SLIATE

SRI LANKA INSTITUTE OF ADVANCED TECHNOLOGICAL EDUCATION
(Established in the Ministry of Higher Education, vide in Act No. 29 of 1995)

Higher National Diploma in Information Technology
Second Year, Second Semester Examination – 2015
HNDIT 2412- Software Configuration Management

Instructions for Candidates:	No. of questions: 06
Answer five (05) questions only	No. of pages : 02
All questions carry equal marks.	Time :Three (03)hours

Question 01

i. Define Software Configuration Management (02 marks)
ii. What are the main activities in Configuration Management? (04 marks)
iii. Briefly explain the above mentioned activities. (08 marks)
iv. Briefly explain the three (03) types of SCM libraries. (06 marks)

(Total 20 marks)

Question 02

i. Explain the term "Version Control System." (02 marks)
ii. Name the main functions of "Version Control System". (03 marks)
iii. List out the disadvantages in manual version control systems. (06 marks)
iv. Give three (03) examples for version control systems. (03 marks)
v. Name the three main characteristics of a Version Control System. (06 marks)

(Total 20 marks)

Question 03

i. Niluka installed a version control software on her machine to manage a software project. Write the SVN commands to perform the following functions.
   a. Check whether subversion is installed. (02 marks)
   b. Create a repository called "svn-repos" in C drive of the computer and add "sub" and "main" two directories. (03 marks)
   c. Add "home.html" in tmp directory in to the 'main" directory in "svn-repos" repository. (03 marks)
   d. Download the "home.html" file to "work" directory in to the local machine to make changes. (03 marks)
   e. Check the file structure of "svn-repos" (03 marks)

ii. Write short notes on the following terms.
    a. Revision number
    b. Repository
    c. Revision tag   (06 marks)

(Total 20 marks)

Question 04

i. How does conflicts occur in version merging?   (03 marks)

ii. When is "svn resolved" command used?   (04 marks)

iii. Explain briefly why we use "svn log" command after updating repository?

    (03 marks)

iv. User1 and User2 download "home.html" from the "svn-repos", User1 changes <title> tag contents and User2 changes body background color of the "home.html" file. User2 uploads the "home.html" file to the "svn-repos".

    a. Write the command User2 used to upload the "home.html" file to the "svn-repos".
    (03 marks)

    b. User1 attempts to upload "home.html", but software is not allowing him to upload. Explain the reason.

    (04 marks)

    c. Write the SVN command used by User1 to identify the changes of the version.
    (03 marks)

(Total 20 marks)

Question 05

i. Explain the differences between Client-server model and Distributed model in version control.   (06 marks)

ii. Define Configuration Management Tool.   (02 marks)

iii. Briefly explain the three classes of tools for SCM.   (09 marks)

iv. Mention the user groups for whom the above tools are most appropriate.   (03 marks)

(Total 20 marks)

Question 06

i. List the four (04) values which Agile development centers on.   (04 marks)

ii. Name three (03) Agile development methods.   (03 marks)

iii. List the common characteristics of Agile development methods mentioned above.

    (04 marks)

iv. Explain the SCM approaches in different Agile development methods   (09 marks)

(Total 20 marks)