## ECII 2205: Advanced Internet and Web Programming

## CAT 2

# Sept 11, 2021

# Instructions to candidates:

## Attempt all questions

- a) Describe the terms as used in web services
  - (i) POX (1 marks)
  - (ii) REST (1 marks)
  - (iii) SOAP (1 marks)
- b) Describe the term Service Oriented Architecture (SOA) (2 marks)
- c) Explain any FOUR benefits of cloud computing (4 marks)
- d) Describe the term AJAX and explain how it is can be applied it in web development, stating its advantages (5 marks)
- e) PHP is one of the server side programming languages that you can use in your web applications. Write a PHP statement that can be used to:
  - (iv) Pass data from the PHP script to HTML so as to be viewed on a browser (1 mark)
  - (v) Pass data from HTML element called 'name' to PHP variable called \$name in script. (1 mark)
  - (vi) Connect PHP program to MySQL server (2 marks)
- f) Describe the following terms as used in service deployment/acquisition models in cloud computing (3 marks)
  - (i) Software as a service (SAAS)
  - (ii) Platform as a service (PAAS)
  - (iii) Infrastructure as a service (IAAS)
- g) Using a clearly labeled diagram, describe the term Model –View-Controller (MVC) as used in Internet and Web Programming (4 marks)
- h) Explain how the following trends are influencing the future of web design and development (5 marks)
  - (i) noSQL DBs
  - (ii) Easier Hosting, Deployment and Scaling
  - (iii) No-Touch Interfaces
  - (iv) Massively Online users
  - (v) Internet of Things

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