Total No. of Questions – [4]

Total No. of Printed Pages 2

G.R. No.	

Paper Code - U218-126 (T1)

OCTOBER 2018/ IN-SEM (T1)

S. Y. B. TECH. (COMPUTER ENGINEERING) (SEMESTER - I)

COURSE NAME: OBJECT ORIENTED PROGRAMMING

COURSE CODE: (CSUA21176)

(PATTERN 2017)

Time: [**1 Hour**] [Max. Marks: **30**]

Instructions to candidates:

1) **Answer Q.1 OR Q.2 and Q.3 OR Q.4.**
2) **Figures to the right indicate full marks.**
3) **Use of scientific calculator is allowed**
4) **Use suitable data wherever required**

Q.1) a) Explain various features of Object Oriented Programming. [6]

b)An Election is contested by five candidate, the candidates are numbered as 1 to 5 and voting is done by marking candidates number (Like 1,2...5) on ballot paper. Write a program to read ballots and count the votes cast to each candidates. (Use Class and Object and static variable) [6]

c) What are the differences between POP and OOP? [4]

OR

Q.2) a) What is copy constructor? What is the purpose of using copy constructor? Demonstrate.(with Example) [6]

b) An electricity board charges following rates to customers for consumption of energy. The charges as per rule of MESB
for 001-100 Units @Rs 3.00/- (per unit)
for 101-300 Units@ Rs 7.00 /- (per unit)
for 301-500 Units@ Rs 9.00 /- (per unit)
for 501-1000 Units@ Rs 11.00 /- (per unit) and
beyond 1000 Units@ Rs 13.00 /- (per unit)
Display the above values using constructor.
Write a C++ program for total electricity bill consumption done by customer. [6]

c)What is the difference between the keywords *struct* and *class* in C++? Support your answer with an example. [4]

Q.3) a) Write a program for copying and concatenation of two string using operator overloading [6]

b) Explain the public and private derivation in Single inheritance. [4]

c) Define i) Function overloading ii) friend function [4]

OR

Q.4) a) Illustrate with program how the execution of constructor and destructor can be done in base and derived class [6]

b) What is operator overloading & pitfalls of operator overloading [4]

c) How we can use the concept of re-usability in C++? Justify your answer [4]