

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

**Q.1 Attempt All (Each of 5 Marks)**

(15 M)

**(a) Multiple choice questions**

- i. FLOSS stands for.....
  - a. Fixed latest Operating System Software
  - b. Free Libre Open Source software
  - c. Free Libre Open Source system
  - d. Free latest Operating System Software
- ii. GDB is.....
  - a. GNU Debugger
  - b. GNU Data
  - c. GNU Developer
  - d. GNU Design
- iii. LGPL is published by.....
  - a. FSF
  - b. FFS
  - c. SFF
  - d. SFS
- iv. .... is also Intellectual Property protection
  - a. Patent
  - b. Brand Name
  - c. Trademark
  - d. Copyright
- v. Irfanview is.....
  - a. Shareware
  - b. Freeware
  - c. Licenced software
  - d. Malware

**(b) Fill in the blanks**

(Mozilla foundation, Linux OS, Open Source Software, Java developers, Microsoft, Freepress, WordPress, Licensing, Content Delivery )

- i. Eclipse is a popular IDE used by ..... for the open source community.
- ii. Firefox is developed by .....
- iii. .... is granting the permission to use intellectual property rights such as trademark or patents.
- iv. Websites can be developed using .....
- v. .... is design which can be easily copied.

**(c) Short answers (Attempt all)**

- i. License
- ii. Public domain software
- iii. Communication and Etiquettes
- iv. List any two Open Source Database Technologies
- v. Containerization

**Q.2 Attempt the following (Any three)**

(15 M)

- a. Write a note on GNU Project
- b. What are the problems with Commercial Softwares?
- c. How does License work in Public Domain? Explain.
- d. What is Open Source Governance?
- e. "Free Doesn't Mean No Cost" Explain.
- f. What is Zero marginal cost related to FOSS?

**Q. 3 Attempt the following (Any three)****(15 M)**

- a. Write Short note on Wordpress and Wikipedia.
- b. Explain GCC.
- c. What is Open Source Teaching?
- d. Differentiate between Commercial and Open design Practices.
- e. How to interact with GITHUB?
- f. Explain open source code testing.

**Q. 4 Attempt the following (Any three)****(15 M)**

- a. Write note on LAMP.
- b. Write any 5 features of Linux OS.
- c. Discuss Docker.
- d. Explain Open Solaris Operating System.
- e. What are the advantages of Virtualization?
- f. Explain Free BSD.

**Q. 5 Attempt the following (Any three)****(15 M)**

- a. Discuss Principles of Open Source.
- b. Explain open source media.
- c. Distinguish Copyright and Copyleft.
- d. Define software freedom.
- e. Explain Google Docs in regards with following points
  - i. Introduction
  - ii. Features
  - iii. Any 2 components