

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)**(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. 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'.
