



K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

TEACHING AND LEARNING

CONTENT BEYOND SYLLABUS

Academic Year	2023-24 (ODD)
Name of the Faculty	Dr.Chanda V Reddy
Course Name /Code	Digital Design and Computer Organization / BCS302
Semester	III
Activity Name	Quiz
Topic Covered	Digital Design and Computer Organization
Date	4/12/2023
No. of Participants	59
Objectives/Goals	<ul style="list-style-type: none">• To improve the self-learning skills of students• To improve the communication skills of students.• To improve the writing skills of journal paper.
ICT Used	-
Appropriate Method/Instructional materials/Exam Questions <ul style="list-style-type: none">• Quiz QP	
Relevant PO's	9,10,12
Significance of Results/Outcomes	<ul style="list-style-type: none">• This will teach & enhance working in team along with writing communication skills.• Students wrote individual paper and also a merged together paper after analyzing with other papers written by their group mates.
Reflective Critique	<ul style="list-style-type: none">• The activity improved the learning and communication skills of students• The activity provided a platform for students to interact with peers, improve their communication skills and work as individuals.• The activity also helped them to write journal literature paper which will be required in future in research work.

Proofs : Hard copies

Signature of Course Incharge

Signature of HOD ECE



K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109
DEPARTMENT OF COMPUTER AND COMMUNICATION ENGINEERING
TEACHING AND LEARNING
CONTENT BEYOND SYLLABUS REPORT

Academic Year	2023-2024 (ODD)
Name of the Faculty	SHASHIKALA H.C.
Course Name/Code	DATA STRUCTURE AND ITS APPLICATION / BCS304
Semester/Section	III
Activity Name	QUIZ
Topic Covered	DATA STRUCTURE AND ITS APPLICATION (All Modules)
Date	5/03/2024
No. of Participants	59
Objectives/Goals	<ul style="list-style-type: none">● To improve Engineering knowledge in Research and IPR● To improve the self-learning skills of students● To face GATE and placement
ICT Used	OFFLINE
Appropriate Method/Instructional materials/Exam Questions <ul style="list-style-type: none">● Prior information was given to students● Students are asked to answer the quiz and only one response was given	
Relevant PO'S	PO1, PO2, PO4, PO6, PO8, PO10, PO12
Significance of outcomes	Students able to Improve their knowledge in DATA STRUCTURE AND ITS APPLICATION
Reflective Critique	The activity improved the learning, Engineering knowledge in DATA STRUCTURE AND ITS APPLICATION
Proof	HARD COPY

Shreeekala H. C.

Signature of Course In charge

Signature of HOD

Head of the Department
Dept. of Computers and Communication Engg.
K. S. Institute of Technology
Bengaluru - 560 109.



K. S. INSTITUTE OF TECHNOLOGY, BENGALURU - 560109
DEPARTMENT OF COMPUTER & COMMUNICATION ENGINEERING

Branch : DEPARTMENT OF COMPUTER & COMMUNICATION
ENGINEERING
Course Name : DATA STRUCTURE AND ITS APPLICATION / Course Code : BCS304
Semester/Section : III

Content Beyond Syllabus

Activity type : Quiz Marks : 15
Objective : 1. To improve the learning, Engineering knowledge in DSA
2. To improve the self-learning skills of students
3. To face GATE and placement

POs Covered : PO 9, PO10

SL. NO.	USN	NAME	MARKS (15)
1	1KS22CM001	ADITHYA ARUN SATHVIK	7
2	1KS22CM002	ANITHA P C	14
3	1KS22CM003	ANUSH S	13
4	1KS22CM005	ARSHIYA J	15
5	1KS22CM006	ARUN L JADAVA LAMANI	13
6	1KS22CM007	B S AISHWARYA	15
7	1KS22CM008	B S BRUNDHA	15
8	1KS22CM010	BASAVARAJ PATIL	11
9	1KS22CM011	BRINDA S	11
10	1KS22CM012	DEEKSHA H R	13
11	1KS22CM013	DEEKSHA S	11
12	1KS22CM014	DEEPIKA G	13
13	1KS22CM015	DINESH SHARMA B	13
14	1KS22CM016	DISHA A	15
15	1KS22CM017	GANGOTHRI P	13
16	1KS22CM018	H R CHANDANA	9
17	1KS22CM019	HARIJA ANWAR	15
18	1KS22CM020	HAMEED VAJIR TERDALE	8
19	1KS22CM021	HEMANTH B R	10
20	1KS22CM022	HEMANTH K E	13
21	1KS22CM023	K R SHREYA	11
22	1KS22CM024	KARTHIK R JOSHI	11

23	1KS22CM025	KIRAN D	11
24	1KS22CM026	KUNDANKUMAR S	13
25	1KS22CM028	MANJUNATH K	11
26	1KS22CM030	MOHAMMED FAHIM R	13
27	1KS22CM031	NARASIMHA M K	15
28	1KS22CM032	NEELANJALI C	11
29	1KS22CM033	NIMISHA S L	12
30	1KS22CM034	NISHAL R	6
31	1KS22CM035	NITHIYA V	12
32	1KS22CM036	PAVAN R	11
33	1KS22CM037	PAVAN UMESH KULKARNI	8
34	1KS22CM038	PRAJWAL M P	9
35	1KS22CM039	PRUTHVIRAJ N	12
36	1KS22CM040	PUNITH K M	10
37	1KS22CM041	RAKSHITH M	12
38	1KS22CM042	SAI SMRITI M	13
39	1KS22CM043	SAKSHI SINGH	15
40	1KS22CM044	SATHVIK R P	9
41	1KS22CM045	SHREEDHANYA M S	15
42	1KS22CM046	SHREEPADA C	12
43	1KS22CM047	SHREYAS P	12
44	1KS22CM048	SHRIKUMAR	10
45	1KS22CM049	SNEHA B KORADAKERI	14
46	1KS22CM050	SREYASREE R JOSHI	12
47	1KS22CM051	SRILAKSHMI P Y	13
48	1KS22CM052	SRINIVASA R	12
49	1KS22CM053	SUHAS PRABHAKAR CHINDI	10
50	1KS22CM054	SUJAN S P	12
51	1KS22CM055	SUJITH MANNE	10
52	1KS22CM057	UMME HANI	13
53	1KS22CM058	Y ISHITHA	12
54	1KS22CM059	YERABOTHULA CHAITANYA	10
55	1KS22CM060	YERRABOTHULA KIRAN	9
56	1KS23CM401	CHETAN S KORADAKERI	15
57	1KS23CM403	RAKESH KUMAR R	12
58	1KS23CM402	PRANATHI SAI M	12
59	1KS23CM400	CHANDRASHEKHARA SWAMY	13

Appropriate Method/Instructional materials/Exam Questions

DATA STRUCTURE CONCEPTS BY SARTAAJ SAHANI AND GATE PAPERS

TEST questions:

Module-1			
1	Which one of the following is an application of Stack Data Structure? a). Managing the function calls b). Stock span evaluation c). Arithmetic expression evaluation d). All of the above	CO1	1
2	The following postfix expression with single digit operands is evaluated using a stack: $8\ 2\ 3\ ^\ / 2\ 3\ * + 5\ 1\ * -$. The top two elements of the stack after the first * is evaluated are: Note that ^ is the exponentiation operator. a). 6,1 b) 5,7 c) 3, 2 d) 1,2	CO1	2
3	Consider the following sequence of operations on an empty stack, push(54), push(52), pop(), push(55), S=pop(); Consider the following sequence of operations on an empty queue, ins_queue(21), ins_queue (24), del_queue(), ins_queue(28), ins_queue(32) Q=del_queue(); S+Q=? a). 94 b).83 c). 79 d).86	CO1	2
Module-2			
4	Which of the following points is/are true about Linked List data structure when it is compared with array? a). Arrays have better cache locality that can make them better in terms of performance. b). It is easy to insert and delete elements in Linked List c). Random access is not allowed in a typical implementation of Linked Lists. d). The size of array has to be pre-decided, linked lists can change their size any time. e). All of the above	CO2	1
Module-3			
7	The height of a binary tree is the maximum number of edges in any root to leaf path. The maximum number of nodes in a binary tree of height h is: 1M a) 2^h-1 b) $2^{h-1} - 1$ c) $2^{h+1} - 1$ d) 2^{h+1}	CO3	1
Module-4			
10	The post order traversal of a binary tree is 8,9,6,7,4,5,2,3,1. The in order traversal of the same tree is 8,6,9,4,7,2,5,1,3. The height of a tree is the length of the longest path from the root to any leaf. Then the height of the binary tree is _____. a).5 b).4 c) 10 d).1	CO4	2
11	The following numbers are inserted into an empty binary search tree in the given order: 10, 1, 3, 5, 15, 12, 16. What is the height of the binary search tree (the height is the maximum distance of a leaf node from the root)?	CO4	2
Module-5			
13	Given the following input (4322, 1334, 1471, 9679, 1989, 6171, 6173, 4199) and the hash function $x \text{ mod } 10$, which of the following statements are true? i) 9679, 1989, 4199 hash to the same value ii) 1471, 6171 has to the same value	CO5	2

	PO4-Investigation of complex problem solving PO8-Ethics PO9-Individual & Team Work PO10-Communication PO12-Lifelong learning
Mapped CO's: CO4 Relevant PO's: PO1-PO4,PO8,PO9,PO10,PO12	CO4: To discuss applications of Nonlinear Data Structures in problem solving. PO: PO1-Science and Engineering knowledge PO2-Problem Analysis PO3-Design & Development PO4-Investigation of complex problem solving PO8-Ethics PO9-Individual & Team Work PO10-Communication PO12-Lifelong learning
Mapped CO's: CO5 Relevant PO's: PO1-PO4,PO8,PO9,PO10,PO12	CO5: advanced Data structure concepts such as Hashing and Optimal Binary Search Trees. PO: PO1-Science and Engineering knowledge PO2-Problem Analysis PO3-Design & Development PO4-Investigation of complex problem solving PO8-Ethics PO9-Individual & Team Work PO10-Communication PO12-Lifelong learning

Shreehari H. C.

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