

	A. Sequence B. Decision	C. Loop D. Nested		
SECTION B 4Qx5M= 20 Marks				
Q11	What is computer Software? Explain system software and application software with examples.		5	CO1
Q12	Write a short note on Microsoft PowerPoint. List any three functions.		5	CO1
Q13	Explain network topology with diagram? Differentiate between star and bus topology.		5	CO2
Q14	Discuss the main features of SPSS.		5	CO1
SECTION-C 3Qx10M=30 Marks				
Q15	Compute the hexadecimal equivalent of the given binary numbers: i. 1011010101111 ii. 1111101100001		10	CO2
Q16	Discuss the role of an operating system with respect to following functions: a) Process Management b) Security Management		10	CO1
Q17	Compute ciphertext using Vigenere Cipher technique, if the plaintext is “we are discovered save yourself” and key is “deceptive”. OR In a public key system, perform encryption and decryption using the RSA algorithm for $p = 7$; $q = 17$; $e = 11$; $M = 11$.		10	CO3
SECTION-D 2Qx15M= 30 Marks				
Q18	Suppose that you have trained a robot to carry a box of 40 tapes. If each tape contains 7 gigabits data and the speed of robot is 18km/hour, then for what range of distances does robot can have a higher data rate than a transmission line whose data rate is 14 megabytes per second? What would be the effect on the range of distances if: a) The capacity of each tape is doubled. b) The speed of robot is doubled; and c) The data rate of the transmission line is doubled.		15	CO2
Q19	Design an algorithm which generates odd numbers between 2 and 20 and then prints them in the standard output. It should also print total sum. OR Draw a flowchart for the problem of printing even numbers less than 20. It should also calculate their sum and count.		15	CO3