

Q. P. Code: 12211

(Time: 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.

Q. 1 Attempt All(Each of 5Marks)**(15M)****(a) Multiple Choice Questions**

- i. BSD stands for
 - a. Berkeley Software Distribution
 - b. Basic Software Distribution
 - c. Berkeley System Development
 - d. Berkeley System Design
- ii. OSI with respect to opens source software stands for
 - a. open source initiative
 - b. open system interchange
 - c. open source interchange
 - d. open system interconnection
- iii. GPL is
 - a. General Public License
 - b. Globally Published License
 - c. General Published License
 - d. Global Public License
- vi. LAMP is
 - a. Linux based Advanced MySQL database Programming
 - b. Linux Apache Web server MySQL database PHP/Python/Perl
 - c. Linux Android MySQL database, PHP/Python/Perl
 - d. Linux Advanced MYSQL Programs
- v. Adobe PDF an example of
 - a. Freeware
 - b. Licensed software
 - c. Shareware software
 - d. Closed Software

(b) Fill in the blanks

(Public domain software, IBM, Sun Microsystems, Mozilla thunderbird, Internet explorer, Linux, Windows, Docker, Wordpress, Licensed software)

- i. _____ is software where there is absolutely no ownership such as copyright, trademark, or patent.
- ii. Eclipse is a popular IDE donated by _____ to the open source community.
- iii. _____ is free and open source web browser.
- iv. _____ operating is free open system for PC.
- v. _____ is open source project for automation of Linux based application.

(c) Write Answers in two lines.

- i. What is free software?
- ii. What is closed source code software?
- iii. What do you mean by "Software Freedom"?
- iv. What is GCC?
- v. List any two Open Source database technologies.

Q. P. Code: 12211**Q. 2 Attempt the following (Any THREE)(Each of 5Marks) (15M)**

- (a) Give comparison between Free Software and Open Source software.
- (b) Explain the concept of "Free doesn't mean no cost".
- (c) Write short on principals of open source.
- (d) Write a note on the following:
 - i. LGPL licenses
 - ii. Apache license
- (e) Discuss the problems in traditional commercial software.
- (f) Explain the zero marginal cost with respect to FOSS.

Q. 3 Attempt the following (Any THREE)(Each of 5Marks) (15M)

- (a) Write a note on the following:
 - i. Drupal
 - ii. Wordpress
- (b) Explain five key components of Open Office.
- (c) How one can contribute to Wikipedia? Explain.
- (d) Explain the following terms:
 - i. Open Source Media
 - ii. Open source Hardware
- (e) Distinguish between Commercial design practices and Open Design practices.
- (f) Explain process of testing open source code.

Q. 4 Attempt the following (Any THREE)(Each of 5Marks) (15M)

- (a) Explain the features of Android operating system.
- (b) Write short note on Open Solaris operating system.
- (c) Write sort note on "virtualization technology".
- (d) Discuss containerization technology for IDE.
- (e) Write short note on "debugger".
- (f) Write short note on development tools.

Q. 5 Attempt the following (Any THREE)(Each of 5Marks) (15M)

- (a) Explain the following terms:
 - i. Trademark
 - ii. Copyleft
- (b) What is communication and etiquette? Discuss.
- (c) Explain role of open source in today's word.
- (d) How the mode of funding followed for Apache Web Server project?
- (e) Write short note on 'Docker'.
