



DEVASWOM BOARD PAMPA COLLEGE

Parumala P O, Pathanamthitta

(NAAC Accredited B Grade) | Affiliated to MG University, Kottayam

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16/09/2026

Notice on Action Taken: IQAC Meeting (10 September 2026)

As part of the action taken on the IQAC meeting held on 10th September 2026, the following proposal is presented for organizing an International Conference as an initiative of the IQAC, D.B. Pampa College, Parumala. Departments are requested to review the proposed subthemes and indicate any omissions or additions. Further, each Department is requested to nominate one faculty member to serve as a representative in the Conference Subcommittee.

Sathyajith.S

Convenor (IQAC)

Prof.(Dr.) Suresh. S

Principal

International Conference on Emerging Developments in Science, Social Science, and Literature ('PRAJNA'-Wisdom for the Age of Intelligence)

The **Internal Quality Assurance Cell (IQAC)** of **D.B. Pampa College** proudly organizes '**PRAJNA**', an International Conference dedicated to exploring the convergence of traditional academic rigor and futuristic innovation. Derived from the ancient Malayalam word meaning **Wisdom or deep awareness**, *Prajna* serves as an intellectual lighthouse in an era defined by profound technological shifts.

The core theme of the conference, "**International Conference on Emerging Developments in Science, Social Science and Literature**," addresses the unprecedented and sweeping penetration of **Artificial Intelligence (AI), automation, and emerging digital technologies** into the landscape of higher education and global research. As classrooms and research laboratories transition into tech-augmented ecosystems, *Prajna* provides a premier multidisciplinary platform for researchers, academicians, industry experts, and students to deliberate on how modern technological breakthroughs reshape pedagogy, ethics, and domain-specific knowledge across disciplines.

Conference Sub-Themes by Discipline

To capture the holistic spirit of *Prajna*, the technical sessions are categorized across the physical, biological, mathematical, humanistic, Languages, Literature and economic sciences, ensuring every academic department engages with the core theme of technological integration.

1. Biological Sciences

- **Plant Genomics and Bioinformatics:** Applying big data analytics and AI algorithms to crop improvement, bioinformatics, and genetic mapping.
- **Biotechnology and Environmental Conservation Technologies:** High-tech interventions for biodiversity tracking, ecosystem restoration, and sustainable agriculture.
- **Computational Biology and Omics Technologies:** Leveraging AI and high-throughput sequencing to decode animal physiology and evolutionary patterns.

- **Biodiversity Informatics and Ecological Monitoring:** Advanced tracking systems, telemetry, and spatial modeling for wildlife and ecosystem conservation.
- **Modern Biotechnological Applications and Bioethics:** Navigating the ethical dimensions of genetic engineering, synthetic biology, and animal experimentation in higher education.

2. Social Sciences

- **Artificial Intelligence and Automation in Business:** Transforming corporate finance, auditing, supply chain logistics, and consumer behavior analytics.
- **Corporate Governance and Sustainable Business Models:** Redefining ethical entrepreneurship and corporate social responsibility in an interconnected tech-driven economy.
- **Fintech and AI in Global Economic Paradigms:** The disruption of traditional banking, algorithmic trading, and decentralized financial systems.
- **Econometric Modelling and Big Data Analytics:** Utilizing large-scale datasets for macroeconomic forecasting, policy formulation, and market analysis.
- **Digital Economies and Sustainable Development:** Evaluating the socioeconomic impacts of automation, green growth, and digital transformation in emerging markets.

3. Mathematics & Informatics

- **Mathematical Modelling in the Age of Data Science:** Constructing robust mathematical frameworks to solve complex real-world and industrial problems.
- **Algorithms, Machine Learning, and Theoretical Foundations:** Exploring the mathematical underpinnings of deep learning, optimization theory, and neural architectures.
- **Computational Mathematics and EdTech:** Digital tools, software packages, and innovative pedagogical strategies for advanced mathematical instruction.

4. Languages & Literature

- **Digital Humanities and AI in Literary Studies:** Text mining, computational stylistics, and the shifting boundaries of literary criticism.
- **Technoculture and Cyber-Narratives:** Examining post-humanism, digital storytelling, and virtual realities in contemporary literature.
- **AI-Assisted Language Learning (CALL):** Pedagogical shifts, automated assessment, and digital literacy in English language teaching within higher education.

5. Physical Sciences

- **AI and Machine Learning in Computational Physics:** Utilizing neural networks for quantum simulations, particle physics, and complex physical modeling.
- **Advanced Materials and Nanotechnology:** Emerging material paradigms for next-generation electronic and energy storage devices.
- **Smart Instrumentation and IoT in Physics Education:** Integrating microcontrollers, digital sensors, and remote-triggered laboratories into higher education curricula.
- **Cheminformatics and AI-Driven Drug Discovery:** Accelerating molecular design, property prediction, and pharmaceutical synthesis through machine learning.
- **Green Chemistry and Sustainable Technologies:** Innovative chemical pathways and eco-friendly industrial applications in the modern technological era.
- **Digital Laboratories and Virtual Simulation Tools:** Redefining practical chemical education through safe, high-fidelity digital platforms.

Department Name:

Representative to Subcommittee:

** Strike out the subtheme to be omitted.*

New addition to Subtheme:

- 1.
- 2.
- 3.