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Visit Date: 15th- 17th July 2022
Name of the Programme: Computer Science and Engineering

Annexure 7.1

Observations actions for target and attainment of PO and PSO

<table>
<tr><th>POs</th><th>Target Level</th><th>Attainment Level</th><th>Observations</th></tr>
<tr><td colspan="4">PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.</td></tr>
<tr><td>PO1</td><td>2.5</td><td>2.77</td><td>• It has been observed that attainment of PO1 is more than the target level for most of the courses; hence PO1 is well attained.
• However, attainment for Courses like Theory of Computation (CS34) and Cloud Computing (CSE14) have not met the target -
o Few Slow learners are finding difficulty in Understanding the Engineering Fundamentals as they lack in-depth knowledge of the same.
o Few students are unable to connect Mathematical/Science Knowledge with Engineering Applications.</td></tr>
<tr><td colspan="4">Action:
• More emphasis is laid on tutorial classes and giving assignments of problem-solving on fundamentals for Theory of Computation.
• Remedial classes are being conducted for Theory of Computation to support slow learners.
• Course coordinators relate the mathematical concepts with engineering applications while delivering the concepts.
• Partial delivery of the Machine Learning and Cloud Computing by the industry experts will help the students to get better insight about the industry case studies, current trends and Industry expectations.</td></tr>
<tr><td colspan="4">PO2: Problem analysis: Identity, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.</td></tr>
<tr><td>PO2</td><td>2.5</td><td>2.76</td><td>• PO2 is well attained as compared with the set target level for most of the courses.
• However, Attainment for Courses like Theory of Computation (CS34), Artificial Intelligence (CSE02), Project management & Engineering Economics (CSE24) and Cloud Computing (CSE14) have not met the target -
o Identifying, formulating and analyzing the problem is a challenging task for a few students and hence are finding difficulty in problem-solving.
o A couple of courses have scope for reviewing research literature.</td></tr>
<tr><td colspan="4">Action:
• Video lectures and animation of solving sample problems for the above courses are scheduled to strengthen the ability to identify and formulate Problems of Engineering for the course Cloud Computing and Artificial Intelligence.
• About 90% of the courses are coupled with learning activities such as course projects/case studies/Assignments, which would enhance problem analysis skills. Problem statements of the learning activities are framed so as to improve identifying/formulating/analyzing skills.</td></tr>
<tr><td colspan="4">PO3: Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.</td></tr>
<tr><td>PO3</td><td>2.5</td><td>2.79</td><td>• Attainment of PO3 for most of the courses is more than the target level; hence PO3 is attained well.
• However, Attainment for Courses like Artificial Intelligence (CSE02), Project management & Engineering Economics (CSE24) have not met the target -</td></tr>
</table>

			○ Few students lack design and code optimization skill set. ○ The design capability of the students is moderate. ○ Few projects (final year) developed by the students as course projects/major projects are concerned with social and environmental issues.

Action:

- Introduce complex problems related to the application of core computer science and information technology concepts. The problem solving assignment is given for the course Project management & Engineering Economics.
- Students will be encouraged to actively participate in events organized by local chapters of professional societies like IEEE Hackathon, IME, SAE and ISTE etc., to promote design solutions for the complex problems.
- In courses like Analysis and Design of Algorithms, Theory of Computation (CS34) etc., tutorial classes are planned to enhance the design skillset. In laboratory/hybrid courses, students need to design the experiments independently under faculty supervision.

PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods, including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO4	2.5	2.75	• It has been observed that attainment of PO4 is more than the target level for most of the courses; hence PO4 is well attained. • However, attainment for Courses like Artificial Intelligence (CSE02), Project management & Engineering Economics (CSE24) have not met the target- ○ It is observed that most of the project abstract and literature surveys address the research-based approaches but do not end with valid conclusions. ○ A moderate number of students is dependent on faculty instructors for the design of experiments. ○ For some of the laboratory courses, the experiments lack the synthesis of the information to provide a valid conclusion.

Action:

- Real-time problems will be given in tutorial classes and assignments to enhance skills to investigate/analyze complex problems related to various computer courses. Faculty frame the problem set after reviewing latest literature for the Artificial Intelligence Course.
- After the design of the experiments, students need to implement the experiments independently. To strengthen PO4, after conducting the experiments, students are asked to test the experiments with different use cases, analyze the results and document the interpretation.

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO5	2.5	2.79	• Attainment of PO5 is more than the target level; hence PO5 is attained. • However, attainment for Courses like Analog and Digital Design (CS35), Artificial Intelligence (CSE02), Project management & Engineering Economics (CSE24) have not met the target. ○ It is observed that Up-gradations of tools and resources are necessary to meet the industry standards and research.

Action:

- Courses like Big data Analytics lab, Web Technology, Java application development lab and mobile application development lab etc will involve modern tools usage effectively.
- Rubrics for the final year project include modern tool usage as a performance indicator. Department of CSE collaborates with UNISYS, and SAMSUNG so that students are assigned real-time/research/innovative projects where students will use modern tools utilized by these companies.

<table>
<tr><td colspan="4">PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.</td></tr>
<tr><td>PO6</td><td>2.5</td><td>2.75</td><td>• It has been observed that attainment of PO6 is more than the target level for most of the courses; hence PO6 is well attained.
• A couple of Computer science & Engineering courses address the needs of health, safety, and social concerns regarding engineering practices in real life.
• A moderate number of students lack awareness about societal health, safety, legal and cultural issues.</td></tr>
<tr><td colspan="4">Action:
• Real-world projects have been carried out by the students of the department, like security issues (Unisys project). To address the legal and cultural issues, department will introduce specific topics in courses like Software project management and IPR.
• Certain short-term and long-term internships help students work on societal/health/safety/legal/cultural issues.
• Students are motivated to actively participate in various National Level Hackathons that deal with societal applications.</td></tr>
<tr><td colspan="4">PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.</td></tr>
<tr><td>PO7</td><td>2.5</td><td>2.63</td><td>• It has been observed that attainment of PO7 is more than the target level for most of the courses; hence PO7 is well attained.
• However, Attainment for Courses like Project management & Engineering Economics (CSE24) have not met the target -
o Very few topics in a couple of courses are related to environmental context; hence the environmental awareness among the students should be improved.
o Only a few of the final year projects address environmental and sustainable development.</td></tr>
<tr><td colspan="4">Action:
• The students' team and faculty guides are instructed to define the final year project problem statements by considering the environment and sustainable development. The courses like High Performance Computing, Cloud Computing, Blockchain, Computer Organization and Architecture, Machine Learning etc., will strengthen sustainable development skillsets.
• Students are motivated to develop environment-friendly and sustainable solutions by participating in various National Level Hackathons.</td></tr>
<tr><td colspan="4">PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.</td></tr>
<tr><td>PO8</td><td>2.5</td><td>2.65</td><td>• It has been observed that attainment of PO8 is more than the target level for most of the courses; hence PO8 is well attained.
• However, attainment for Courses like Artificial Intelligence (CSE02), Project Management & Engineering Economics (CSE24) have not met the target -
o While preparing final year/course project reports, it must be ensured that all students are following professional ethics.
o Few students are not including references for the material used for the presentation/case study.</td></tr>
<tr><td colspan="4">Action:
• Faculty shall ensure that students follow ethics in all domains of engineering courses.
• To strengthen PO8, a career readiness program, corporate lectures and motivational talks are arranged to overcome the above observations. Technical Societies like IEEE computer society IEI Student chapters are established to ensure Ethical practices in engineering.</td></tr>
</table>

- Sessions on plagiarism and its effect, LaTeX-based technical documentation, Issues on Copyright violations and such ethical and professional topics Technical society must be arranged to create awareness.
- Plagiarism check has been made mandatory for final year project reports.

PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO9	2.5	2.74	• Attainment of PO9 is more than the target level. Hence PO9 is attained. • Attainment for Courses like Artificial Intelligence (CSE02), Cloud Computing (CSE14) and Distributed Systems (CSE20) have not met the target - o The students are working individually as well as in groups in various projects/learning activities, but still, there is a scope to work on multidisciplinary projects.

Action:

- Most of the learning activities like tutorials/course projects/case studies/programming assignments will be executed by a team of students.
- The Department of CSE has initiated an active club called the Association of Computer Engineers (ACE), which provides a platform to work individually and in a group in the fields of Engineering. This club grooms students on these skill such as effective communication, Leadership qualities and teamwork.
- For project work, CSE guidelines mention that students can collaborate with students of other disciplines, which results in a couple of multidisciplinary project teams during the assessment year.
- To strengthen teamwork and leadership skills, the department has established various clubs like Code-MSRIT, Google DSC

PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO10	2.5	2.78	• Attainment of PO10 is more than the target level; hence PO10 is attained • The communication, presentation and report writing skills are to be further improved among students. • Most of the students were not following industry coding standards and practices.

Action:

- The students are encouraged to participate in competitive events like essay writing, group discussion, seminars, debate events etc. to improve communication skills.
- Periodically, soft skills training will be imparted to students to enhance various aspects of communication/technical talks by group discussions and presentations.
- At the first-year level, English classes are conducted for all the students to improve their communication skills.
- Interpersonal Skill Development Trainings are conducted periodically.

PO11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO11	2.5	2.78	• Attainment of PO11 is more than the target level; hence PO11 is attained. • No core course contributed strongly to PO11. • There was no component to measure the financial aspects of the project. For the final year projects/course projects, few batches of students did not incorporate all the phases of the project management life cycle.

Action:

- Software project management courses were introduced as core course, which also covers the financial aspects.
- Agile technology was introduced as a component in the Software Engineering course. Department has conducted an undergraduate project contest, PRADARSHANA, wherein students must follow the project management life cycle with budgeting.
- Institute / Department organizes talks periodically on Project Management to bridge the gap in the curriculum towards project management.
- The rubrics designed for course project / final year projects include performance indicators regarding project management lifecycle and finance.

PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PO12	2.5	2.77	• It has been observed that attainment of PO12 is more than the target level for most of the courses; hence PO12 is well attained. • MOOC-based learning activities were not present. • Few students were not able to acquire lifelong learning skills.

Action:

- Faculty members will encourage students to join online certification courses from NPTEL, MOOCs etc. Students have cleared NPTEL exams for the course Artificial Intelligence, Design and Analysis of Algorithms, Object Oriented Programming.
- The short-term and long-term internships facilitate the students to acquire the lifelong learning skills.

PSO1: Understand the principles, architecture and organization of computers, embedded systems and computer networks.

PSO1	2.5	2.77	• It has been observed that attainment of PSO1 is more than the target level for most of the courses; hence PSO1 is well attained.

Action:

- Planned to conduct more lectures on Modern tools and arranging workshops to improve logical thinking and problem-solving skills by expert from industry to get more practical exposures.

PSO2: Apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems that include both hardware and software.

PSO2	2.5	2.77	• It has been observed that attainment of PSO2 is more than the target level for most of the courses; hence PSO2 is well attained.

			• However, attainment for Courses like Theory of Computation, Artificial Intelligence (CSE02), Cloud Computing, Distributed Systems (CSE20) and Project management & Engineering Economics (CSE24) have not met the target.

Action:

- Video lectures and animation of solving sample problems for the above courses are scheduled to strengthen the ability to identify and formulate Problems of Engineering for the course Cloud Computing and Artificial Intelligence.
- About 90% of the courses are coupled with learning activities such as course projects/case studies/Assignments, which would enhance problem analysis/modeling skills. Problem statements of the learning activities are framed so as to improve design thinking in the students.

PSO3: Apply software design and development practices to develop software applications in emerging areas such as IoT, Data Analytics, Social Networks, Cloud and High-Performance Computing.

PSO3	2.5	2.77	• It has been observed that attainment of PSO3 is more than the target level for most of the courses; hence PSO3 is well attained.

Action:

- Organize workshops and guest lectures where subject matter experts make the students aware of the latest trends and technologies and their applications in emerging areas like IoT, Social Networks etc.
- Project statements must be devised by referring the relevant literature in these domains and students implement such projects will help them understand the emerging domains in depth and analyze the practical benefits and limitations in these emerging areas.

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7.1 a Project Based Learning and Animations

Course: **Artificial Intelligence** Course code: **CSE02**
Semester: **5**
Faculty Incharge: **Shreekanth Jere**
Innovative Teaching Method: **Project Based Learning**

Report on Project Based Learning

For the course Artificial Intelligence, innovative teaching methodology like Project based Learning is conducted. Project based learning is a powerful teaching method that has extensive benefits for students, ranging from critical thinking to project management to self- confidence. This method helps every student to work with his or her peers, building teamwork and group skills. Each student can well understand how and when to use technology and also to choose the most appropriate tool for the Project assigned. This methodof learning will make them to learn about planning, critical thinking, reasoning and creativity.

Students were informed to form a Team of 4 to 5 members maximum. Every Team was assigned a Project to work on for a period of 5 weeks. Each Team prepared the PowerPoint slide for presenting the work carried out and also showed the demo of working model of the project assigned. And for the same each team submitted a Report.

List below shows the Number of Teams formed and the Type of Project assigned to every team by Faculty.

Sl.No	Team Number	USN	Project Title
1	1	1MS19CS406	Rice Crop Yield Forecasting Using RandomForest Algorithm and Decision Tree
2		1MS19CS405	
3		1MS19CS408	
4		1MS19CS411	
5	2	1MS18CS051	Detection of Brain Tumors using ArtificialNeural Network Fuzzy Inference System(ANFIS)Classification method
6		1MS18CS057	
7		1MS18CS068	
8		1MS18CS066	
9		1MS18CS069	
10	3	1MS18CS056	Pneumonia Detection Using ConvolutionalNeural Networks (CNN) using Chest XRay/CT Scan image
11		1MS18CS058	
12		1MS18CS063	
13		1MS18CS095	
14	4	1MS18CS076	Soyabean Crop Price Prediction Support

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15		1MS18CS096	Vector Machine
16		1MS18CS094	
18		1MS18CS082	
18	5	1MS18CS050	Covid-18 detection using CNN from X-raychest Images
18		1MS18CS060	
20		1MS18CS061	
21		1MS18CS065	
22	6	1MS18CS067	Brain tumor detection from MRI images usingdeep learning techniques
23		1MS18CS077	
24		1MS18CS078	
25		1MS18CS086	
26	7	1MS18CS080	Covid-18 detection using CT scan imagesemploying a deep learning algorithm
27		1MS18CS089	
28		1MS18CS092	
29		1MS18CS093	
30	9	1MS18CS084	Crop yield using Machine learning techniques
31		1MS18CS088	
32		1MS18CS087	
33		1MS18CS083	
34	10	1MS18CS097	Image Classification using ConvolutionalNeural Networks
35		1MS18CS149	
36		1MS18CS079	
37		1MS18CS055	
38	11	1MS18CS059	Detection of Diseases in Arecanut Using Convolutional Neural Networks
39		1MS18CS039	
40		1MS18CS062	
41		1MS18CS071	
42		1MS18CS148	
43	12	1MS18CS072	Covid-18 detection using ConvolutionalNeural Networks (CNN)
44		1MS18CS070	
45		1MS18CS064	
46		1MS18CS054	
47	13	1MS18CS052	Sentiment Analysis of Amazon reviewcomments
48		1MS18CS074	
49		1MS18CS085	
50		1MS18CS090	
51	14	1MS18CS081	Human Detection using Drone Image inDisaster situation
52		1MS18CS075	
53		1MS18CS073	
54		1MS18CS091	

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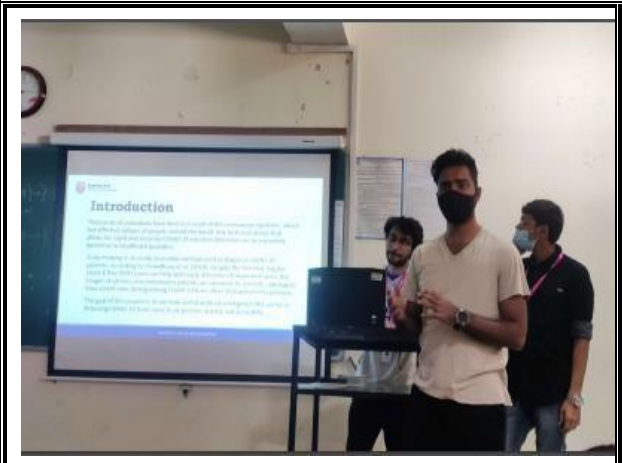
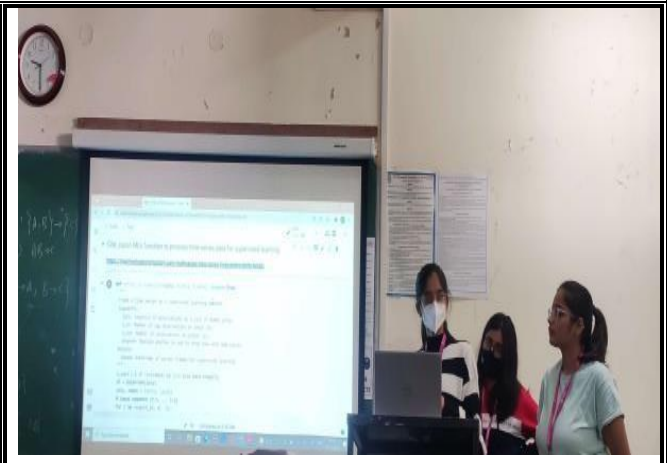
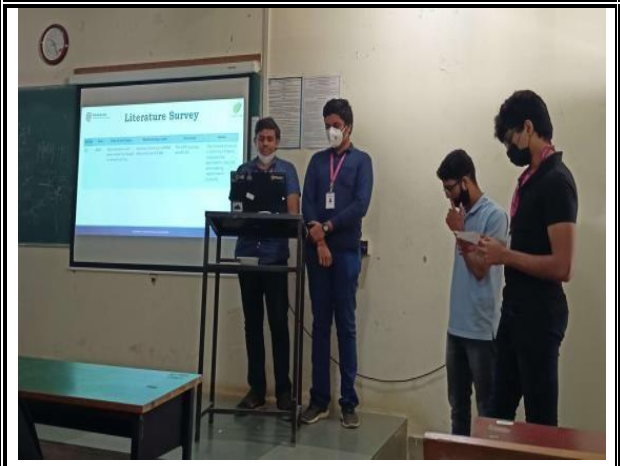
	
Students developed a model to Detect Brain Tumors using ArtificialNeural Network Fuzzy Inference System (ANFIS).	Students compared the performance analysis of Support Vector Machine(SVM) and Artificial Neural Network(ANN) AI models that are Commonly used for forecasting purposes. The main objective is to predict the price of soybean crop due to the uncertainty embedded in its production as well as in the market. ANN model provided an accurate output for the prediction of price for the soybean crop.
	
Students examined the various machine learning classifiers like Logistic Regression, Naïve Bayes, Random Forest etc. to urge a pattern. The Application shows the list of crops suitable for entered data with predicted yield value. Random Forest algorithm provides the foremost accurate value.	

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7.1 b Problem Solving Assignments for Project Management and Engineering Economics

1MS17CS089
Rahul Sharma
PMEE
7th Sem 'B' Section

Unit-2

Ex-4.1 Alpha industry is planning to expand its production operation. It has identified three different technologies for meeting the goal. The initial outlay and annual revenues with respect to each of the technologies are summarized in below table. Suggest the best technology which is to be implemented based on the present worth method at comparison assuming 20% interest rate, compounded anually.

	Initial Outlay (Rs)	Annual Revenue (Rs)	Life (years)
Technology 1	12,00,000	4,00,000	10
Technology 2	20,00,000	6,00,000	10
Technology 3	18,00,000	5,00,000	10

Soln:- In all the technologies, the initial outlay is assigned a negative sign and the annual revenues are assigned a positive sign.

Tech 1

Initial Outlay, P = Rs. 12,00,000 Annual Revenue, A = Rs. 4,00,000
Interest Rate, i = 20%, compounded anually life of this technology, n = 10 yrs.

Cash flow diagram:-

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7.1 c. Programming Assignment for Design and Analysis of Algorithms

Algorithms Laboratory							
USN: [illegible]			Section: B		Date:		
Assessments	**Write-up (5)**	**Program (5)**	**Output (5)**	**Analysis of time complexity (3)**	**Viva (2)**	**Attendance (5)**	**Record submission (5)**
Marks							
Total (30):				Instructor's signature:			

Instructions:

- **Complete the following using Java programming language.**

Part –A

1. Design and implement Bellmann ford algorithm.

Algorithm:

```
function BellmanFord(G,s)
    for each vertex v in G
        distance[v] ← infinite
        previous[v] ← NULL
    distance[s] ← 0
    for each vertex v in G
        for each edge(u,v) in G
            tempdistance ← distance[u] + edge.weight(u,v)
            if(tempdistance < distance[v])
                distance[v] ← tempdistance
                previous[v] ← u
    for each edge(u,v) in G
        if distance[u] + edgeweight(u,v) < distance(v)
            error: negative cycle exists
    return distance[], previous[]
```

Analysis:

Best case: $\Omega(E)$
Worst case: $O(VE)$
Average case: $\Theta(VE)$

V → no. of vertices
E → no. of edges

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7.1 d. Problem Solving Assignment for Theory of Computation

TOC ASSIGNMENT

- Define PDA

A pushdown Automata is a way to implement a context free grammar in a similar way we design finite Automata for regular grammar.

PDA = Finite Statemachine + A Stack

A pushdown Automata is formally defined by 'Seven typles' as shown below

$P = (Q, \Sigma, \Gamma, \delta, q_0, z_0, F)$

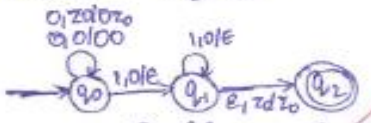
where Q = A finite set of states
Σ = A finite set of input symbol
Γ = A finite stack Alphabet
δ = Transition function
q_0 = The start state
F = Final States / Accepting state

- Construct a PDA which accepts a language 0^n1^n where $n \geq 1$.

When $n = 1, 2, 3 \ldots$

$L = \{01, 0011, 000111, \ldots\}$

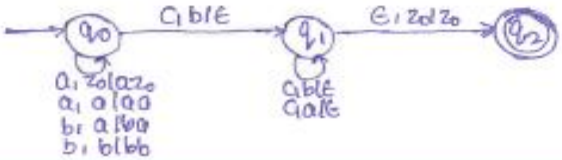
$\delta(q_0, 0, z_0) = \{(q_0, 0z_0)\}$
$\delta(q_0, 0, 0) = \{(q_0, 00)\}$
$\delta(q_0, 1, 0) = \{(q_1, \epsilon)\}$
$\delta(q_1, 1, 0) = \{(q_1, \epsilon)\}$
$\delta(q_1, \epsilon, z_0) = \{(q_2, \epsilon)\}$



$P = (\{q_0, q_1, q_2\}, \{0, 1\}, \{0, z_0\}, \delta, q_0, z_0, \{q_2\})$

- Construct a PDA for $a^n b^m c^{n+m}$ $n, m \geq 0$

$L = \{abcc, aabccc, \ldots\}$



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7.1 e. Problem Solving Assignment for Data Communication and Networking

Subject : DATA COMMUNICATION AND NETWORKING

Subject Code : CS44

ASSIGNMENT SOLUTIONS

Name : Ankit Bargotra
USN : 1MS19CS019
Sem : IV
Section : 'A'
Course : BE (CSE)
Term : March-June 2021

Q1. Solution:

Given that the address space is 8 bit, therefore $2^8 = 256$ addresses are present in internet which are divided between four networks N0, N1, N2, N3, each with 64 addresses

N0 has addresses from 0 to 63
N1 has addresses from 64 to 127
N2 has addresses from 128 to 191
N3 has addresses from 192 to 255

Prefix $= n = 8 - \log_2 64 = 8 - 6 = 2$

The leftmost 2 bits in an address belonging to a network identify the interface through which router forwards data packets.

Network	Starting address	Last address	Prefix	Network address
N0	00000000	00111111	00	0.0.0.0/2
N1	01000000	01111111	01	0.0.0.64/2
N2	10000000	10111111	10	0.0.0.128/2
N3	11000000	11111111	11	0.0.0.192/2

Forwarding Table:

Prefix	Interface Number
00	M0

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7.1 f. Paper Presentation for Cloud Computing

2020 IEEE International Conference for Innovation in Technology (INOCON)
Bengaluru, India. Nov 6-8, 2020

Cloud Storage Security Risks, Practices and Measures: A Review

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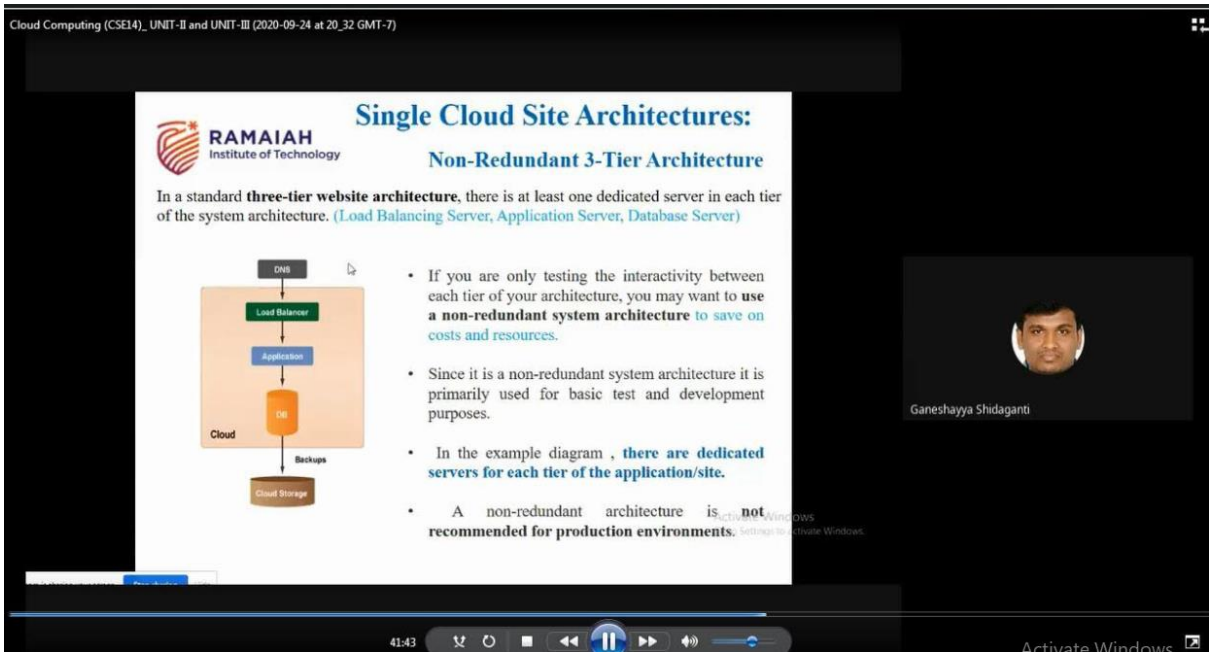
***Abstract*— The world has seen a quick transition from hard devices for local storage to massive virtual data centers, all possible because of cloud storage technology. This has brought about the advent of transfer and sharing of data between multiple individuals and organizations, making it one of the most commonly used services on the cloud platform. Businesses have grown to be scalable, meeting consumer demands on every turn. However, with massive developments in this field, security and privacy are at the forefront of concerns and needs. Poor data visibility, storage sinks without secured pointers, instances with massive data overflows, etc. are concerns that can cause monetary and information damage to people on a large scale. With this in mind, current data security and advisory methods to monitor data sinks is one of the biggest challenges we face today. This paper aims to look at some of the security concerns and current state of the art implementations to refurbish the same.**

types of clouds. Network Security encompasses three types of clouds – public, private, and hybrid. To understand better, we conservatively define these below.

Cloud computing denotes a computing platform that is outside of an organizations' firewall on shared systems. In this scenario, your cloud service provider is in control of the infrastructure. In contrast, a private cloud is the same platform; however, it is implemented within the corporate firewall, under the control of the organization's IT department.

A private cloud is designed to offer the same features and benefits of public cloud systems, but removes a number of objections to the cloud computing model including control over corporate and customer data, worries about security and issues connected to regulatory compliance [2].

7.1 g. Video Presentation for Cloud Computing



Name of the Institution: M S Ramaiah Institute of Technology
Visit Date: 15th- 17th July 2022
Name of the Programme: Computer Science and Engineering

7.1 h. Remedial Classes

Circular for the Remedial Classes

RAMAIAH
Institute of Technology

RAMAIAH INSTITUTE OF TECHNOLOGY, BANGALORE
(Autonomous Institute Affiliated to VTU)

Department of Computer Science & Engineering

Circular

Remedial Class (TERM: AUGUST-DECEMBER 2019)

This is to inform all the subject handling faculty to conduct the remedial classes for your assigned subjects based on the performance of CIE-1 and CIE-II.

The following parameters to be considered to conduct remedial classes:

1. The students who have scored below 12 marks should attend the classes compulsorily
2. Lateral entry students must attend the classes.

Regards,

(Dr. Anita Kanavalli)
Head of the Department
Computer Science & Engineering
Ramaiah Institute of Technology
Bangalore-54

Professor & Head
Dept. of Computer Science and Engg.
Ramaiah Institute of Technology
(Autonomous Institute Affiliated to VTU)
Bangalore-560 054

Name of the Institution: M S Ramaiah Institute of Technology
Visit Date: 15th- 17th July 2022
Name of the Programme: Computer Science and Engineering

Remedial Class Timetable

RAMAIAH INSTITUTE OF TECHNOLOGY

Record as per Format MSRIT. F 701 Revision 0.1

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

DATE: 18-11-2019 TO 30-11-2019 | REMEDIAL CLASS TIME – TABLE | TERM :AUG-DEC 2019

DEPARTMENT: CSE | SEMESTER: III | SECTION: A | ROOM NO: LHC-303

TIME / DAY	9.00 – 9.55	9.55-10.50	11.05-12.00	12.00-12.55		1.45-2.40	2.40-3.35	3.35-4.30
MONDAY	3 'A' DSC LAB (CSE LAB-2) (ARL,AP,SBJ)		MATHS	OOPS	B	DMS	TOC TUTORIALS (VS,CP)	
TUESDAY	OOPS	MATHS	TOC	ADD (VGS)	R	DSC	3 'A' EC/DD LAB (B1/B2) (VGS/HDV)/(MKS,BM)	
WEDNESDAY	DMS	TOC	3 'A' OOP LAB (CSE LAB-1) (JGR,VS,HKS)		E	ADD (MKS)	DSC TUTORIAL (ARL,HMR)	
THURSDAY	DSC	DMS	MATHS	OOPS	A	TOC REMEDIAL CLASS		OOPS REMEDIAL CLASS
FRIDAY	TOC	DMS	ADD (MKS)	DSC	K	DMS REMEDIAL CLASS	ADD REMEDIALCLASS	
SATURDAY	MATHS(TUTORIAL) (VSB,AS)		DSC REMEDIAL CLASS					

SUBJECT CODE	SUBJECT NAME	STAFF
CS31	ENGINEERING MATHEMATICS-III (3:1:0:0) (MATHS)	B. Azghar Pasha
CS32	DATA STRUCTURES (3:1:0:0) (DSC)	APARNA R., DR. PARKAVI A
CS33	DISCRETE MATHEMATICAL STRUCTURES (4:0:0:0) (DMS)	SRINIDHI HIRIYANNAIAH, DR. GEETHA J.
CS34	THEORY OF COMPUTATION (3:1:0:0) (TOC)	DR. S. SEEMA, DR. JAYALAKSHMI D. S., DR. MONICA R. MUNDADA
CS35	ANALOG AND DIGITAL DESIGN (3:0:1:0) (ADD)	DR. MOHANA KUMAR S, VEENA G.S.
CS36	OBJECT ORIENTED PROGRAMMING (3:0:0:1) (OOP)	DR. GEETHA J., PRAMOD SUNAGAR

HOD
Professor & Head
Dept. of Computer Science and Engg.
Ramaiah Institute of Technology
(Autonomous Institute, Affiliated to VTU)

Name of the Institution: M S Ramaiah Institute of Technology
Visit Date: 15th- 17th July 2022
Name of the Programme: Computer Science and Engineering

Internal Assessment details for the course Theory of Computation

Department of Computer Science and Engineering

Term: Aug Dec 2019

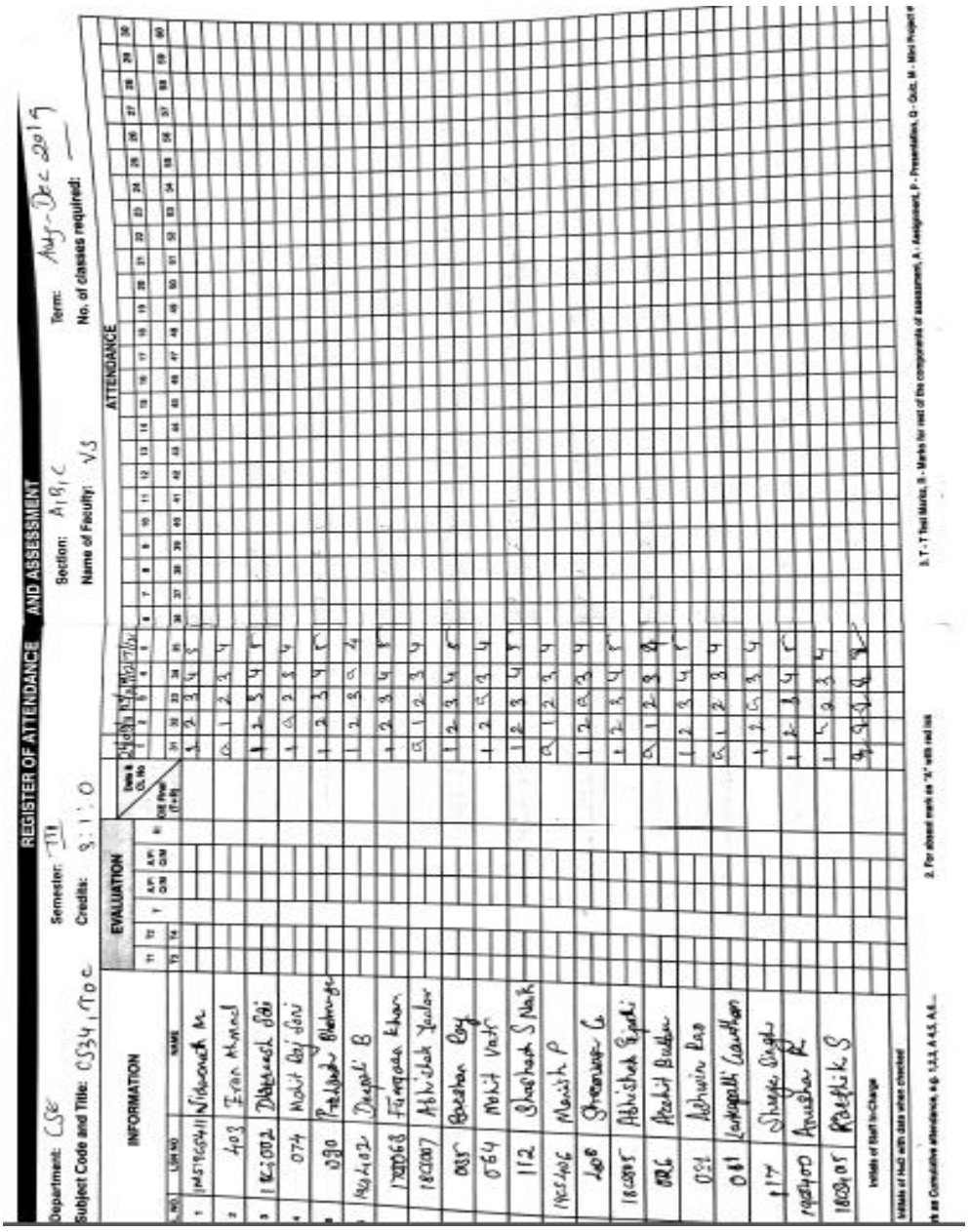
Course Name: Theory of Computation **Course Code:** CS34

Remedial Class Details

Sl. No	Name	USN	CIE1	CIE2
1	VISHWANATH M SHANTPURMATH	1MS19CS411	0	18
2	IRAN AHMAD N KATARKI	1MS19CS403	1	16
3	A N H DHATREESH SAI	1MS18CS002	2	10
4	MOHIT RAJ SONI	1MS18CS074	2	12
5	PRAHARSH BHATMURGE	1MS18CS090	3	2
6	DEEPALI BHENDIGERI	1MS19CS402	4	10
7	MOHAMMED FURQAAN KHAN	1MS17CS063	4	15
8	ABHISHEK YADAV	1MS18CS007	5	6
9	BARSHAN ROY CHOWDHURY	1MS18CS035	5	12
10	MOHIT VATS	1MS17CS064	5	13
11	SHASHANK S NAIK	1MS17CS112	5	9
12	MANISH ABHAY PADMANNAVAR	1MS19CS406	6	13
13	SHREENIVASA G	1MS19CS408	6	11
14	ABHISHEK TRIPATHI	1MS18CS005	7	3
15	ARCHIT BUBBER	1MS18CS026	7	6
16	ASHWIN RAO	1MS18CS031	8	19
17	LANKAPALLI GAUTHAM	1MS18CS061	8	3
18	SHREYA SINGH	1MS18CS117	8	8
19	ANUSHA RAVIKANT NAIK	1MS19CS400	8	11
20	KARTHIK S	1MS18CS405	8	A

Name of the Institution: M S Ramaiah Institute of Technology
Visit Date: 15th- 17th July 2022
Name of the Programme: Computer Science and Engineering

List of Students attended Remedial Classes for the Course TOC



REGISTER OF ATTENDANCE AND ASSESSMENT

Department: CSE Semester: VII Section: A, B, C Term: Aug-Dec 2019

Subject Code and Title: CS54, TOC Credits: 3:1:0 Name of Faculty: VS No. of classes required:

S.No.	USN NO	NAME	EVALUATION IA1	IA2	IA3	ATTENDANCE
1	1MS19CS411	Vishwanath M				
2	403	Ifran Ahmed				
3	1MS20CS002	Abhinandh Adi				
4	074	Mohit Raj Jain				
5	090	Pratyusha Bhatnagar				
6	1MS19CS	Deepak B				
7	1MS20CS068	Fayaqaan Khan				
8	1MS20CS087	Abhishek Yadav				
9	095	Bodhan Roy				
10	064	Mohit Vats				
11	112	Shashank S Naik				
12	1MS19CS	Manish P				
13	108	Dhananjay G				
14	1MS19CS	Abhishek Rajoli				
15	086	Akshit Bidlan				
16	054	Ashwin Rao				
17	081	Lakshmanth Gandham				
18	114	Shreyas Singhi				
19	1MS19CS	Ayushman M				
20	1MS19CS	Rishik S				
		Initials of Staff in-Charge				
		Initials of HoD with date when checked				

1. As per Cumulative attendance, e.g. 1,2,3, 4, 4.5, 5, 6, 7, ... 2. For absent mark as "A" with red ink 3. T - Test Marks, S - Marks for rest of the components of assessment, A - Assignment, P - Presentation, Q - Quiz, M - Mini Project