P.G. DIPLOMA IN COMPUTER APPLICATIONS

PGDCA – I SEMESTER
Internal Assignment Questions

2021

PROF. G. RAM REDDY CENTRE FOR DISTANCE EDUCATION
(Recognised by the Distance Education Bureau, UGC, New Delhi.)
OSMANIA UNIVERSITY, HYDERABAD – 500 007 Telangana State INDIA
(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 **30 marks.** University Examinations will be held for **70 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 online http://oucde.net and submit the payment receipt along with assignment at the concerned counter **on or before 13th June, 2021** and obtain proper submission receipt.
ASSIGNMENT WITHOUT THE PAID RECEIPT 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.

FORMAT

a. NAME OF THE COURSE   :

b. NAME OF THE STUDENT   :

c. ENROLLMENT NUMBER   :

d. NAME OF THE PAPER   : _____

e. DATE OF SUBMISSION   : _____

6. Write the above said details clearly on every assignment paper, otherwise your paper will not be valued.

7. Tag all the assignments paper-wise and submit.

8. Submit the assignments on or before **13th June, 2021** at the concerned counter at PGRRCDE, OU on any working day and obtain receipt.

Prof.Chintha Ganesh
DIRECTOR

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ASSIGNMENT-I
PGDCA – I SEMESTER
C AND DATA STRUCTURES – PC 101 IT

Answer all the following questions	Marks : 30

1. In brief, explain different types of computer. (4)
2. Explain a general structure of C program. (4)
3. Explain the symbols used in drawing flowchart with diagram. (4)
4. Discuss in detail about the two dimensional arrays with example (6)
5. Write a program to calculate the bill amount for an item given its quantity sold, value, discount and tax. (6)
6. Explain stack data structures with their operations (6)

ASSIGNMENT-I
PGDCA – I SEMESTER
ELEMENTS OF INFORMATION TECHNOLOGY– PC 102 IT

Answer the following short questions (each question carries five marks)	Marks : 30

1. Explain about the Information System with a neat diagram. (5)
2. What are the relative merits of Compiler and Interpreters. (5)
3. Explain about the levels of Information. (5)
4. Convert the following Binary numbers into Octal and Hexadecimal numbers. (5)
   i. 1100011
   ii. 1100.101
5. Explain about Input and Output devices with examples. (5)
6. What is a Computer Language and classify it. (5)

ASSIGNMENT-I
PGDCA – I SEMESTER
OPERATING SYSTEMS – PC 103 IT

Answer all the following questions	Marks : 30

1. Explain about layered approach (6)
2. Write the structure of process control block. (6)
3. Explain about round robin CPU scheduling algorithm (6)
4. With a neat figure, explain the paging memory allocations (6)
5. Explain the linked list allocation method (6)

ASSIGNMENT-I
PGDCA – I SEMESTER
DATA BASE MANAGEMENT SYSTEMS – PC 104 IT

Answer all the following questions	Marks : 30

1. Explain E-R diagram in detail with diagram (6)
   (a) Strong Entity   (b) Weak Entity   (c) Attributes & Relations

2. What is normalization explain the different types of normalization. (6)

3. Explain about the keys (6)
   (a) Super key   (b)   candidate key   (c) primary key   (d) foreign key
   (v) alternative key (vi)   composite key
4. write the syntax for all (6)
   (a) DDL   (b)   DML   (c) TCL   (d) DCL commands with examples

5. Explain the advantages of dbms. (6)
   (a)   Write the difference between DBMS and RDBMs
   (b)   Write the difference between DBMS and FILE management system.

ASSIGNMENT-II
PGDCA – I SEMESTER
C AND DATA STRUCTURES – PC 101 IT

Answer all the following questions	Marks : 30

1. What is the meaning of break and continue keyword in C? (3)
2. Explain string manipulation library functions with their syntaxes.
   Write a program to check whether a string is palindrome or not. (7)
3. Write a program that uses a function to search a number within an array (5)
4. List and describe dynamic memory allocation functions. (4)
5. What is a structure? Explain how to declare, initialize and access the structure elements. (5)
6. Explain Single linked list operations with example (6)

ASSIGNMENT-II
PGDCA – I SEMESTER
ELEMENTS OF INFORMATION TECHNOLOGY– PC 102 IT

Answer the following short questions (each question carries five marks)	Marks : 30

1. Explain about the tasks performed by the Operating System. (5)
2. What are the characteristics of UNIX Operating System. (5)
3. Explain about Document Formatting and Spreadsheet. (5)
4. What are the properties of Database Package. (5)
5. Explain about different types of Computer Networks. (5)
6. What is Virtual Reality. (5)

ASSIGNMENT-II
PGDCA – I SEMESTER
OPERATING SYSTEMS – PC 103 IT

Answer all the following questions	Marks : 30

1. Explain the problem of critical section with an example. (6)
2. Give an elaborate description of the dining philosopher problem and its solution. (6)
3. Explain the concept of deadlock. (6)
4. Explain the steps for an interrupts with a figure. (6)
5. Explain the process management in Linux with figure. (6)

ASSIGNMENT-II
PGDCA – I SEMESTER
DATA BASE MANAGEMENT SYSTEMS – PC 104 IT

Answer all the following questions	Marks : 30

1. Explain about the ACID properties. With examples (6)
2. Explain the b+ tree in detail along with the diagram (6)
3. Explain about transaction state diagram in detail. (6)
4. Explain about (6)
   (a) Serializability   (b) View Serializability   (c) Conflict Serializability.
5. Explain about concurrency protocol, time based protocol, lock based protocol, validation based protocol. (6)

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