

TILAK MAHARASHTRA VIDYAPEETH, PUNE
BACHELOR OF COMPUTER APPLICATIONS (B.C.A.)(044)/
BACHELOR OF SCIENCE(COMPUTER APPLICTIONS)(750)/
BSC (DATA SCIENCE AND ARTIFICIAL INTELLIGENCE)(799)/
BACHELOR OF COMPUTER APPLICATIONS(DATA SCIENCE AND MACHINE
LEARNING)(786)/SPECIALIZATION IN CYBER SECURITY
(CS)(464)/BACHELOR OF SCIENCE (CYBER SECURITY)(760)
EXAMINATION MAY- 2026
SEMESTER – II

Sub: Structured System Analysis & Design
(BCA243-20/BCA23-203/BSC24-203/79925-203/78625-203BCA-CS-243-20/BCAC23-
203/46425-203/76025-203/BSCC24-203)

Date : 29/05/2026

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. Candidates are advised to attempt questions in order.
 3. Answers written illegibly are likely to be marked zero.
 4. Use of scientific calculators, Log tables, Mollier Charts is allowed.
 5. Draw neat and labeled diagrams wherever necessary.
-

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

1. In RFP , P stands for _____.
a) Project
b) Proposal
c) Private
d) People
2. _____ is the system development methodology which enables the developer to construct a working model of the final system.
a) Testing
b) Antivirus
c) Prototyping
d) None of these
3. In UID , U stands for _____.
a) User
b) Unit
c) Useful
d) Unknown
4. _____ technique is used to collect information from individuals or from groups.
a) Interview
b) Research
c) Brainstorming
d) None of these
5. In RAD, R stands for _____.
a) Rate
b) Rest
c) Rotation
d) Rapid

Q.2. State True/False. (05)

1. Functional testing is a Type of black box testing.
2. In waterfall model the process is structured as a cascade of phases, where the output of one phase is the input to the next one.
3. The system designer does not make high level decisions about overall architecture.
4. Computer Input consists of data and instructions
5. In bottom up testing the lowest modules are tested first.

Q.3. Answer the following. (Solve any 5) (10)

1. What is system?
2. List the skills required by a system analyst.
3. What is Black box testing?
4. Define testing.
5. List the three levels of normalization.
6. What is structural testing?

Q. 4. Answer the following in detail. (Solve any 6) (30)

1. What are the characteristics of a system?
2. Describe threats to system security.
3. Explain the elements of a system.
4. What is ESS?
5. Explain the causes of software failure.
6. What is system design specification?
7. Explain Criteria for software selection?

Q. 5. Answer the following in detail. (Solve any 1) (10)

1. Explain the multifunctional role of system analyst and his different functions.
 2. What are the different types of system?
-