

Seat No. : _____

AO-122

April-2022

M.Sc. (CA & IT), Sem.-IV

Open Source Technologies Theory (OST Theory)

Time : 2 Hours]

[Max. Marks : 50

- Instructions :**
- (i) In Section-I, out of **five** questions, attempt any **three** questions.
 - (ii) In Section-II, Question-6 is compulsory. In Question-6, out of ten questions, attempt any **eight** questions.

Section-I

1. (A) What is CatB ? Explain both open-source development models. (07)
(B) What is Open Source Software ? Write the criteria of the distribution terms of the Open Source Software. (07)
2. (A) Write a short-note on VI Editor. Also explain all the modes and commands of VI Editor. (07)
(B) What are the environment variables (ENVs) ? Explain some commonly used ENVs in detail. (07)
3. (A) Explain python Data Types in detail. (07)
(B) Explain if-else and if-elif-else statement in python with example. (07)
4. (A) Explain Default arguments and Variable Length arguments of Functions in python. (07)
(B) Write a short-note on Lambda Functions in python. (07)
5. (A) (i) Write a short-note on Access Modes of File Handling in python. (04)
(ii) Explain raise keyword in python exception handling. (03)
(B) Explain Multiple and Multi-level Inheritance in python with example. (07)

Section – II

6. Answer the following MCQs. (any **eight**)
(1) API stands for (01)
 - (a) Application Public Interface
 - (b) Application Programming Interface
 - (c) Application Private Interface
 - (d) None of the above

- (2) Who published CatB model ? **(01)**
(a) Richard Stallman
(b) Eric Raymond
(c) Netscape
(d) Donald Knuth
- (3) FSF is which type of foundation ? **(01)**
(a) govt
(b) profitable
(c) non-profitable
(d) semi-govt
- (4) Which version of GNU GPL is/are widely used ? **(01)**
(a) GPL version 2
(b) GPL version 3
(c) Both (a) & (b)
(d) None
- (5) Which command is used for detailed listing of files ? **(01)**
(a) \$ls
(b) \$ls-l
(c) \$ls-d
(d) \$ls-f
- (6) Which character is used to make a comment in python ? **(01)**
(a) / (b) //
(c) /**/ (d) None of the above
- (7) Data returned from the input function will be of which data-type ? **(01)**
(a) integer (b) float
(c) boolean (d) None of the above
- (8) Which of the following is not an access mode in file handling in python ? **(01)**
(a) rb (b) ra
(c) ab+ (d) w
- (9) What will be the output of the following statements in python : **(01)**
x, z = 10, "V"; print(z) ?
(a) 10 (b) V
(c) (10,V) (d) error
- (10) What is the syntax to access the doc-string of a python function ? **(01)**
(a) functionname.doc (b) _doc
(c) functionname._doc_ (d) doc_