

# **Master in Science (IT) Semester 1**

## **ASSIGNMENT BOOKLET [2]**

Assignments for subjects MSIT 101, MSIT 102, MSIT 103,  
MSIT 104, MSIT 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!**

# INFORMATION MANAGEMENT

## MSIT-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

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

1

- a. What is DSS?
- b. Define content management system.
- c. List various formatting that we can apply in Word.
- d. What is a slide show?
- e. What we mean by access control?
- f. What is an E-Mail.
- g. What we mean by security?
- h. Differentiate between MIS and DSS.
- i. List various office automation softwares available.
- j. What is the importance of MIS?

### **SECTION: B**

Q2. Define knowledge management system. Give the nature and scope of business intelligence.

Q3. Explain various characteristics of spreadsheet office automation tool.

Q4. Define MIS. Explain Business Process Re-engineering in detail.

# OBJECT ORIENTED PROGRAMMING IN C++

## MSIT-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 ORGANIZATION AND ASSEMBLY LANGUAGE

## MSIT-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

1

- a. What is cache coherence?
- b. What are the different levels of cache?
- c. What is segmented page mapping?
- d. Define multiprocessor memory.
- e. What are various characteristics of multiprocessors?
- f. Define a register.
- g. What are machine control instructions used in 8085?
- h. What is virtual memory?
- i. Describe interprocessor communication.
- j. Explain any two program control instructions used in 8085.

### SECTION: B

- Q2. Explain the three cache mappings in detail.
- Q3. Describe various interconnection structures with neat diagram.
- Q4. Elaborate about various addressing modes used in 8085 with examples.

## **Operating Systems**

**MSIT-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 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.

## **TECHNICAL COMMUNICATION**

**MSIT-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. Distinguish between Resume and CV.
- b. What is a downward memo?
- c. List 4 advantages of E-mails.
- d. Name various types of reports.
- e. Explain briefly the meaning of dissertation.
- f. Difference between reference and bibliography.
- g. What is the difference between an oral presentation and a speech?
- h. Discuss the role of body language in presentation.
- i. Define a mock interview.
- j. List some of the commonly used evaluation parameters for GD.

### **SECTION-B**

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

**2.** In recent months, your company staff has not been punctual in reporting for work. Your General Manager has taken note of this worrying trend. In the capacity of HR executive, write a memo to your company staff ensuring that your message is clear, concise, courteous and complete. Include in your memo:

- a. The importance of being punctual.
- b. A table or graph explaining the trend of latecomers.
- c. Some recommendations on how they can be punctual

3. What are the various strategies to make a presentation more effective? Support your answer with appropriate illustrations.
4. Draft an application along with a resume in response to the following advertisement in 'The Times of India' dated March 20, 2015.

*Applications are invited for the post of a Computer Engineer. Should be well qualified for the post, with fluency in English and Hindi. Candidate with experience in the line would be preferred. Apply within 15 days to the General Manager, HCL Technologies, Gurgaon.*



**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**

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**FOR OFFICE USE**

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

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

(Signature of evaluator)