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No. of printed pages : 02

[52/A-15]

Sardar Patel University
External Examination (CBCS)
M. Sc.(Integrated) (Information Technology) - IIIrd Semester
PS03CIIT03
Object Oriented Programming and C++
25th October, Tuesday, 2016

Time: ~~00~~ 00 am to 5.00pm

Total Marks: 70

Q-1 Select an appropriate option.

10

- 1 In _____ data is hidden and cannot be accessed by external functions.
(a) OOP (b) POP (c) SOP (d) None
- 2 _____ means "To bind data & functions into a single unit".
(a) Inheritance (b) Polymorphism
(c) Data hiding (d) Encapsulation
- 3 The header file _____ should be included that use input/output statements.
(a) iostream (b) stdio (c) conio (d) io
- 4 _____ is a selection control structure.
(a) if (b) switch (c) if...else (d) all of above
- 5 _____ constructor contains an object as argument.
(a) Default (b) Copy (c) Parameterized (d) None of these
- 6 _____ access specifier is default in class definition.
(a) private (b) public (c) protected (d) none of these
- 7 By default, main() in C++ returns _____.
(a) void (b) int (c) char (d) char*
- 8 While defining the derived class, base class name is written on _____ side of : symbol.
(a) RHS (b) LHS (c) Both (a) & (b) (d) None of these
- 9 The correct function name for overloading the addition (+) operator is _____.
(a) operator+ (b) +operator (c) operator(+) (d) operator:+
- 10 Which one of the following operators can be overloaded?
(a) :: (b) New (c) .* (d) Sizeof

Q-2 Answer the following questions. (Attempt any **TEN**)

20

- 1 What is object – oriented programming?
- 2 Define encapsulation as applied to OOP.
- 3 List the Applications of OOP.
- 4 Define classes and objects.

- 5 Explain cin in C++ with example.
- 6 Define destructor with example.
- 7 Define virtual function.
- 8 What is a virtual base-class? What is the use of it?
- 9 Discuss default arguments briefly.
- 10 What is Operator Overloading?
- 11 What are input and output stream?
- 12 Can we overload destructor? Explain.

Q-3

- (a) Explain features of OOP in detail. 5
- (b) What is C++? Explain structure of C++. 5

OR

Q-3

- (a) Explain different data types available in C++. 5
- (b) Explain the concept of class & object with example. 5

Q-4

- (a) Explain declaration and initialization of one dimensional array with example. 5
- (b) Explain constructor overloading with example. 5

OR

Q-4

- (a) What do you mean by constructors? What is the use of constructors in C++? 5
- (b) Explain live objects with proper example. 5

Q-5

Define inheritance. List all types of inheritance. Discuss the syntax of defining base-class & derived class. 10

OR

Q-5

Write note on : (i) inline functions (ii) friend function 10

Q-6

- (a) Explain unary operator overloading with example. 5
- (b) Explain binary operator overloading using friend function. 5

OR

Q-6

- (a) What is file mode? Describe the various file mode operations. 5
- (b) Explain read(),write(),seek() and close(). 5

