

B.SC(H) Computer Science (CBCS)

C-I: Programming Fundamentals using C++

Total Marks: 150

Theory: 75

Practical: 50

Internal Assessment: 25

Guidelines

Ref Book: A. B. Forouzan, Richard F. Gilberg *Computer Science: A structured Approach using C++*, 2nd edition, Cengage Learning, 2010.

S.No	Content	Chapters
1.	Programming constructs, Basic data types, Constants and variables	Ch 2 (2.1 – 2.8) Pg 26 - 59
2.	Control structures in conditionals, Arithmetic and logical expressions, Assignment	Ch 3 (3.1 to 3.6) Pg 75-101, 3.7 ,5.5 for Lab only Ch 5 (5.1 to 5.3) Pg 175-205
3.	Looping	Ch 6 (6.1 to 6.7) 6.8 for Lab only Pg 227-260
4.	Functions	Ch 4 (4.1 – 4.4) (Pg 118- 147)
5.	Strings and arrays, Command line arguments,	Ch 8 (8.1 to 8.3,8.7) Pg 345- 359 , 382 – 391 Ch 9 (9.1 to 9.9) Pg 412 – 434 Ch 14 (14.1 to 14.5, 14.7) Pg 678 – 707, 715 - 721 Appendix L(Pg 955-958)
6.	File handling.	Ch 7 (7.1, 7.2) Pg 299-303 (7.3 – 7.7 For Lab only)
7.	Abstraction and Encapsulation, Procedural abstractions, Objects and classes	Ch 10 (10.1 – 10.5) Pg 489-513 Ch 11 (11.1 – 11.5) Pg 542 - 561
8.	Inheritance, polymorphism	Ch 12 (12.1 – 12.6)Pg 597 -625
9.	Exception Handling	Ch 15 (15.1 – 15.3)Pg 738-751