**Bahria University, Islamabad Campus**

Department of Computer Science

Final Semester Examination Solution Class/Section: BS (CS)-8A & 8B

**(Spring 2022)**

# Paper Type: Descriptive

Subject: **Software Quality Assurance Date: 28-7-2022**

Course Code: SEN-420 Time: Session: II

Name of Faculty: Fazal Wahab Max Marks: 50

Time Allowed: 150 minutes Total Pages: 1

**INSTRUCTIONS:**

1. All questions are compulsory.
2. There are a total of five questions.
3. The paper is closed book.
4. The students are not allowed any helping material (books, tables, formulas, etc).   
   Calculators are allowed. Programmable Calculators are NOT allowed.

VI. Use blue, black, or blue-black ink only. Do NOT use lead pencil especially.

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enroll No \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(USE CAPITAL LETTERS)

**Q.No.1** What should be specified in the SQA Plan? What important documentations need to be mentioned in the SQA plan suggested by IEEE 730 standard, for review?

Please also discuss the minimum reviews/audits required to be specified in the SQA Plan. (10)

**Q.No.2**  Why we should measure software products/processes? Discuss major issues that need to be identified for measurement. How do we measure the cost and size of the software product? (10)

**Q.No.3** Differentiate between Process capability and Process performance. What is the major focus in the **defined maturity level** of CMM? Please also discuss the KPAs of level 2 Maturity level CMM/CMMI. (10)

**Q.No.4** Discuss in detail the objectives and goals of software testing. What are the major software testing activities? Please also discuss quality factors related to (10)

* + 1. Functionality (exterior quality)
    2. Engineering (interior quality)
    3. Adaptability (future quality)

**Q.No.5** Why Software testing is important? What are the major factors which can be involved in software testing? Please also explain the V-Model of Software Testing in detail. (10)