



# UNIVERSITY OF THE PUNJAB

**B.A. / B.Sc. Part – I**  
**Supplementary Examination - 2017**

Roll No. ....

**Subject: Computer Studies-I**  
**PAPER: A (Introduction to IT and Computer Programming)**

**TIME ALLOWED: 3 hrs.**  
**MAX. MARKS: 70**

**NOTE: Question#1 in Part-I and Question#5 in Part-II are compulsory. Attempt any TWO of the remaining THREE questions in Part-I and Part-II.**

For objective type questions (Question#1 and Question#5), you do not need to write the question statements. You are only required to write the part number (e.g. 1, 2, 3, etc.) and your selected answer letter (e.g. A or B or C or D) against it. Cutting and/or overwriting should be avoided. You must provide answers to the questions in the sequence (from 1 to 15)

**Part-I (Introduction to Information Technology) Max Marks: 35**

**Q # 1 (Do all parts in this question) (15)**

1. The process of reading instruction from memory is called:  
(A) Fetch (B) Translate (C) Decode (D) Execute
2. BIOS stands for  
(A) Basic Input Output System (B) Binary Input Output System  
(C) Basic Input Off System (D) All of the given
3. \_\_\_\_\_ is the ability of a device to "jump" directly to the requested data.  
(A) Sequential access (B) Random access (C) Quick access (D) All of the given
4. A computer program that converts an entire program into machine language is called a/an  
(A) Interpreter (B) Simulator (C) Compiler (D) Commander
5. \_\_\_\_\_ resides in active memory and replicates itself over a network to infect computers:  
(A) Time bomb (B) Worm (C) Melissa virus (D) Macro virus
6. Secondary memory of computer is also called \_\_\_\_\_  
(A) Main memory (B) Volatile memory (C) Cache memory (D) Auxiliary memory
7. In color monitors, each pixel is made of \_\_\_\_\_ dots.  
(A) 1 (B) 2 (C) 3 (D) 4
8. The following keyboard has a design that reduces then chance of wrist injuries:  
(A) Wireless Keyboard (C) Cordless Keyboard  
(B) Gaming Keyboard (D) Ergonomic Keyboard
9. Light pen and joystick are \_\_\_\_\_  
(A) Algorithm (B) Input devices (C) Output devices (D) Portals
10. Which of the following are the functions of an operating system?  
(A) Allocates resources (C) Monitors activities  
(B) Manages disks and files (D) All of the given
11. \_\_\_\_\_ server translates the domain name to its associated IP address.  
(A) DNS (B) FTP (C) ISP (D) Dial up
12. The process of transferring files from a computer on the Internet to your computer is called \_\_\_\_\_  
(A) Uploading (B) FTP (C) Downloading (D) JPEG
13. A modem is connected to \_\_\_\_\_  
(A) a telephone line (B) a keyboard (C) a printer (D) a monitor
14. A computer connected to a network is called a \_\_\_\_\_  
(A) Hub (B) Bridge (C) Router (D) Node
15. Primary key of a relation consisting of two or more attributes is called \_\_\_\_\_  
(A) Large key (B) Multi key (C) Composite key (D) Strong key

**Q# 2: Briefly explain the following: (10)**

- a) Multicore processor
- b) Global Positioning System (GPS)
- c) Data and address buses
- d) Virtual reality
- e) Network protocol

**Q# 3: What is hard disk? Describe working, storage mechanism and performance characteristics of hard disk in detail. (10)**

**Q# 4: (P.T.O.)**

- a) Define IP address, domain name, DNS server, web browser and www. (5)
- b) Discuss the major functions of operating system. (5)

**Q # 5 (Do all parts in this question)**

(15)

1. What is the value of integer variable x after the statement  $x = 2^3 + 5$  is executed?  
(A) 10 (B) 13 (C) 25 (D) 256
2. Let A = 15 and B = 20, then the expression (A > 10) OR NOT(B=20) evaluates to \_\_\_\_\_  
(A) True (B) False
3. In Visual Basic, the declaration of variables is done by \_\_\_\_\_ keyword.  
(A) int (B) dim (C) define (D) declare
4. Code window consists of a(n) \_\_\_\_\_ box and a procedure list box.  
(A) object (B) event (C) tool (D) message
5. \_\_\_\_\_ variables retains or preserves value even when a procedure ends.  
(A) Static (B) Dynamic (C) Virtual (D) Currency
6. SDI stands for \_\_\_\_\_.  
(A) Simple Document Interface (C) Single Document Interface  
(B) Sample Document Interface (D) Simple Document Internal
7. In command button, \_\_\_\_\_ property is used to change the label value for any content.  
(A) name (B) font (C) caption (D) height
8. In Visual Basic, \_\_\_\_\_ file consist of complete coding and form design.  
(A) project (B) form (C) class (D) module
9. \_\_\_\_\_ statement is used to change the control to specified location without any condition.  
(A) goto (B) select (C) else if (D) while
10. In a list box, \_\_\_\_\_ function is used to insert item to the list.  
(A) addlist() (B) additem() (C) addcount() (D) adddata()
11. \_\_\_\_\_ control is used to provide an identifiable grouping for other controls.  
(A) Frame (B) Label (C) List box (D) Command button
12. \_\_\_\_\_ array can be resized at any time.  
(A) Auto (B) Integer (C) Multidimensional (D) Dynamic
13. \_\_\_\_\_ method is used to delete items from a list box.  
(A) Remove (B) Clear (C) Remove item (D) Delete
14. Which of the following character is a string concatenation operator?  
(A) # (B) \* (C) % (D) &
15. A Label control's AutoSize property is set to True by default.  
(A) True (B) False

**Q# 6:** Write a VB 6 program that asks the user to enter the data of as many phone calls as the user wants. Each data entry of a phone call consists of call type and call duration in minutes. The call type can either be 'ON-NET' or 'OFF-NET'. The tariff of 'ON-NET' call is 1.2 Rs. per minute and the tariff of 'OFF-NET' call is 2 Rs. per minute. Your program should compute the total calling cost and after that 16% sales tax should be added in it to obtain the total payable amount by the consumer. (10)

**Q# 7:** Write a VB 6 program that requests the lengths of three line segments as inputs and tells whether the lines can form a triangle. Three lines can form a triangle if the length of the longest line is less than the sum of the lengths of other two lines. (10)

**Q# 8:** Write a VB 6 program that receives 10 integers and store them in an array. Write a procedure isDuplicate that determines whether a certain element is duplicated / repeated in the array. (10)

**Sample Run 1:**

INPUT  
17 20 -12 65 36 39 78 -32 90 90

OUTPUT  
The Array contains duplicate elements

**Sample Run 2:**

INPUT  
17 20 -12 65 36 39 78 -32 90 22

OUTPUT  
The Array does not contain duplicate elements