

LOVELY PROFESSIONAL UNIVERSITY

Academic Task No. 3 (SET A)

School: School of Computer Science & Engineering

Faculty of Technology and Sciences

Name of the faculty member: Richa Jain

Course Code: CSE202

Course Title: Object Oriented Programming

Program: B-Tech (CSE)

Max. Marks: 30

Is Rubric Applicable: NA

Date of Allotment: 23-04-2021

Date of Submission: 02-05-2021

Important Guidelines:

1. All questions in this Academic Task are compulsory.
2. It is mandatory to attempt all questions of the assignment in your own handwriting on A4 size sheets/pages with a blue colour ink pen. Any other mode of attempt (typed or printed codes or table) except hand written/drawn will not be accepted/considered as valid submission(s) under any circumstances.
3. Every attempted sheet/page should carry clear details of student such as Name, Registration number, Roll number, Question number and Page number. The page numbers should be written clearly on the bottom of every attempted sheet in a prescribed format as: for page 1; **Page 1 of 4**, for page 2; **Page 2 of 4**, for page 3; **Page 3 of 4** and for page 4; **Page 4 of 4**, in case your assignment/ document is of 4 pages.
4. After attempting the answer(s), student needs to take photograph of each of these answer sheets/pages and needs to convert the jpeg format images into a sequential single pdf format document (can be done with many free online available converters).
5. This PDF file should be uploaded onto the UMS interface on or before the last date of the submission.
6. Refrain from indulging into plagiarism as copy cases will be marked zero.
7. Questions are mentioned in the following table

S.No.	Roll No.	Objectives of Academic Activity	Topic/Question Details	Evaluation Parameters	Expected Outcomes
1.	For all roll numbers of Group-1	To check the understanding of programming and conceptual level of students.	<ol style="list-style-type: none"> 1. We want to calculate the total marks of each student of a class in Physics, Chemistry and Mathematics and the average marks of the class. The number of students in the class are entered by the user. Create a class named Marks with data members for roll number, name and marks. Create three other classes inheriting the Marks class, namely Physics, Chemistry and Mathematics, which are used to define marks in individual subject of each student. [10 Marks] 2. Write a program to count the number of prime number elements in an array of 10 elements where array is allocated memory dynamically [10 Marks] 3. Explain dynamic constructor with example. [5 Marks] 4. Show ambiguity in hybrid inheritance by suitable program and then resolve the problem of ambiguity [5 Marks] 	<ol style="list-style-type: none"> 1. Programming 2. Programming 3. Concepts understanding 4. Theoretical concepts will be checked. 	<ol style="list-style-type: none"> 1. Program 2. Program 3. Concept based answer 4. Theoretical answer