

B 262

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2005.

Sixth Semester

Computer Science and Engineering

CS 062 — C # AND .NET FRAME WORK

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What are the components of a .NET framework?
2. Differentiate between managed code and unmanaged code.
3. What is an IC code?
4. What are the features of a constructor?
5. What is masking?
6. What are the various unconditional control constructs supported by C#?
7. What is a namespace?
8. What is an inner class?
9. List the valid operators of C # that can be overloaded.
10. What are the basic I/O methods supported by C #?

PART B — (5 × 16 = 80 marks)

11. (i) What are the features of C #? (5)
- (ii) Explain in brief the different data types supported by C # with examples. (6)
- (iii) What are the lexical elements of C #? Explain. (5)

12. (a) Explain in detail the different .NET building blocks. (16)

Or

(b) Write notes on :

(i) .NET web services. (8)

(ii) Windows forms. (8)

13. (a) (i) How are bitwise logical operators classified in C #? Explain them with examples. (8)

(ii) Write a C # program to find the value of $\sin(x)$ from the series

$$\sin(x) = x - \frac{x^3}{3!} + \frac{x^5}{5!} - \frac{x^7}{7!} + \dots \quad (8)$$

Or

(b) (i) Explain how C # supports type conversion with examples. (8)

(ii) What is a jagged array? With examples, explain the creation and storage representation of a jagged array. (8)

14. (a) (i) Compare structure with class. (5)

(ii) Explain the concept of multiple inheritance. (4)

(iii) Write a C # program by having an abstract class solid and implement cylinder by inheriting from solid, to find surface and volume. (7)

Or

(b) (i) What is inheritance? Explain under what condition to use inheritance. (8)

(ii) Write a program to device base class printer. Derive classes from printer to display the details of different types of printers. (8)

15. (a) (i) With syntax, explain the operator method declaration for overloading. (8)

(ii) What is a thread? Explain the different states of a thread. (8)

Or

(b) (i) With a neat flow chart, explain the different exception handling mechanism in C #. (8)

(ii) With syntax, explain the usage of try-catch statement in C #. (8)