# TILAK MAHARASHTRA VIDYAPEETH, PUNE
## BACHELOR OF COMPUTER APPLICATIONS (B.C.A.)
## SPECIALIZATION IN CYBER SECURITY (CS)
### EXAMINATION : MAY- 2024
### SEMESTER – II
### Sub: Structured System Analysis & Design
### (BCA243-20/BCA243-18/BCA23-203/BCAC23-203/BCA-CS-243-20)

| | | |
|---|---|---|
| **Date : 25/05/2024** | **Total Marks : 60** | **Time: 10.00 am To 12.30 pm** |

*Instructions:*

*1. All questions are compulsory unless and otherwise stated.*
*2. Bold figures to the right of every question are the maximum marks for that question.*
*3. Candidates are advised to attempt questions in order.*
*4. Answers written illegibly are likely to be marked zero.*
*5. Use of scientific calculators, Log tables, Mollier Charts is allowed.*
*6. Draw neat and labeled diagrams wherever necessary.*

**Q.1.    Fill in the blanks.**                                                     **(05)**

1. A _____ is an orderly grouping of independent components linked together
   a) System                                b) Goal
   c) Behaviour                             d) Structure

2. _____ maintenance is concerned with adjustment of application with the environment
   a) Corrective                            b) Perfective
   c) Adaptive                              d) Repetitive

3. _____ is one of the technical skills of the system analyst
   a) Teaching                              b) Creativity
   c) Motivation                            d) Communication skill

4. In _____ model process is structured as cascade of phases
   a) RAD                                   b) Prototyping
   c) Waterfall                             d) Spiral

5. _____Normal form has no internal repeating group
   a) 1NF                                   b) 2NF
   c) 3 NF                                  d) 4NF

**Q.2.    State True/False.**                                                       **(05)**
1. DBA stands for Database Administrator
2. Entity set is made up of set of entities of different kind
3. Strategic Information is needed for long range planning
4. Behavioral feasibility focuses on existing Hardware, software, and personnel
5. TPS stands for Transport processing system

**Q.3.    Answer the following.  (Solve any 5)**                                     **(10)**
1. What is Boundary and Environment of system?
2. Write short note on feedback control
3. What is limited entry decision table?

4. What is white box and black box testing?
5. What do you mean by software post implementation review
6. Write a note on service suppliers

**Q. 4.  Answer the following in detail.  (Solve any 6)**                    **(30)**
1. Explain with diagram, different management levels of an organization
2. Write a note on feasibility study
3. Explain waterfall model
4. Explain why an interview is treated as powerful fact-finding technique?
5. Write a note on Data flow diagram
6. Write a note on Normalization
7. What is system maintenance? Explain its types

**Q. 5.  Answer the following in detail. (Solve any 1)**                     **(10)**
1. What is System? Explain characteristics and Elements of system
2. Explain Multifunctional role of system analyst

_____