



MAL-003-001523

Seat No. _____

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

October / November – 2016

**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) Which symbol used to root Directory in Linux? _____
- (2) _____ command used to clear the Screen in Linux.
- (3) _____ command used to changing file permission.
- (4) Give the full name of grep command _____
- (5) Write syntax of grep command _____
- (6) Which command is used to count the line, word and character? _____
- (7) Write a command for displaying currently login users list _____
- (8) Which command is used to compare two files? _____
- (9) Full form of bc command _____
- (10) Full form of ps command _____
- (11) Which command is used to change the priority of process? _____
- (12) Which mode is default mode of vi editor? _____
- (13) Which symbol used for output redirection? _____
- (14) Full form of SDLC _____
- (15) What is last step in the SDLC? _____

- (16) Give full name of DFD _____
- (17) Which is the first level of software testing? _____
- (18) Full name of COCOMO _____
- (19) The spiral model is developed by whom? _____
- (20) Full form of V & V process _____

2 (a) Explain following questions : (any **three**) **6**

- (1) Explain File Directory structure of linux.
- (2) Explain types of shell.
- (3) Explain deleting commands in vi editor.
- (4) Explain is command.
- (5) Explain who 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 nice and kill 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 year and check that year is leap year or not.
- (5) Write a shell script to following output.
 - 1
 - 1 2
 - 1 2 3
 - 1 2 3 4
 - 1 2 3 4 5

- 3** (a) Explain following questions : (any **three**) **6**
- (1) What is Software Engineering?
 - (2) Explain the role of system analyst.
 - (3) What is Software Crisis?
 - (4) What is Software Design?
 - (5) What is quality and productivity?
 - (6) What is Software Testing?
- (b) Attempt following questions : (any **three**) **9**
- (1) Explain SDLC 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).
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