



HCN-003-001523

Seat No. _____

B. Sc. (Sem. V) (CBCS) Examination

October - 2017

**CA - 503 : Software Engineering & Shell
Programming using Linux**

Faculty Code : 003

Subject Code : 001523

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

Instructions :

- (1) Answer for all must be written in your answer sheet.
- (2) Figures on the right indicate full marks.

1 Attempt all :

20

- (1) _____ shell is by default inbuilt in any Linux.
- (2) Which command is used to display all login users list ?
- (3) Give the full name of grep command _____.
- (4) _____ command is used to display the current date and time.
- (5) Which command is used to count the line, word and character ?
- (6) _____ is the sign of root directory in linux.
- (7) Which command is used to compare two files ?
- (8) Which command is used to delete empty directory in Linux ?
- (9) Which command is used to display process status in Linux ?

- (10) Which command is used to change user mask ?
- (11) Which mode is default mode of vi editor ?
- (12) Which symbol is used for output redirection ?
- (13) Which command is used to delete single character in VI editor ?
- (14) Full form of SDLC _____.
- (15) Give full name of DFD _____.
- (16) Which is the first level of software testing ?
- (17) Full name of COCOMO _____.
- (18) The spiral model is developed by whom ?
- (19) Full form of V & V process _____.
- (20) Give the full form of SRS _____.

- 2** (a) Explain following questions : (any three) **6**
- (1) Explain Unix Architecture.
 - (2) Explain types of shell.
 - (3) Explain cursor movement commands in vi editor.
 - (4) Explain who command.
 - (5) Explain cat command.
 - (6) Explain wc command.
- (b) Attempt following questions : (any three) **9**
- (1) Explain grep command with example.
 - (2) Explain modes of vi editor.
 - (3) Explain sort command with example.
 - (4) Explain at and batch command with example.

- (5) Explain while loop with example in shell programming.
- (6) Explain case structure with example in shell programming.
- (c) Attempt following questions : (any two) **10**
- (1) Explain positional parameter in linux.
- (2) Explain input and output redirection in shell programming.
- (3) Explain piping concept with example.
- (4) Write a shell script to enter any number and check that number is odd or even.
- (5) Write a shell script to enter any filename and check that file has read permission or not.
- 3** (a) Explain following questions : (any three) **6**
- (1) What is Software Engineering ?
- (2) What is Quality and Productivity factor in Software Engineering ?
- (3) What is Software Crisis ?
- (4) What is Software Design ?
- (5) What is Software Testing ?
- (6) What is Maintenance ?
- (b) Attempt following questions : (any three) **9**
- (1) Explain spiral Model as a Software Development Process Model.
- (2) Explain Prototype Model.
- (3) Explain different Software Project Risks.

- (4) Explain SEI CMM Software Quality Model.
- (5) Explain levels of software testing.
- (6) Explain Software Verification and Validation.

(c) Attempt following questions : (any two) **10**

- (1) Explain Software Project Management Plan in detail.
- (2) Explain Software Project Cost Estimation.
- (3) Explain Software Project Scheduling Management.
- (4) Explain Software Testing Methods.
- (5) Explain Software Requirement Specification (SRS).
