

12. (a) Define a class Time with string containing seconds elapsed till midnight (12.00 AM) as a single data member. Write AddTime function which adds two different Time objects and returns a new Time object. Write a DisplayNormal function which converts the time in seconds and displays in a normal fashion HH:MM:SS. (16)

Or

- (b) Define a class called Complex. Include functions for reading and displaying complex objects. Write a function to overload + operator to add two Complex objects. (16)

13. (a) What is a function template? Write a template function to sort arrays of float and int using bubble sort. (16)

Or

- (b) Discuss in detail about exception handling constructs and write a program to illustrate divide-by-zero exception. (16)

14. (a) What are virtual functions? Explain with an example how late binding is achieved using virtual function. (16)

Or

- (b) Explain the various runtime casting methods in detail. (16)

15. (a) Discuss in detail about Standard Template Library (STL). (16)

Or

- (b) (i) Write a detailed note on namespaces. (8)
(ii) Explain how sequence iterators work. (8)