will be held for **80 marks**. The concerned faculty evaluates these assignment scripts. The marks awarded to you will be forwarded to the Controller of Examination, OU for inclusion in the University Examination marks. If you fail to submit Internal Assignments before the stipulated date, the internal marks will not be added to University examination marks under any circumstances. **The assignment marks will not be accepted after the stipulated date.**

You are required to **pay Rs.300/- fee** towards Internal Assignment marks through DD (in favour of Director, PGRRCDE, OU) and submit the same along with assignment at the concerned counter **on or before 17.10.2016** and obtain proper submission receipt.

ASSIGNMENT WITHOUT THE DD WILL NOT BE ACCEPTED

Assignments on Printed / Photocopy / Typed papers will not be accepted and will not be valued at any cost. Only hand written Assignments on A/4 size paper (one side only) will be accepted and valued.

Methodology for writing the Assignments:

1. First read the subject matter in the course material that is supplied to you.
2. If possible read the subject matter in the books suggested for further reading.
3. You are welcome to use the PGRRCDE Library on all working days including Sunday for collecting information on the topic of your assignments.

   (10.30 am to 5.00 pm).
4. Give a final reading to the answer you have written and see whether you can delete unimportant or repetitive words.
5. The cover page of the each theory assignments must have information as given in FORMAT below.

***Note:**

1) **Each paper carries 20 marks.**
2) **Submit the answer sheets on or before 17th October, 2016.**
3) **Practical Internal exams are from 8th October & 9th October, 2016.**
4) **The cover page of the assignments must have the following information:**

Name : _____	**Enrollment Number : 94-_____.**
Semester : _____	**Subject Code : _____**
Subject: _____	**Date of Submission : _____**

DIRECTOR

PGDCA – II Semester Assignments - I

CS851: VISUAL PROGRAMMING

I. Answer all the following questions. **[Marks: 5*4=20]**

1. Write typical features of integrated development environment Visual Basic
2. Write detail procedure in VB to access database using ODBC and DSN.
3. What is the technique used in VC++ MFC base windows application to make document class data available to view class ? Explain with suitable example code segment.
4. Explain the steps involved in creating SDI/MDI applications using application wizards.
5. Write a procedure in VC++ to create on ActiveX control

CS 852 : DATA BASE MANAGEMENT SYSTEMS

I. Answer all the following questions. **[Marks: 5*4=20]**

1. Briefly explain the structure of Database system. Explain in detail the structure of relational databases.?
2. Explain the steps to reducing E-R diagram to tables. Explain about project operation in relational algebra
3. What is hashing ? What are the different types of hashing ? What are the advantages of hashing
4. Construct a B+ tree for the following set of key values and there are three pointers in each node [4,9,17,36,22,39]
5. What is normalization ? explain different types of normalization. what are the advantages of normalization ?

CS 853 : DATA STRUCTURES

I. Answer all the following questions. **[Marks: 5*4=20]**

1. Define algorithm. How to analyze the performance of an algorithm ?
2. Explain how N-dimensional array are sorted and compute the address of an element using Row major order.
3. Transform the following infix expression into their equivalent postfix and prefix forms.

   (a) (A + B) % (C * (D – E) / F) – G (b) (X – Y) / (Z * (P + Q) /R) * S
4. Explain how to insert an element in AVL tree what is the time complexity of your procedure.
5. What is hashing ? Explain any four methods of hashing.

.CS 854 - INTERNET & INTRANET PROGRAMMING

I. Answer all the following questions. **[Marks: 5*4=20]**

1. Describe the structure of a typical java programming and explain the implementation of a java program
2. What is a constructor and list out its properties. Explain types of constructors.
3. Explain HTML tags and the procedure for design a webpage
4. Write briefly about applet lifecycle and explain init(), start(), stop(), destroy() and paint() methods and steps for creating an applet.
5. Write about extending and implementing interfaces and write a java program to implement multiple inheritance (using interfaces).

PGDCA – II Semester Assignments - II

CS851: VISUAL PROGRAMMING

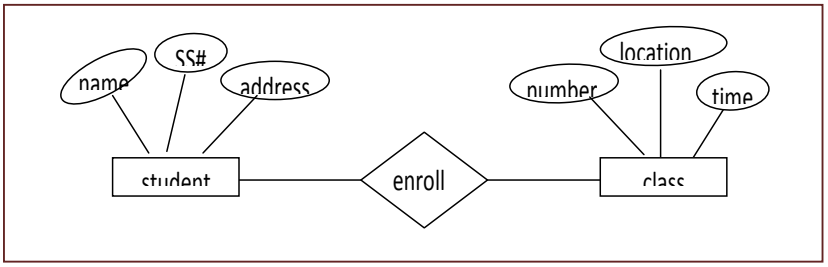
I. Answer all the following questions. **[Marks: 5*4=20]**

1. Write the properties and methods of the following
   (i) Combo box (ii) List box (iii) Dir List Box
   (iv) Drive List Box (v) File List box
2. Discuss about file handling in VC++.
3. Write about the following methods of document class in VC++ with simple code
   (i) Serialize (ii) Constructor
4. Write a program to create an employee data base with ename, eid, salary and experience as fields and connect it to the VC++ front end using ODBC.
5. Write about the following
   (a) Database Objects (b) Class Wizards in VC++
   (c) DLL's in VC++ (d) OLE Technology.
   Give an example for each of the above.

CS 852 : DATA BASE MANAGEMENT SYSTEMS

I. Answer all the following questions. **[Marks: 5*4=20]**

1. What are the responsibilities of database manager ?
2. Describe the working of 3-phase commit protocol.
3. Explain the steps involved in connecting relational model into network model with a suitable example
4. Transform the following E-R diagram into a tree-structure diagram?
5. What are the advantages of data distribution in distributed databases ? Explain the file organization using variable length records?



CS 853 : DATA STRUCTURES

I. Answer all the following questions. **[Marks: 5*4=20]**

1. Explain the different asymptotic notations used in Analysis of algorithms.
2. Implement a Stack using Linked list, representation.
3. What is Hashing ? How is it different from conventional Search strategies ?
4. State the principle of bubble sort. Write a C Program that implements this principle, in sorting a list of max. of 20 elements. Trace the steps involved through the given example set.
   42 23 74 11 65 58 94
5. What is an AVL tree ? Explain and write an algorithm for deletion operation in AVL tree.

CS 854 - INTERNET & INTRANET PROGRAMMING

I. Answer all the following questions. **[Marks: 5*4=20]**

1. Define web browser. Explain types of web browsers.
2. Discuss the role of java in the implantation of java applet.
3. Describe the complete life cycle of a thread.
4. Give syntax for try and catch block. And explain exception handling mechanism with the help of a block diagram and example.
5. What is a package ? How do we design a package and how do we add a class or an interface to a package ? Explain with the help of an example.