TILAK MAHARASHTRA VIDYAPEETH, PUNE
BACHELOR OF COMPUTER APPLICATIONS (B.C.A.)
EXAMINATION : DECEMBER - 2022
SEMESTER - III

Sub: Software Testing & Quality Assurance (BCA –345-18/345-20/BCA-CS-345-20)

Date : 26/12/2022   **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.**   **(5)**

1.   _____ Methodology is used to perform Maintenance testing.

   a) Sanity testing   b) Breadth test and depth test

   c) Retesting   d) Confirmation testing

2.   _____ is not a valid phase of SDLC (Software Development Life Cycle)

   a) Testing Phase   b) Requirement Phase

   c) Deployment phase   d) Testing closure

3.   _____ is not part of the Test document?

   a) Test case   b) Requirement traceability matrix

   c) Test strategy   d) Project Initiation Note

4.   _____ testing is related to Non-functional testing?

   a) Unit Testing   b) Black-box Testing

   c) Performance Testing   d) None of the above

5. In CMM, letter C stands for _____.

   a) Capability   b) Cost

   c) Capacity   d) Contact

Q.2.   **State True/False.**   **(5)**

1. Software defects are mainly design defects.

2. Software engineers are not involved in SQA.

3. Quality control is pillar for Software Quality Assurance.

4. Post Implementation phase evaluates testing processes.

5. The alpha test is conducted at user's site.

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

1.   What is Buddy Check?

2.   Define LOC and KLOC.

3.   What do you mean by regression testing?

4.   Define Domain testing.

5.   Define top-down Integration.

6.   What is Unit Testing?

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

1.   Write a note on Cyclomatic Complexity.

2.   Write a note on Six Sigma.

3.   What are the objectives of Quality assurance?

4.   Differentiate between Alpha and Beta testing.

5.   Write a note on Plan content of SQA.

6.   Explain the term Peer Review.

7.   Difference between Black Box testing and White Box testing

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

1.   Software quality metrics.

2.   Explain in detail testing of web-applications.

_____