



K. Sambal

Avinashilingam Institute for Home Science and Higher Education for Women
Deemed to be University Estd. u/s 3 of UGC Act 1956, Category A by MHRD (now MoE)
Re-accredited with A++ Grade by NAAC. CGPA 3.65/4, Category I by UGC
Coimbatore - 641043, Tamil Nadu, India

Bachelor's Degree Examination - November 2025
V Semester

Class : III UG 2019 & 2022 Batch Repeater
Major : Computer Applications

Time : 3 Hours
Max. Marks : 100

18BCAC21/21BCAC21 Open Source Technologies

Course Outcomes:

- CO1:** Apply the principles of Open source software.
CO2: Design real time applications using Open source.
CO3: Develop skill sets in Open source tools.
CO4: Able to apply the concepts of Open source in solving problems.
CO5: Ability to build and modify free and open source software packages.

Part A

10 × 1 = 10

Choose the correct answer

1. Which of the following is an example of free software?
a. Windows
b. Linux
c. MS Office
d. Photoshop
CO1 K1
2. BSD stands for what?
a. Basic Software Distribution
b. Binary Source Distribution
c. Berkeley Software Distribution
d. Business System Design
CO1 K1
3. Which license is most commonly used in open source projects?
a. Apache
b. MIT
c. GPL
d. Oracle
CO2 K2
4. What does FOSS stand for?
a. Free Open Secure Software
b. Free and Open Source Software
c. Free Optional Source Service
d. Free Object System Software
CO2 K1
5. Which organization launched the GNU Project?
a. Free Software Foundation
b. Microsoft
c. Oracle
d. Mozilla
CO3 K2
6. Which is an example of an open source browser?
a. Edge
b. Safari
c. Mozilla Firefox
d. Internet Explorer
CO3 K1
7. Which open source platform is widely used for Learning Management Systems?
a. Zoom
b. Blackboard
c. Moodle
d. Skype
CO4 K2
8. What is the main principle of open source methodology?
a. Secrecy
b. Collaboration and Transparency
c. Paid licensing
d. Restricted access
CO4 K2
9. Joomla is used mainly for:
a. Image Editing
b. Video Editing
c. Content Management
d. Database Administration
CO5 K1
10. Which of the following is an open source programming language?
a. Perl
b. C#
c. Java (Proprietary)
d. Swift
CO5 K1

Part B

5 x 6 = 30

Answer ALL questions

Each answer should not exceed 400 words or two pages

- 11.a. Define open source and free software with examples. CO1 K2
(or)
- 11.b. Explain the differences between open source and closed source software. CO1 K2
- 12.a. Explain the key principles of open source methodology. CO2 K2
(or)
- 12.b. List and describe any three important FOSS licenses. CO2 K2
- 13.a. Describe the steps in starting and maintaining an opensource project. CO3 K2
(or)
- 13.b. Write short notes on opensource hardware with examples. CO3 K2
- 14.a. Explain the social and financial impacts of opensource technology. CO4 K2
(or)
- 14.b. Discuss open source ethics and shared software concepts. CO4 K2
- 15.a. Write a note on Apache software. CO5 K2
(or)
- 15.b. Discuss on Ruby & Perl. CO5 K2

Part C

5 x 12 = 60

Answer ALL questions

Each answer should not exceed 800 words or four pages

- 16.a. Explain the history of the GNU project and its significance in open source. CO1 K2
(or)
- 16.b. Discuss the importance and advantages of FOSS in the software industry. CO1 K2
- 17.a. Discuss in detail the economics of FOSS and zero marginal cost. CO2 K2
(or)
- 17.b. Explain the role of copyrights, copylefts, and patents in open source. CO2 K2
- 18.a. Describe the process of developing and managing an open source project with a real-time example. CO3 K2
(or)
- 18.b. Write in detail about open source design and teaching. CO3 K2
- 19.a. Explain the ethical issues in open source technology with examples. CO4 K2
(or)
- 19.b. Discuss the impact of open source in government and society. CO4 K2
- 20.a. Write a detailed case study on Linux and its contributions to open source technology. CO5 K2
(or)
- 20.b. Discuss in detail about Mozilla Firefox. CO5 K2