

Duration : 02 Hours

- N.B. 1. All questions are compulsory.
 2. Figures to the right indicate marks.
 3. Illustrations, in-depth answers and diagram will be appreciated.
 4. Mixing of sub-question is not allowed

- Q. 1** **Attempt any four of the following** 16
- What are the principles of Open Source Software? Explain
 - Describe the role of Open source in Government.
 - Differentiate between Open source and Closed Source
 - What are the Income generation opportunities in Open source? Explain
 - Discuss different FOSS Licenses
 - What is copyrights and copy lefts? Explain
 - Write note on Free Software.
 - Write note on Open source ethics.
- Q. 2** **Attempt any four of the following** 16
- Write a note on GCC.
 - What are the steps to contribute to Wikipedia?
 - Write note on Drupal
 - Explain the Open source development model.
 - Write note on Open source in media.
 - Write note on Github.
 - Write note on Apache web server.
 - Explain Open Source Hardware.
- Q. 3** **Attempt any four of the following** 16
- Explain FreeBSD operating system.
 - Explain OpenSolaris operating system
 - Discuss Linux Operating system? Explain its features.
 - Write note on Debugger
 - What is Virtualization? Discuss the types of Virtualization.
 - Write note on Android operating system.
 - Discuss Containerization technology for IDE.
 - Describe in brief LAMP
- Q. 4** **Attempt any Three of the following** 12
- What is Software freedom? Explain.
 - Discuss the Problems with traditional commercial software.
 - Discuss about Open source in teaching.
 - Define terms: IDE, Development Tools, Programming languages
 - Write note on Docker.
 - Explain any two Open source Database technologies.