POKHARA UNIVERSITY

Level: Bachelor Semester: Spring Year: 2020
Program: BE Full Marks: 70
Course: Software Testing Verification, Validation and Quality Assurance Pass Marks: 31.5

Time: 2 hrs.

Candidates are required to answer in their own words as far as practicable.

The figures in the margin indicate full marks.

Attempt all the questions.

Section – A: $(5 \times 10 = 50)$

- Q.N. 1 Explain at least 5 impacts of software defect considering Hospital Management Information System as an example.
- Q.N. 2 Differentiate between Verification and Validation. Write your opinions on the importance of these two in an organization for any software development.
- Q.N. 3 Explain seven principles of testing. Why it is cheap to find and fix defects in early stages of SDLC? Justify.
- Q.N. 4 How do you differentiate entry and exit criteria for testing? Considering the login system with username (email address only) and password, write down 5 entry and exit criteria cases.
- Q.N. 5 Illustrate the potential benefits and challenges of introducing automated testing tools over the manual one. Would you prefer to embrace such tools or go against the use? Give your personal opinion.

OR

Generate an incident report of a Financial software system expressing the reflection of a failure during testing. Describe how such document help in software development life cycle.

Section – B:
$$(1 \times 20 = 20)$$

- Q.N.6 You are given an UI of registration form below. Consider it as a simple project and write down the necessary functions to develop the system (you can use pseudocode or any programming language). Now for the above registration system show how do you plan and conduct: -
 - 1. Component/ Unit testing
 - 2. Integration testing
 - 3. System testing
 - 4. Acceptance testing

Conditions: - No duplication of user allowed. Password should be minimum of 8 characters with at least one number, Capital letter and special character. Proper validation in each field is needed.

John	User account registered!
Lastname	
Smith	
Username	
john	
Password	
••••	
✓ I agree with the terms and conditions.	
Regiçter	