

Ahsansullah University of Science and Technology

Course No: CSE1206

Time: 1 hour

Total marks: 20

1.	<p>Create a class named “Officer” that has four instance variables: (2)</p> <ol style="list-style-type: none">1. name (String)2. age (int)3. basicSalary (double)4. A one-dimensional array called “salaryInfo (double): the array hold the salary of the officer for 12 months. <ul style="list-style-type: none">• Provide proper constructors, setter and getter methods. (1)• Provide a method that will calculate the salary of the manager on particular month and save the salary in the array. The month name is given as a parameter. The gross salary can be calculated by multiplying basic salary by 1.55. In addition, extra random percentage (between 3 to 7%) of the basic salary is added to the salary. The percentage is given as a parameter. (2)
2.	<p>Create another class named “Manager” that has four instance variables: (2)</p> <ol style="list-style-type: none">1. name (String)2. age (int)3. basicSalary (double)4. profitMadeInAYear (double)5. A one-dimensional array called “Salaryinfo”: the array hold the salary of the Manager for 12 months. <ul style="list-style-type: none">• Provide proper constructors, setter and getter methods. (1)• Provide a method that will calculate the salary of the manager on particular month and save the salary in the array. The month name is given as a parameter. The gross salary can be calculated by multiplying basic salary by 1.65, in addition, 1% of company profit will be added to the salary. Company profit of the month is given as parameter. (2)
3.	<p>Create a class called “Employee” that has two static methods with the same name: calculateYearlyBonus(). One static method calculates bonus for a “Officer” while the other method calculates bonus for a “Manager”. Use a proper object-oriented concept to design the class. (7)</p> <ul style="list-style-type: none">• Bonus of a manager is equal to average salary of the entire year and 10% of the profit he made in a year.• Bonus of a officer is equal to the average salary of entire year.
4.	<p>Create a demo class that contains the main() method. You have to illustrate the concept you use in question # 3 by providing an example. (3)</p>