

4460

BOARD DIPLOMA EXAMINATION, (C-14) OCT / NOV-2017 DECE-FOURTH SEMESTER EXAMINATION PROGRAMMING IN C

Time : 3 Hours]

PART - A

[Total Marks : 80

 $3 \times 10 = 30$

Instructions : (1) Answer all questions.

- (2) Each question carries **three** marks.
- (3) Answers should be brief and straight to the point and shall not exceed five simple sentences.
- 1. What is the output if the following statement executed.

int num = 12;

printf (¹¹%d %o %x¹¹, num, num, num);

- 2. List and write the purpose of any six input format specifiers.
- 3. Write three conditional statements supported by C with syntax.
- 4. Explain for iterative statement.
- 5. Write a simple C statements to read string using gets().
- 6. Explain about putchar() and getchar().
- 7. Define a pointer. Give an example for integar pointer.
- 8. List three storage classes supported by C.
- 9. Write the purpose of any three conditional pre-processor directives.
- **10.** Differentiate between structure and union.

/4460

PART - B

- (2) Each question carries **ten** marks.
- (3) Answers should be comprehensive and the criteria for valuation is the content but not the length of the answer.
- **11.** a) Explain with example the basic data types in C language.
 - b) Distinguish between Array and Structure.
- 12. a) Explain the conditional statement if-elseif with syntax and flowchart.
 - b) Write a program to find the largest of given three numbers using if-elseif.
- **13.** a) Explain the while loop statement with syntax and flowchart.
 - b) Write a program to display multiplication table for 15 using while loop.
- **14.** Define array. Explain how to declare and initialize a 1-D, 2-D array with example.
- **15.** Explain the string manipulated functions strcat(), strchr(), strncmp(), strcpy() and strlen().
- **16.** a) Explain the storage classes automatic, static, register and global, supported by C.
 - b) Write a C program to find the maximum of two given numbers using a function call technique.
- **17.** a) Explain the concept of arithmetic operations on char and int type pointers.
 - b) Write a program to access 10 elelments of an integar array with pointer and print.
- **18.** a) Explain the pre-processor directives : define, include, ifdef and ifndef.
 - b) Write a program to read student information like name and four subjects marks into the structure array and to print the same with total marks.

* * *

/4460

 $10 \times 5 = 50$