

Roll Number
 In Figures: _____
 In Words: _____

PR XII (01) 16
COMPUTER SCIENCE
 Inter Part – II
 (Fresh / Reappear)
 Fic. No. _____
 (For Board's Office use only)

Superintendent
 Signature / Stamp:

COMPUTER SCIENCE
 Inter Part – II
 (Fresh / Reappear)

Fic. No. _____
 (For Board's Office use only)

Time Allowed: 3 Hours

Marks: 75

Note: There are THREE sections in this paper i.e. Section A, B and C.
Attempt Section-A on the same paper and return it to the Superintendent within the given time.
 No marks will be awarded for Cutting, Erasing or Overwriting. Marks of Identification will lead to UFM case, Mobile Phone etc are not allowed in the examination hall.

Time Allowed: 20 minutes

Section – A

Marks: 15

Q-I Write the correct option i.e. A, B, C or D in the empty box provided opposite to each part.

- | | | | | | |
|--|-----------------------|---------------------------|--------------------------|--------------------------|---------------------------------------|
| i. Database is said to be.....if it has connectivity to web. | A. Offline | B. Online | C. DBMS | D. Distributed database. | <input type="checkbox"/> |
| ii. A DBMS in which relationships are treated as table is called..... | A. Hierarchical DBMS | B. Network DBMS | C. Procedural DBMS | D. Relational DBMS | <input type="checkbox"/> |
| iii. A field is used to locate a..... | A. Record | B. File | C. Data item | D. Database | <input type="checkbox"/> |
| iv. The term schema refers to..... | A. Data model | B. Database | C. Data Dictionary | D. Data item | <input checked="" type="checkbox"/> B |
| v. In an ERD, a derived attribute is represented by..... notation. | A. Oval shape | B. Double line oval shape | C. A dotted oval shape | D. None of these | <input type="checkbox"/> |
| vi. 2 nd NF is obtained by removing.....from 1 st NF relation. | A. Partial dependency | B. Transitive dependency | C. Functional dependency | D. Repeating groups | <input type="checkbox"/> |
| vii. A black triangle in Datasheet view identifies..... | A. An empty row | B. The current row | C. A row to be edited | D. A row to be deleted | <input type="checkbox"/> |
| viii. The extension of C's program is..... | A. .CCP | B. .h | C. .C | D. .mdb | <input type="checkbox"/> |
| ix. There are.....kinds of constant in C. | A. 3 | B. 2 | C. 5 | D. 4 | <input checked="" type="checkbox"/> A |
| x. Every C program must have at least.....function. | A. 1 | B. 2 | C. 3 | D. 4 | <input checked="" type="checkbox"/> A |
| xi. There are.....ways to communicate with a function. | A. 1 | B. 2 | C. 3 | D. 4 | <input type="checkbox"/> |
| xii. Keyword.....ensure that the function will return no value. | A. int | B. void | C. float | D. Switch | <input type="checkbox"/> |
| xiii. >= is an operator..... | A. Relational | B. Conditional | C. Logical | D. Unary | <input type="checkbox"/> |
| xiv. Which one is Post-tested loop? | A. 'for' loop | B. 'while' loop | C. 'do/while' loop | D. Nested loop | <input type="checkbox"/> |
| xv. Variables are created in..... | A. RAM | B. ROM | C. Hard Disk | D. Cache | <input type="checkbox"/> |

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Inter Part -II
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Note: Time allowed for Section - B and Section - C is 2 Hours and 40 minutes.

Section - B

Marks: 40

Q-II Answer any TEN parts. Each part carries FOUR marks.

1. Differentiate Homonyms and Synonyms.
2. What are the advantages of C language?
3. Differentiate degree and cardinality of relationships.
4. What do you mean by keys? Explain primary and secondary keys with the help of example.
5. Explain external and internal schema.
6. Describe why it is important for database system to ensure data integrity?
7. What is source program and object program? Why are these concepts important?
8. What would be the correct variable type to store the following information?
a. Salary b. National Identity Card Number c. Gender d. Age.
9. What is the purpose of control string in a scanf()? Compare this function with getchar().
10. Define Database, Entity Class, Data Item and attribute.
11. If originally $x = 3$ and $y = 5$ what is the value of x and y after each of the given expressions.
i. $x++ + y$ ii. $x-- - y-$
12. What is function prototype? What is the use of return statement?
13. What is switch statement?

Section - C

Marks: 20

Note : Attempt any TWO questions. All questions carry equal marks.

- Q-III** Describe the basic requirements of a database approach.
- Q-IV** What is normalization and why it is applied? Describe a well structured relation in detail.
- Q-V** Write a program that ask for the radius of a circle and find area of the circle.