

RUBRICS: HSSC 1st ANNUAL EXAMINATION 2023
SUBJECT: COMPUTER SCIENCE-II (L)

Q.# / Part #	Criteria	Level 1 (Marks)	Level 2(Marks)		Level 3 (Marks)		Level 4 (Marks)	Level 5 (Marks)
2(i)	Reasons for requirements of operating system for memory management	Any three valid reasons for requirements of operating system for memory management (3)	Any two valid reasons (2)		Any one valid reason (1)		Irrelevant/wrong (0)	
2(ii)	Differentiation between process and thread	Any three correct differences between process and thread (3)	Any two correct differences (2)		Any one correct difference (1)		Irrelevant/wrong (0)	
2(iii)	Comparisons between batch processing and timesharing OS	Any three correct comparisons between batch processing and time sharing OS(3)	Any two correct comparisons (2)		Any one correct comparison (1)		Irrelevant/wrong (0)	
2(iv)	Importance of testing/ verification in SDLC	Any three correct reasons of the importance of testing/ verification in SDLC (3)	Any two valid reasons (2)		Any one valid reason (1)		Irrelevant/wrong (0)	
2(v)	Compile time errors identification	Correction of any six errors (3)	Correction of any five errors (2.5)	Correction of any four errors (2)	Correction of any three errors (1.5)	Correction of any two errors (1)	Correction of any one error (0.5)	Irrelevant/wrong (0)
2(vi)	Results of expressions	Three correct responses (3)	Two correct responses (2)		One correct response (1)		Irrelevant/wrong (0)	
2 (vii)	C++ program to display temperature in Celsius	Correct program code with: i. Structure & variables declaration ii. Input & output statement iii. correct expression (3)	Any two correct aspects (2)		Any one correct aspect (1)		Irrelevant/wrong (0)	
2 (viii)	a) Output of the program code	Correct output of the code (1.5)	Partially correct output (1)		Irrelevant/wrong (0)			
	b) Conversion of program code to if-else	Correction conversion of the code to if-else (1.5)	Partially correct code (1)		Irrelevant/wrong (0)			

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2 (ix)	Differentiation between switch and else –if function	Any three correct differences (3)	Any two correct differences (2)	Any one correct difference (1)	Irrelevant/wrong (0)			
2(x)	Output of program segment	Three correct outputs (3)	Two correct outputs (2)	One correct output (1)	Irrelevant/wrong (0)			
2(xi)	Purpose of strcat() function	Correct purpose of strcat() function (2)	Partially correct purpose (1)	Irrelevant/wrong (0)				
	Example	Correct example (1)	Wrong example (0)					
2(xii)	Purpose of static variable	Correct purpose/ usage of static variable (2)	Partially correct purpose/ usage of static variable (1)	Irrelevant/wrong (0)				
	Example	Correct example (1)	Wrong example (0)					
2(xiii)	Advantages of function overloading	Any three correct Advantages of function overloading	Any two correct advantages (2)	Any one correct advantage (1)	Irrelevant/wrong (0)			
2(xiv)	Purpose of asterisk (*) in the given statements	Correct purpose of the asterisk (*) in each of the three statements (3)	Correct purpose of the asterisk (*) in any two statements (2)	Correct purpose of the asterisk (*) in any one statement (1)	Irrelevant/wrong (0)			
2 (xv)	Comparison of private and public access specifies w.r.t accessibility in the three given statements	Correct comparison of private and public access specifies w.r.t accessibility in three given statements (3)	Correct comparison in any two statements (2)	Correct comparison in any one statement (1)	Irrelevant/wrong (0)			
2(xvi)	Purpose of file opening modes	Correct purpose of any three file opening modes (3)	Correct purpose of any two modes (2)	Correct purpose of any one mode (1)	Irrelevant/wrong (0)			
3 (a)	Writing Program to input a number and display its factors until zero or negative number is entered	Correct program code with: i. Structure & variables ii. Input statement iii. Use of outer loop iv. User of inner loop v. Use of if statement vi. Output statement for factors (6)	Any five correct steps (5)	Any four correct steps (4)	Any three correct steps (3)	Any two correct steps (2)	Any one correct step (1)	Wrong (0)
3 (b)	Writing a Program declaring class, its member functions, and output	Correct program code with: i. declaration of class,	Any five correct aspects (5)	Any four correct aspects (4)	Any three correct aspects (3)	Any two correct aspects (2)	Any one correct aspect (1)	Wrong(0)

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		ii. member variables iii. get-data() iv. display-large() v. creating object vi. using member function								
4 (a)	Purpose of the C++ statements	All eight correct purposes of C++ statements (8)	Any seven correct purposes (7)	Any six correct purposes (6)	Any five correct purposes (5)	Any four correct purposes (4)	Any three correct purposes (3)	Any two correct purposes (2)	Any one correct purpose (1)	Irrelevant/wrong (0)
4 (b)	Writing Program to declare 2D array and finding the average number and the minimum number	Correct program code with: i. Declaring 2D array ii. Input statement iii. Displaying average iv. Displaying minimum number (4)	Any three correct aspects (3)	Any two correct aspects (2)	Any one correct aspect (1)		Irrelevant/wrong (0)			
5 (a)	Responsibilities of persons involved in SDLC	Any four correct responsibilities of system analyst (4)	Any three Correct responsibilities of system analyst (3)		Any two correct responsibilities of system analyst (2)		Any one correct responsibility of system analyst (1)		Irrelevant/wrong (0)	
		Any four correct responsibilities of project manager (4)	Any three correct responsibilities of project manager (3)		Any two correct responsibilities of project manager (2)		Any one correct responsibility of project manager (1)		Irrelevant/wrong (0)	
5 (b)	Correct output using user defined function (passing by reference)	Correct program code with: i. Input statement ii. Function prototype iii. Function definition iv. Function calling by reference (4)	Any three correct aspects (3)		Any two correct aspects (2)		Any one correct aspect (1)		Irrelevant/wrong (0)	

Note: All the markers must know the solutions of all the question items of the question paper before starting marking.