



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Computer Science-I**

**MAX. TIME: 15 Min.**

**Course Code: COMP-211/IT-21335 Part-I (Compulsory)**

**MAX. MARKS: 10**

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- i. Which one of the following is not used for sending an online message?  
(a) facebook (b) skype (c) gmail (d) google
- ii. Decimal number 74 has its equivalent binary that is equal to:  
(a) 111111 (b) 1010101 (c) 1000101 (d) none
- iii. For  $A = \pi r^*$ ; which of the following is true in C++:  
(a) Your variable: A (b) Your variables: A, r (c) Your variables: A, r, pi (d) your variables: true
- iv. Which of the following is true for a variable name to calculate sum of two numbers  
(a) sum (b) sum(a, b) (c) sum = a + b (d) both b and c
- v. If  $a = 4$ ; and  $b = 5$ ; then which of the following is true for  $a++$ ; and  $++b$  ;  
(a) a is 4, b is 5 (b) a is 5, b is 5 (c) a is 4, b is 6 (d) a is 5, b is 6
- vi. The file extension of a presentation program is:  
(a) .ppt (b) .txt (c) .pdf (d) .doc
- vii. In case of while loop, it is:  
(a) fixed iterations loop (b) condition control loop (c) easy loop (d) incremental
- viii. if  $k=9$ , then  $k++$  will give:  
(a) 9 (b) 10 (c) 11 (d) 12
- ix. you can run C++ in :  
(a) mobile (b) computer (c) laptop (d) both b and c
- x. for  $\text{int } a = 2.9$ ;  $\text{cout} \ll a$ ; will give you:  
(a) 2 (b) 2.9 (c) 3.0 (d) All



# UNIVERSITY OF THE PUNJAB

Third Semester – 2019

Examination: B.S. 4 Years Program

Roll No. ....

**PAPER: Computer Science-I**

**Course Code: COMP-211/IT-21335 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**

**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

Q.2.	Write short answers of the following Questions:  1 What is the difference between input device and tactile input devices? Write an algorithm to calculate y such that ( e.g., $y = 4x^2$ )  2 Give decimal equivalent of binary number: 11000111.  3 Differentiate between int and float in C++computer and write examples for each.  4 Write program to print out product of first five integers.  5 Comment on the following in C++: selection and repetition (loop).	20= 4x5
Q.3.	How the steps input, process and output are graphically shown in a flow chart? Differentiate between an algorithm and a flow chart? Write an algorithm to calculate and print c such that $c = (a + b)(a-b)$ .  Write C++ program to print a number, its square and cube such that the numbers are from 1 to 500. How you can print only odd numbers in the above series?	10
Q.4.	Write program to read from the user a value of t and prints out y1, y2 and y3 in C++ such that: $y1 = \sin(2t)$ , $y2 = \cos(4t)$ and $y3 = y1 + y2$  Write C++ program to print the table of number 5.	10
Q.5.	Write program to read from the user a value of a resistance R and current I and prints out values of voltage V and power P such that $V = IR$ and $P = VI$ .  Comment on the following: float, main() and pow().	10