Chapter 9

MINUTES

GOVERNMENT COLLEGE, RAJAHMUNDRY

(An Autonomous institution since 2000)

DEPARTMENT OF MATHEMATICS

Affiliated to Adikavi Nannaya University Accredited by NAAC A^+

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MINUTES OF MEETING OF THE BOARD OF STUDIES

(UG BoS)

FOR UG PROGRAMS IN

MATHEMATICS & COMPUTATIONAL MATHEMATICS

Meeting Details

- **Date:** 15/09/2025
- **Time:** 11:00 AM – 1:00 PM
- **Venue:** Department of Mathematics, Budha Bhavan, Government College(A),Rajahmundry
- **Chairperson:** Mr. G Chandrasekhar, Lecturer-in-Charge, Department of Mathematics

Members Present

1. Sri G. Chandrasekhar ,Lecturer-in-Charge of the Department **Chairman**
2. Dr. D. V. N. S. Murthy, Faculty Member of the Department **Member**
3. Dr. Ch. Srinivasulu, Faculty Member of the Department **Member**
4. Mr. G. Sekhar Babu, Faculty Member of the Department **Member**
5. Mr. M. Rajeev, Faculty Member of the Department **Member**
6. Dr. K. Naveen, Faculty Member of the Department **Member**
7. Dr. M. Sajani Lavanya, Faculty Member of the Department **Member**
8. Mr. G. Sudhakar, Faculty Member of the Department **Member**
9. Mr. K. Rajasekhar, Faculty Member of the Department **Member**
10. Mr. S. S. Bhargava, Faculty Member of the Department **Member**
11. Mrs. N. V. Malathi, Faculty Member of the Department **Member**
12. Mrs. Y. Vijayalakshmi, Faculty Member of the Department **Member**
13. Ms. Md. Fathima Sulthana, Faculty Member of the Department **Member**
14. Sri Chappa Naidu, Lecturer in Mathematics,
    GDC, Veeraghattam **Subject Expert**
15. Sri M. Sudhakar, Lecturer in Mathematics,
    SRR & CVR Government College(A), Vijayawada **Subject Expert**
16. Sri P. Mahalakshmi Naidu, Lecturer in Mathematics,
    GDC, Perumallapuram **University Nominee**
17. Mr. Satish Kumar Kavala,
    IT Analyst, TCS, Malaysia **a Representative from Industry**
18. Mr. Bula Venkat Raju (2020-23 Batch MPC),
    Research Scholar in Mathematics,
    VIT Amaravathi **a Representative from Alumni**
19. Dr. G. Vijay Kumar, Lecturer in Computer Science,
    SCIM GDC (A), Tanuku **External Expert**

Proceedings and Resolutions

1.
   - **Agenda Point 1:** To approve the list of examiners and paper setters for the academic year 2025–26 (Chapter 2).
   - **Discussion:** Dr. Murthy said, "The list covers all specializations of mathematics adequately and maintains academic balance." Dr. Sajani Lavanya added, "We should also ensure gender balance in the panel to reflect inclusivity." External Expert Dr. Vijay Kumar noted, "It is important to include young faculty members; they bring fresh perspectives and also gain valuable experience." Alumni Representative Venkat Raju commented, "As a former student, I feel it is motivating when younger faculty are involved, since they relate better to students." The Chairman responded, "All these are valid points. We can incorporate diversity, gender balance, and opportunities for young faculty while finalizing the panel."
   - **Resolution:** The Board resolved to approve the list of examiners and paper setters for 2025–26 with the following directions: - A balanced representation of all specializations of Mathematics must be ensured. - Gender inclusivity should be considered while finalizing the list. - Younger faculty members should be encouraged to participate to gain academic experience. - The panel shall remain valid for the academic year 2025–26 and will be reviewed annually.

2.
   - **Agenda Point 2:** To approve the existing Vision and Mission statements (Chapter 3).
   - **Discussion:** Dr. Srinivasulu remarked, "The Vision should highlight global competence and employability so that our graduates are ready for international opportunities." Dr. Murthy added, "Our Mission already emphasizes holistic development, but perhaps it could also mention innovation and research culture." Alumni Representative Venkat Raju said, "From a student's perspective, even the current Mission was inspiring and sufficient to guide us during our studies." University Nominee P. Mahalakshmi Naidu stated, "For uniformity across affiliated colleges, it is advisable to retain the current statements for now." The Chairman concluded, "While these are important suggestions, it is appropriate to retain the existing Vision and Mission at present. Revisions can be proposed in the next curriculum cycle after wider consultations."
   - **Resolution:** The Board resolved to approve the existing Vision and Mission statements as presented in Chapter 3, with the following note: - Suggestions regarding global competence, innovation, and research culture will be recorded

and reconsidered in the next review cycle. - The current Vision and Mission shall remain valid for the academic years 2025–26 and 2026–27 to maintain stability.

3. • **Agenda Point 3:** To approve the Program Structure in line with APSCHE Guidelines, effective from 2023–24 and 2025–26 (Chapter 4).

   • **Discussion:** Dr. Naveen asked, "Is there scope to introduce elective papers without violating the APSCHE framework?" The Chairman clarified, "Electives can certainly be offered, but they must be placed within the structure permitted by APSCHE. Core courses, credits, and sequencing must strictly follow their guidelines." Subject Expert Sri Chappa Naidu added, "It would be better to gradually introduce interdisciplinary electives in applied areas like Data Science and Statistics." University Nominee P. Mahalakshmi Naidu emphasized, "Uniformity with APSCHE guidelines is mandatory, because any deviation may cause disapproval during Academic Council scrutiny." Industry Representative Satish Kumar suggested, "In the long term, electives like Machine Learning and Computational Mathematics would enhance employability." The Chairman concluded, "The framework will be approved as per APSCHE rules. Suggestions for electives are valid and can be implemented within the flexibility provided."

   • **Resolution:** The Board resolved to approve the Program Structure as per APSCHE guidelines, effective from 2023–24 and 2025–26, with the following recommendations: - All core courses and credit distribution shall follow APSCHE directives without deviation. - Departments may explore the inclusion of electives within the permissible structure, particularly in applied and interdisciplinary areas. - Suggestions for introducing employability-oriented electives such as Data Science, Computational Mathematics, and Machine Learning will be considered in future cycles subject to APSCHE norms. - The structure shall be reviewed annually to ensure compliance and relevance.

4. • **Agenda Point 4:** To approve the Standard Operating Procedure (SOP) for the assessment of Semester-End Examinations in accordance with the Academic Council Resolutions (Chapter 5).

   • **Discussion:** Mr. G. Sekhar Babu suggested, "Part–I should not only focus on recall-based questions but also include short application-oriented problems to test understanding." External Expert Dr. Vijay Kumar supported this view, saying, "Yes, a mix of knowledge-based and small problem-solving questions will make the assessment more meaningful." Dr. Sajani Lavanya commented,

"The current distribution of marks between Part–I and Part–II is balanced, but question design should ensure coverage of all five units." Alumni Representative Venkat Raju added, "Students often prefer conceptual clarity; even short problems in Part–I help them demonstrate that." The Chairman observed, "We must also ensure that Part–II maintains its depth by testing analytical and problem-solving skills comprehensively."

- **Resolution:** The Board resolved to approve the Standard Operating Procedure for Semester-End Examinations with the following directions: - Part–I will consist of eight short questions covering all five units, out of which students attempt any five (3 marks each, total 15 marks). Questions may test both knowledge and short applications. - Part–II will have two questions from each unit OF given five units, of which students must answer one per unit (7 marks each, total 35 marks). Questions should test higher-order thinking and problem-solving. - The design of question papers must ensure full coverage of the syllabus across all units. - Moderators and paper setters should be briefed to maintain a balance between memory, understanding, and application levels of Bloom's Taxonomy.

5. - **Agenda Point 5:** To approve the Standard Operating Procedure (SOP) for the assessment of Continuous Internal Evaluation (CIE) in accordance with the Academic Council Resolutions (Chapter 5).

- **Discussion:** The Chairman, Sri G. Chandrasekhar, presented the detailed SOP for Continuous Internal Evaluation as outlined in Chapter 5, explaining that it is designed to provide fair, transparent, and comprehensive assessment of students.

  Mr. G. Sudhakar suggested that the provision for multiple assignments encourages students to engage in regular practice throughout the semester. Dr. Ch. Srinivasulu noted that the inclusion of two mid examinations, one of which is online, ensures that students remain consistent in their preparation. Alumni Representative, Mr. Bula Venkat Raju, appreciated the inclusion of seminars, group discussions, and projects as pedagogical tools, which build confidence and prepare students for higher studies. Industry Representative, Mr. Satish Kumar Kavala, observed that field visits, surveys, and participation in workshops will strengthen students' practical and industry readiness.

  The Chairman concluded that this SOP balances academic rigor with holistic skill development and must be uniformly followed across all departments.

- **Resolution:** The Board resolved to approve and adopt the Standard Oper-

ating Procedure for Continuous Internal Evaluation as given in **Chapter 5**, with the following components:

(a) **Mid Examination–1:** **20 Marks**

(b) **Mid Examination–2 (Online Exam):** **10 Marks**

(c) **Assignments:** **5 Marks**

- One assignment – 1 mark
- Two assignments – 2 marks
- Three assignments – 3 marks
- Four assignments – 4 marks
- Five assignments – 5 marks

(d) **Attendance:** **5 Marks**

- 95% and above – 5 Marks
- 91% to 95% – 4 Marks
- 86% to 90% – 3 Marks
- 81% to 85% – 2 Marks
- 75% to 80% – 1 Mark
- Below 75% – 0 Marks

(e) **Any one of the following pedagogical tools:** **5 Marks**

- Pass in any MOOCS course
- Paper presentation in International/National/State/Regional level seminars – 5 Marks
- Participation in International/National/State/Regional seminars – 5 Marks
- Participation in Workshops – 5 Marks
- Participation in Group Discussions – 5 Marks
- Participation in Quiz – 5 Marks
- Participation in Student Study Project – 5 Marks
- Participation in Field Visits – 5 Marks
- Participation in Surveys – 5 Marks

(f) **Viva-voce:** **5 Marks**

Departments shall ensure strict adherence to the SOP given in Chapter 5, maintaining proper records of internal evaluation for transparency, accountability, and audit.

6.
- **Agenda Point 6:** Approval of Programme Learning Outcomes (PLOs), Programme Specific Outcomes (PSOs), Performance Indicators, Competencies, and Bloom's Levels (Chapter 6).
- **Discussion:** The Chairman, Sri G. Chandrasekhar, presented the PLOs, PSOs, Performance Indicators, Competencies, and Bloom's Levels as detailed in Chapter 6, noting that these are essential for evaluating the attainment of programme objectives.

  Industry Representative, Mr. Satish Kumar, emphasized that competencies must align with industry requirements, ensuring that students can apply knowledge to real-world problems. Dr. D. V. N. S. Murthy observed that while the PLOs and PSOs already capture critical thinking and problem-solving, performance indicators must remain measurable for effective attainment tracking. Dr. K. Naveen suggested that mapping Bloom's Levels to each outcome ensures proper alignment of teaching, learning, and assessment. Alumni Representative, Mr. Bula Venkat Raju, remarked that linking competencies with Bloom's Levels would strengthen preparation for competitive exams by balancing conceptual knowledge with application skills.

  The Chairman concluded that the framework in Chapter 6 comprehensively addresses knowledge, skills, employability, and lifelong learning, and must be adopted as the standard for outcome attainment evaluation.
- **Resolution:** The Board resolved to approve the **Programme Learning Outcomes (PLOs), Programme Specific Outcomes (PSOs), Performance Indicators, Competencies, and Bloom's Levels as prescribed in Chapter 6**, and directed that these be uniformly adopted for the evaluation of attainment. - PLOs and PSOs shall remain broad and comprehensive, covering knowledge, skills, values, and attitudes. - Performance indicators shall be used in measurable terms to calculate attainment levels. - Competencies shall explicitly include employability, adaptability, teamwork, and problem-solving. - Bloom's Levels shall be mapped to each PLO/PSO to align teaching, learning, and assessment strategies. - Attainment evaluation shall be periodically reviewed to maintain relevance with academic and industry requirements.

7.
- **Agenda Point No. 7:** Approval of Syllabus Revision (Chapter 7).
- **Discussion** The Chairman, Sri G. Chandrasekhar, informed the members that he had reviewed the syllabus of all papers, and the proposed revision has been finalized in Chapter 7 in accordance with the UGC model curriculum. He emphasized that the revised syllabus maintains the core fundamentals while

incorporating the necessary updates, ensuring uniformity and relevance.

Dr. D. V. N. S. Murthy appreciated that the revised version includes modern examples and problem sets to enhance application orientation. Dr. Ch. Srinivasulu noted that the revision will better prepare students for competitive examinations. Dr. K. Naveen added that the balanced approach retains fundamentals while introducing supplementary material.

External Subject Experts, Sri Chappa Naidu and Sri M. Sudhakar, confirmed that the revision is essential and consistent with syllabi followed in other universities. The University Nominee, Sri P. Mahalakshmi Naidu, endorsed the revision and recommended forwarding it for higher-level ratification. Alumni Representative, Mr. Bula Venkat Raju, and Industry Representative, Mr. Satish Kumar Kavala, both agreed that the revised syllabus would benefit students for research, employability, and analytical skill development.

After the discussions, members unanimously agreed that the revision presented in Chapter 7 is comprehensive and requires no further changes.

- **Resolution** The Board resolved to approve the **Syllabus Revision as given in Chapter 7**, without any modifications. The revised syllabus shall be implemented in its entirety from the academic year 2025–26 onwards.

8. - **Agenda Point 8:** Approval of the curriculum, blueprint, and model papers for the courses of the Mathematics subject for B.Sc. Mathematics (Major), a four-year Honours program in accordance with APSCHE Guidelines (w.e.f. A.Y. 2023–24) for the second and third year students in the academic year 2025–26 (Chapter 11).
   - **Discussion:** The Chairman, Sri G. Chandrasekhar, informed the members that he had prepared the curriculum, blueprint, and model papers for the second and third year courses in accordance with APSCHE guidelines, as detailed in Chapter 11. He explained that the structure ensures balanced coverage of all units, proper alignment with Bloom's taxonomy levels, and transparency in evaluation.

     Members appreciated the efforts and noted that the framework is comprehensive and well aligned with both academic and industry requirements. It was unanimously agreed that the prepared documents require no further modifications.

   - **Resolution:** The Board resolved to approve the **curriculum, blueprint, and model papers for the II and III year courses of B.Sc. Mathematics (Major) as prepared by the Chairman, Sri G. Chandrasekhar,**

in Chapter 11. These shall be implemented **as they are, without any changes**, from the academic year 2025–26 onwards.

9. - **Agenda Point 9:** Approval of the curriculum, blueprint, and model papers for the courses of the Mathematics subject for B.Sc. Mathematics (Major), a four-year Honours program in accordance with APSCHE Guidelines (w.e.f. A.Y. 2025–26) for the first-year students in the academic year 2025–26 (Chapter 11).
   - **Discussion:** The Chairman, Sri G. Chandrasekhar, presented the first-year curriculum, blueprint, and model papers prepared in accordance with APSCHE guidelines as given in Chapter 11. He clarified that the curriculum ensures strong foundations in core areas such as algebra, calculus, and geometry, while maintaining balanced progression of difficulty across units.

     Members expressed satisfaction that the prepared framework provides clarity, balance, and progression, and agreed that no further modifications are required.
   - **Resolution:** The Board resolved to approve the **curriculum, blueprint, and model papers for the I year courses of B.Sc. Mathematics (Major) as prepared by the Chairman, Sri G. Chandrasekhar, in Chapter 11**. These shall be implemented **as they are, without any changes**, for the 2025–26 admitted batch.

10. - **Agenda Point 10:** Approval of the award of credits to the internships of the students in accordance with the Guidelines by APSCHE for the 4-Year UG Honours Program with Single Major and one Minor (w.e.f. A.Y. 2023–24) for the academic year 2025–26 (Chapter 24, Section 24.1, Annexure–I).
    - **Discussion** The Chairman, Sri G. Chandrasekhar, explained that APSCHE has prescribed a structured framework for internships covering community service, apprenticeship, and major project work. He emphasized that the department will follow these guidelines in letter and spirit.

      Members, including faculty, alumni, and industry representatives, appreciated the balance between social responsibility, industry exposure, and research orientation in the APSCHE model. It was agreed that adopting the prescribed framework ensures uniformity and comparability across universities.
    - **Resolution** The Board resolved to approve the award of credits for internships **exactly as per APSCHE guidelines (Chapter 24, Section 24.1, Annexure–I)**, to be implemented without any deviation, as follows: - **First**

Internship (Community Service Project): 180 hours after the 1st year examinations; 4 credits. - **Second Internship (Apprenticeship/Project/On-the-job Training):** 180 hours after the 2nd year examinations; 4 credits. - **Third Internship (Major Internship/Project):** 540 hours during the 6th semester; 12 credits. - Evaluation and assessment shall also follow APSCHE guidelines in full.

11. • **Agenda Point 11:** Approval of the award of one credit to the internship of the students in accordance with the New Guidelines by APSCHE for the 4-Year UG Honours Program with Single Major and one Minor (w.e.f. A.Y. 2025–26) for the students admitted in the academic year 2025–26 (Chapter 24, Section 24.2, Annexure–I-A).

• **Discussion** The Chairman, Sri G. Chandrasekhar, presented the new APSCHE framework, under which the first internship has been restructured into a shorter format of 80 hours with one credit. He clarified that the department will strictly adopt this model as prescribed.

Members noted that although the duration and credits have been reduced, the revised structure is aligned with APSCHE's vision of providing early exposure to community service without overburdening first-year students.

• **Resolution** The Board resolved to approve the award of internship credits **exactly as per APSCHE guidelines (Chapter 24, Section 24.2, Annexure–I-A)**, to be implemented without any deviation, as follows: - **Community Service Project (First Year):** 80 hours after 1st year examinations; 1 credit. - All activities, reporting, and evaluation shall be carried out strictly in accordance with APSCHE guidelines.

12. • **Agenda Point 12:** To approve the transfer of credits for students who successfully complete SWAYAM courses.

• **Discussion:** The Board deliberated on the guidelines of the University Grants Commission (UGC) regarding the Academic Bank of Credits (ABC) and the adoption of SWAYAM courses for credit transfer. Members emphasized that integrating SWAYAM courses into the curriculum would provide students with flexible learning opportunities and exposure to national-level academic resources. It was noted that credit transfer would be strictly as per UGC norms and institutional regulations.

• **Resolution:**

- The Board resolved to approve the transfer of credits for students who successfully complete SWAYAM courses.
- The credits earned shall be considered equivalent to the prescribed curriculum components, subject to UGC/University guidelines.

13.
- **Agenda Point 13:** To implement different pedagogical strategies to enrich the teaching and learning process (Chapter 6, Section 6.5).
- **Discussion:** Dr. D. V. N. S. Murthy said, "We must move beyond traditional chalk-and-talk methods. Active learning strategies should be adopted." Dr. Ch. Srinivasulu added, "Problem-based learning and case studies in mathematics can help students appreciate the applications of abstract topics." Mr. G. Sudhakar remarked, "Flipped classrooms could be useful, especially for difficult subjects like Real Analysis and Algebra." Industry Representative Satish Kumar commented, "From an industry perspective, collaborative projects and team-based problem-solving should be encouraged, as they develop essential soft skills." Alumni Representative Venkat Raju said, "Interactive quizzes and peer-learning sessions helped us a lot. These methods should be used more often." The Chairman concluded, "We must adopt a blend of strategies to ensure deeper engagement, conceptual clarity, and skill development."
- **Resolution:** The Board resolved to implement a variety of pedagogical strategies to enrich teaching and learning, including: - Active learning through problem-based and case study approaches. - Flipped classrooms for challenging topics to encourage pre-class preparation and in-class discussion. - Use of ICT tools such as online quizzes, simulations, and digital resources. - Peer learning, collaborative projects, and group assignments to foster teamwork. - Continuous faculty development to equip teachers with innovative pedagogical skills. - Regular feedback collection from students to refine teaching strategies.

14.
- **Agenda Point 14:** To implement blended learning for the academic year 2025–26 up to (Online Teaching – 60%, Offline Teaching – 40%) as per UGC guidelines.
- **Discussion:** Dr. M. Sajani Lavanya said, "Blended learning provides flexibility, but we must ensure students in rural areas with limited internet access are not disadvantaged." Dr. K. Naveen remarked, "A 60:40 ratio is reasonable, but for certain core mathematical topics, more face-to-face teaching may be necessary." Mr. G. Sudhakar suggested, "We should integrate online components like recorded lectures, quizzes, and forums, so students can revisit concepts."

Industry Representative Satish Kumar observed, "In the workplace, digital skills are essential. Exposure to online platforms will prepare students for real-world professional settings." Alumni Representative Venkat Raju shared, "During the pandemic, many of us struggled with connectivity. Flexibility is key for effective blended learning." The Chairman concluded, "We will adopt the 60:40 ratio as per UGC norms, while allowing flexibility based on student needs and subject requirements."

- **Resolution:** The Board resolved to implement blended learning for the academic year 2025–26 with the following framework: - The proportion of Online:Offline teaching will be 60:40 in line with UGC guidelines. - Departments shall have flexibility to adjust the ratio based on course requirements and student accessibility. - Online teaching will include live classes, recorded lectures, e-content, and interactive quizzes. - Offline teaching will emphasize problem-solving, tutorials, and discussions of difficult concepts. - Continuous monitoring and student feedback shall be collected to evaluate the effectiveness of blended learning. - Infrastructure support (Wi-Fi, digital library access, smart classrooms) will be strengthened to ensure smooth implementation.

15. - **Agenda Point 15:** To approve the introduction of one Value-Added Course and its assessment (Chapter 12).

- **Discussion:** Dr. G. Sekhar Babu said, "We have already discussed the need for computational skills. A Value-Added Course on Python programming would be highly beneficial." Dr. Ch. Srinivasulu added, "Yes, and it should not be limited to syntax learning but also include applications in solving mathematical problems." Dr. K. Rajasekhar suggested, "Alternatively, a Value-Added Course on Data Analytics with R can also be explored, but Python seems more accessible for our students." Industry Representative Satish Kumar remarked, "From the industry's point of view, Python is in high demand. Even basic exposure will make students more confident when they enter the job market." Alumni Representative Venkat Raju said, "If this course includes projects, students will gain confidence in using technology to solve real problems." The Chairman concluded, "The proposal for a Value-Added Course is accepted. The focus will be on practicality and employability."

- **Resolution:** The Board resolved to introduce a Value-Added Course in Python Programming with the following guidelines: - The course shall cover Python basics along with applications to mathematics, including numerical computation and data handling. - Assessment will be practical in nature, including lab

work, assignments, and a mini-project. - The course will be offered in addition to the regular curriculum without increasing examination stress. - Credits will be awarded as per institutional norms, and completion will be reflected in the student's transcript. - Faculty members with computational expertise will design and deliver the course. - Feedback from the first batch will be used to refine the curriculum in subsequent years.

16. • **Agenda Point 16:** To approve the rubric and procedure for attainment calculation (Chapter 13).

• **Discussion** The Chairman, Sri G. Chandrasekhar, presented the rubric and procedure for attainment calculation as laid down in Chapter 13. He emphasized that these guidelines were framed in accordance with Academic Council resolutions and accreditation requirements. Members agreed that the procedure provides clarity, transparency, and alignment with institutional, APSCHE, NAAC, and NBA norms.

• **Resolution** The Board resolved to approve the rubric and procedure for attainment calculation **exactly as prescribed in Chapter 13**, to be followed without any change. Departments shall ensure uniform implementation of the procedure for calculating CO, PO, and PSO attainment.

17. • **Agenda Point 17:** To approve the departmental Capacity Building Programs (Chapter 14).

• **Discussion** The Chairman, Sri G. Chandrasekhar, presented the capacity building initiatives already undertaken by the department. He noted that the department successfully organized: - A one-day training program for staff and students on the **Community Service Project**. - A one-day training program for staff and students on the **Short-Term Internship Program**. - A one-day training program for staff and students on the **Long-Term Internship Program**. - A one-day training program on the **Use of AI Tools**, conducted by Dr. D. Suneel Kumar (Department of Computer Science) as the resource person. - Seven sessions of hands-on training on **MS Excel** for staff and students, conducted with the support of JKC.

Dr. Ch. Srinivasulu remarked that such initiatives significantly improve both technical and academic capacities of faculty and students. Dr. M. Sajani Lavanya suggested adding research methodology and academic writing workshops to strengthen academic capacity. Mr. G. Sudhakar emphasized the importance of bridge courses for first-year students to ease the transition from

intermediate level. Alumni Representative, Mr. Bula Venkat Raju, shared that mock tests and interview practice sessions would further enhance student preparedness for competitive exams. Industry Representative, Mr. Satish Kumar Kavala, stressed that soft skills workshops on communication, teamwork, and problem-solving should complement technical training.

The Chairman further informed that the department has planned a **one-week hands-on training program (2 hours per day) for staff on MATLAB**, to be organized in the near future.

Members appreciated the structured approach of integrating both technical and non-technical skills in departmental training.

- **Resolution** The Board resolved to approve the departmental Capacity Building Programs as described in Chapter 14, with the following framework: - Continue and expand training programs on internships, community service, and the use of AI tools. - Strengthen technical skills through workshops on Excel (with JKC support), MATLAB, Mathematica, Python, and LaTeX. - Conduct a planned **one-week hands-on MATLAB program (2 hours daily)** for staff. - Introduce academic capacity building through training in research methodology, academic writing, problem-solving sessions, and bridge courses. - Develop soft skills through programs on communication, teamwork, leadership, and career readiness. - Support students with competitive readiness through mock tests, interview practice, and guidance for JAM, GATE, and NET. - Enrich faculty through regular FDPs and workshops to update pedagogical and technical competencies. - Establish a monitoring mechanism to review the effectiveness of all capacity building programs annually.

18. - **Agenda Point 18:** To approve continuation of Supporting Cell i.e. MATHS CLUB, and authorize it to take specified activities of the Department (Chapter 15).

- **Discussion** The Chairman, Sri G. Chandrasekhar, highlighted that the Maths Club is a student-driven supporting cell of the department, which has consistently contributed to both academic and extracurricular initiatives.

  Dr. G. Sekhar Babu appreciated that the Club, consisting of student members, actively assists in departmental activities such as National Seminars, Workshops, and Outreach Programs. Mr. K. Rajasekhar noted that the Club organizes important events like **Ramanujan's Birthday**, **Riemann's Birthday**, **National Science Day**, and **Teachers' Day**, which enrich the academic and cultural atmosphere. Dr. K. Rajasekhar pointed out that the Club members

take responsibility for conducting quizzes, talent tests, and other competitions required for departmental activities. Dr. M. Sajani Lavanya remarked that the Club members also play an important role in **induction and orientation programs for freshers**, helping them adapt to college life. Alumni Representative, Mr. Bula Venkat Raju, shared that participation in the Maths Club gave him opportunities to present, organize, and mentor juniors, which boosted his confidence. Industry Representative, Mr. Satish Kumar Kavala, suggested that the Club can further include applied mathematics sessions and awareness about mathematical tools used in industry.

The Chairman concluded that the Maths Club, under faculty guidance, has supported the department in all respects—academic, organizational, outreach, and cultural—and must be continued with recognition and encouragement.

- **Resolution** The Board resolved to approve the continuation of the Maths Club as a student-driven Supporting Cell of the Department, with the following framework: - The Club shall consist of student members only, working under the guidance of departmental faculty. - Members shall assist in departmental programs such as National Seminars, Conferences, Workshops, and Outreach Activities. - The Club shall organize events including Ramanujan Birthday, Riemann Birthday, National Science Day, and Teachers' Day. - Students shall take lead in conducting quizzes, talent tests, and other departmental competitions. - Maths Club members shall guide juniors, mentor peers, and actively participate in the induction and orientation of freshers. - The Club shall document all activities annually, and its outcomes shall be reviewed in the BoS.

19. - **Agenda Point 19:** To approve the departmental Outreach Activities (Chapter 16).

- **Discussion** The Chairman, Sri G. Chandrasekhar, explained that the department has been actively involved in outreach through its unique **"Lab on Wheels"** program, in which about 30 members (faculty and students) travel on the college's Higlow bus to rural and tribal schools. During these visits, the team identifies weak areas in mathematics and teaches the relevant topics, conducts motivational sessions, and organizes awareness programs on the importance of mathematics.

  Dr. D. V. N. S. Murthy emphasized that school students benefit greatly from seeing mathematics presented through models, applications, and hands-on demonstrations. Mr. K. Rajasekhar noted that talent hunts conducted us-

ing various pedagogical tools inspire students to take mathematics seriously. Dr. M. Sajani Lavanya suggested that these visits should especially target rural and underprivileged areas to encourage students to pursue higher studies in mathematics. Alumni Representative, Mr. Bula Venkat Raju, shared that such outreach creates strong role models for schoolchildren and motivates them to continue in higher education. Industry Representative, Mr. Satish Kumar Kavala, added that including practical applications and demonstrations in these outreach sessions makes mathematics more relatable.

The Chairman further explained that, apart from school visits, the department also conducts regular evening sessions (1–2 hours, 3–4 days per week) at nearby social welfare hostels. Faculty and students divide responsibilities based on a self-prepared departmental timetable, offering doubt clarification, remedial teaching, and guidance.

Members unanimously appreciated the systematic approach of outreach through the "Lab on Wheels" and hostel support activities, recognizing it as a model initiative.

- **Resolution** The Board resolved to approve the departmental Outreach Activities as described in Chapter 16, with the following framework: - Continue the **"Lab on Wheels"** program by visiting rural and tribal schools using the college bus, with active participation of both staff and students. - Conduct motivational sessions, awareness programs on the importance of mathematics, and teaching of weak topics identified at schools. - Use mathematical models, applications, and demonstrations to inspire students. - Organize talent hunts and innovative activities using appropriate pedagogical tools. - Conduct evening outreach at nearby social welfare hostels (1–2 hours, 3–4 days per week) to clarify doubts in mathematics, with duties distributed among staff and students as per the departmental timetable. - Ensure that all outreach activities are documented with reports, photographs, and feedback, and presented annually to the BoS for review.

20. - **Agenda Point 20:** To approve the departmental Best Practices (Chapter 17).

- **Discussion:** Dr. Ch. Srinivasulu initiated the discussion by highlighting the importance of structured coaching programs as part of departmental best practices. Mr. G. Sudhakar noted that the department has been successfully conducting **JAM, PGCET, and CUCET coaching**, which has enabled several students to secure admissions into reputed universities. Dr. M. Sajani Lavanya

emphasized the effectiveness of **ICET coaching**, which has helped students pursue higher studies in management and interdisciplinary fields. Dr. D. V. N. S. Murthy added that **NET/GATE/Ph.D. entrance exam coaching** has significantly contributed to improving the research orientation and career progression of postgraduate students. The Alumni Representative, Mr. Bula Venkat Raju, observed that such coaching sessions were very useful during his student days and strongly recommended their continuation and expansion. The Industry Representative, Mr. Satish Kumar Kavala, suggested documenting success stories of students who benefited from these coaching practices, to inspire future batches. The Chairman concluded by stressing that these best practices directly contribute to students' academic growth and competitiveness and must be institutionalized.

- **Resolution:** The Board resolved to approve the following as departmental Best Practices: - Coaching for JAM, PGCET, and CUCET examinations. - Coaching for ICET examination. - Coaching for NET, GATE, and Ph.D. entrance examinations. - Documentation of student achievements and continuous review of these practices for effectiveness.

21. - **Agenda Point 21:** To approve the departmental MoUs with different institutions (Chapter 18).

- **Discussion:** The Chairman, Sri G. Chandrasekhar, presented the details of the existing MoUs and explained how they have strengthened the department's academic and professional outreach.

  Dr. D. V. N. S. Murthy emphasized that MoUs with **Government Degree College, Pithapuram**, **Government Degree College, Sithanagaram**, **SCIM Government College (A)**, and **SKVT College, Rajahmundry** have facilitated collaborative teaching, academic discussions, and sharing of resources.

  Dr. Ch. Srinivasulu noted that MoUs with **Ramanujan Educational Society**, **Ramanujan Mathematics Library**, and **Ramanujan Museum, Ramachandrapuram** have created excellent opportunities for students to engage in motivational activities and field trips, which broaden their appreciation for mathematics beyond the classroom.

  Mr. G. Sudhakar highlighted the significance of the MoU with **IT Globe Solutions, Hyderabad**, which provides internships, campus recruitment training, and industry exposure to the students.

  Alumni Representative, Mr. Bula Venkat Raju, suggested that more MoUs

with research institutes would further enhance opportunities for higher studies. Industry Representative, Mr. Satish Kumar Kavala, endorsed the MoUs with industry partners and recommended periodic review meetings to track student outcomes.

After extensive discussion, members agreed that these MoUs are valuable for academic enrichment, student motivation, and career development.

- **Resolution:** The Board resolved to approve the departmental MoUs with the following institutions: - **Academic Collaborations:** Government Degree College, Pithapuram; Government Degree College, Sithanagaram; SCIM Government College (A); SKVT College, Rajahmundry. - **Motivation and Field Trips:** Ramanujan Educational Society; Ramanujan Mathematics Library; Ramanujan Museum, Ramachandrapuram. - **Internships and Campus Recruitment Training:** IT Globe Solutions, Hyderabad.

  The Board further resolved that the department shall periodically review these MoUs for effectiveness and explore possibilities of entering into additional collaborations in the future.

22. - **Agenda Point 22:** To approve the proposed Seminars, Conferences, and Workshops (Chapter 19).

- **Discussion:** The Chairman, Sri G. Chandrasekhar, initiated the discussion by highlighting the department's vision to organize academic events of national importance to strengthen both student and faculty development.

  Dr. D. V. N. S. Murthy proposed conducting a **National Workshop on Hands-on Practice with MATLAB and Octave**, emphasizing that such training would enhance computational and problem-solving skills among students and research scholars.

  Dr. Ch. Srinivasulu suggested organizing a **National Seminar** that brings together eminent academicians to discuss emerging areas in mathematics and its applications.

  Dr. M. Sajani Lavanya emphasized the need for a **Faculty Development Programme (FDP) – National Level Workshop**, which would enhance teaching methodologies and research skills among faculty members.

  Mr. G. Sudhakar pointed out the importance of securing funding support and suggested mobilizing resources through **College funds, CSR initiatives, and Government funding agencies** to ensure the smooth conduct of these programs.

The Alumni Representative, Mr. Bula Venkat Raju, stressed that exposure to such national-level events would inspire students to pursue advanced research and collaborative opportunities. The Industry Representative, Mr. Satish Kumar Kavala, recommended that industry experts also be invited to workshops and seminars to bridge the gap between theory and practice.

After detailed deliberations, members unanimously agreed that the proposed academic events will significantly enhance the academic profile of the department and must be approved.

- **Resolution:** The Board resolved to approve the conduct of the following programs: - A **National Workshop on Hands-on Practice with MATLAB and Octave**. - A **National Seminar** on recent trends in mathematics and its applications. - A **Faculty Development Programme (FDP) – National Level Workshop**. - Funding support to be mobilized through **College funds, CSR funds, and Government funding agencies**. - Outcomes of these programs shall be documented and reviewed for academic enrichment.

23. • **Agenda Point 23:** To approve the proposal for Field Trip (Chapter 20).

- **Discussion:** The Chairman, Sri G. Chandrasekhar, initiated the discussion by stressing the importance of field trips in motivating students and giving them exposure to higher centers of learning.

  Dr. Ch. Srinivasulu remarked that the department's **MoU with Ramanujan Educational Society, Ramanujan Mathematics Library, and Ramanujan Museum, Ramachandrapuram** has already created opportunities for local motivational visits, which have been well-received by students.

  Dr. D. V. N. S. Murthy suggested extending these visits to premier national institutes, observing that direct interaction with researchers would significantly boost students' aspirations.

  Mr. G. Sudhakar proposed organizing academic tours to institutions such as the **University of Hyderabad (Central University)**, **Andhra University**, **Indian Institute of Science, Bangalore**, **IIT Madras**, **Ramanujan Mathematical Institute**, and **IIT Hyderabad**. He emphasized that such exposure would inspire students to pursue higher studies and research.

  Dr. M. Sajani Lavanya added that careful planning of itineraries and pre-visit orientation sessions would maximize the benefit of these field trips.

  The Alumni Representative, Mr. Bula Venkat Raju, recalled his own participation in field trips during his student days and noted how such visits had positively influenced his academic journey. The Industry Representative,

Mr. Satish Kumar Kavala, suggested integrating industry visits along with academic field trips to provide a balanced outlook of both research and employability pathways.

After active discussion, the members unanimously agreed that field trips are an essential part of student enrichment and should be institutionalized.

- **Resolution:** The Board resolved to approve the proposal for Field Trips with the following guidelines: - Utilize the **MoU with Ramanujan Educational Society, Ramanujan Mathematics Library, and Ramanujan Museum, Ramachandrapuram** for local motivational visits. - Organize academic tours to premier institutions such as the University of Hyderabad, Andhra University, Indian Institute of Science (Bangalore), IIT Madras, Ramanujan Mathematical Institute, and IIT Hyderabad. - Explore possibilities of integrating select industry visits to provide career-oriented exposure. - Ensure that each field trip is well-documented and that feedback is collected from students for continuous improvement.

24. - **Agenda Point 24:** To approve the proposed departmental Action Plan and timeline for 2025–26 (Chapter – 21).

- **Discussion:** Dr. M. Sajani Lavanya said, "The action plan should focus on integrating curricular, co-curricular, and extracurricular activities so that students receive holistic development." Dr. Ch. Srinivasulu added, "We must ensure that the timeline for curriculum delivery is realistic and allows space for remedial classes and revision sessions." Mr. G. Sudhakar remarked, "Including departmental seminars and guest lectures at regular intervals in the action plan will keep students academically engaged." Industry Representative Satish Kumar commented, "The timeline should include at least one industry-oriented workshop or training session per semester." Alumni Representative Venkat Raju suggested, "Mock tests for competitive exams should be part of the annual calendar to keep students motivated." The Chairman concluded, "The action plan should be comprehensive, measurable, and strictly time-bound to ensure accountability."

- **Resolution:** The Board resolved to approve the departmental Action Plan and timeline for 2025–26 with the following directives: - Academic calendar to include completion of syllabus, remedial classes, and revision sessions within stipulated timelines. - Regular departmental seminars, guest lectures, and student workshops to be scheduled at least once per month. - Industry-oriented training sessions to be organized once each semester. - Outreach activities,

bridge courses, and Maths Club events to be integrated into the action plan. - Mock tests for JAM, GATE, and other competitive exams to be conducted at least twice during the year. - Progress of the action plan will be monitored quarterly, with reports presented in departmental meetings.

25.
- **Agenda Point 25:** To approve the departmental expenditure budget (Chapter 22).
- Discussion The Board examined the proposed expenditure budget of the Department of Mathematics, which detailed allocations for commemorative events, workshops, seminars, outreach activities, field trips, and capacity-building initiatives. The members appreciated the systematic planning and item-wise breakdown presented by the department. It was emphasized that all activities are aligned with academic enrichment, research promotion, and student development.

  The Board also noted that resource mobilization will be carried out through institutional support, government schemes, CSR funding, and alumni/industry contributions. The sustainability of these financial plans was acknowledged as feasible.
- Resolution
  - The Board approved the proposed expenditure budget for the academic year 2025–2026, with a total estimated expenditure of **Rs. 3,60,000**.
  - The budget covers events such as commemorations of eminent mathematicians, National Science Day, Pi Day, MATLAB Workshop, Lab on Wheels, National Seminar/Conference, Capacity Building Programs, Best Practices, and Field Trips.
  - The Board resolved that all programs must be conducted within the approved allocations, ensuring accountability and transparency in resource utilization.
  - Documentation of outcomes and proper financial reporting are to be maintained for all activities.

26.
- **Agenda Point 26:** Any other item with the permission of the Chair.
- **Discussion:** Industry Representative Satish Kumar suggested, "We should explore the integration of Artificial Intelligence and Machine Learning applications into mathematics courses, at least through guest lectures or workshops." Alumni Representative Venkat Raju said, "Mock interview sessions

and resume-building workshops would greatly benefit final-year students preparing for placements and higher studies." Dr. G. Sudhakar remarked, "It may also be useful to start a departmental newsletter to document our achievements, events, and student contributions." Dr. K. Naveen added, "We should consider establishing a research collaboration cell that helps students connect with external research institutions." The Chairman responded, "These are excellent suggestions. Some can be implemented immediately, while others will be included in the long-term departmental strategy."

- **Resolution:** The Board resolved to take the following actions under "Any Other Item": - Organize guest lectures and workshops on Artificial Intelligence and Machine Learning applications in mathematics during 2025–26. - Conduct mock interviews, career guidance, and resume-building workshops for outgoing students. - Initiate a departmental newsletter to be published bi-annually, showcasing academic and extracurricular achievements. - Explore the possibility of establishing a research collaboration cell in consultation with the Academic Council. - Suggestions received under this agenda point will be reviewed for phased implementation, beginning in the academic year 2025–26.

27. **Vote of Thanks and Closing Remarks.**

- **Discussion:** Dr. D. V. N. S. Murthy said, "This meeting has been very productive. The detailed discussions and decisions will greatly benefit both faculty and students." Dr. Ch. Srinivasulu added, "The inclusion of industry and alumni perspectives has made the deliberations richer and more practical." Industry Representative Satish Kumar remarked, "I appreciate the openness of the department to align academic programs with employability and industry relevance." Alumni Representative Venkat Raju shared, "As a former student, it is encouraging to see the department evolve and remain future-oriented." The Chairman, Sri G. Chandrasekhar, said, "I sincerely thank all members for their valuable time, insightful suggestions, and constructive participation. Together, we are shaping the academic excellence of the department."
- **Resolution:** The Board resolved to record its appreciation for the active participation of all members, including faculty, subject experts, the university nominee, industry representative, alumni representative, and external expert. - It was agreed that the resolutions passed in this meeting will be forwarded to the Academic Council for approval and implementation. - The Chairman assured that action plans will be prepared immediately for each approved item to ensure timely execution. - Members unanimously expressed their commit-

ment to work collaboratively for the continued growth of the Department of Mathematics. - The meeting concluded formally with a vote of thanks at 2:00 PM.

Draft of Minutes prepared by

Dr. Ch. Srinivasulu
Senior Faculty Member

Minutes Approved by

Mr. G Chandrasekhar
Lecturer-in-Charge
Chairmain of Board of Studies

Distribution of Minutes

1. Principal / Head of Institution
2. IQAC /Academic Cell
3. Controller of Examination
4. Administrative Office
5. Department Notice Board

6. Sri G. Chandrasekhar ,Lecturer-in-Charge of the Department Chairman
7. Dr. D. V. N. S. Murthy, Faculty Member of the Department
8. Dr. Ch. Srinivasulu, Faculty Member of the Department
9. Mr. G. Sekhar Babu, Faculty Member of the Department
10. Mr. M. Rajeev, Faculty Member of the Department
11. Dr. K. Naveen, Faculty Member of the Department
12. Dr. M. Sajani Lavanya, Faculty Member of the Department
13. Mr. G. Sudhakar, Faculty Member of the Department
14. Mr. K. Rajasekhar, Faculty Member of the Department
15. Mr. S. S. Bhargava, Faculty Member of the Department
16. Mrs. N. V. Malathi, Faculty Member of the Department
17. Mrs. Y. Vijayalakshmi, Faculty Member of the Department
18. Ms. Md. Fathima Sulthana, Faculty Member of the Department
19. Sri Chappa Naidu, Lecturer in Mathematics,
    GDC, Veeraghattam ,Subject Expert
20. Sri M. Sudhakar, Lecturer in Mathematics,
    SRR & CVR Government College(A), Vijayawada ,Subject Expert
21. Sri P. Mahalakshmi Naidu, Lecturer in Mathematics,
    GDC, Perumallapuram ,University Nominee
22. Mr. Satish Kumar Kavala,
    IT Analyst, TCS, Malaysia ,a Representative from Industry
23. Mr. Bula Venkat Raju (2020-23 Batch MPC),
    Research Scholar in Mathematics,
    VIT Amaravathi. a Representative from Alumni
24. Dr. G. Vijay Kumar, Lecturer in Computer Science,
    SCIM GDC (A), Tanuku External Expert