

CDOE
MASTER OF COMPUTER APPLICATIONS (CBCS-2018 COURSE)
M.C.A. Sem - III : WINTER :- 2021
SUBJECT: OBJECT ORIENTED PROGRAMMING

Day : Monday
Date 21-02-2022

W-19193-2021

Time : 10:00 AM-01:00 PM
Max. Marks: 70

N.B.:

- 1) Attempt **ANY FOUR** questions from Section-I and **ANY TWO** questions from Section-II.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Answer to both the sections should be written in **SAME** answer books.
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SECTION-I

- Q.1** Explain the characteristics of object oriented programming. (10)
- Q.2** Explain types of constructor that java supports. Give example of each. (10)
- Q.3** What is advantage of modularity in software design? How encapsulation and packaging helps to provide modularity for large programs? (10)
- Q.4** State with example the use of the following built in exceptions in java. (10)
i) IndexOutOfBoundsException ()
ii) NullPointerException ()
iii) ArrayIndexOutOfBoundsException()
- Q.5** Describe collection framework. Explain its fractures. (10)
- Q.6** Write short notes on (**ANY TWO**): (10)
a) Serialization
b) BufferedInputStream
c) Set Implementers
d) Collection Framework

SECTION-II

- Q.7** Write a Java Program with a class College containing data members as college containing data members as college_id, college_name, university_name, establishment_year. Write member functions, (15)
i) To accept 'n' college details.
ii) To display college details of specific university.
iii) To display college details according to specified establishment year.
(Use Array of object and function Overloading)
- Q.8** Write a java program to display the contents of text file in reverse order. (15)
- Q.9** Write a java program to accept records of students and store it in an array of objects. The class Student contains data int roll no, char name [20], float percentage as members. Overload 'search' function for (15)
i) Search by roll no ii) Search by name

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