S0131 F.Y.B.SC. INCOMPUTER SCIENCE (SEMESTER 1)/S9054 FREE & OPEN SOURCE SOFTWARE. (s)

Q. P. Code: 12211

(Time: 2 1/2 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. а Q.1 Attempt All(Each of 5Marks) (a) Multiple Choice Questions i. BSD stands for a. Berkeley Software Distribution b. Basic Software Distribution; Se c. Berkeley System Development d. Berkeley System Design'. ii. OSI with respect to opens source software stands a. open source initiative. b.open systeminterchange c. open source interchange $^{\circ}$ -d. open system interconnection: = $^{\circ}$ iii, GPL is _ a. General Public License b.Globally Published License c. General Published License. d. Global Public License. iv. = 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) is software where there is absolutely no ownership i)___ such that 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. _____ operating is free open system for PC. iv) v) is open source project for automation of Linux based a application c)Write answer 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:
 - 1. 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 opetatingsystem.
- () Write sort note on "virtualization technology".

(ec) Write short note on "debugger"

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

a)Explain the following terms:

a)Trademark b)copyleft

- What is communication and etiquette? Discuss.
- c). Explain role of apen source in today's word.
- d)How the model of finding followed for Apache Web Server project?

e)Wrote short note on 'Docker'