Post Graduate Diploma in Computer Applications – I Semester
INTERNAL ASSIGNMENT QUESTIONS
(February, 2018)

DIRECTOR

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PROF. G. RAM REDDY CENTRE FOR DISTANCE EDUCATION
OSMANIA UNIVERSITY

Dear Students,

All the II 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 28th March, 2018** 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.

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 **28.03.2018** at the concerned counter at PGRRCDE, OU on any working day and obtain receipt.

Prof. Cintha Ganesh

DIRECTOR

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| **Paper – I (CS801: Programming Methodology) -** | **Assignments - I** |

I. Answer all the following Questions. (Marks:4 * 5 = 20)

1. Write about (i) Data types (ii) Getchar, putchar, scant, print functions

2. Write about following in C-language

   (i) If ..else (ii) do-while and while-do (iii) for   condition (iv) switch statement

3. (i) Describe different storage classes with examples (ii) Describe about pointers with examples

4. Write short notes on the following :

   (i) Write a program to initialize the diagonal elements of an array to '1' and rest of the elements to '2'

   (ii) Write a function to find average of given numbers in C++.

| **Paper – II (CS802: Computer Organization) -** | **Assignments - I** |

I. Answer all the following questions. (Marks: 4 * 5 =20)

1) What are the addressing modes ? Explain them with suitable examples.

2. Differentiate between Hardwired Control and Micro Programmed Control.

3. Explain the use of a modulo K sequence counter method and the various steps that are implemented for the use of this method for controller design

4. Explain about interactions between CPU and Memory.

| **Paper – III (CS803: IT Foundations)   -** | **Assignments - I** |

I. Answer all the following questions. (Marks: 4 * 5 = 20)

1. What is an operating system. (i) Explain the types of Operating Systems, What are the functions of Operating System (ii) Explain windows NT and Linux operating systems.

2. (i) Explain the features of contemporary OS(Command level) (ii) What are the primary memory and Secondary memory ? Explain

3. Define Network. Explain LAN, WAN and MAN

4. (i) Discuss about various transmission media. (ii) Write notes on internet, addressing and domain names.

| **Paper – IV (CS804: Business Information Systems) -** | **Assignments - I** |

I. Answer all the following Questions. (Marks: 5 * 4 = 20)

   1. Describe the divisions and sections of a COBOL program.

   2. Write the OCCURS CLAUSE in COBOL

   3. Explain about indexed sequential file organization with an example program.

   4. Explain about Hashing, External sorting with SORT verb and search verb.

| **Paper – V (CS805: Operating Systems) -** | **Assignments - I** |

I. Answer all the following Questions. (Marks: 5 * 4 = 20)

1. Define the essential differences between the following types of Operating Systems.

   (i) Batch   (ii) Interactive   (iii) Timesharing   (iv) Realtime

2. (a) Briefly explain the characteristics used for the comparison of scheduling algorithm.

   (b) Define and compare the multilevel feedback scheduling algorithm.

3. Define the term "Deadlock". Explain the necessary conditions to characterize a deadlock with an example.

4. What is paging ? What is the hardware support required for paging ? Describe this with the help of a diagram.

Paper – I (CS801: Programming Methodology) -   Assignments - II

I. Answer all the following Questions.   (Marks:4 * 5 = 20)

1. Discuss the important features of OOPs. Explain the organization of data and functions in OOP.
2. Describe about structures and unions
3. (a) Write short notes on the following : (i) Template function   ii) Friend function
      (ii) Write any program to explain the concept of derived class and explain.
4. (b) (i) What are the different types of inheritance used in c++ programs. Explain with simple

      program. (ii) Write any program to explain the concept of derived class and explain.

Paper – II (CS802: Computer Organization) -   Assignments - II

I. Answer all the following questions.   (Marks: 4 * 5 =20)

1. a) Explain about
      (i) Asynchronous data transfer   (ii) Daisy-Chain Priority Schemes
      (iii) Explain all instruction formats   (iv) Micro-program sequences
2. a) (i) Define microprogram, Explain about microprogram sequencer with the help of neat diagram.
      (ii) Discuss about state table and state diagram using an example.
   b) Write short notes on
      (i) Storage media   (ii)   Printer and Printer types (iii) VDU (iv) Cache Memory
3. Briefly explain the following:
      i) Opcode & Operand   ii) Privileged and Normal instructions
      iii) Half Adder & Full Adder   iv) Horizontal and Vertical format of control word
4. Write short notes on
      (i) Instruction formats (ii) e-mail   (iii) Reports in database   (iv) Domain Names

Paper – III (CS803: IT Foundations) -   Assignments - II

I. Answer all the following questions.   (Marks: 4 * 5 = 20)

1. Explain different types of Internal and External DOS Commands.
2. Discuss about CPU, memory and peripheral devices.
3. Discuss about various transmission media
4. Explain about the ISO OSI seven layered architecture in detail.

Paper – IV (CS804: Business Information Systems) -   Assignments - II

I. Answer all the following Questions.   (Marks: 4 * 5 = 20)

1. Discuss about Information system life cycle and write notes on feasibility study.
2. Differentiate System Approach and System Analysis.
3. Explain major steps in SDLC. What is the role of System Analysis ?
4. Explain in detail about Testing and types of Testing.

Paper – V (CS805: Operating Systems) -   Assignments - II

I. Answer all the following Questions.   (Marks: 4 * 5 =20)

1. Define operating system. Explain the functions of multi-programmed operating system/
2. What are page replacement algorithms ? Explain using an example.
3. What is Process Scheduling ? Explain about CPU Scheduling algorithms.
4. Define the term "Memory Fragmentation". Identify the differences between "Internal Fragmentation" and "External Fragmentation".

*Note:

1) **Each paper carries 20 marks.**
2) **Internal Assignments - Submit the answer sheets on or before 28th   March, 2018.**
3) **Practical Internal exams are from 14the & 15th April, 2018.**
4) **The cover page of the assignments must have the following information:**

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