

[22]

SEAT No. \_\_\_\_\_

No. of printed pages : 2

# SARDAR PATEL UNIVERSITY

Master of Computer Applications – Semester I Examination  
PS01CMCA21 – Computer Programming and Problem Solving  
22<sup>nd</sup> NOVEMBER 2018, Thursday

Time: 10.00 am to 01.00 pm

Total Marks: 70

Q1. Select the appropriate answer of the following questions: [8]

- Which of the following is an unary operator?  
A. + B. ++  
C. % D. ||
- In a for loop in a C program, if the condition is missing  
A. it is assumed to be present and taken to be false  
B. it is assumed to be present and taken to be true  
C. it result in a syntax error  
D. execution will be terminated abruptly
- Which is the value of A and B after executing following expressions :  
int A=19; int B=40; A=A++ - B--;  
A. A = -20, B= 39 B. A = -19, B= 39  
C. A = -20, B= 40 D. A = -19, B= 40
- Array index start from \_\_\_\_\_  
A. 1 B. -1  
C. 0 D. None of these
- A function with return type \_\_\_\_\_ does not return any value.  
A. void B. float  
C. char D. None of these
- The statement float P=21; printf("%0.3f", P); will print \_\_\_\_\_  
A. 21.000 B. 21.000000  
C. 0.021 D. 0.00021
- Which of the following is an address operator?  
A. \* B. %  
C. # D. &
- \_\_\_\_\_ is a int data type format specifier?  
A. %f B. %d  
C. %x D. %c

Q2. Answer the following questions: [Any seven]

[14]

- What is High level language? List out High level language names.
- Explain Arithmetic operators.
- Explain data type casting.
- What is Comment in C Program? How to write it?
- Enlist the variable data types with occupy memory.
- Discuss the #define statement.
- Discuss the structure of C program.
- Explain in brief, command line argument.

(1)

(P.T.O.)

**Q3 A** What is Flowchart and Algorithm? Draw a flowchart / an algorithm to check whether the given number is prime or not. [6]

**Q3 B** Explain exit control loop with break and continue statement [6]

OR

**Q3 B** Explain the for loop in detail. Write a c program to print the following pattern using for loop: [6]

```
A
A B
A B C
A B C D
A B C D E
```

**Q4 A** Explain nested if...else and switch statement with example [6]

**Q4 B** Discuss Array with example. [6]

OR

**Q4 B** How a string can be declared in C? List at least four string functions. Explain any one in detail with example. [6]

**Q5 A** Explain user define functions. Write the differences between local variable and global variable. [6]

**Q5 B** Write a note on Structure. Give the difference between structure and union. [6]

OR

**Q5 B** Write a C program that defines a structure employee. The structure has four members id, name, join\_date, desig. Create an array variable of structure employee and use it in main function. [6]

**Q6 A** Explain C storage classes. [6]

**Q6 B** What is a file? Explain fopen() function with file opening modes. [6]

OR

**Q6 B** What is pointer? What is the importance of it? How can we declare and initialize pointer? How can we change value of variable pointed by the pointer? [6]

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(2)