

(2½ Hours)

[Total Marks: 75]

- N.B.
- 1) All questions are compulsory.
 - 2) Figures to the right indicate marks.
 - 3) Illustrations, in-depth answers and diagrams will be appreciated.
 - 4) Mixing of sub-questions is not allowed.
 - 5) Assume suitable data wherever required.

Q1 Attempt All(Each of 5 marks)**(15)****a) Multiple Choice Questions**

- 1) GPL stands for _____
 - i) Generle Public License
 - ii) General Public License
 - iii) Generic Public License
 - iv) General Private License
- 2) Which of the following is not a phase of Life Cycle Paradigm / waterfall model?
 - i) Analysis
 - ii) Manufacturing
 - iii) Design
 - iv) Coding
- 3) _____ is the founder of FSF
 - i) Richard Stallman
 - ii) Denis Ritchie
 - iii) Ken Thomson
 - iv) All of these
- 4) _____ is a form of licensing in which an author surrenders some but not all rights under copyright law
 - i) Copydown
 - ii) License
 - iii) Copyleft
 - iv) Patent
- 5) The term BSD stands for _____
 - i) Binary software distribution
 - ii) Berkley software distribution
 - iii) Binary software development
 - iv) Berkley software development

b) Fill in the blanks

(Waterfall model, full, internationalization, Prototyping model, Firefox, localization, chrome, free hardware design, partial, open source software)

- 1) _____ is a static, sequential and procedural approach in software engineering methodology.
- 2) _____ copyleft is when all parts of work can be modified by consecutive authors.
- 3) _____ is the process of adapting software for a specific region or language by adding locale-specific components and translating text.
- 4) _____ is a web browser project descended from Mozilla application suite.
- 5) _____ refers to design which can be freely copied, distributed, modified and manufactured.

c) Short Answers:

- 1) What is free software?
- 2) Define Shared software.
- 3) Define GCC.
- 4) Draw symbol of copyright.
- 5) What is Public domain software?

- Q2. Attempt the following (Any THREE): (15)**
- a) List and explain 4 freedoms of free software.
 - b) Define BSD. Explain its history.
 - c) Write a note on following:
 - i) LGPL license
 - ii) Internationalization
 - d) Explain the concept 'Free doesnot mean no cost.'
 - e) Discuss about Copyleft.
 - f) Differentiate between Open source software and Closed software.

- Q3. Attempt the following (Any THREE): (15)**
- a) Write a note on Drupal.
 - b) Describe Apache in regards with the following points:
 - i) History
 - ii) License
 - iii) Applications
 - c) Define debugging. Explain GDB.
 - d) What is Github? How to interact with it? Explain.
 - e) Write a note on open source media.
 - f) Explain Open source teaching.

- Q4. Attempt the following (Any THREE): (15)**
- a) Discuss Android operating system.
 - b) Define virtualization. Explain its types.
 - c) Write a note on LAMP.
 - d) Explain OpenSolaris operating system.
 - e) Define terms: IDE, Development Tools, Programming languages. Give example.
 - f) Write any 5 features of Linux operating system.

- Q5. Attempt the following (Any THREE): (15)**
- a) Discuss Life cycle paradigm (waterfall model) as a software engineering methodology.
 - b) Differentiate between commercial design and free design practice.
 - c) List and explain any two open source database technologies.
 - d) Explain Shared Source in regards with following points:
 - i) Definition
 - ii) Any 2 shared source licenses
 - iii) Any 2 shared source programs
 - e) Discuss Openoffice.org case study in regards with following points:
 - i) introduction
 - ii) features
 - iii) any three components
