

# **Post Graduate Diploma in Computer Application (PGDCA) Semester 1**

## **ASSIGNMENT BOOKLET [2]**

Assignments for subjects PDCA 101, PDCA 102, PDCA 103,  
PDCA 104, PDCA 105  
(for Session January 2015)

Directorate of Distance Education  
Punjab Technical University, Jalandhar

## **Dear Student**

The assignment is the important component of our evaluation system and your internal assessment will be based on the assignments. The objective of such assignments is to enable you to comprehend the subject knowledge. The assignments are purposely designed on the lines of examination pattern so as to prepare you for the final examinations. In the entire semester, you will have to attempt **TWO** assignments. Assignment 1 will cover the topics from Unit 1 and Unit 2. Assignment 2 will cover topics from Unit 3 and Unit 4. All assignments are tutor marked assignments and carry 50 marks each. In internal assessment assignment 1 and assignment 2 shall carry the weightage of 20 marks respectively.

As the assignment is integral part of your internal assessment, it is compulsory to attempt the assignment. Therefore, plan well for the attempt of your assignments. Before attempting the assignment, please read **IMPORTANT INSTRUCTIONS** and all questions carefully and then arrange your answers in a rational sequence.

Dear student, please note following points regarding attempt of assignments:

- Assignments should be submitted in your own handwriting.
- Use A4 size plain papers for assignments.
- Carefully follow the instructions and ensure that you have attempted all questions.
- Answers should be correct and neatly written.
- Submit assignment of each subject in a separate file.
- Each assignment should consist of a title page containing the details of the student and subject (Template of title page is attached as **ANNEXURE**. Take print out of that annexure on A4 size page and fill it in your handwriting for each subject.)

### **Instructions for students regarding Submission of Assignments:**

- Before submitting the assignment, please retain one copy of your assignment with you and take receipt of the assignment from your study centre.
- Last date of submitting 2<sup>nd</sup> Assignment of all subjects is 30<sup>th</sup> April, 2015.
- Please tag a self addressed A4 size envelope with assignments of all subjects separately.

**Work Hard and Perform Well!**

# COMPUTER FUNDAMENTALS

## PDCA-101

### IMPORTANT INSTRUCTIONS:

1. SECTION-A All questions are compulsory and each question carries 2 marks.
2. SECTION-B All questions are compulsory and each question carries 10 marks.

### SECTION: A

1

- a. Define a multi-programming and time sharing operating system.
- b. What are the macros as used in word processing?
- c. How can we create formulas in spreadsheets?
- d. How can you use special features in slides?
- e. What are templates and views with respect to slides?
- f. List different types of network topologies.
- g. What is a computer network?
- h. What is FTP?
- i. Define firewalls and proxy servers.
- j. What do you mean by WAIS?

### SECTION: B

- Q2. What is an operating system? Describe various types of operating system.
- Q3. What are the various network topologies and various communication devices?
- Q4. Write a note on internet and its various applications.

## PROGRAMMING IN C++

### PDCA-102

#### IMPORTANT INSTRUCTIONS:

1. SECTION-A All questions are compulsory and each question carries 2 marks.
2. SECTION-B All questions are compulsory and each question carries 10 marks.

#### SECTION: A

1.
  - A. Define Inheritance as a feature of Object Oriented Paradigm.
  - B. What are address and reference operators in C++.
  - C. Define Pointers.
  - D. How the variable is dereferenced using pointers.
  - E. What are files in C++.
  - F. Differentiate between early and late binding.
  - G. What is polymorphism?
  - H. What are virtual and pure virtual functions?
  - I. How files are opened and closed in C++.
  - J. What do you mean by Dangling or wild pointer.

#### SECTION: B

- Q1. Describe various types of inheritance in C++ using individual programs of each.
- Q2. A) Write a program to show overloading of functions.  
B) Write a program to overload ++ operator in C++.
- Q3. Write a program using file handling to copy the contents of one file to another.

# COMPUTER OPERATING SYSTEM

## PDCA-103

### IMPORTANT INSTRUCTIONS:

1. SECTION-A All questions are compulsory and each question carries 2 marks.
2. SECTION-B All questions are compulsory and each question carries 10 marks.

### SECTION: A

**All questions are compulsory and each question carries 2 marks.**

#### QUES 1.

- a. Define demand paging.
- b. What do you mean by the term page locking.
- c. Define file system management.
- d. Write down the types of file system objects .
- e. Explain file system architecture.
- f. Differentiate between access methods and access control.
- g. What do you mean by the term direct memory access.
- h. Explain text based display.
- i. Differentiate between buffering and caching.
- j. Define hard disk scheduling.

### SECTION: B

**All questions are compulsory and each question carries 10 marks.**

**QUES 2.** Explain virtual memory in detail. Also write down the page replacement algorithms.

**QUES 3.** Explain system management giving directories and its names in detail.

**QUES 4.** Explain in detail the concept of hardware I/O organization.

## **RDBMS**

### **PDCA-104**

#### **IMPORTANT INSTRUCTIONS:**

1. SECTION-A All questions are compulsory and each question carries 2 marks.
2. SECTION-B All questions are compulsory and each question carries 10 marks.

#### **SECTION: A**

**All questions are compulsory and each question carries 2 marks.**

##### **QUES 1.**

- a. Define arithmetic operators.
- b. Differentiate between group functions and scalar functions.
- c. Give advantages of using views..
- d. Explain PL/SQL structure.
- e. Write down the conditional control in PL/SQL.
- f. What do you mean by the term joins.
- g. Differentiate between logical operators and comparison operators.
- h. What do you mean by the term pattern searching.
- i. Differentiate between variables and constants.
- j. Define the term index.

#### **SECTION: B**

**All questions are compulsory and each question carries 10 marks.**

**QUES 2.**What do you mean by the term joins. Also explain different types of joins in detail.

**QUES 3.** Explain views and also give methods how to create and alter views using indexed and partitioned views.

**QUES 4.** Explain in detail the concept of Composite index and unique index used for accessing data .

## COMMUNICATION SKILLS

### PDCA-105

#### IMPORTANT INSTRUCTIONS:

1. SECTION-A All questions are compulsory and each question carries 2 marks.
2. SECTION-B All questions are compulsory and each question carries 10 marks.

#### SECTION: A

**All questions are compulsory and each question carries 2 marks.**

1.
  - a. Discuss the agenda and minutes of meeting?
  - b. What is an extempore speech?
  - c. List various types of business reports.
  - d. Explain the significance of preparing PPTs.
  - e. Discuss the role of eye contact in an effective presentation.
  - f. List some of the commonly used evaluation parameters for GD.
  - g. What is an exit interview?
  - h. Discuss briefly the essential features of dissertation.
  - i. Distinguish between summary and abstract.
  - j. Define acknowledgement in a dissertation.

#### SECTION-B

**All questions are compulsory and each question carries 10 marks.**

2. In the capacity of the Chief Marketing Manager of Easy day Retails, Chandigarh, write a detailed report on the sluggish growth of two retail marts, which your company opened in Chandigarh three years ago. Report should also contain your recommendations to enhance the growth.
3. What kind of preparation needs to be made a day before the interview and on the day of the interview.
4. Discuss in detail the difference between a research paper and a project report?

**ANNEXURE**

**Title Page of Assignment**

<b>1</b>	<b>Name of the Student</b>	
<b>2</b>	<b>Registration Number</b>	
<b>3</b>	<b>Assignment Number (1/2)</b>	
<b>4</b>	<b>Subject Name</b>	
<b>5</b>	<b>Subject Code</b>	
<b>6</b>	<b>Date of Submission</b>	

**Signature of Student**

**Signature of Coordinator**

---

**FOR OFFICE USE**

Total Marks obtained: \_\_\_\_\_

Evaluated by: \_\_\_\_\_

(Signature of evaluator)