

INSTITUTE OF TECHNOLOGY & MANAGEMENT, GWALIOR

IQAC Guidelines for Evaluating the Attainment of POs and COs



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Assessment Process Report

Academic Year 2020-2021

1. PROGRAM OUTCOMES AND PROGRAM SPECIFIC

Program outcomes are statements that describe the knowledge, skills, abilities, and attributes that students are expected to have acquired by the time they complete a program of study. These outcomes are designed to reflect the broader educational goals and objectives of the program, and they guide the curriculum, teaching methods, and assessment strategies throughout the program.

POs are statements that describe what the students graduating from engineering programs should be able to do at the time of graduation

The NBA (National Board of Accreditation) has set 12 Program Outcomes, which are as follows:

A. Program Outcomes (POs)

- Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. **Problem analyses**: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. 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 public health and safety, and the cultural, societal, and environmental considerations.



- 4. **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.
- 5. **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.
- 6. **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.
- 7. **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.
- 8. **Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. Individual and teamwork: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. 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.
- 11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- 12. 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.



B. Program-Specific Outcomes (PSOs) (Sample of CSE Dept)

PSOs are statements that describe what the graduates of a specific engineering program should be able to do at the time of graduation. There are three PSOs which are as follows:

PSO1: The ability to understand the principles of computer hardware and software to analyze, design, and develop algorithms for complex and logical problems.

PSO2: Enhance programming concepts and professional competencies of students by exercising principles of software engineering to fix various computational problems.

PSO3: To implement emerging technologies such as the internet of things, cloud computing, artificial intelligence, machine learning, etc. to serve society.

C. Course Outcomes (COs)

Course outcomes, also referred to as learning outcomes or objectives, are statements that outline the knowledge, understanding, and skills students should possess by the end of a course or program. These outcomes specify the expected competencies, abilities, and attitudes students should develop through their learning experiences.

Serving as a foundation for instructional design and delivery, course outcomes provide a clear and measurable focus for both educators and students, guiding the teaching and learning process. By clearly defining these outcomes, course designers can ensure that instructional strategies, assessments, and learning activities are aligned to actively engage students in achieving the desired results.

The development of course outcomes begins with a thorough understanding of the subject matter and the educational objectives of the program or institution. These outcomes should be specific, observable, measurable, and attainable, reflecting the broader goals of the curriculum and addressing the cognitive, affective, and psychomotor domains of learning. A sample is presented in Table 1.



Table.1 (Sample of course outcomes)

| Course Name: C303 (Data Structure) | Year of Study: 2020-21 |
|---------------------------------------|--|
| C303.1 | Ability to define, and understand concepts of different categories of data structures. |
| C303.2 | Identify different parameters to analyze the performance of an algorithm. |
| C303.3 | Design algorithms to perform operations with linear and nonlinear data structures. |
| C303.4 | Compare and contrast different implementations of data structures. |
| C303.5 | Apply appropriate data structure to solve and implement various real-time problems. |

D. Course Outcome mapping with Program Outcomes according to new AICTE Exam Reform Policy

The detailed procedure for mapping COs with the POs and PSOs of CSE Dept. by using AICTE Exam Reform Policy is mentioned below in annexure 1. Table 2 depicts a sample of this matrix



| | | Tabl | e 2: N | /Iappi i | ng wit | h Cou | ırse (| | mes a | nd Pr | ogran | Outco | mes | | | |
|---------|--|------|--------|--------------|--------|-------|--------|-----|-------|-------|-------|-------|------|------|------|------|
| Course | Course Out | P01 | P02 | P03 | P04 | P05 | P06 | P07 | P08 | P09 | P010 | P011 | P012 | PSO1 | PSO2 | PSO3 |
| CS303.1 | Ability to Define, understand concepts of different categories of data Structures | 2 | 1 | | 1 | 1 | | | | | - | | | | | |
| CS303.2 | Identify different parameters to analyze the performan ce of an algorithm. | 2 | 1 | | 1 | 1 | | | | | | • | • | 1 | 1 | |
| CS303.3 | Design algorithms to perform operations with Linear and Nonlinear data structures | 2 | 1 | | 1 | 1 | | | | | | | | 1 | 1 | |
| CS303.4 | Compare and contrast different implement ations of data structures. | 1 | 1 | 1 | 1 | 1 | • | • | 1 | | 1 | | | | 2 | |
| CS303.5 | Apply appropriat e data structure to solve and implement various real time problems. | 1 | 1 | 1 | 1 | 1 | | | | | 1 | | | • | 2 | |
| Average | | 1.6 | 1 | 1 | 1 | 1 | - | - | 1 | - | 1 | - | - | 1 | 1.5 | - |



2. PROGRAMME ASSESSMENT PROCESSES & ATTAINMENT TOOLS

A comprehensive and continuous assessment system is in place to actively engage students in their learning journey and enhance their participation in acquiring knowledge. This system includes various components designed to improve students' ability to demonstrate both technical knowledge and personal attributes. Key elements of this system comprise theory sessions, assignments, quizzes, mid-term exams, and Activity-Based Continuous Assessments (ABCAs) such as presentations, open-book assessments, and question framing, as well as project-based learning (PBL) and projects. To further strengthen the system's effectiveness, we also utilize Course Exit Surveys, Graduate/Exit Surveys, Alumni Surveys, Employer Surveys, and other evaluative measures.

2.1. Assessment processes

The Assessment Processes used to gather the data upon which the evaluation of course outcome is based is constituted with

- A. Direct Attainment (80%)
 - Midterms, Quiz, ABCA, Viva, End Semester Examination
- B. Indirect Attainment (20%)
 - Course Exit Survey

Attainment of course outcome is computed by these two components, as shown in the Figure 1.1.

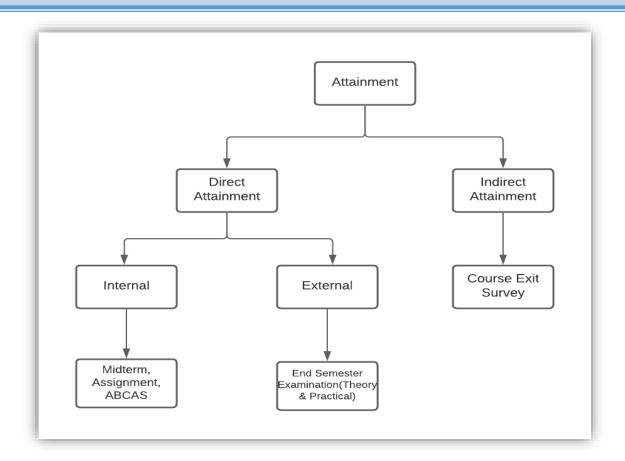


Figure 1.1 Attainment Calculation Process

Direct assessment holds the share of 80% for the calculation of final attainment, whereas indirect assessment contains 20%.

Data collection for course result

The process of collecting course result data involves multiple steps and utilizes both the Management Information System (MIS) and Learning Management System (LMS). Here's an overview of the process:

• Course Assignment to Faculty: Courses are assigned to faculty members based on their expertise and specialization, ensuring that each course is taught by someone with the appropriate knowledge and skills in that subject area.



- Data Storage in MIS and LMS: Faculty and student information is stored in the
 Management Information System (MIS) and Learning Management System
 (LMS). The MIS serves as a centralized database containing faculty profiles,
 student information, course details, and other relevant data. The LMS is an online
 platform used for managing course content, assessments, and tracking student
 progress.
- Attendance and Lecture Data Recording: Faculty members record daily student
 attendance and the lectures they conduct. This information is entered into the MIS,
 enabling easy tracking of student attendance and faculty activity.
- **Examinations and Evaluation**: When exams or tests are conducted, faculty members evaluate the answer scripts, grading and assigning scores based on student performance.
- **Result Upload in LMS**: After evaluation, the results are uploaded to the Learning Management System (LMS), allowing students to view their individual results online.
- Result Storage and Presentation: The LMS stores all result data, including
 individual student scores. This information is presented to students so they can
 review their grades and overall course performance.
- Data Access for Analysis: The stored data, which includes attendance records, lecture details, and exam results, is accessible for generating reports and analyzing student performance. This data provides valuable insights into student progress, highlights areas for improvement, and supports informed decision-making

A. Direct Attainment

Direct attainment is a prime assessment technique that includes the following

- Assignment
- Quiz
- Midterm

- **❖** ABCAs
- Project-Based Learning(PBL)/Projects/Internship

B. Indirect Attainment

Indirect attainment accomplishes by conducting various surveys. Course Exit Survey is the prime constituent for the calculation, of course, indirect assessment.

- Course Exit Survey
- Graduate Exit Survey
- **❖** Alumni Survey
- Employer Survey

Direct Attainment (Assessment) Methods

Assignment: Assignments serve as a qualitative assessment tool to evaluate students' understanding of engineering practices, frameworks, and problem-solving skills. Students will be assigned a minimum of 2 and a maximum of 8 topics per subject.

Quiz: Multiple-choice question-based quizzes are administered, offering a user-friendly platform for both instructors and students during examinations.

Midterm: Midterm exams are integral to ensuring that students achieve both course and program outcomes. These exams are crucial in verifying that students who meet the program outcomes are eligible for certification. Each semester includes two midterm exams: one conducted offline and the other online.

ABCAS (**Activity-Based Continuous Assessment System**): Two activities are conducted each semester. Faculty members select activities based on their subject, choosing from options such as:

- Open book test
- Case study
- **❖** PPT/Poster presentation
- Simulation work, coding, virtual model creation, or dry runs
- Group discussion



Project-Based Learning (PBL)/Projects: Students are divided into groups of up to four members, with each group being mentored by a faculty member. Projects are then evaluated by external examiners who conduct a viva-voce and assign grades based on the students' performance.

Award of Credits and Grades: The distribution of weight-age/marks for theory and practical components is outlined in Table 3 and Table 4.

Theory fragment

Table: 3

| S. No | Particulars | Weightage % |
|-------|-------------------------------------|-------------|
| 1 | Quizzes, assignments and regularity | 10% |
| 2 | Mid –semester test | 20% |
| 3 | End –semester Exam | 70% |
| | Total | 100% |

Practical fragment

Table: 4

| S. No | Particulars | Weightage % |
|-------|--|-------------|
| 1 | Lab work and performance, quizzes, assignments, and regularity | 40% |
| 2. | End-semester examination | 60% |
| | Total | 100% |



| | | Table: 5 | |
|-------|---|----------------|----------------------------|
| Grade | %Marks range (based on absolute marks system) | Grade Point | Description of performance |
| A+ | 91-100 | 10 | Outstanding |
| A | 81-90 | 9 | Excellent |
| B+ | 71-80 | 8 | V. Good |
| В | 61-70 | 7 | Good |
| C+ | 51-60 | 6 | Average |
| С | 41-50 | 5 | Satisfactory |
| D | 31-40 | 4 | Marginal |
| F | 30 and Below | 0 | Fail |
| I | | 0 | Incomplete |
| W | | 0 | Withdrawal |

From the above table 5, it is clear that passing marks are 31%. From this passing marks out of 70 is equal to $70x \ 31/100 = 21.7$ which is 22 marks.



2.2.Process to calculate course attainment

The Program shall have set Course Outcome attainment levels for all courses.

(The attainment levels shall be set considering average performance levels in the university examination or any higher value set as target for the assessment years. Attainment level is to be measured in terms of student performance in internal assessments concerning the Course Outcomes of a course in addition to the performance in the University examination)

The Direct Attainment of Course Outcome is evaluated under two categories – University Assessment and Internal Assessment.

a) Measuring Course Outcomes attained through University Examinations

Attainment Level for External Assessment Exam

| Table: 6 | | | | | | | | | |
|------------------------|------------------|--|--|--|--|--|--|--|--|
| Percentage Of students | Attainment Level | | | | | | | | |
| scoring more than 60 | | | | | | | | | |
| marks | | | | | | | | | |
| >=60% | 1 | | | | | | | | |
| >=70% | 2 | | | | | | | | |
| >=80% | 3 | | | | | | | | |

Attainments levels

- i. Level 1:- 60% of students score 60% marks or more.
- ii. Level 2:-70% of students score 60% of marks or more
- iii. Level 3:-80% of students score 60% of marks or more
- b) Measuring CO attainment through Internal Assessments: (The examples indicated are for reference only. Program may appropriately define levels)

Attainment Level for Internal Assessment Exam



| Table: 7 | | | | | | | | | |
|------------------------|------------------|--|--|--|--|--|--|--|--|
| Percentage Of students | Attainment Level | | | | | | | | |
| scoring more than 60 | | | | | | | | | |
| marks | | | | | | | | | |
| >=60% | 1 | | | | | | | | |
| >=70% | 2 | | | | | | | | |
| >=80% | 3 | | | | | | | | |

Attainments Levels

- i. Level 1:- 60% of students score 60% marks or more.
- ii. Level 2:- 70% of students score 60% of marks or more
- iii. Level 3:- 80% of students score 60% of marks or more

Direct Course Attainment calculation for Internal and External Exam

Here we are giving 40% weightage to internal assessment and 60% weightage to external due to the following reason:

- Internal examinations are more meticulously check.
- University question papers have internal choices for which the Cos are not well defined in the syllabus.
- The question paper of RGPV is still not aligned with the AICTE exam reform policy.

Weightage given to Internal Assessment = 40%

Weightage given to External Assessment = 60%

Total Direct attainment assessment = (Internal Assessment in COs)*0.4 + (External Assessment in COs)*0.6

Indirect Course Attainment is evaluated by using course exit survey

Indirect attainment is evaluated through Course Exit Surveys conducted after course completion, gathering students' feedback on their learning experience.

Overall Course Attainment calculation

With the help of threshold value (60% of marks) the attainment of each CO related to Internals (Midterm1, Midterm2, Assignment, ABCA Activity1, ABCA Activity 2) and external (End Sem. marks, External viva) marks are calculated.

Overall CO Attainment Level = Direct CO Attainment $\times 0.8$ + Indirect CO Attainment $\times 0.2$

The detailed calculation for CO attainment are provided in the annexure no.2

3. ATTAINMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES

Direct Assessment

The Direct attainment level of a PO / PSO is determined by the following procedure

a) For a given core course calculate the CO attainment and also consider the correlation matrix of COs with POs.

(For example, consider a Course (Data Structure of CSE Dept.) and POs, the attainment levels of the COs for this course, and the correlation levels with POs are shown below in Table No.8)

Course CS303, Data Structure in II Year III Semester 2020-21 shown in table 8.

Table: 8

| Course | Atta | P | P0 | P0 | P0 | P0 | P0 | P0 | P0 | P0 | P0 | P0 | P0 | PSO | PSO | PSO |
|---------|-------|-----|-----|-----|-----|-----|----|----|-----|-----------|-----|----|----|-----|-----|-----|
| | inm | 01 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 | 3 |
| | ent | | | | | | | | | | | | | | | |
| | level | | | | | | | | | | | | | | | |
| CS303.1 | 2.17 | 2 | 1 | - | 1 | 1 | - | - | - | - | - | - | - | - | - | - |
| CS303.2 | 2.18 | 2 | 1 | - | 1 | 1 | - | - | - | - | - | - | - | 1 | 1 | - |
| CS303.3 | 2.06 | 2 | 1 | - | 1 | 1 | - | - | - | - | - | - | - | 1 | 1 | - |
| CS303.4 | 2.26 | 1 | 1 | - | 1 | 1 | - | - | 1 | - | 1 | 1 | - | - | 2 | - |
| CS303.5 | 2.06 | 1 | 1 | 1 | 1 | 1 | ı | - | - | - | 1 | 1 | ı | - | 2 | - |
| Average | 2.14 | 1.6 | 1.0 | 1.0 | 1.0 | 1.0 | i | • | 1.0 | - | 1.0 | - | · | 1.0 | 15 | - |

b) To determine the Attainment level for PO5 from this course, the CO attainment level for each CO is multiplied with the corresponding Correlation levels. Their sum is then divided by the sum of the correlation levels. Only the COs (CS303.1, CS303.3, CS303.4, CS502.5) which correlate with the PO (PO5) are considered in the calculation. Hence attainment level for PO1, for this Course is obtained as

Attainment level for PO5 from the course =

$$(2.17*1 + 2.18*1 + 2.06*1 + 2.26*1 + 2.06*1) / (1+1+1+1+1)$$

$$= 2.15$$



- c) Similarly, the attainment levels for all POs/PSOs are determined for this course.
- d) For direct assessment, the average attainment levels from all courses are calculated.

Indirect Assessment

Indirect assessment of POs & PSOs is evaluated by the following assessment tools:

- i. Graduate exit survey (20%)
- ii. Alumni Survey (20%)
- iii. Employer Survey (20%)

The survey questions are based on the POs and PSOs of the program. Students are given ratings of 3(High), 2(Moderate), and 1(Low) to indicate the attainment of POs /PSOs. The attainment level from exit surveys is then calculated as

Attainment level = (N1*3 + N2*2 + N3*1) / (N1+N2+N3)

Total PO Attainment = 80% of Direct attainment + 20% of Indirect attainment

CONCLUSION

In conclusion, this document outlines a comprehensive framework for assessing and achieving Program Outcomes (POs), Program-Specific Outcomes (PSOs), and Course Outcomes (COs) within the engineering curriculum. By defining clear and measurable outcomes, the program ensures that students acquire the necessary knowledge, skills, and attributes essential for their professional development.

The assessment process is robust, incorporating both direct and indirect methods to provide a well-rounded evaluation of student performance. The use of assignments, quizzes, midterms, ABCAs, and Project-Based Learning (PBL) ensures continuous engagement and assessment, while the incorporation of various surveys (Course Exit, Graduate Exit, Alumni, and Employer) provides valuable feedback for ongoing program improvement.

The integration of these assessment tools and processes demonstrates a commitment to aligning educational objectives with industry standards, ultimately fostering a culture of continuous learning and improvement. This systematic approach not only enhances the academic experience but also ensures that graduates are well-equipped to meet the challenges of the engineering profession.





Annexure 1

CO_PO_PSOs mapping

of

Data Structure Course

(July Dec 2020)



According to New Exam Reform Policy, Mapping of CO's With PO's

Each PO contains Competencies and each Competency consists of Performance Indicator

| Program Outcomes | C.No. | Compet encies | PI No. | Performanc e Indicators | CO1 | CO2 | CO3 | CO4 | CO5 |
|---|-------|--|-----------|---|-----|-----|-----|-----|-----|
| PO1: Engineering Knowledge: apply knowledge of | | Demonstra te competenc e in mathemati cal modelling | 1.1.1 | Apply the knowledge of discrete structures, linear algebra, statistics and numerical techniques to solve problems | YES | | | | |
| | 1.1 | | 1.1.2 | Apply the concepts of probability, statistics and queuing theory in modelling of computer-based system, data and network protocols. | | | | | |
| mathematics, science, engineering fundamentalsandanengi neeringspecializationto thesolutionofcomplexe | 1.2 | Demonstra te competenc e in basic sciences | 1.2.1 | Apply laws of natural science to an engineering problem | | | | | |
| thesolutionofcomplexe ngineeringproblems. | 1.3 | Demonstra te competenc e in engineerin g fundament als | 1.3.1 | Apply engineering fundamentals | YES | YES | YES | YES | YES |
| | 1.4 | Demonstra te competenc e in specialized engineerin g knowledge to the program | 1.4.1 | Apply theory and principles of computer science and engineering to solve an engineering problem | YES | YES | YES | YES | YES |
| PO2: Problem Analysis: identify, formulate, review | 2.1 | Demonstra te an ability to | 2.1.1 | Evaluate problem statements and | | | | | |



| research literature, and analyse complex engineering problems | | identify and formulate | | identifies objectives. | | | | | |
|---|-----|--|-------|---|-----|-----|-----|-----|-----|
| reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences. | | complex engineerin g problem | 2.1.2 | Identify processes/mod ules/algorithm s of a computer-based system and parameters to solve a problem | YES | YES | YES | YES | YES |
| | | | 2.1.3 | Identify mathematical algorithmic knowledge that applies to a given problem | | | | | |
| | 2.2 | Demonstra te an ability to formulate a solution plan and methodolo gy for an engineerin g problem | 2.2.1 | Reframe the computer-based system into inter connected subsystems | | | | | |
| | | | 2.2.2 | Identify functionalities and computing resources. | | | | | |
| | | | 2.2.3 | Identify existing solution/metho ds to solve the problem, including forming justified approximation s and assumptions | | | YES | | |
| | | | 2.2.4 | Compare and contrast alternative solution/metho ds to select the best methods | | | | | |
| | | | 2.2.5 | Compare and contrast alternative solution processes to select the best process | | | | | |



| | 2.3 | Demonstra te an ability to formulate and interpret a model | 2.3.1 | Able to apply computer engineering principles to formulate modules of a system with required applicability and performance. | | | | |
|---|---|---|-------|---|--|-----|-----|--|
| | | | 2.3.2 | Identify design constraints for required performance criteria. | | | | |
| | 2.4 | Demonstra te an ability to execute a solution process and analyse results | 2.4.1 | Applies engineering mathematics to implement the solution. | | | | |
| | | | 2.4.2 | Analyse and interpret the results using contemporary tools. | | | | |
| | | | 2.4.3 | Identify the limitations of the solution and sources/causes. | | | | |
| | | | 2.4.4 | Arrive at conclusions with respect to the objectives | | YES | YES | |
| PO3:Design &DevelopmentofSoluti ons:designsolutionsforc omplexengineeringpro | onsforc ingpro mpone sattmeet lswitha deration salth she | Demonstra te an ability to define a complex/ open- ended problem in engineerin g terms | 3.1.1 | Able to define a precise problem statement with objectives and scope. | | | | |
| blemsand designsystemcompone ntsorprocessesthatmeet thespecifiedneedswitha ppropriateconsideration for the public health and safety, and the cultural, societal, and environmental considerations. | | | 3.1.2 | Able to identify and document system requirements from stakeholders. | | | | |
| | | | 3.1.3 | Able to review state-of-the-art literature to synthesize | | | | |



| | | | system | | | |
|-----|--|-------|---|--|--|--|
| | | | requirements. | | | |
| | | | Able to choose | | | |
| | | | appropriate | | | |
| | | | quality | | | |
| | | 3.1.4 | attributes as | | | |
| | | | defined by | | | |
| | | | ISO/IEC/IEEE | | | |
| | | | standard. | | | |
| | | | Explore and | | | |
| | | | synthesize | | | |
| | | | system | | | |
| | | | requirements | | | |
| | | 3.1.5 | | | | |
| | | | from larger social and | | | |
| | | | | | | |
| | | | professional | | | |
| | | | concerns. | | | |
| | | | Able to | | | |
| | | | develop | | | |
| | | 3.1.6 | software | | | |
| | | 3.1.0 | requirement | | | |
| | | | specifications | | | |
| | | | (SRS). | | | |
| | | | Able to | | | |
| | | 3.2.1 | explore design | | | |
| | | | alternatives. | | | |
| | | | Able to | | | |
| | | | produce a | | | |
| | | | variety of | | | |
| | Demonstra | | potential | | | |
| | te an | 3.2.2 | design | | | |
| | ability to | 3.2.2 | solutions | | | |
| | generate a | | | | | |
| 3.2 | diverse set | | suited to meet | | | |
| | of | | functional | | | |
| | alternative | | requirements. | | | |
| | design | | Identify | | | |
| | solutions | | suitable non- | | | |
| | Jordions | | functional | | | |
| | | 3.2.3 | requirements | | | |
| | | 3.2.3 | for evaluation | | | |
| | | | of alternate | | | |
| | | | design | | | |
| | | | solutions. | | | |
| | Demonstra te an ability to select optimal design | | Able to | | | |
| | | | perform | | | |
| | | | systematic | | | |
| | | | evaluation of | | | |
| | | 3.3.1 | the degree to | | | |
| 2.2 | | 3.3.1 | | | | |
| 3.3 | | | which several | | | |
| 0.0 | | | design | | | |
| | | | | | | |
| | scheme for | | concepts meet | | | |
| | scheme for further | | concepts meet the criteria. | | | |
| | scheme for further developme | 222 | concepts meet the criteria. Consult with | | | |
| | scheme for further | 3.3.2 | concepts meet the criteria. | | | |



| | | | | and stakeholders to select candidate engineering design solution | | | | | |
|--|-----|--|-------|---|-----|-----|-----|-----|-----|
| | | Demonstra te an ability to | 3.4.1 | for further development Able to refine architecture design into a detailed design within the existing constraints. | | | | | YES |
| | 3.4 | advance an engineerin g design to defined end state | 3.4.2 | Able to implement and integrate the modules. | | | | | |
| | | | 3.4.3 | Able to verify the functionalities and validate the design. | | | | | |
| | | Demonstra te an ability to conduct | 4.1.1 | Define a problem for purposes of investigation, its scope and importance | YES | | | | |
| PO4: Conduct Investigation of Complex Problems: Use research-based knowledge and | 4.1 | investigati ons of technical issues consistent with their level of | 4.1.2 | Able to choose appropriate procedure/algo rithm, dataset and test cases. | YES | YES | YES | YES | YES |
| knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide | | knowledge and understand ing | 4.1.3 | Able to choose appropriate hardware/soft ware tools to conduct the experiment. | | | | | |
| valid conclusions. | 4.2 | Demonstra te an ability to design experiment s to solve open- ended problems | 4.2.1 | Design and develop appropriate procedures/me thodologies based on the study objectives | | | | | YES |



| | | | | T | | | | | |
|---|-----|---|-------|---|-----|-----|-----|-----|-----|
| | | | 4.3.1 | Use appropriate procedures, tools and techniques to collect and analyse data | | | | | |
| | | 4.6 Demonstra | 4.3.2 | Critically analyse data for trends and correlations, stating possible errors and limitations | | | | | |
| | 4.3 | te an ability to analyse data and reach a valid conclusion | 4.3.3 | Represent data (in tabular and/or graphical forms) so as to facilitate analysis and explanation of the data, and drawing of conclusions | | | | | |
| PO5: Modern Tools Usage: create, select and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and | | | 4.3.4 | Synthesize information and knowledge about the problem from the raw data to reach appropriate conclusions | | | | | |
| | 5.1 | Demonstra te an ability to identify/cr eate modern engineerin g tools, techniques and resources | 5.1.1 | Identify modern engineering tools, techniques and resources for engineering activities | | | | | |
| prediction and modelling to complex engineering activities with an understanding of the limitations. | 3.1 | | 5.1.2 | Create/adapt/m odify/extend tools and techniques to solve engineering problems | YES | YES | YES | YES | YES |



| | | | | | | | |
|--|-----|---|-------|---|------|--|--|
| | 5.2 | Demonstra te an ability to select and apply discipline specific tools, techniques and resources | 5.2.1 | Identify the strengths and limitations of tools for (i) acquiring information, (ii) modelling and simulating, (iii) monitoring system performance, and (iv) creating engineering designs. | | | |
| | | | 5.2.2 | Demonstrate proficiency in using discipline- specific tools | | | |
| | | Demonstra te an ability to evaluate the | 5.3.1 | Discuss limitations and validate tools, techniques and resources | | | |
| | 5.3 | suitability and limitations of tools used to solve an engineerin g problem | 5.3.2 | Verify the credibility of results from tool use with reference to the accuracy and limitations, and the assumptions inherent in their use. | | | |
| 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. | 6.1 | Demonstra te an ability to describe engineerin g roles in a broader context, e.g. pertaining to the environme nt, health, | 6.1.1 | Identify and describe various engineering roles; particularly as pertains to protection of the public and public interest at the global, regional and local level | | | |



| | | safety, legal and public welfare | | Interpret | | | |
|--|-----|--|-------|---|--|--|--|
| | 6.2 | te an understand ing of profession al engineerin g regulations , legislation and standards | 6.2.1 | Interpret legislation, regulations, codes, and standards relevant to your discipline and explain its contribution to the protection of the public | | | |
| | | Demonstra te an understand ing of the impact of engineerin | 7.1.1 | Identify risks/impacts in the life- cycle of an engineering product or activity | | | |
| PO7: Environment & Sustainability: understand the impact of the professional engineering solutions in societal and | 7.1 | g and industrial practices on social, environme ntal and in economic contexts | 7.1.2 | Understand the relationship between the technical, socioeconomic and environmental dimensions of sustainability | | | |
| environmental contexts, and demonstrate the knowledge of, and need for sustainable | | Demonstra te an | 7.2.1 | Describe management techniques for sustainable development | | | |
| need for sustainable development. | 7.2 | ability to apply principles of sustainable design and developme nt | 7.2.2 | Apply principles of preventive engineering and sustainable development to an engineering activity or product relevant to the discipline | | | |
| PO8: Ethics: apply ethical principles and commit to professional ethics and | 8.1 | Demonstra te an ability to recognize | 8.1.1 | Identify situations of unethical professional | | | |



| mananaihiliti 1 | | ethical | | aandust aad | | | |
|---|-----|-------------------|-------|-----------------------------|--|-----|--|
| responsibilities and norms of engineering | | dilemmas | | conduct and propose ethical | | | |
| practice. | | unemmas | | alternatives | | | |
| practice. | | | | Identify tenets | | | |
| | | | | of the ASME | | | |
| | | Demonstra | 8.2.1 | professional | | | |
| | | te an | | code of ethics | | | |
| | 0.0 | ability to | | Examine and | | | |
| | 8.2 | apply the | | apply moral & | | | |
| | | Code of | 8.2.2 | ethical | | ≝ | |
| | | Ethics | 0.2.2 | principles to | | YES | |
| | | | | known case | | | |
| | | | | studies | | | |
| | | | | Recognize a | | | |
| | | | | variety of | | | |
| | | | | working and | | | |
| | | | 0.1.1 | learning | | | |
| | | Demonstra | 9.1.1 | preferences; appreciate the | | | |
| | | te an | | value of | | | |
| | | ability to | | diversity on a | | | |
| | | form a | | team | | | |
| | 9.1 | team and | | Implement the | | | |
| | 7.1 | define a | | norms of | | | |
| | | role for | | practice (e.g. | | | |
| | | each | | rules, roles, | | | |
| | | member | 9.1.2 | charters, | | | |
| | | | 9.1.2 | agendas, etc.) | | | |
| | | | | of effective | | | |
| DO0 1 11 1 1 0 | | | | team work, to | | | |
| PO9: Individual & | | | | accomplish a | | | |
| Team work: function effectively as an | | | | goal. | | | |
| individual and as a | | | | Demonstrate | | | |
| member or leader in | | Demonstra | | effective | | | |
| diverse teams, and in | | te effective | | communicatio | | | |
| multidisciplinary | | individual | 9.2.1 | n, problem- solving, | | | |
| settings. | | and team | 9.2.1 | conflict | | | |
| | | operations- | | resolution and | | | |
| | | - | | leadership | | | |
| | 0.0 | communic | | skills | | | |
| | 9.2 | ation, | | Treat other | | | |
| | | problem | 9.2.2 | team members | | | |
| | | solving, conflict | | respectfully | | | |
| | | resolution | 9.2.3 | Listen to other | | | |
| | | and | 7.2.3 | members | | | |
| | | leadership | | Maintain | | | |
| | | skills | 9.2.4 | composure in | | | |
| | | | | difficult | | | |
| | | | | situations | | | |
| | | Demonstra | | Present results | | | |
| | 9.3 | te success | 9.3.1 | as a team, with smooth | | | |
| | | in a team- | | integration of | | | |
| | | | | integration of | | | |



| | | based project | | contributions from all individual efforts | | | |
|---|------|---|--------|--|--|-----|-----|
| | | | 10.1.1 | Read, understand and interpret technical and non- technical information | | | |
| | 10.1 | Demonstra te an ability to comprehen d technical literature and document | 10.1.2 | Produce clear, well- constructed, and well- supported written engineering documents | | | |
| PO10: Communication: communicate effectively on complex engineering activities | | project work | 10.1.3 | Create flow in a document or presentation – a logical progression of ideas so that the main point is clear | | | YES |
| with the engineering community and with society at large, such as, being able to comprehend and write effective reports and | | Demonstra te competenc e in | 10.2.1 | Listen to and comprehend information, instructions, and viewpoints of others | | | |
| | 10.2 | listening, speaking, and presentatio n | 10.2.2 | Deliver effective oral presentations to technical and non- technical audiences | | YES | YES |
| | 10.3 | Demonstra te the ability to integrate different | 10.3.1 | Create engineering- standard figures, reports and drawings to complement writing and presentations | | | |
| | | modes of communic ation | 10.3.2 | Use a variety of media effectively to convey a message in a document or a presentation | | | |



| | l | | 1 | l | | | |
|---|------|---|--------|--|--|--|--|
| | | Demonstra te an ability to evaluate the economic | 11.1.1 | Describe various economic and financial costs/benefits of an engineering activity | | | |
| | 11.1 | and financial performan ce of an engineerin g activity | 11.1.2 | Analyse different forms of financial statements to evaluate the financial status of an engineering project | | | |
| PO11: Project management & 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. | 11.2 | Demonstra te an ability to compare and contrast the costs/benef its of alternate proposals for an engineerin g activity | 11.1.3 | Analyse and select the most appropriate proposal based on economic and financial considerations. | | | |
| environments. | 11.3 | Demonstra te an ability to plan/mana ge an engineerin | 11.3.1 | Identify the tasks required to complete an engineering activity, and the resources required to complete the tasks. | | | |
| | 11.5 | g activity within time and budget constraints | 11.3.2 | Use project management tools to schedule an engineering project, so it is completed on time and on budge | | | |
| PO12: Life-long Learning: recognize the need for, and have the preparation and ability to engage in | 12.1 | Demonstra te an ability to identify gaps in | 12.1.1 | Describe the rationale for the requirement for continuing | | | |



| independent and life- long learning in the broadest context of technological change. | | knowledge and a strategy to close these | | professional development | | | |
|---|------|---|--------|---|---|---|--|
| | | gaps | 12.1.2 | Identify deficiencies or gaps in knowledge and demonstrate an ability to source information to close this gap | | | |
| | 12.2 | Demonstra te an ability to identify changing trends in | 12.2.1 | Identify historic points of technological advance in engineering that required practitioners to seek education in order to stay current | | | |
| | | engineerin g knowledge and practice | 12.2.2 | Recognize the need and be able to clearly explain why it is vitally important to keep current regarding new developments in your field | | | |
| | | Demonstra te an ability to identify | 12.3.1 | Source and comprehend technical literature and other credible sources of information | | | |
| | 12.3 | and access sources for new informatio n | 12.3.2 | Analyse sourced technical and popular information for feasibility, viability, sustainability, etc. | | | |
| PSO1 | | ty to understar r hardware and | | ciples of | 1 | 1 | |



| | to analyse, design and develop algorithms for complex and logical problems. | | | | |
|------|--|---|---|---|---|
| PSO2 | Enhance programming concepts and professional competencies of students by exercising principles of software engineering to fix various computational problems. | 1 | 1 | 2 | 2 |
| PSO3 | To implement emerging technologies such as internet of things, cloud computing, artificial intelligence, machine learning etc. to serve the society. | | | | |

From the above mapping. Total No. of "YES" Mapped with PI's (Generated Matrix)

| | CO1 | CO2 | CO3 | CO4 | CO5 |
|------|-----|-----|-----|-----|-----|
| PO1 | 3 | 2 | 2 | 2 | 2 |
| PO2 | 1 | 1 | 3 | 2 | 1 |
| PO3 | 0 | 0 | 0 | 0 | 1 |
| PO4 | 2 | 1 | 1 | 1 | 2 |
| PO5 | 1 | 1 | 1 | 1 | 1 |
| PO6 | 0 | 0 | 0 | 0 | 0 |
| PO7 | 0 | 0 | 0 | 0 | 0 |
| PO8 | 0 | 0 | 0 | 1 | 0 |
| PO9 | 0 | 0 | 0 | 0 | 0 |
| PO10 | 0 | 0 | 0 | 1 | 2 |
| PO11 | 0 | 0 | 0 | 0 | 0 |
| PO12 | 0 | 0 | 0 | 0 | 0 |
| PSO1 | 0 | 1 | 1 | 0 | 0 |
| PSO2 | 0 | 1 | 1 | 2 | 2 |
| PSO3 | 0 | 0 | 0 | 0 | 0 |



Mapping Strength of Course Outcomes with Program Outcomes

| | | | | | | | | | | | | | | | | | P | rogra | m O | utcon | ies | | | | | | | | | | | | | | | | | | PSO: | 5 |
|-------|------|------|------------|--------|------|-------|----|------|-------|----|------|-------|------|------|-------|----|------|-------|-----|-------|-------|----|------|-------|----|------|-------|----|------|-------|----|------|-------|----|------|-------|----|------|------|---------|
| | | | PO1 | | | PO2 | 2 | | PO3 | | | PO | | | P05 | | | P06 | | | P07 | | | P08 | | | P09 | | | PO10 | | | P011 | | | PO12 | | PS01 | PSO: | PS03 |
| | | TPIs | M.Pls | MG | TPIs | M.Pls | MG | TPIs | M.Pls | MG | TPIs | M.PI | MG | TPIs | M.Pls | MG | TPIs | M.Pls | MG | TPIs | M.Pls | MG | TPIs | M.Pls | MG | TPIs | M.Pls | MG | TPIs | M.Pls | MG | TPIs | M.Pls | MG | TPIs | M.Pls | MG | | | |
| Cours | CO1 | 5 | 3 | 2 | 14 | 1 | 1 | 14 | 0 | 0 | 8 | 2 | 1 | 6 | 1 | 1 | 2 | 0 | 0 | 4 | 0 | 0 | 3 | 0 | 0 | 7 | 0 | 0 | 7 | 0 | 0 | 5 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 |
| e | CO2 | | 2 | 2 | 14 | 1 | 1 | 14 | 0 | 0 | 8 | 1 | 1 | 6 | 1 | 1 | 2 | 0 | 0 | 4 | 0 | 0 | 3 | 0 | 0 | 7 | 0 | 0 | 7 | 0 | 0 | 5 | 0 | 0 | 6 | 0 | 0 | 1 | 1 | 0 |
| Outco | CO3 | | 2 | 2 | 14 | 3 | 1 | 14 | 0 | 0 | 8 | 1 | 1 | 6 | 1 | 1 | 2 | 0 | 0 | 4 | 0 | 0 | 3 | 0 | 0 | 7 | 0 | 0 | 7 | 0 | 0 | 5 | 0 | 0 | 6 | 0 | 0 | 1 | 1 | 0 |
| mes | CO4 | 5 | 2 | 2 | 14 | 2 | 1 | 14 | 0 | 0 | 8 | 1 | 1 | 6 | 1 | 1 | 2 | 0 | 0 | 4 | 0 | 0 | 3 | 1 | 1 | 7 | 0 | 0 | 7 | 1 | 1 | 5 | 0 | 0 | 6 | 0 | 0 | 0 | 2 | 0 |
| 11100 | C05 | 5 | 2 | 2 | 14 | 1 | 1 | 14 | 1 | 1 | 8 | 2 | 1 | 6 | 1 | 1 | 2 | 0 | 0 | 4 | 0 | 0 | 3 | 0 | 0 | 1 7 | 0 | 0 | 7 | 2 | 1 | 5 | 0 | 0 | 6 | 0 | 0 | 0 | 2 | 0 |
| _ | | 1 | _ | _ | | _ | _ | 1 | _ | _ | _ | _ | 1 | _ | | _ | - | | _ | _ | | | | | _ | _ | _ | | _ | _ | _ | _ | _ | | _ | | | | _ | \perp |
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| _ | TPIs | Tota | I Perf. In | dicato | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | : %L€ | vels | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | 3 | 67 | _ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | 2 | 34 | - | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | 1 | 0 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | _ | | | _ | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



CO-PO-PSO Mapping matrix

| Course | Course Outcomes | P01 | P02 | P03 | P04 | P05 | P06 | P07 | P08 | P09 | P010 | P011 | P012 | PS01 | PSO2 | PSO3 |
|---------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| CS303.1 | Ability to Define, understand concepts of different categories of data Structures to analyze the data. | 2 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CS303.2 | Identify different parameters to analyze the performance of an algorithm. | 2 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| | Design algorithms to perform operations with Linear and Nonlinear data structures | 2 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| | Compare and contrast different implementations of data structures. | 2 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 2 | 0 |
| CS303.5 | Apply appropriate data structure to solve and implement various real time problems | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 |
| Average | | 2.00 | 1.00 | 0.20 | 1.00 | 1.00 | 0.00 | 0.00 | 0.20 | 0.00 | 0.40 | 0.00 | 0.00 | 0.40 | 1.20 | 0.00 |



Annexure 2

CO_PO Attainment

of

Data Structure Course

(July Dec 2020)

Target Setting for 2020

Course name-Dats structure Course code:303

| On the basis of 2019 CO attainment | |
|---|--|
| Total course attainment for Data Structure from previous year(2019) is 1.74 | |

| | 2019 | 2020(Target) |
|-----|------|--------------|
| CO1 | 1.74 | 1.85 |
| CO2 | 1.74 | 1.85 |
| CO3 | 1.74 | 1.85 |
| CO4 | 1.74 | 1.85 |
| CO5 | 1_74 | 1.85 |

| >=60% = level1 >=70% = level2 | 60 perc. Of students score 60 perc. Or more |
|----------------------------------|---|
| >=70% = eve 2 | 70 perc. Of students score 60 perc. Or more |
| >=80% = eve 3 | 80 perc. Of students score 60 perc. Or more |



| rogram | B-Tech | | | | | | | | | | | | | | | | | | | | | | | Branc | ch:- QS | , | | | | |
|---------|------------------------------|-----------------|-----------|------------|---------------------------------|--------------------------|-----------|--------------|------------|--------------------------|-------|-------|------|--------------|-------|-------|----------------|---------|-----|-----|------------|-----|-----|----------------|----------|---------|---------|---------|-------|---|
| ourse n | ame: Data Str | ucture | | | | | | | | | | | | | | | | | | | | | | Cours | se cod | e:CS 3 | 303 | | | |
| meste | r=3 | | | | | | | | | | | | | | | | | | | | | | | June- | Dec(2) | 020-20 | (21) | | | |
| | | | | | | N | Hillermic | 200 | | | A dem | 20200 | | | ABCA | | | | | | | | | | nomi | Every O | | + Pract | a b | |
| | | | | | | | | | | Q(20) | | | | Total | ARCAT | ABCAS | | | 0.1 | 0.2 | 0.3 | 0.4 | OT2 | | KUPY | Exam (| liseary | - | ocet. | |
| | | | Course Or | doorse | | | 001 | COS | COS | 001.2.3.4.5 | 003 | C04 | 006 | :04.00 | C04 | C05 | | ractice | C01 | CD2 | C03 | C04 | 005 | C | 01,2,3,4 | | COS | CCS | 004 | П |
| NO. | ROLL No. | NAME | | | Midsen | | - | _ | - | | | | | Actus | - | _ | Avg | | | | | | - | | | | | | | Т |
| | KOLL No. | NAME | | internal S | avgrassg mrast.) Total 30 | Total HT1 marks 22 | 6.67 | 6.67 | 6.67 | Total MT2 marks 20 | 6.67 | 6.67 | 6.87 | activit Y | 10 | 10 | Assg & Act. | 20 | 4 | ٠ | ٠ | 4 | 4 | Total Marks | 100 | 20 | 20 | 20 | 20 | |
| | | | Compet | | | 12 | 4 | 4 | 4 | 12 | 4 | 4 | 4 | 6 | | - 6 | LL S | 12 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 60 mr | 90 | 12 | 12 | 12 | 12 | ı |
| - | 0905CS191001 | ABRAT DRUPAK | | | 21,8/6 | 16 | 100 | - | 2 | 14 | 44 | - | 47 | - 1 | | 9 | 7,875 | 20 | 4 | 4 | 4 | 4 | 4 | 80 | 80 | -17 | 17 | 17 | 17 | 4 |
| 2 | | ASHINAV GOTAL | | | 17,875 | 11 | U | N. | 327 | 70 | 333 | 33 | 3.3 | 3.5 | | 0 | 7,375 | 12 | 2,4 | 2,4 | 2,4 | 2,4 | 2.4 | 75 | 73 | 15 | 15 | 35 | 15 | 4 |
| 4 | | ABH NAV GUPTA | | | 26,625 | 19 | 63 | -03 | -03 | | 9.3 | - 12 | | 725 | | 0 | 7.425 | 14 | 3,5 | 3,6 | 2,8 | 2,8 | 2,8 | -00 | 80 | 17 | 17 | 177 | 17 | 4 |
| -7 | 0905CS191005 | | | 34,75 | 21,75 | 16 | 43 | 43 | 633 423 | 18 | 100 | 30 | - | - 2 | 8 | | 7.075 | 18 | 226 | 326 | 3.6 2.6 | 2,6 | 2.6 | - 22 | 75 | -17 | 17 | 175 | 10 | 4 |
| - | | ADDIBUTE GUPTA | | 29,75 | 18,75 | 12 | 1 40 | 40 | 40 | - 15 | 33 | 33 | 33 | - | 8 | 8 | 7.75 | 10 | 22 | 2.2 | 2.2 | 2,2 | 2.2 | 75 | - 10 | 12 | 12 | 132 | 10 | 4 |
| Ť | | ABHISHEK JHA | | 27.75 | 12,75 | 0 | 300 | 000 | 0.0 | - 12 | 5.0 | 8.0 | 8.0 | | | 0 | 2.76 | 15 | 3 | 3 | 3 | 3 | 3 | 95 | 95 | 17 | 10 | 100 | 10 | 4 |
| * | | ADRIBREK KUMAR | | 39,25 | 23,25 | 14 | 1 v | - 20 | 1 | - 17 | 107 | 107 | 5.7 | | - 6 | | 710 | 10 | 32 | 3.2 | 3.2 | 3,2 | 3,2 | 85 | 85 | -17 | -17 | 100 | | 4 |
| 9 | | ABHIBHEK KUMAR | | 26,575 | 14,875 | 7 | 2.3 | 2.5 | 2.3 | 50 | 33 | 33 | 3.3 | | 0 | | 6.325 | 12 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 66 | 65 | 13 | 13. | 53 | 13 | 4 |
| 10 | | ABHISHEK PATEL | | 24,125 | | - 5 | 10 | 0 | 177 | 0 | 0.0 | | 0.0 | 3 | | ő | 7,625 | 14 | 2,8 | 2,8 | 2,8 | 2,8 | 2,8 | 66 | 65 | 13 | 13 | 13 | 13 | 4 |
| II | 0905C5191011 | ABHISHEK PATHAK | | 41.5 | 21.5 | 13 | 43 | 43 | 43 | 54 | 40 | 4.7 | 47 | 7 | 7 | | 8 | 20 | 4 | 4 | 4 | -4 | 4 | 88 | 85 | 17 | 17 | 17 | 17 | 4 |
| 12 | 090508191012 | ABHIBHEK | | 31,875 | 17,875 | 9 | 3.0 | 3.0 | 3.0 | 12 | 4.0 | 4.0 | 4.0 | 0 | 0 | 0 | 7,375 | 14 | 2.6 | 228 | 2.8 | 2.8 | 2.8 | 75 | 75 | 15 | 15 | 15 | 16 | 4 |
| 13 | 0905C5191013 | | | 37 | 21 | 15 | 5,0 | 5_0 | 5,0 | 12 | 4.0 | 4.0 | 4.0 | 7.5 | 7 | - 8 | 7.5 | 16 | 3.2 | 3.2 | 3,2 | 3,2 | 3.2 | 95 | 95 | 19 | 19 | 19 | 19 | 4 |
| 14 | 0905CS191014 | | | 28,25 | 15.25 | 11 | 327 | 327 | 927 | 12 | 4.0 | 4.0 | 4.0 | 3.5 | T | 0 | 3.75 | 13 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 100 | 0.5 | 17 | 17 | 17 | 17 | 4 |
| 15 | | ADHIBHEK SINGH | | 34,75 | 18,75 | 15 | 5,0 | 5,0 | 6,0 | 14 | W | 100 | -07 | 7 | 7 | 7 | 4.25 | 16 | 3.2 | 3.2 | 3,2 | 3,2 | 3,2 | 85 | 85 | 17 | 17 | 27 | 17 | 4 |
| 16 | | ADARSH DUBEY | | 42_375 | 24,375 | 17 | 52 | 6.7 | 527 | 17 | 5.7 | 34 | 5.7 | 745 | | 8 | 7,375 | 18 | 3.5 | 3.5 | 3,5 | 3,5 | 3,6 | - 68 | 85 | 17 | 17 | 17 | 17 | 4 |
| 17 | 0905C8191017 | | | 36.625 | 19,425 | 15 | 5,0 | 5,0 | 5,0 | 10 | | 3.3 | 3.3 | - 8 | 0 | | 7,125 | 17 | 3.4 | 3.4 | 3,4 | 3,4 | 3,4 | 85 | 95 | 19 | 19 | 19 | 19 | 4 |
| | 0905CS191018 | | | 30 | 15 | 9 | 3.0 | | 3.5 | - 3 | 12 | | - 14 | | | 0 | - 8 | 15 | - 3 | - 5 | 3 | 3 | 3 | 75 | 76 | 15 | 15 | 15 | 16 | 4 |
| 19 | 0905CS191019 | | | 34,125 | 14.125 | 13 | 43 | 43 | 43 | | 0.0 | 90 | 9.0 | | 7 | | 7,625 | 20 | 4 | 4 | 4 | 4 | 4 | - 85 | 985 | 19 | 19 | 12 | 19 | 4 |
| 20 | 0905CS191020 | ADJITYA SHARMA | | 27,875 | 11,875 | 5 | v | v | 17 | | 1.3 | 1.3 | 1.3 | - 0 | 0 | 0 | 7.375 | 16 | 3.2 | 3.2 | 8,2 | 8,2 | 3,2 | 76 | 70 | 15 | 15 | 15 | 15 | 4 |
| 21 | 0905CS191022 | | | 29,5 | 17,5 | 16 | 33 | 333 | 33 | - 11 | 5.0 | -34 | 34 | 0 | -7 | | 7.5 | 19 | 2,4 | 2.4 | 3.0 | 2,4 | 2,4 | 100 | 85 | | -7/ | | 15 | 4 |
| 22 | | ADJUYA UPADHYAY | | 32,375 | 15,375 | 10 | 80 | 6.0 | 6.0 | - 1 | 3.7 | 3.4 | 3.1 | | | 0 | 7 | 12 | 3.2 | 3.2 | 2,4 | 3,2 | 3.2 | 76 | TO. | 15 | 15 | 15 | 15 | 4 |
| 25 | | AJAY PAL JATAV | | 22 | 11 | 18 | 13 | 133 | 13 | | 100 | - | - 44 | 0 | 0 | | 7,376 | 16 | 3.2 | 2.2 | 3.2 | 2-2 | 2.2 | 75 | 10 | 70 | 15 | 125 | 10 | 4 |
| 25 | 0905C5191025 | | | 36,875 | 19,875 | 4 | 35 | 3.0 | 335 | | 12 | - | - 27 | - | 8 | 8 | 0.5 | 17 | 22 | 3.4 | 3,4 | 3,4 | 3.4 | 300 | 30 | 17 | | 133 | -11 | 4 |
| 26 | | ANARSH LAHANIYA | | 33,75 | 18,75 | 17 | 527 | 5.7 | 527 | - 17 | 5.7 | 37 | 3.7 | 725 | 8 | | 7.875 | 15 | 3. | 3 | 3 | 3 | 3 | 85 | 95 | 37 | 17 | 37 | 17 | 4 |
| 27 | | AKSHAT MANGAL | | 30,5 | 15,5 | 11 | 1 20 | v | 1 30 | - | 17 | - | - 77 | 0 | | 6 | 7.5 | 15 | - 5 | - 5 | 3 | 3 | 3 | - 20 | - 35 | - 17 | | - | 17 | я |
| 28 | | ARSHAT VERMA | | 27,75 | 15,75 | 7 | 223 | 223 | 2.3 | 12 | 40 | - AU | - | 3,5 | | | 6.26 | 12 | 2,4 | 2.4 | 2.4 | 2.4 | 2,4 | 66 | 65 | 53 | 13 | - 5 | 128 | ł |
| 29 | | ALANKRITA SAH | | 41,375 | | 17 | 100 | 107 | 67 | 17 | 67 | 5.7 | 3.7 | 9 | | 9 | 6,375 | 10 | 3,6 | 3,6 | 3,6 | 3,6 | 3,6 | 85 | 85 | 17 | 17 | 17 | 17 | 1 |
| 30 | 0905CS191030 | | | | 17,75 | 8 | 227 | 2.7 | 22 | 11 | 30 | 37 | - 17 | 8 | 8 | | 8.25 | 18 | 3.5 | 3.5 | 3,6 | 3,6 | 3.5 | 76 | 78 | 16 | 15 | 18 | 16 | đ |
| 31 | 090508191031 | AWAN ARYAN | | 36,125 | | 12 | 440 | 40 | 420 | 13 | 43 | 4.5 | 4.5 | - 6 | | 8 | 7,525 | 16 | 322 | 3.2 | 3.2 | 3.2 | 3.2 | 185 | 85 | 57 | 17 | 17 | 17 | 4 |
| 32 | 0905CS19103Z | | | 28,525 | 16,625 | 7 | 2,3 | 2,5 | 2.3 | 12 | 4.0 | 40 | 40 | - 0 | | 0 | 7,125 | 12 | 2,4 | 2,4 | 2,4 | 2,4 | 2,4 | 65 | 85 | 13 | 13 | 19 | 13 | ø |
| 33 | | AMIT KUSHWAH | | 39 | 23 | 15 | 5.3 | 5.3 | 5.3 | 12 | 4.0 | 4.0 | 4.0 | - 0 | | 8 | - 2 | 16 | 32 | 3.2 | 3.2 | 3.2 | 3.2 | 185 | 85 | 17 | 17 | 17 | 17 | 1 |
| 34 | 090505191034 | | | 41,25 | 21,25 | 14 | W | U | 47 | 13 | 4.3 | 4.8 | 43 | - 0 | | 0 | 7-75 | 20 | 4 | 4 | 4 | -4 | 4 | 85 | 85 | -17 | 17 | 17 | | 4 |
| 33 | | ANADISHARMA | | 32,375 | | 16 | 5.3 | 5.3 | 5.3 | 0 | | | 0.0 | - 6 | - 8 | - 8 | 9,375 | 18 | 325 | 3,6 | 3,6 | 3,5 | 3,6 | 75 | | 15 | 15 | 15 | 16 | 4 |
| 36 | | ANANT KUMAWAT | | 42,75 | 22,75 | 15 | 6,0 | 6,0 | 6,0 | 15 | | | | 3,5 | 7 | 0 | 6.25 | 20 | -4 | -4 | 4 | - 4 | 4 | 85 | 85 | 17 | 17 | 57 | 17 | 1 |
| 37 | | ANDRET AGRAWAL | | 30,25 | 18.25 | 9 | 3.0 | 310 | 3.5 | 13 | 4.5 | 4.3 | 4.3 | | 0 | | 7.26 | 12 | 2.4 | 2,4 | 2,4 | 2,4 | 2.4 | 76 | 76 | 15 | 15 | 15 | 16 | 4 |
| 38 | | ANIMESH SHARMA | | 364675 | | 12 | 4.0 | 4.0 | 4.0 | 14 | - | - | 4.7 | 745 | 7 | 8 | 5,675 | 20 | 4 | 4 | 4 | - 4 | 4 | 75 | 79 | 15 | 15 | 15 | 15 | 4 |
| 39 | | ANJUL SHARMA | | 29,75 | 15,75 | 11 | 307 | 3.7 | 3.7 | | | 2.3 | | - 0 | | 0 | 6.75 | 14 | 2,5 | 2,8 | 2,8 | 2.8 | 2.8 | 50 | 50 | 13 | 13 | 13 | 13 | 4 |
| 40 | 0905CS191040 0905CS191041 | | | 25,375 | | 7 | 2.5 | 2.5 | 2.3 | | 0.0 | | -0 | 0 | | 0 | 0,875 | 11 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 100 | 95 | 13 | 13 | - 53 | 13 | 4 |
| 41 | | ANKUR GUPTA | | 35,25 | 18,25 | 14 | -0 | 47 | 47 | | 3.0 | 3.0 | 3.0 | 0 | | 0 | 6.75 | 17 | 3,4 | 3.4 | 3,4 | 3,4 | 3.4 | 80 | 80 | -17 | 17 | 37 | 17 | 4 |
| 42 | 0905C8191042 | | | 37,25 | 21,25 | 16 | 5.3 | 5.3 | 5.3 | | 100 | -34 | -30 | 725 | | 8 | 5.76 | 16 | 3.2 | 3.2 | 5,2 | 5,2 | 3,2 | - 00 | 95 | -1/- | 17 | | 17 | 4 |
| 9.0 | | ANSH MISHRA | | 34.25 | 18-23 | 13 | 43 | 4.3 | 43 | 100 | - | | | - 6 | 0 | - 0 | 9,75 | 16 | 32 | 2.2 | 3,2 | 3,2 | 3.2 | 100 | - 60 | E 7 | -7 | 4-37-3 | 17 | 4 |



| 5 10 | 905CS191045(ANUJ GARG | 24,5 12,5 | 7 | 2.3 | 2.3 | A. | 7 1 2 | 3 23 | 2.2 | 0 0 | 0 65 | 19 24 | 2.4 2. | 4 24 | 2.4 | 55 | 65 13 | 9 9 | 100 |
|------|------------------------------|---------------|------|------|-------|----------|---------|--------|---------|-------------------|----------|--------|----------|--------|-----|-------|---------|------------|-----|
| . 1 | 905CS191046[ANUJ SHARMA | 33 17 | 11 | - 20 | | Ü | 12 8 | .0 4.0 | 4.0 | | 0 5,5 | 16 3.2 | 3.2 3. | | | 75 | 75 54 | 18 18 | 10 |
| | 905CS191047 ANUPAM DUBLY | 35 13 | 14 | | | ō - | 0 0 | 0.0 | - | | 8 6 | 20 4 | 4 2 | 1 4 | 4 | - | | 17 17 | 17 |
| | 9905CS191048TANUSAR SINGH | 34.5 19.5 | 11 | | | ŏ | - N | 3 53 | - 33 | 0 8 | | 20 7 | 3 1 | 1 3 | 3 | - 100 | 95 17 | | - |
| | 995CS191049 ANUSHKA | | | | | | 10 0 | 2 22 | _ | | 8 6 | 16 3 | 3,6 3, | | | 100 | - 17 | 10 10 10 | |
| | 905CS191U5U APARNA VERMA | | 18 | | | UP . | -12 0 | 0.0 | 9.0 | | 9 4 | | | | | 80 | 00 17 | 17 17 | 30 |
| | | 35.5 19.5 | 14 | | | | 30 D | 0.0 | 3.0 | 6 8 | 8 5 | 16 3.2 | 3.2 3. | | | - 86 | 05 17 | 17 17 | 37 |
| | 995C8191051 APOORVA | 40,5 21,5 | | | | U | 13 4 | 3 43 | 4.0 | | 0 5 | 19 3,8 | 3,8 3, | | | 80 | 90 19 | 19 19 | 19 |
| | 905CS191052 APURVA MATHUR | 40.75 21.75 | | | | 1.0 | 35 5 | JD 5JD | 5.0 | 5.5 9 | 8 5,75 | 19 328 | 3.8 3. | | | 95 | 95 19 | 19 19 | 19 |
| | 905CS19105S ARSHAD KHAN ZAEE | 41.75 20.79 | | - 45 | 4.7 | | 16 5 | 3 53 | 100 | 725 7 | 8,75 | 18 3.6 | 3.0 3. | 0 34 | 3.0 | 100 | 85 17 | 17 17 | 17 |
| 4 0 | 905CS191054 ARYAN PANDLY | 30,625 14,62 | 5 15 | 5.0 | 5,0 6 | UD | - 0 | .0.0 | 0.0 | 4 | 8 7,125 | 16 3.2 | 3.2 3. | 2 8,2 | 3,2 | 85 | 85 17 | 17 17 | 100 |
| | 9905CS191056[ASHISH ARORA | 40 22 | 12 | | | Ü | 37 8 | 7 5.7 | 3.7 | 8 8 | | 18 3.6 | | 0 3.0 | | 100 | 05 17 | 12 12 | - |
| | 905CST91056 ASHEH SHARMA | 34 16 | 14 | | | ō | -11 - 7 | 7 27 | - | | 3 3 | 18 3,6 | | 8 3,8 | | - 20 | 95 - 17 | | - |
| | 905CS191057 ASHUTOSH SINGH | 34 10 | | | | | | 2 0 | _ | 100 0 | 0 4 | 18 952 | 20 0 | 20 000 | 9/9 | 00 | 90 17 | 17 31 | - |
| 27 6 | | | - 0 | | 0.0 | 10 | | _ | _ | | | 2 | | | - | | - 0 | 0 0 | -32 |
| | 905C8191058 ASTHA GUPTA | 40.5 21.5 | | | | 0 | 35 5 | 0 5.0 | 5.0 | 8,5 g | 0 7 | 19 3,8 | 3,8 3, | 8 3,8 | 3,8 | 80 | 85 17 | The Street | 107 |
| | 905CS191059[ATISHAY | 40,125 22,12 | 13 | 4.3 | 4.3 | . | 25 5 | JD 5JD | 0.0 | 0 | 8,125 | 18 3.5 | 3.6 3. | .6 3.6 | 3,6 | 75 | 70 16 | 15 16 | 16 |
| 50 0 | 2905CS191060[AVIHAL HWARI | 38.25 19.25 | 14 | 40 | 4.7 | 0 | 54 4 | 7 4.7 | - 77 | 0 8 | 8 5,25 | 19 3.6 | 3.0 3. | .0 3.0 | 3.0 | 95 | 95 19 | 19 19 | 19 |
| 51 0 | 905CS191051 AYUSH GANGE. | 30,75 14,78 | | | 3.3 3 | ÚS. | 52 4 | 0 4.0 | 4.0 | 4 8 | 3,75 | 16 3.2 | 3.2 8. | 2 8.2 | 3.2 | 76 | 75 15 | 15 15 | - |
| | 905CS191062 BHARAT RATHORE | 36,525 17,62 | | 2.7 | | 2 | 11 9 | 7 37 | - 17 | | 8 8,125 | 19 3.6 | 3.0 3. | | | 105 | 85 12 | 22 22 | - |
| | 905CS19106S DEV MITTAL | 27,5 15,5 | | | | Ō. | -11 - 7 | 7 77 | - | - | 0 0 163 | | 2.4 2. | | | - | 34 44 | 18 18 | - |
| 4 0 | 905CS191068 DEVANSH JHA | 250 190 | 13 | | | | | 7 | | 50 | 2 | | | | | 10 | 13 | 19 1 19 | 19 |
| | | 38,525 19,62 | | | | S. | -23 3 | 3.1 | | 725 6 | 9 7,425 | 19 3.6 | 3.8 3. | | | 00 | 90 17 | 17 | 11 |
| | 905C8191065 DIKSHANT KUMAR | 19.75 7.75 | | | | UP . | - 0 | 0.0 | 9.0 | 0 | 3,25 | 12 2.4 | | 4 2.4 | | 100 | 99 13 | 13 13 | -13 |
| | 905C5191066 DINKAR PUR | 40,375 21,37 | 5 13 | | | | 34 4 | J 4J | 4.7 | | 6 INCM | 19 3.8 | 3.8 3. | 3.8 | 3,8 | 855 | 85 17 | 17 17 | 117 |
| 57 0 | 9935CS191067 DIVAS GUPTA | 18 6 | 6 | 2.0 | 220 3 | 2.0 | 6 2 | 0 20 | 2.0 | D | 0 | 12 24 | 2.4 2. | A 2.4 | 2.4 | 66 | 05 13 | 13 13 | 13 |
| | 905CS191068 DIVYA MISHRA | 40,375 21,37 | 5 0 | 22 | | 0 | 24 6 | 3 0.3 | 4.3 | 8.5 9 | 0 7,475 | 19 3,8 | 3,8 3, | | | 85 | 85 17 | 17 17 | 17 |
| | 905CS191068 UNYANSHU GUPTA | 38,375 19,37 | | 700 | | ŭ | - T | 0 4 | 4.0 | 180 | 0 223 | | | 0 3.0 | | - 10 | 05 12 | 27 27 | - |
| | 005CS101070 DNYANSHU GUPTA | | | | | | | - | | | 7,375 | | | | | 100 | 97 | | # |
| | | 42,625 23,62 | | | | U) | - 0 | 0.0 | 200 | | 9 7,625 | 19 3,8 | 3,8 3, | | | 00 | 99 17 | 17 17 | 200 |
| | 905CS191071 DIVYANSHU | 30,575 20,87 | 12 | | | | 25 5 | U 5.0 | 0.0 | 6 8 | | 19 3.6 | | .8 3.8 | 3,6 | 000 | 00 17 | | 11 |
| | 905C8191072[ESHA GUPTA | 40.75 22.73 | 12 | 440 | | U0 | 18 0 | 0.0 | 0.0 | 7-5 7 | 0 7,75 | 18 3-6 | 320 3. | 0 3/0 | 3.6 | 160 | 85 17 | 17 27 27 | 37 |
| 3 0 | 905CS191073[FA[SHAL NAZ]R | 40,25 21,25 | 14 | - 40 | 47 4 | 0 | 13 4 | 3 43 | 4.3 | 6 a | 8 7.75 | 19 3,5 | 3,8 3, | 8,8 | 3,5 | 85 | 85 17 | 17 17 | En. |
| | 9905CS191074 FAIZAN AHMAD | 27.75 12.79 | | | | L3 | 8 2 | 7 27 | 27 | 4 | 8 3.75 | 15 3 | 3 3 | 3 3 | 3 | 76 | 75 16 | 15 15 | 14 |
| | 905CS191075 GAHANA GUPTA | 35,75 18,70 | | | | Ü. | 5 7 | 0 4.0 | - | | 9 7,75 | 17 3.4 | 3.4 3. | 4 84 | 3.4 | - 10 | 95 17 | 3 3 3 | - |
| | 905CS191076 GARINA GUPTA | 39,375 21,37 | | 520 | | | | 5 50 | | | 7,10 | | 3.6 3. | | | 100 | N 17 | ## W | - |
| | | | | | | 20 | | | | | 0.375 | | | | | - | | | ш |
| | 905C8191077 GARIMA GUPTA | 39,125 21,12 | | | | U | 20 5 | 10 Oct | 9.0 | 6,6 5 | 0 7.625 | 18 3,6 | 3,6 3, | | | 70 | 19 15 | 15 15 | 15 |
| | 905CS191078 GAURAV SRIVAS | 35 18 | 9 | | | U0 | 22 3 | J 3.7 | 3.7 | 5.5 9 | 8 8 | 17 3.4 | 3.4 3. | | | 0.0 | 00 17 | 17 17 | 17 |
| | 2905CST91079 CAURVI SINCH | 364675 22.67 | 15 | 100 | | 23 | 25 5 | 0 5.0 | 5.0 | 6 9 55 9 | 7 7,375 | 16 3.2 | 3.2 3. | | 3.2 | 85 | 90 19 | 19 19 | 19 |
| 80 C | 905CS1910E0 GAUTAN SAHU | 39,5 23,5 | 11 | 8,0 | 6,0 6 | CO CO | 34 4 | 7 47 | 4.7 | 5.0 8 | 8 7.5 | 16 3.2 | 8.2 8. | 2 8.2 | 3,2 | 85 | 85 17 | 7 17 | 17 |
| | 905CS1910F1 HARSH BHARGAVA | 32.75 18.79 | 177 | | | ō - | 11 / | 3 43 | 4.1 | 0 | 3.74 | 14 2.6 | 2.0 2. | | | 73 | 75 14 | 15 15 | 100 |
| 2 0 | 905CS191082 HARSH JAIN | 37,75 18,71 | | | | õ | | 7 57 | 5.7 | | 0 7/2 | 19 338 | | 8 3,8 | | - 22 | 95 35 | 45 1 15 1 | |
| | 905CS1910E0 HARSH RAI | 36,875 19.87 | | | | | | 7 77 | - | | 9 425 | | | | | - 00 | | | - |
| | | 20,070 19,07 | | | | 9 | -1 -3 | - | | 5.0 6 | 7 7,375 | 17 3.4 | | A 5.4 | | - 80 | - | | Ш |
| | 905C8191084 HARBHIT | 35-625 18-62 | | | | UP . | | | 101 | 7,5 6 | 7,125 | 17 3.4 | 3,4 3, | | | 80 | 99 17 | 17 | 17 |
| | 905CS191GES HARSHITA | 42 24 | 16 | | | 1.0 | 27 5 | U 5.7 | 2.7 | 5.5 8 | 9 8 | 18 325 | | 8 3.6 | | 66 | 85 17 | | |
| | 9905CS191086 HIMANGI SHUKLA | 31.125 15.12 | | | | LO . | - 0 | 0.0 | 0.0 | 3.5 7 | 7,625 | 16 3.2 | 3.2 3. | | | 05 | 95 17 | 17 17 | 17 |
| 87 0 | 905CS191067 HIMPANSHU DPQT | 40,875 22,87 | | | 4.8 | G | 38 0 | JD 8JD | 3.0 | 7 7 | 7 7,375 | 18 3,6 | 3,6 8, | 8 8,8 | 3,6 | 86 | 85 17 | 7 | 17 |
| | 905CS191088 JANHVI GUPTA | 40 23 | 12 | | | Ö 💮 | 22 0 | 3 63 | 4.1 | 6 7 | 0 7.5 | 17 3.4 | | 4 3.4 | | 180 | 95 17 | 12 12 | 17 |
| | 905CS191089 JATIN RATHOR | 37 21 | 11 | | | Ŭ | | 7 67 | 5.7 | 725 0 | 1 2 | 16 3.2 | 32 5 | 2 32 | | 20 | 95 67 | 2 2 | - |
| | 905CS191090 JAYESH KATARE | | | | | | | 5 30 | | | 1 100 | | 20 2 | | | - 00 | | | - |
| | | 36,375 18,37 | | | | O . | | 30 | 300 | 725 7 | S 1,375 | 18 3.5 | 3.6 3. | | | 00 | 90 17 | 17 17 | 100 |
| | 905C8191091 JONES SAJAN | 37-5 19-5 | | | | G. | -4 | | 100 | 6.5 6 | 7 6.5 | 10 3,6 | 20 3 | 9 3,9 | | 10 | 19 15 | 15 15 | 15 |
| | 905CS191092 JOV[TA JADEAV | 39,375 20,37 | | | | UD . | 36 5 | 3 9.3 | 8.3 | 7 8 | 8 7,875 | 19 328 | | 8 3,8 | | 889 | 85 17 | 17 17 | 17 |
| | 0905CS191093[KAPIL VERMA | 26.25 14.25 | 12 | 4.0 | | ω · | 23 4 | 3 43 | 4.3 | 4 | 8 1.75 | 12 2.4 | 2.4 2. | 4 24 | 2.4 | 75 | 75 15 | 15 15 | |
| 2 0 | 905CS191094 KEERTI SAHU | 40 21 | 13 | | | Ö 💮 | 34 2 | 7 47 | 4.7 | 7 6 | 0 75 | 19 3,8 | 3.8 3 | 8 38 | 3.8 | 85 | 85 17 | 17 17 | 17 |
| | 905CS191095 RETAN SINGH | 32,25 18,25 | | 5.0 | | ŭ | - | 0 30 | 10 | 25 | 2 22 | 14 2.6 | 2.0 2. | 0 2.0 | 2,8 | - 10 | 05 12 | 27 27 | - |
| | 2905CS191096 KHUSHBOO YADAV | 33,375 15,37 | 12 | | | ŭ | | 7 97 | 4.7 | 7 6 | 2.00 | | 3,6 3, | | | - 2 | 95 17 | | - |
| | | | | | | | - 1 | - 1 | | | 0 6,375 | | | | | -00 | 47 | 17 17 | - |
| 7 0 | 905CS191067 KHUSHI CHANDIL | 30.75 20.75 | 15 | | | 1.0 | 20 3 | 3 33 | 0.3 | | 8 8.26 | 19 3.8 | 3.8 3. | | | | 0 0 | 0 0 | - 0 |
| | 905CS19108B KHUSHI KAU | 42,625 24,62 | | | | 20 | 36 5 | 2 53 | 9.0 | 6.5 6 | 7 7,625 | 18 3-6 | 320 33 | | | 80 | 90 19 | 19 19 | 19 |
| | 905CS191099 KHUSH SON | 38,125 21,12 | | 4.3 | | US B | 25 5 | JD 5.0 | 5.0 | 5.5 8 | 9 7,125 | 17 3.4 | 3.4 3. | A 3.4 | | 85 | 80 17 | 17 17 | 17 |
| 0 0 | 9935CS191100[4]KII | 37.5 18.5 | | 2.7 | | 27 | 11 7 | 7 3.7 | 17 | 725 6 | 9 9 | 19 3.6 | 3.0 3. | 8 3.0 | 3.0 | 28 | 95 19 | 19 19 | 10 |
| | 905CS191101 KRISHNA PRATAP | 42,25 25,20 | | | | 3 | 29 0 | 3 0.3 | 4.0 | 6 a | 9 2.75 | 17 3.4 | | A 3,4 | | 85 | 85 17 | 17 17 | |
| | 905CS191102 KSHITIZ CHAUHAN | 40,375 21,37 | | | | ŏ | 10. | 3 32 | 4.3 | 2 0 | 2 8.275 | 19 3.6 | | 3 3.0 | | 100 | AS 12 | 27 1 27 | |
| | 2005CS101103 KUNAL SHARMA | | | | | | | 1 | | | 0.373 | | | | | - 2 | 95 17 | | # |
| 7 1 | 905CS19110K KUNAL SIFIARE | 30,75 12,75 | 0 | | | UP | | 2 23 | | 7,5 7 | 0 625 | 18 3.6 | 3,6 3, | | | 90 | 90 17 | 17 17 | 1 |
| | | 38,25 22.29 | | | | 2.3 | 29 4 | J 4.7 | | 7 6 | 8 7.26 | 16 3.2 | | 2 3.2 | | 000 | 00 17 | 17 17 | 10 |
| | 2905CST91105 MAYANK PHATAP | 33,375 15,37 | | | | <u> </u> | 0 3 | 2.0 | 2.0 | 7-5 7 | 0 5,875 | 18 3.6 | 320 3 | | | 86 | 90 19 | 19 19 | 19 |
| | 905CS191106 MEGHNA MISHRA | 37,75 19,75 | 11 | 30 | 3.7 | U I | 15 9 | .0 5.0 | 5,0 | 725 7 | 9.5 6.75 | 18 3.5 | 3,6 3, | 8 8,6 | 3,6 | 85 | 85 17 | 17 17 | 117 |
| | 9905CS191107 MENIKA RAJPUT | 43,875 24,87 | | | | Lib | 20 8 | 7 67 | 4.7 | | 0 5,875 | 10 3.6 | 3.0 3. | | | 20 | 95 19 | 10 10 | 1 |
| | 905CS19110B MOH ADNAN | 32,75 14,71 | | 1 73 | | ũ. | | 0 20 | 2.0 | | | 10 3.6 | 3.6 3. | | | 100 | 95 45 | 47 13 1 | - |
| | 905CS19T109 MOHT GUPTA | 35.25 16.25 | | 100 | | | 9 | 1 100 | | N 38 N 2 | 0 5.75 | | | | | - | - 17 | | 4 |
| | | | | | 240 | 2 | 10 3 | 20 | Shell . | 8.25 7.6 7.5 7 | 9 5,76 | | 2.0 3. | | 3,6 | 80 | 17 | 17 17 | TI. |
| | 905C8191110 NAGESH MUDGAL | 38.25 19.25 | | | | v | - | 7 47 | 4.7 | 730 7 | 0 6,75 | 19 3,8 | 3,8 3, | | | 80 | 80 17 | 17 17 | 17 |
| | 905CS191111 NANDINI SUN | 37.75 18.79 | | | | U) | 12 2 | UD 4.0 | 4.0 | 7.5 7.5 | 7.5 6.75 | 19 3.8 | 3.8 3. | | 3,8 | 15 | 70 16 | 15 16 | 15 |
| | 9905C8191112]NHARIKA GUPTA | 30.5 16.5 | | 3.0 | 320 3 | 100 | | | | 7.5 8 | 7 5.5 | 14 2.6 | 2.0 2. | 8 2.0 | 2.0 | | | | |



| 11 | | | | | | | | | | | | | | | | | | _ | _ | | | | |
|--|------------|--|--------|---------|------|------|-----|------|------|--------|-----------|----------|-------|---------|--------|---------|--------|----------|----------|--------------|--------|----------|-----------|
| Tell | 113 | T0905CS191113INISHANT MEENA | 34.6 | 18.5 | 44 | 1.45 | 4.0 | 4.5 | - 58 | 4714 | 47 47 | 0 1 0 | - 0 | 6.6 | 10 3.5 | 32 3 | 2 52 | 3.5 | 50 | 65 . | 2 1 12 | 100 | 40 40 |
| 13 | 117 | | | | 12 | | | | | - | - | | | 0.0 | | | | | - 00 | - | | | 13 18 |
| The | 1.14 | | | | 12 | | | | 12 | 4.0 | 40 | | 0 | 6 | | | | | 75 | 79 7 | 3 13 | 12 7 | 15 15 |
| Tell | 115 | 0905CS191115]PARTH AGRAWAL | 37 | 19 | 14 | - 40 | 407 | 40 | - 12 | 4.0 | 4.0 | 4 0 | 8 | - 0 | 18 3,5 | 3,6 3, | 8 8,6 | 3,6 | 80 | 85 9 | 7 77 | 17 | 17 17 |
| 11 0000000000 0000000000000000000 | 116 | 0905CS191116ICM PATE | 18.5 | 9.5 | | 0.3 | | 0.5 | - | 2.0 | 2.0 2.0 | 0 0 | - O | - | 2 1.6 | 10 1 | 0 1.0 | 4.8 | 100 | 73 7 | 4 16 | 2.6 | 10 10 |
| Tell | | | | | _ | | | | | - | | | | - | | | | | _ | | | | 19 1 19 |
| 137 00000000 120 | | | | | | | | | 37 | W | | | 7 | 5 | | | | | 70 | 70 5 | 5 15 | 15 1 | 15 15 |
| 19 | 118 | 0905CS191119]PRAJJWAL | 35 | 21 | 15 | 540 | 5.0 | 540 | - 37 | 501 | 5.7 | 7.25 6 | 8,5 | - 6 | 14 2.0 | 2.0 2.0 | 8 2.6 | 2.0 | - 6 | 33 1 | 7 17 | 17 | 17 17 |
| 23 00000589172 PRACIAC CUPITA 4(2) 2(2) 11 2 2 2 2 2 2 2 2 | 110 | DUDGECK 101120 PRANTE SHARWA | 4175 | 22.75 | 4.6 | 5.0 | 5.0 | 5.6 | - 17 | 57 / | 57 57 | 7.75 7.4 | | 4.74 | 10 3.6 | 30 3 | 9 39 | 2.0 | 95 | 95 / | | | 47 47 |
| 171 172 173 174 174 175 | | | | | | | | | _ | | - | | | 210 | | | | | - | - | | | 12 12 |
| 123 OSCIGNIT PROPERTY PROPE | | | | | 18 | | 4.0 | | 10 | 6.0 | 0.0 | 72/5 6 | 9,0 | 9.70 | | | | | 000 | 99 1 | 7 17 | 37 | 17 12 |
| 123 OSCIONINI PROPERTY PROP | 121 | 0905C8191122]PHANJAL | 36,25 | 18,25 | 6 | 2.0 | 220 | 2.5 | - 17 | 57 | 57 57 | 7.5 8 | 7 7 | 6,75 | 18 346 | 3.0 3.4 | 0 3/0 | 3.0 | 163 | 85 7 | 7 17 | 57 | 17 17 |
| 231 | 122 | DOOSES 491123 PRIASHANT | 78.75 | 207 775 | 4.5 | 3.6 | 4.0 | 4.5 | | 6.5 | 50 50 | 7 77 | 6.6 | 2.32 | | 30 3 | 0 50 | 9.8 | | 95 | 4 | | 42 42 |
| 131 | | | | | 12 | | | | | 0.00 | 0.0 | 1 1,0 | 0,0 | 0.10 | | | | | 90 | 99 | | 37 | 11 11 |
| 32 002-05-07-12 PRIANCE COUPAN 15,15 17,15 10 | 1.23 | | | 10.75 | 9 | 340 | 3.0 | 340 | 39 | 5.0 | 5.0 5.0 | 5.25 6.5 | 4 4 | 5,75 | | | | 3.6 | 065 | 05 7 | 7 17 | 57 7 | 17 17 |
| 123 | 124 | 10905CS191125TPRATISHTHA | 35.75 | 21.75 | 46. | 5.5 | 5.3 | 6.3 | | 47 4 | 47 47 | | | A 75 | 14 2.8 | 2.8 2 | 8 28 | 2.8 | 100 | 95 4 | 4 | 120 | 10 10 |
| 13 | 175 | ngnerigagesee population | 30.76 | | | | | | | 4.5 | 19 19 | | | 2.00 | | | | 2.5 | | | | | 12 II |
| Total | | | | 20213 | | | | | - 10 | - | 9 9 | | | 0.10 | | | | 3,0 | 10 | 19 | 2 12 | 72 1 | 10 15 |
| 125 | 1.26 | 0905C8191128 PHINGE GUPTA | 33-5 | 17.5 | 12 | 4.0 | 4.0 | 4,0 | 12 | 4.0 | 4.0 | 0 0 | 0 | 5.5 | 16 3.2 | 3.2 3 | 2 32 | 3,2 | 66 | 95 7 | 3 13 | 13 | 13 13 |
| 125 | 127 | 0905CS191129[PR]YANSHU | 58,375 | 17,375 | 13. | 4.8 | 4.3 | 433 | 10 | 3.3 | | 5.5 8.5 | 8.5 6 | 9.825 | 19 3,8 | 3.8 3. | 8 3.8 | 3.8 | 100 | 35 7 | 2 22 | 22 | 27 27 |
| 139 | 178 | PROPERTY AND AND ADDRESS OF THE PARTY OF THE | 26.26 | | | | | | _ | 5.5 | 3.0 3.0 | | | 200 | | | | | - | - | _ | _ | |
| 131 | | | | | 15 | | | | | | 20 | - 0 | | €10 | | | | 348 | - 100 | - | | 37 | 17 17 |
| 131 | 129 | | | 29,875 | 15 | 6.0 | 6.0 | 6.0 | 15 | 6,0 | 6.0 6.0 | 32/5 0 | 7.5 5 | 5.87.5 | 14 2.8 | 2,8 2, | 8 2.8 | 2.5 | 5.0 | 80 9 | 7 17 | 57 7 | 17 17 |
| 131 | 130 | 0905CS191132[PULK]T SHARWA | 30 | 21 | 14 | 45 | 2.7 | 4.7 | 57 | 5.7 | | 7.5 8 | - 7 | 5.5 | 18 3.6 | 3.6 3. | 6 3.6 | 3.6 | | 95 7 | 9 19 | 10 | 10 10 |
| 131 - 0000000000000000000000000000000000 | 122 | | | | | | | | | 4.0 | 40 40 | | | 200 | | | | | - | - | - | | 13 TH |
| 131 | | | | | | | | | | -00 | -U | | | F-10 | | | | | -00 | 90 1 | - 1/ | 100 | 12 |
| 131 | 132 | | | | 14 | 1.0 | 4.7 | 427 | 16 | 4.0 | 4.0 | 4.25 8.5 | 0 | 6,76 | 16 3.2 | 3.2 3. | 2 3.2 | 3.2 | 00 | 00 9 | 7 12 | 1 17 1 | 17 17 |
| 131 | 133 | 0905C8191135TRANVI ARORA | 35,375 | 21,375 | | | | | 18 | 14.1 | 5.0 | | | 5.875 | | | | 2.8 | 85.1 | 95 4 | 9 12 | 12 | 19 10 |
| 131 00000000000000000000000000000000000 | | | | | | | | | | 97 | - | | | 2.35 | | | | 9.4 | | | | 1 | 3 1 12 |
| 131 | | | | | 11 | | | | | 0.0 | 3.1 | | | 9.10 | | 20 37 | 0 0,0 | 0.0 | - | 99 1 | 17 | 17 | 17 17 |
| 156 00000018191400181140401 1APM | | | | | 4 | | | | 3 | 1.0 | 120 120 | | 0 | 5,75 | | 3 3 | 3 | 3 | - 30 J | 99 9 | 1 11 | 4 33 1 | 11 11 |
| 131 090000819144 | 136 | 090508191139 RISHABH JAN | 24 875 | 55 975 | - 5 | 0.7 | 6.7 | 0.2 | - | 27 | 27 27 | 0 0 | 0.0 | 2.50 | | 28 2 | 8 28 | 2.8 | - 50 | 55 3 | 4 44 | 100 | 44 44 |
| 135 | | | | | - 4 | | | | - | | | | 9 8 | | | | | 2.0 | | | | | |
| 130 00000000000000000000000000000000 | | | | | 15 | | | | 13 | 43 . | 43 | 7.5 8 | 7 9 | 5.75 | | | | 2.0 | 88 | 05 1 | 7 17 | 37 . | 17 17 |
| 130 0000008191148 00011 18000 132,75 18000 | 138 | 0005CS101144]RIYA PANDEY | 36,75 | 22,75 | 15 | 5.0 | 5,0 | 6.0 | - 17 | 0.7 | 5.7 | 8.5 6.5 | 0.5 | 6,75 | 14 2.8 | 2,8 27 | 8 2,8 | 2.8 | 86 | 85 4 | 7 12 | 57 | 17 17 |
| 141 000000819149 PARTA RELLY 38,75 21,75 18 10 10 10 10 10 10 10 | 130 | 0905CS191545 ROHT PRAJAPATI | 38.35 | | | | 3.7 | | 58 | 6.5 | 4.3 | | | 6 76 | | | | 38 | - | 45 4 | 2 32 | 100 | 12 12 |
| 141 CODECRIPTED SEASON FROM SEASON SEASO | 1.33 | | | | | | | | - 15 | 3.0 | | | | 0.10 | | | | | 00 | 00 1 | 7 17 | 37 | 27 27 |
| 141 CONSISTENTIAL PROPERTY CONTINUE NOT A CON | 1.40 | | | 19-75 | 15 | 5.0 | 5.0 | | - 11 | 327 | 3.7 | 3 0 | 6 6 | 5,75 | 14 2-8 | 2-8 27 | 8 2.8 | 2.8 | 70 | 79 9 | 3 13 | 15 | 15 15 |
| 143 0990CS1911149 SACH TEPATH | 141 | 0905CS191147 RYAN RILLY | 38,75 | 20,75 | | 5.0 | 5.0 | 5.5 | 13 | 4.8 | 4.3 | 6 a | | 4.75 | 19 3.5 | 3.6 3. | 8 88 | 3.6 | 200 | 85 7 | 200 | 37 | 17.0 |
| 144 | | PROPERTY OF THE CASE OF THE CA | | | | | | | 500 | - | 13 13 | | | 20.00 | | | | | - | - | _ | | |
| 144 | | 0000CG101146 SAHLTRPATH | | | | | | | 10 | 20 . | 9 3 | | 0 | | | _ | _ | | | | C 17 | 37 | 17 17 |
| 145 | 143 | | 39,5 | 21.6 | 16 | 0.3 | 6.8 | 0.3 | 37 | 607 T | 6.7 | 8 6 | 0 | 5 | 18 3.5 | 3.6 3.0 | 8 88 | 3,6 | 80 | 85 5 | 7 37 | 57 | 17 17 |
| 145 | 144 | [0905CS191150]SANKALP GUPTA | 41,375 | | 18 | 8.0 | 6.0 | | 37 | 57 | 5.7 5.7 | 6.5 8 | 9 8 | 5.875 | 18 3.5 | 3.6 3 | 6 3.6 | 3.6 | - 23 J | 95 * | 9 19 | 19 | 19 16 |
| The | | | | | | | | | _ | 0.0 | 0.0 | | | 0.00 | | | | | 100 | - | | | - |
| 147 MARCHANICAN CARTS 1475 2475 17 17 17 17 17 17 17 | | | | | | | | | 10 | 0,0 | 0.0 | | | 6.75 | | | | | 80 | 80 1 | 7 17 | 17 7 | 17 17 |
| 148 | | | | | 18 | | | 5,3 | 16 | 5.3 | 5.3 5.3 | 4 0 | 8 8 | 6,76 | 17 3.4 | 3.4 37 | 4 3.4 | 3.4 | 50 | 85 7 | 7 17 | 17 | 17 17 |
| 148 | 147 | 0905C8191153[SARANSH CARD | 41.75 | 23,75 | 17 | 100 | 100 | 100 | - 17 | 5.7 | 5.7 | 7 6 | 0.00 | 6.75 | 18 346 | 3.0 3.0 | 0 3.0 | 3.6 | | 95 4 | 2 12 | 57 | 17 17 |
| 14 0000CS191116 SNR HAX AVX | | | | | - 11 | | | | _ | 0.0 | 0.0 | | | 2.75 | | | | | | | | | 23 1 25 |
| State | | | | | | | | | 160 | 0.00 | 0.0 | | | 0.70 | | | | | 00 | 99 | (1/ | 30 10 | 10 1/ |
| 151 CONSIGNATION CONTROL CON | 149 | 0906CS191166[SARTHAK JAIN | 41.25 | 23,25 | 16 | 5.3 | 5.5 | 5.3 | | 57 1 | 5.7 5.7 | 4.5 0 | 9 8 | 5,75 | 18 3.6 | 3.6 37 | 0 3.0 | 3.6 | 23 | 95 7 | 2 12 | 19 | 10 10 |
| 151 0930CS191130 STANTUN TUMAN 37 22 19 52 50 50 51 52 50 52 51 52 52 52 52 52 52 | 150 | 090508191156[SHANTANU | 27 875 | 15,975 | | 47 | 4.7 | 47 | - 6 | 2.0 | | | | 4 1 2 5 | 10 74 | 74 7 | 4 24 | 24 | - | 75 4 | 4 14 | 44 | 45 45 |
| 152 0098CS191186 SFASHANK YADAW 23 13 6 20 20 23 23 24 24 25 5 5 5 5 5 5 5 5 | 151 | | | | | | | | - 11 | 7.5 | 13 13 | | | - | | | | 3 | - | | 4 | | 13 13 |
| 154 0930CS191190 STASHWAT 25 12 7 23 23 23 19 23 23 23 24 25 25 25 25 25 25 25 | | | | | 15 | | | | 10 | 90 . | 00 00 | 9 9 | | 8 | | 0 0 | - 3 | - 2 | - 00 | 00 | 4 | 100 | 17 17 |
| 154 0090CS191110S 541ASHWAN 25 12 7 22 23 23 23 24 25 25 25 25 25 25 25 | 152 | 0905C8191158 SHASHANK YADAV | 23 | 13 | - 6 | 2,0 | 2.0 | 2.0 | 13 | 43 (| 43 | 2,5 5 | 0 | 3.5 | 10 2 | 2 2 | 2 | 2 | 665 | 65 7 | 3 13 | 13 | 13 13 |
| 15 | 153 | 0905C5191159ISHASHWAT | 25 | 12 | - 7 | 2.3 | 2.3 | 2.00 | 10 | 3.3 | 33 33 | 7 6 | - 0 | 9.6 | 19 76 | 78 7 | 8 28 | 28 | 100 | 70 1 | 45 | 45 | 15 15 |
| 155 | | | | | - 40 | | | | 53 | 77 | 73 | | | 0.0 | | | | | - | | | | 10 10 |
| 137 OSSIGNATIVES SERVICIAN SPECIAL 1 | | | | | | | | | | ~ . | 9 9 | - | | 2 | | 2 2 | - 3 | -3 | 79 | 19 | 2 12 | 12 7 | 10 15 |
| 15 | | | | 21,75 | 16 | | 6.8 | 6,3 | | 67 1 | 6.7 | 2.0 7 | 0 | 5.25 | 15 3 | 8 3 | 3 | 3 | 70 | 70 1 | 5 15 | 15 7 | 15 15 |
| 157 0000CS1911150 SHYAM AUCHA | 156 | 0905CS191162ISH KHAR SINGHAL | 41 | 26 | 16 | 5.0 | 5.0 | 5.0 | 18 | 6.0 | | 9 0 | - 0 | 0.5 | 16 3 | 3 3 | 3 | 3 | 100 | 95 7 | 9 19 | 50 | 10 10 |
| 158 0900CS1911M SHVAM SHOP 34 19 19 40 40 40 40 18 80 80 80 10 2 2 2 2 2 2 2 85 85 | 127 | PROPERTY THE SEX PORCES OF A DISTRESS | | | | | | | _ | 0.0 | 0.0 | | | 200 | | | | - | | | - | | - |
| 158 (000000000000000000000000000000000000 | | | | | | | | | | 0.0 | | | 9 | /- ro | | 0 0 | | - 3 | 00 | 00 | 7 17 | 30 13 | 10 12 |
| 159 CONSISTENTIAL SHIPMAN 34 18 12 40 40 40 15 50 50 50 50 50 50 5 | | | | | 12 | | | | 15 | 5.0 | 500 500 | | 0 | 0 | 10 2 | | 2 | 2 | - 20 J | 99 1 | 1 11 | 4 11 1 | 11 11 |
| Fig. 0.000000000000000000000000000000000 | 150 | 10905C819116518HWAM SINCH | 34 | 19 | | 4.0 | 4.0 | 4.0 | 15 | 5.0 | 5.0 5.0 | | | 5.5 | | 3 3 | 1 3 | 3 | 85.1 | 95 4 | 2 52 | 57 | 17 47 |
| 161 0000CS191146 SHILEYANSH 32,52 21,25 11,63 33 34 34 34 34 34 34 | | | | | | | | | | 7.5 | 10 7 | 6 6 | | - | | | | 22 | | - | | | 10 10 |
| 162 0930CS191178 SHIRLY ANSIN 27.25 17.25 13 43 43 43 60 22 23 23 23 23 23 23 2 | | | | | | | | | | - 10 | - 4.3 | | | 6.00 | | | | 6.6 | -00 | 90 | 1 19 | 1 23 1 . | 18 |
| 162 0930CS191175 SHIRLI JANS 27.25 17.25 31 43 43 43 43 60 22 23 23 23 23 23 23 2 | 161 | | 36.25 | 21.25 | 10 | 3.3 | 3.3 | | 17 | 92 | - 57 | 4.5 9 | 0 | 7.75 | 16 3 | 3 3 | 3 | 3 | (B) | 80 0 | 7 17 | 1 17 1 | 17 17 |
| 15 | 162 | 0905CS191169[SHREYANSH | 27.25 | 17.25 | 13 | 4.3 | 4.8 | 4.3 | | 2.7 | 2.7 2.7 | 5.5 5 | 0 | 6.75 | 10 2 | 2 2 | 2 | 2 | 76 | 76 4 | 5 15 | - 15 | 15 45 |
| 15 15 15 15 15 15 15 15 | | | | | - 15 | | | | _ | 7.0 | 10 10 | 400 | | - | 40 4 | | | - | - | | | | |
| 153 0930CS191172 STUDRAM 32,25 21,25 39 53 53 53 53 53 53 5 | | | | | 10 | | | | | | - | / 5 | 9 | 7 | 10 3 | 2 3 | | -2 | 12 | | 2 12 | 1 12 1 | 19 15 |
| 15 0990CS191172 SHUBBAM 36,25 21,25 34 5.3 | 164 | 0905C8191171 SHRUII | 27,75 | 15,75 | 10 | 3,3 | 3.8 | 3.3 | 9 | 12 | 10 107 | 2,5 5 | 0 | 8,25 | 12 2,4 | 2,4 2, | 4 2,4 | 2.4 | 80 | 80 9 | 7 17 | 177 | 17 17 |
| 16 | 165 | 10905CS181172[SHUBHAM | 38.75 | 21.26 | 16 | 5.5 | 5.5 | | 10 | 5.3 | 5.3 5.9 | 5.5 0 | | 6.96 | 16 3 | | 3 | 3 | 100 | 85 4 | 2 52 | 12 | 17 17 |
| 157 0935CS191174 STUDIMAN SINGIA 117.5 5.75 1 | 152 | | | | | | | | 12 | 4.5 | 10 70 | | | 200 | | 1 1 1 | 1 3 | - | - 22 | 0.5 | | | ** |
| 168 0999C8191176 SHUBBANSH 22.5 16.5 14 47 47 47 47 47 15 15 15 15 15 15 15 1 | 196 | | | | 15 | | | | - 16 | - | | | | 200 | 10 4 | 3 3 | - 3 | -3 | 660 | - | | | 32 37 |
| 168 0939CS191175 SHUBBANSH 22.5 16.5 14 4.7 4.7 4.7 51 5.0 5.0 5.0 5 0 6 2 6 C2 C2 1.2 1.2 1.3 | 167 | | 11,75 | 5,75 | 1 | 0.3 | 0.3 | 0.3 | 3 1 | 1.0 | 130 130 | 0 0 | 0 | 3,75 | 6 12 | 12 12 | 2 1.2 | 1.2 | 55 | 20 2 | 1 11 | 11 | 11 11 |
| 150 | 168 | 0909CS191175[SHUBHANSH | 22,5 | 16.5 | 14 | 407 | 4.7 | 4.7 | 18 | 5.0 | 5.0 5.0 | | | 2 | 8 15 | | | 1.2 | 123 | 65 4 | 3 33 | 53 | 13 15 |
| 170 0000CS191177 SHUBH SHOPMARE 37.75 22.75 19 52 50 50 50 51 51 52 53 53 53 53 53 53 53 | | | | | | | | | - 10 | - | 50 50 | | | 100 | | - | | - 0 | | | | 4-12-1- | 77 HB |
| 171 | | | | | | | | | | 0.0 | 0.3 | 2 4 | | 5.70 | | 2 2 | 2 | 2 | 10 | 10 1 | 2 15 | 1 42 1 4 | 19 15 |
| 171 0000CS101178 BIDDHARTH 40 25 41 40 40 40 53 41 40 40 53 40 40 53 40 40 53 40 40 53 40 40 53 40 40 53 40 40 53 40 40 53 40 40 40 53 40 40 40 40 40 40 40 4 | 170 | | 37.75 | 22,75 | 15 | 5.0 | 5.0 | | 10 | 5.3 | 23 53 | 7 8 | 6 | 7.25 | 16 3 | 3 3 | 3 | 3 | 75 | 75 7 | 5 15 | 15 | 15 15 |
| 172 09355819170 503543 134 135 23 13 23 23 23 23 23 23 | 171 | 0905C8191178[SIDOHARTH | 40 | 25 | 18 | 6.0 | 5.0 | | 13 | 4.3 | 43 43 | 8 0 | 9 | 9.5 | 16 3 | 3 3 | 3 | 3 | 86.1 | 85 4 | 2 52 | - 52 | 17 47 |
| 173 0095C819118C SEALAN GUPTA 37.75 22.25 12 42 40 40 70 70 70 70 70 70 | | | | | | | | | - 10 | - | - | 5 9 | | 40 | | 2 0 | | - 3 | | | | | 3 I II |
| 174 | | | | | | | | | - 10 | 0.0 | - 0.3 | | | 10 | 10 3 | 9 9 | 3 | 3 | -00 | 90 | | 100 | 12 |
| 174 | | | | | 12 | | 440 | | - 17 | 5.7 | 5.7 | 7-5 6 | 9 | 7,75 | 15 3 | 3 3 | 3 | 3 | 165 J | 85 9 | 7 37 | 100 | 17 17 |
| 175 0950C8191182 SUMT BON 28 18 17 17 17 17 17 17 17 17 17 19 17 19 19 19 19 19 19 19 19 19 19 19 19 19 | 174 | 10905CS191181 SREHITPATURIYA | | | 45 | 5.5 | 5.0 | | 7 | 2.8 | 23 22 | 8 0 | | 6.00 | 10 78 | 28 3 | 8 28 | 24 | - No. 1 | 85 | 2 32 | 1 22 | 17 19 |
| 176 002003311185 SUNNY 2U 10,5 7 23 23 23 31 32 32 33 33 | 177 | | | | - 10 | | | | | - | 100 | 0 0 | | 200 | | 200 20 | 200 | 20.0 | - | | | | |
| 177 0900051911186 TANYA GUPTA | 1.75 | | | | 17 | | | | 14 | 400 | - U | 4 8 | 0 | 3.5 | | 2 2 | 2 | 2 | 100 | 100 1 | | | 17 17 |
| 177 0900CS1911MCTANYA GUPTA 35.35 20.35 19 33 33 32 4.0 4.0 4.0 9 9 9 9 5.05 16 3 5 3 3 3 56 85 77 17 17 17 17 17 17 19 0900CS1911MCTANYA GUPTA 42.25 27.25 17 07 07 18 0.0 0.0 0.0 9 9 9 5.05 16 3 3 3 3 3 86 85 77 17 17 17 17 17 17 17 17 17 17 17 17 | | D905CS191183[SUNNY | 20,5 | 10,5 | 7 | 2.8 | 7.8 | 2.3 | - 11 | 37 | 3.7 | 8 0 | 0 | 1.5 | 10 2 | 2 2 | 2 | 2 | 60 | 19.5 | 3 13 | 23 | 13 13 |
| 178 0005CS191165 TANYA GUPTA 42,25 27,25 17 57 57 57 57 57 58 50 50 50 50 50 50 50 50 50 50 50 50 50 | 176 | | | | 46 | | | | 12 | 4.0 | A 1 2 10 | | | 0.765 | 10 | 3 3 | 3 | 3 | 100 | 75 | - | 1 22 1 | 17 T 18 |
| 179 0935CS191100 TARINI 98.5 25.5 15 50 50 50 60 60 6 7 9 8.5 16 5 3 3 3 86 95 19 19 19 19 19 | 176 | | | | | | | | | | | | | 200 | | | | - | | | | | 17 |
| | | THE PERSON NAMED IN PROPERTY OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN | | | 47 | 1 57 | 5.7 | 0.7 | 10 | 0.0 | 0.0 | 9 9 | 9 3 | 9,75 | 15 3 | 3 3 | 3 | 3 | 250 | PO 1 | 2 1 12 | 4 47 1 | 17 17 |
| | 178 | | | | | | | | | | | | | | | | | | | | | | |
| 1 100 100 100 100 100 100 100 100 100 1 | 178 | | | | | | | 9.5 | 15 | 5.0 | 5.00 | 6 7 | - 9 | 8.5 | | 3 3 | 3 | 3 | 60 | 95 3 | 1 | 100 | 19 19 |
| | 178 179 | 0905CS191186 TAR[N] | 38,5 | 23.5 | | 5.0 | 520 | | 15 | 5.0 | 5.0 5.0 | | | 8,5 | 16 3 | | | 3 | 9 | 95 1 | 9 19 | 19 | 19 19 |
| | 178 179 | 0905CS191186 TAR[N] | 38,5 | 23.5 | | 5.0 | 520 | | 3 | 120 | 10 10 | | | 8,5 | 16 3 | | | 3 2.4 | 96 75 | 95 1 75 1 | 9 19 | 19 1 | 19 19 |



| O Level | | | | | 13 | 135 | 1.5 | | | | | | 1,0 | | | | | | | | | | | | | | |
|----------------------------|--|----------------|-------|----------|--------|--------|-------|------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-----|-----|
| vg mrks) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| bove(Target ttainment | | | | 65,36565 | 65,366 | 65,395 | 65,37 | 0 | 50,14 | 60,14 | 68_14 | 59,11 | 68,21 | 71.07 | | 90.5 | 88,67 | 86,67 | 66,57 | 86,57 | 00,67 | 1049 | 104.6 | 104,0 | 104,0 | 105 | 105 |
| erc. of stude | ints | | | | | | | | | | | | | | | | | | | | | | | | | | |
| o. of student =60 %mark | | | | 134 | 134 | 124 | 134 | | 139 | 139 | 139 | 120 | 133 | 140 | | 181 | 180 | 180 | 180 | 100 | 190 | 194 | 195 | 195 | 195 | 195 | 195 |
| tempted | | 200 | 203 | 200 | 205 | 206 | 200 | | 204 | 234 | | 21/0 | 166 | 197 | 203 | 200 | 21/3 | 21/8 | 2003 | 20,63 | 233 | 160 | 188 | 188 | 166 | 168 | 180 |
| o_ of student | ts. | 203 | 203 | 205 | 205 | 206 | 205 | 201 | | 204 | | 200 | 400 | 197 | 203 | 200 | 203 | 203 | 203 | 203 | 203 | 145 | 186 | | 186 | 400 | |
| | | _ | | | | | | | | | | | | | | | | | | | | | | | | | |
| 205 0905 | RC19103 SAURABH RUSHWAH | D | 0 | 0 | 0.0 | 0.0 | 0.0 | | 0 | 0 | - 0 | 0 | 0 | 0 | 0 | | 0 | D | 0 | 0 | 0 | 0 | | | | | |
| 204 0905 | SC191003 Anushka Rajput | 0 | 0 | 0 | 0.0 | 0,0 | 0,0 | | 0 | 0 | - 0 | 0 | Ď. | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 86 | 85 | 17 | 17 | 17 | 17 |
| | cc200d00 rishita gupta | 6.5 | 6.5 | Ö | 0.0 | 0.0 | 0.0 | 13 | 433 | 4.33 | 4,33 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | ă i | 0 | 75 | 75 | 15 | 15 | 15 | 15 |
| | co203d02 Innshu mahva | 6.5 | 6.5 | 0 | 0.0 | 0.0 | 0.0 | 18 | 4.33 | 4.33 | 4.33 | | 0 | | - 0 | | ő | 0 | 0 | ő | 0 | 12 | 75 | 45 | 15 | 15 | 15 |
| | captoid01 lavi oueta | 7.5 | 7.5 | 12 | 0.0 | 0.0 | 0.0 | - | 420 | 4.33 | 4.13 | 0 | 0 | 0 | 10 | 18 | 6 | 0 | 0 | ŏ | 0 | 66 | 95 | 33 | 12 | 43 | 479 |
| | CS191207 YUVRAJ | 32,75 | 17,25 | 13 | 43 | 43 | 43 | - 10 | 3 33 | 3.33 | 3.33 | 725 | 9 | 9 | 6.75 | 15 | 3 | - 5 | 3 | 9 | 3 | 88 | 85 | 17 | 17 | 17 | 17 |
| | SCS191205 YASHI GUPTA SCS191206 YASHIKA GUPTA | 32,75 | 17,75 | 14 | 20 | 27 | 27 | - 10 | 200 | - 0 | - 2 | 4.5 | 9 | 0 | | -11 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 86 | 85 | 17 | 17 | 17 | 17 |
| | SCS191204 YASH NAMDEV | 39,5 | 24,5 | 12 | 4.0 | 4.0 | 4,0 | 18 | - 0 | - 5 | - 6 | 9 | 9 | 9 | 9.5 | 15 | 3 | 8 | - 3 | 3 | 3 | 76 | 76 | 15 | 15 | 15 | 15 |
| | SCS191203 MVEX SINGH | 24.75 | 13,75 | 10 | 22 | 3.5 | 3.3 | - 10 | 3.33 | 3.33 | 3,33 | 525 | - 6 | 6 | 3,75 | -11 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 65 | 95 | 13 | 13 | 13 | 13 |
| | SCS191202 VISHAL SON | 10 | 2 | 2 | 0.7 | 0.7 | 0.7 | | 0 | 0 | - 0 | | -0 | - 0 | - 0- | - 8 | 1,6 | US. | 1,6 | 1.6 | 1.6 | | | 11 | 11 | 11 | 11 |
| | SCS191201 VISHAL | 17-5 | 9.5 | 10 | 3.3 | 3,3 | 3,3 | 8 | 2.67 | 2.67 | 2.67 | - 0 | 0 | 0 | 0.5 | - 8 | 1,6 | 1,6 | 1,6 | 1,6 | 1.6 | | 55 | - 51 | | 11 | 11 |
| | SCS191200 VISHAKHA SAIN | 30.75 | 15,75 | 12 | 440 | 4.0 | 4.0 | - 12 | 4 | 4 | 4 | 2.5 | - 6 | 0 | 3,76 | 16 | 3 | - 3 | 3 | 3 | 3 | 88 | 85 | 17 | 17 | 17 | 17 |
| 192 0905 | SCS191199 VISHAKHA GANDHI | 40,25 | 25,25 | 14 | 40 | 47 | 47 | - 15 | - | | - 6 | - 9 | 9 | 9 | 9,35 | 15 | 3 | 8 | 3 | 3 | 3 | 85 | 85 | -17 | -17 | -17 | 17 |
| | SCS191168 VIPRANSH | 34.75 | 19,75 | 16 | 53 | 533 | 5.3 | 12 | 1 4 | 4 | - Ă | 725 | 9 | 6 | 5.76 | 15 | 3 | 3 | 5 | 3 | 3 | 06 | 05 | 17 | 17 | 57 | 47 |
| | SCS191197 VATSAL KUMAR | 38,5 | 23,5 | 16 | 5.0 | 5.0 | 5.0 | - 10 | - | | | 725 | 9 | 9 | 210 | 15 | - 5 | - 5 | 3 | 3 | 3 | 86 | 85 | 17 | -17 | 10 | 47 |
| | SCS191196 VARUN RUSHWAH | 36,75 | 21,25 | 14 | 8 | 47 | 20 | - 17 | 3.67 | 5.00 | 5,33 | 7,5 | 9 | 6 | 8.70 | 15 | 3 | 9 | 9 | 9 | 3 | 800 | 95 | 37 | 17 | 37 | 17 |
| | SCS191194 VANIARORA SCS191195 VARNITA | 22,25 38,75 | 14,25 | 13 | 43 | 43 | 43 | | - 2 | - 2 | - 4 | 0 | 0 | 0 | 4.75 | 8 | 1,6 | 1,6 | 1,6 | 1,9 | 1,9 | 210 | 70 | 15 | 15 | 15 | 15 |
| | SCS191183 VAISHNAVI GUPTA | 35.75 | 22,75 | 16 | 33 | 5.5 | 5.3 | - 16 | 5,33 | 5,33 | 5,33 | - 0 | 0 | 0 | 6,76 | 18 | 2.6 | 2.6 | 2.6 | 2,6 | 2.6 | - 62 | 85 | 17 | 17 | 17 | 17 |
| | SCS191192 VARHAV OMRE | 27,25 | 14,25 | 9 | 3,0 | 3,0 | 300 | - 11 | 3.7 | | 3.7 | 2,5 | 0 | - 5 | 4.25 | 13 | 2,6 | 2,6 | 2,8 | 2.6 | 2.6 | | | 15 | 15 | 15 | 15 |
| | SCS191191 VAIBHAV GUPTA | 30.75 | 15,75 | 13 | 43 | 4.5 | 4.3 | - 8 | 2.7 | 2.7 | 2.7 | 7 | - 5 | 9 | 5,25 | 15 | 3 | 3 | - 3 | 3 | 3 | 100 | 85 | 17 | 17 | 17 | 17 |
| | SCS191190 VACHASPATI | 33,75 | 18,75 | 8 | 27 | 27 | 2.7 | 10 | 3.3 | 3.3 | 3,3 | 4.5 | 0 | 9 | 9,75 | 15 | - 8 | 8 | 8 | 3 | 3 | 80 | 85 | 17 | 17 | 17 | 17 |
| 1.82 0905 | SCS191180 UJJWAL BATHAM | 38,25 | 23,25 | 16. | 540 | 5.0 | 520 | | 100 | 5.7 | - | 845 | - 0 | - 9 | 7.26 | 15 | -3 - | - 3 | - 3 | - 3 | - 3 | | 104 | 57 | 17 | 57 | 47 |

60 pero, Of students score 60 pero, Or more 70 pero, Of students score 60 pero, Or more 80 pero, Of students score 60 pero, Or more

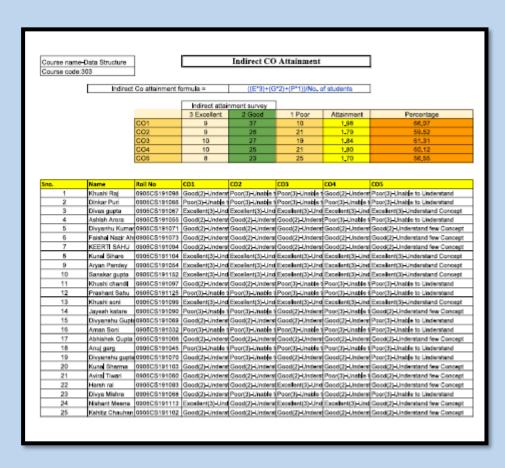
Level Weighted Average

| 11001110 | |
|----------|-------------|
| CO | leve |
| C01 | 1_045951064 |
| 002 | 1_198232208 |
| C03 | 0_791927671 |
| C04 | 1_42743199 |
| C05 | 0_889308463 |

1.070570283

* Blank cell=Not attempted ABCA= Activity Based Continous Assessment





Final CO Attainment

Course name-Data Structure Course code:303

| | Final direct course | attainment C | oculations | Final InDirect | course(2020) |
|----------------|----------------------------|--------------|--------------|----------------|--------------|
| Course Outcome | | nternal | End Semester | CO | Leve |
| CO1 | | 1.05 | 3 | CO1 | 1_98 |
| CO2 | 1 [| 1.20 | 3 | CO2 | 1_79 |
| COS |] [| 0.79 | 3 | COS | 1,84 |
| CO4 | 1 [| 1.43 | 3 | CO4 | 1_80 |
| CO5 | 1 | 0.89 | 3 | CO5 | 1.70 |
| | Attainment | 1.07 | 3 | Final InDirect | |
| | Weightage | 40% | 60% | course | |
| | Direct total attainment | 0,43 | 1,0 | attainment | |
| | Fina direct total attainme | | 2.23 | calc. | 1,82 |
| | Weightage | - 1 | 10% | 20 | % |
| | Total attainment | - | L78 | 0,3642 | 86714 |
| | Final course attainment | | 9 | 1.5 | |

CO-Wise Attainment

| | | | Direct | | | Direct(80%) | indirec | ct(20%) | Tota |
|-----|---------|----------|-------------|---------------|-------|-------------|---------|-------------|-----------------|
| CO | End Sem | Internal | Endsem(80%) | Internal(40%) | Total | | Survey | Survey(20%) | Direct-ledirect |
| CO1 | 3 | 1.05 | 1_8 | 0.42 | 2.22 | 1.77 | 1.98 | 0.40 | 2.17 |
| CO2 | 3 | 1.20 | 1_8 | 0.48 | 2,28 | 1.82 | 1.79 | 0.36 | 2.18 |
| COS | 3 | 0.79 | 1_8 | 0.32 | 2.12 | 1.69 | 1.84 | 0.37 | 2.06 |
| CO4 | 3 | 1.43 | 1_8 | 0.57 | 2.37 | 1.90 | 1_80 | 0.36 | 2,26 |
| CO5 | 3 | 0.89 | 1_6 | 0.36 | 2.16 | 1.72 | 1.70 | 0.34 | 2.06 |

2,15



Target attainment Calculation

ourse name-Data Structure ourse code;303

| | CO attainments | | | | | | | | | | | | | |
|--------------------------|-----------------|----------------|----------|--|--|--|--|--|--|--|--|--|--|--|
| | Target set(2020 | COAttainment 2 | Remarks | | | | | | | | | | | |
| CO1 | 1.85 | 2,17 | Achieved | | | | | | | | | | | |
| CO2 | 1.85 | 2,18 | Achieved | | | | | | | | | | | |
| CO3 | 1,85 | 2,06 | Achieved | | | | | | | | | | | |
| CO1 CO2 CO3 CO4 | 1.85 | 2,26 | Achieved | | | | | | | | | | | |
| CO5 | 1.85 | 2.06 | Achieved | | | | | | | | | | | |

AVG

Remark:-

In 2020-21 the RGPV examination conducted were open book exam, hence the the endsemester CO attainment is extraordinary.

2,15

With due consideration about the pandemic situation and the examination process, the target set for 2021-22 is not the average of cos

attainded but we are making progressive development from 1.85 to 1.9

(Dr. S. 9' Chauhan)
Dean Academic/ Coordinator IQAC
CO-ordinator, IQAC
Institute of Technology & Management
Gwellor (ALP)