

CHRIST (Deemed to be University)
BANGALORE CENTRAL CAMPUS
DEPARTMENT OF COMPUTER SCIENCE
CIA Component -II

COURSE CODE/ COURSE NAME: MCA272 – PROGRAMMING IN JAVA

PROGRAM – II MCA B

Time Duration – 1.30 hrs Marks – 30 Marks

Design a class **Person** with the following members

Data Members

name, age, height

Member Functions

get() -> To read values to the data members

show()-> To display the values of the data members.

Design another class **Student** inherit from **Person** class with the following members

Data Members

studentId, institutionName, phoneNumber.

Member functions

get() -> To read values to the data members

show() -> To display values of the data members

Inherit **GraduateStudent** class from **Student** class with the following members

Data members

programName, noOfSubjects, classTeacherName, Marks, attendance.

Member function

get() -> to read values to the data members

show() -> To display values of the data members

The program should have the following features (CO1, CO2 & CO3)

1. Array of objects to create multiple instances of the **Student and GraduateStudent** classes (Minimum five objects)
2. Implement the concept of the **abstract** method in any one of the classes (Parent class or sub-classes).
3. Usage of **static** keyword to display Student Id
4. Display the list of male students who have above 60% of marks in the program MCA. And also display the list of female students who have above 75% of attendance in the program MCA.
5. Apply the parameter passing technique to the parent constructor and use **final** keywords wherever possible.

Note: You can add additional functions in the classes wherever required.