**TITLE OF PAPER: Software Development Tools and Practices**

**INSTRUCTIONS TO CANDIDATES:**

**Answer Five Questions – Total Marks 100**

**The exam paper consists of two sections; Section A (MCQs) and Section B (Essay Type)**

**Section A:** Select the most appropriate answer for the questions below regarding development technologies and quality assurance.

(1.5 x 40 = 60 Marks)

**The following are some sample questions, DO NOT expect the same for the exam.**

* 1. Choose the correct statement about a dynamic web page.
     1. It is same every time whenever it displays
     2. It generates on demand by a program or a request from browser
     3. It is same every time whenever it displays and generates on demand by a program or a request from browser
     4. None of the mentioned
  2. Which of the following is a server side programming language?
     1. Python
     2. Java
     3. Ruby
     4. All of these
  3. What does markup tags tell the web browser?
     1. How to organize the page
     2. How to display the page
     3. How to display message box on page
     4. None of these
  4. How can you open a link in a new browser window?
     1. <a href = "url" target = "new">
     2. <a href = "url" target= "\_blank">
     3. <a href = "url".new>
     4. <a href = "url" target ="open">
  5. Suppose we want to arrange five DIVs so that DIV4 is placed above DIV1. Which CSS property should we use to control the order of stack?
     1. d-index
     2. s-index
     3. x-index
     4. z-index
  6. Which of the following applications/software can be used to create a favicon?
     1. Unity
     2. Adobe Photoshop
     3. Dreamweaver
     4. VLC
  7. What is not a web server?
     1. Apache
     2. Microsoft IIS
     3. Git
     4. nginx
  8. Which is the element that has an “src” property to initiate HTTP GET request?
     1. img
     2. iframe
     3. script
     4. Both img and script
  9. PHP is \_\_\_\_\_\_\_ scripting language
     1. Server-side
     2. Clint-side
     3. Middle-side
     4. Out-side
  10. In PHP Language variables name starts with which character?
      1. ! (Exclamation)
      2. & (Ampersand)
      3. \* (Asterisk)
      4. $ (Dollar)

**There will be two structured type questions related to software development mainly web development and quality assurance. Each question will have multiple sub question.**

**The following are some sample questions, DO NOT expect the same for the exam.**

1. Compare and contrast static and dynamic web pages.
2. Explain URIs, URLs & URNs with examples each.
3. Explain client-side and server-side state management techniques.
4. Compare and contrast sessions with one of the client-side state management techniques.
5. What does DBMS stand for? What are the other types of storage systems other than RDBMS?
6. Name three commercial software programs for managing DB.
7. What are the problems of not validating a web form?
8. Discuss what are the impacts if user sensitive data was exposed.
9. Regular expressions rules and how to apply them
10. Name different methodologies for web applications testing.
11. Explain best practices in web development.
12. QA principles and how to apply them in a given scenario
13. Characteristics of test cases
14. Writing test cases for a given scenario