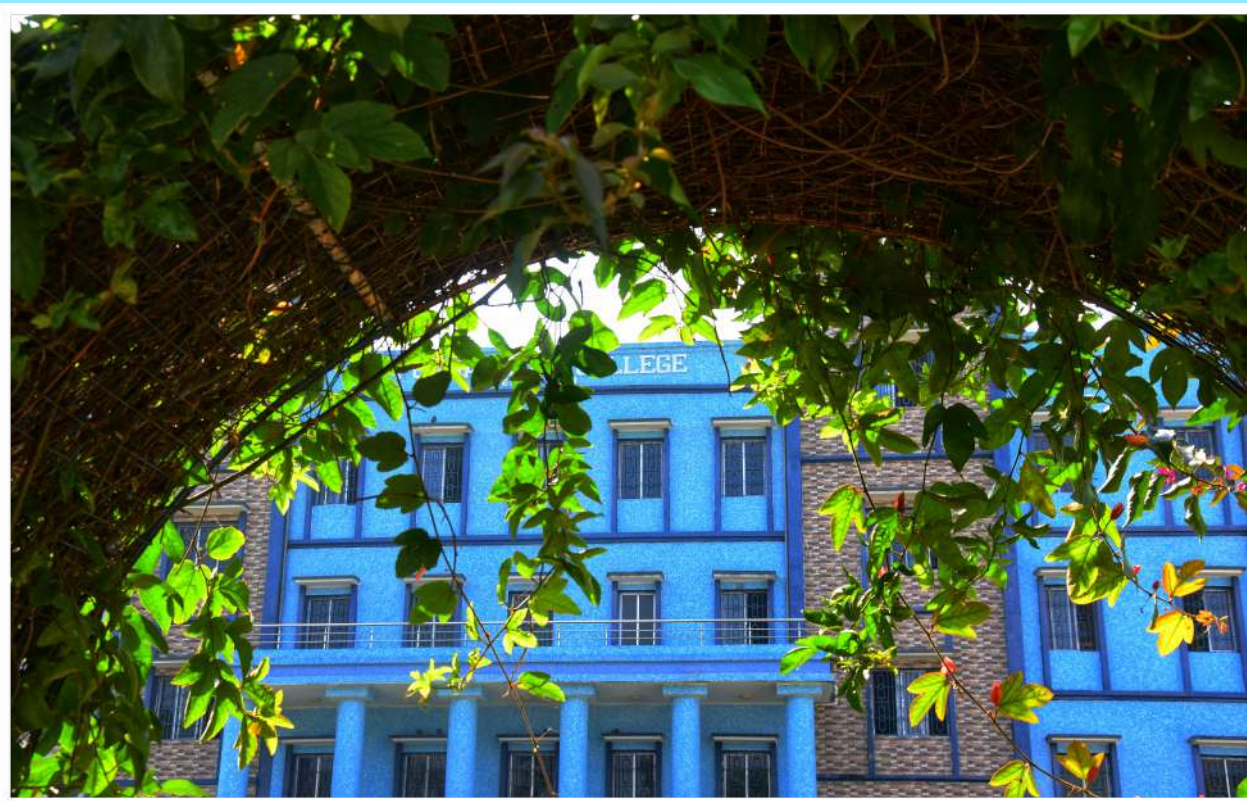


PURBASTHALI CHRONICLE

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Prepared by Research Committee, Purbasthali College



Research Committee Convener's Column

It brings me immense pleasure to inaugurate our college's newsletter, a testament to our collective dedication to fostering academic excellence and innovation. It embodies our commitment to promoting scholarly inquiry and intellectual discourse.

The Research Committee stands as a beacon of academic

PRINCIPAL'S CORNER

I am thrilled to extend my warmest greetings to each of you as we embark on a new chapter in our college's history with the launch of our very first newsletter, 'Purbasthali Chronicle'. This momentous occasion marks not only a milestone in our communication efforts but also a celebration of the vibrant spirit and collective achievements that define our college community.

As we unveil this inaugural edition, I am reminded of the profound significance of effective communication in fostering unity, transparency, and engagement within our college family. Our newsletter serves as a dynamic platform to celebrate our successes, share updates, and amplify the voices of our diverse community.



rigor, facilitating avenues for faculty and students alike to delve into the realms of discovery and exploration. Through collaborative efforts, research initiatives, and interdisciplinary collaborations, we endeavor to push the boundaries of knowledge and address the pressing issues of our time.

This newsletter serves as a conduit for disseminating our achievements, sharing insights, and nurturing a culture of scholarly engagement within our college community. I invite each of you to actively participate in this endeavor, contributing your ideas, perspectives, and discoveries to enrich the intellectual tapestry of our institution.

Together, let us embark on a journey of intellectual discovery, innovation, and transformative change. I am excited about the possibilities that lie ahead as we chart new scholarly frontiers and make meaningful contributions to our fields of study and beyond.

Dr. Sukla Bhattacharyya



At Purbasthali College, we are committed to nurturing an environment that encourages intellectual curiosity, fosters creativity, and cultivates a passion for lifelong learning. Through this newsletter, we aim to highlight the myriad opportunities, accomplishments, and initiatives that enrich the academic and extracurricular experiences of our students.

I am immensely proud of the dedication and resilience demonstrated by our students, faculty, and staff, especially amid the challenges we have faced in recent times. As we navigate the complexities of the present landscape, let us remain steadfast in our commitment to excellence, innovation, and inclusive growth.

I extend my heartfelt gratitude to the editorial team, contributors, and all those involved in bringing this newsletter to fruition. Your hard work and dedication have made this vision a reality, and I am confident that our newsletter will serve as a beacon of inspiration and connection for years to come.

With warm regards,

Dr. Bibhas Chandra Saha

Principal



IQAC Insights

It is with great pleasure that I share with you the inaugural edition of our college newsletter, a platform that promises to be instrumental in fostering transparency, collaboration, and continuous improvement within our academic ecosystem. Through meticulous assessment and strategic planning, the IQAC continuously enhance the quality of education and institutional processes. Our endeavors encompass curriculum development, faculty development programs, and infrastructure upgrades to ensure holistic growth. By fostering a culture of innovation and accountability, we prioritize student-centric initiatives and community engagement. The IQAC remains steadfast in its commitment to upholding accreditation standards and promoting a culture of continuous improvement. As we navigate the educational landscape, we invite active participation from all stakeholders to collaborate in shaping a dynamic and responsive learning environment.

Dr. Soumya M. Ghosh, Coordinator

CAMPUS INITIATIVES

In response to the pressing need for environmental stewardship and resource conservation, our campus has spearheaded several sustainability initiatives aimed at mitigating water scarcity and managing biodegradable waste effectively.

1. Rainwater Harvesting:

Recognizing the significance of rainwater as a precious resource, our campus has implemented rainwater harvesting systems to capture and store rainwater for various purposes. Through strategically placed collection mechanisms such as rooftop catchment systems and storage tanks, we harness rainfall runoff, thereby reducing dependence on external water sources and mitigating the strain on municipal water supplies.

2. Groundwater Recharge:

In tandem with rainwater harvesting, our campus focuses on groundwater recharge strategies to replenish aquifers and sustain local water resources. Permeable pavements, green spaces, and recharge wells are among the techniques employed to facilitate the infiltration of rainwater into the soil, thus augmenting groundwater reserves.

3. Compost Pit for Biodegradable Waste Management:

Addressing the challenge of organic waste management, our campus has established compost pits to facilitate the decomposition of biodegradable waste materials. Through segregation at the source and proper disposal practices, organic waste, including food scraps, garden trimmings, and biodegradable packaging, is directed to composting facilities to be utilized as a natural fertilizer for campus gardens and green spaces.

These campus sustainability initiatives underscore our commitment to environmental conservation, resource efficiency, and community engagement. By harnessing rainwater, replenishing groundwater, and managing organic waste effectively, we strive to create a resilient and eco-friendly campus environment that inspires positive change and fosters a culture of sustainability among all the stakeholders- student, faculty, and staff.



Librarian's Message'

As the Librarian of Purbasthali College, I am delighted to welcome you to our inaugural newsletter. This platform is a testament to our collective commitment to academic enrichment and collaboration.

In this inaugural newsletter, I would like to share some of the services that the Library offers:

Book Collection: Our extensive collection caters to the diverse academic interests.

Online Resources: Access thousands of e-books, journals, and research databases.

Study Spaces: Explore our designated study areas.

Workshops and Events: Stay tuned for workshops on information literacy, research skills, and academic writing.

Library Staff: Our dedicated team of librarian and staff are here to assist you.

I encourage each of you to contribute your insights to further our shared mission of educational excellence.

Dr. Ashes Datta

CAMPUS EVENTS

The Women's Cell of Purbasthali College, in collaboration with JKA India, West Bengal, organized an empowering initiative titled "Empower Her: A Comprehensive Self-Defense Training Program for Women" during the months of January and February 2023. This pioneering program aimed to equip female students with essential self-defense skills, fostering confidence, resilience, and personal safety awareness.

The program comprised a series of hands-on training sessions conducted by experienced instructors from JKA India, renowned for their expertise in martial arts and self-defense techniques. Participants learned practical strategies for self-protection, including situational awareness, and physical defense maneuvers tailored to real-life scenarios.

Throughout the program, participants engaged in interactive workshops, demonstrations, and simulated drills, gaining practical insights into personal safety strategies and effective self-defense tactics. The sessions emphasized empowerment, encouraging participants to assert their boundaries, cultivate self-assurance, and stand up against harassment or violence.

The event garnered widespread acclaim, highlighting the college's commitment to promoting gender equality, empowerment, and safety on campus.





Visitor Speaks

The lively ambiance and friendly welcome that permeate Purbasthali College left me deeply impressed on my recent visit. It is clear that this institution is committed to supporting students' holistic growth and academic performance from the lively classroom discussions to the captivating extracurricular activities. It is quite admirable how much love and care teachers and staff have for developing the skills and goals of their students. Furthermore, the students' strong sense of belonging and support for one another indicates an inclusive and supportive culture, which fosters growth and learning.

The unwavering dedication to excellence and innovative spirit that characterize Purbasthali College inspired me as a guest. It is indeed an honor to observe directly the revolutionary influence that this establishment has had.

Dr. Subhas Singha Roy
Associate Professor
Chandidas Mahavidyalaya

RESEARCH HIGHLIGHTS

Machine-Assisted Translation: Evolution, Challenges, and Future Directions

Dr. Soumya M. Ghosh

Introduction

Overcoming language barriers is critical in a society where communication is limitless and interconnectedness is the norm. In this sense, machine-assisted translation (MAT) has become a potent instrument, providing automatic methods for translating text between various languages. MAT has advanced significantly, changing the way translations are done, starting with the early days of rule-based translation systems and continuing with the latest developments in neural machine translation (NMT). But even with its amazing progress, MAT still has to overcome a number of obstacles, from linguistic difficulties to moral dilemmas. In order to give readers a thorough understanding of MAT, this article will examine its history, present situation, obstacles, and potential future developments.

Evolution of Machine-Assisted Translation

The origins of MAT can be found in the early years of computing, when rule-based translation systems focusing on translations on dictionaries and linguistic rules were developed. Statistical machine translation (SMT) systems were made possible by the shortcomings of rule-based methods, such as their incapacity to handle idiomatic expressions and language difficulties. SMT models were a major breakthrough in automated translation technology since they use statistical algorithms to learn translation patterns from massive corpus of parallel texts.

However, SMT systems encountered problems with coherence and fluency, which led to the development of neural machine translation (NMT) models. By using artificial neural networks to translate sequences from input to output without the requirement for explicit linguistic rules or alignments, NMT is a paradigm change in machine translation. This method has been widely used across a variety of applications and



Community Engagement Opportunities

NSS (National Service Scheme) Purbasthali College offers an array of community engagement opportunities, fostering social responsibility and active citizenship among its students. Through various initiatives, students can actively contribute to the betterment of society while gaining invaluable experiences.

The college encourages participation in outreach programs, such as organizing awareness campaigns, conducting cleanliness drives, or tree plantation programmes, in which students play a vital role in uplifting the community.

Additionally, NSS Purbasthali College organizes camps, seminars, and rallies to promote awareness on topics like women's education, safe driving, maintaining hygiene, gender equality, among others. These events not only educate the community but also empower students to become catalysts for change.

disciplines because of its impressive advances in translation quality, fluency, and naturalness.

Challenges in Machine-Assisted Translation

Even with the amazing advancements in MAT, a number of obstacles still stand in the way of its broad acceptance and efficiency. A major obstacle is linguistic diversity because different languages have different grammatical rules, syntax, and cultural nuances that are difficult for automated systems to consider. Slang, idiomatic phrases, and meanings that change depending on the situation all make translation more difficult and frequently result in mistakes or mistranslations. Furthermore, MAT systems frequently have trouble learning proper translation patterns for low-resource languages because of a lack of training data.

In the field of machine learning, ethical issues are also quite important. These issues include privacy, data security, bias, and intellectual property rights. Concerns of data privacy and permission are brought up by the dependence on massive datasets and user-generated material, especially in delicate fields like government translations, healthcare, and law. Moreover, the possibility of algorithmic bias, in which MAT systems reinforce cultural or racial prejudices found in training data, emphasizes the necessity of strong assessment metrics and bias reduction techniques.

Human-Machine Collaboration

Despite these difficulties, human translators continue to play a crucial role in the translation process. Human translators contribute linguistic knowledge, cultural sensitivity, and contextual understanding, whereas MAT systems offer speed and scalability. Therefore, the best course of action is to have a symbiotic relationship between human translators and machine assistance (MAT) tools, whereby MAT technologies enhance human talents rather than completely replace them. Professional translation environments are seeing a rise in the use of hybrid translation procedures, which strike a compromise between quality and efficiency by combining automated pre-translation with human post-editing.

Career Development Resources

We are pleased to spotlight the comprehensive career development resources available within our library, catering not only to current students but also extending support to our esteemed alumni.

Our shelves boast an extensive collection of pertinent books covering a spectrum of career-focused topics including current affairs, general knowledge, logic and reasoning, English comprehension and grammar, etc. Complementing these resources are carefully curated magazines and newspapers providing up-to-date information on current affairs and employment opportunities.

Students are encouraged to take advantage of our continued services, ensuring accessibility to career advancement materials even after their academic tenure. Whether seeking foundational knowledge or exploring new career avenues, our library remains committed to facilitating your professional growth and success.

We invite you to engage with these invaluable resources, fostering your career progression with knowledge.

Future Directions in Machine-Assisted Translation

Looking ahead, MAT has a lot of exciting prospects for growth and innovation. It is anticipated that additional advancements in translation quality, especially for low-resource languages and domain-specific information, will result from ongoing research in neural machine translation. Additionally, new opportunities for improving translation accuracy and context awareness are presented by the integration of multimodal inputs, including text, speech, and images. Context-aware translation systems have the ability to provide more precise and customized translations that are catered to the preferences and requirements of the user by utilizing contextual clues and user feedback to improve translations. Furthermore, by allowing systems to learn from minimum supervision and adapt to dynamic translation circumstances, advances in machine learning algorithms, such as reinforcement learning and self-supervised learning, have the potential to completely transform machine translation. The creation of real-time collaborative translation platforms between human translators and machine learning algorithms has the potential to boost efficiency and encourage information exchange among translation professionals.

Conclusion

Since its conception, MAT has undergone significant development, moving from rule-based systems to sophisticated neural models that can match the translation quality of humans. Even though there has been a lot of development, issues like linguistic variety, moral dilemmas, and the requirement for human-machine cooperation still exist. However, it seems that MAT has a bright future ahead of it, with chances for growth and innovation in context-aware systems, multimodal integration, neural machine translation, and collaborative workflows. With the capacity to break down barriers and promote greater connectivity in our increasingly globalized society, machine translation (MAT) has the potential to open up new possibilities in cross-lingual communication by utilizing the skills of both human translators and machine help.

Glimpses of Student Enrichment Programmes



State-level seminar on "Bharatiya Darshane Niti o Naitikata" on February 7, 2023.



State-level seminar on "Contemporary Politics in India: Trends and Challenges" on September 27, 2022.



National Seminar on "Literary Theory and Linguistic Turn" on September 15, 2022.

CAMPUS NEWS

Purbasthali College is thrilled to announce the introduction of eight new add-on courses, designed to provide students with diverse learning opportunities and enhance their academic and professional skills. These courses, spanning a wide range of subjects and disciplines, aim to enrich students' educational experience and equip them with valuable knowledge and skills for personal and professional growth.

Bangla Bananbidhi: Samasya o Protikar (Bengali): This course delves into the intricacies of Bengali language and literature, exploring various aspects of grammar.

Life Skill Education (Education): Life Skill Education focuses on equipping students with essential life skills to navigate challenges and succeed in various facets of life.

Regional and Social History of Purbasthali (History): This course offers a deep dive into the regional and social history of Purbasthali, exploring its cultural heritage, socio-economic dynamics, and historical significance.

Yoga Philosophy: Theory and Practice (Philosophy): Yoga Philosophy explores the philosophical foundations and practical applications of yoga, encompassing both theoretical concepts and experiential practices.

Sanskrit in the Development of Mental Health (Sanskrit): This course examines the role of Sanskrit language and literature in promoting mental health and well-being.

Communication Development and Proficiency in English (English): This course focuses on enhancing students' communication skills and proficiency in the English language.

The Preparation for Various Government Jobs: Special Focus on Indian Constitution (Political Science): This course provides comprehensive preparation for various government job examinations, with a special emphasis on the Indian Constitution and political system.

Basic Computer Proficiency (Central Library): This course offers fundamental training in computer literacy and proficiency, covering essential skills such as MS Office, internet navigation, and digital communication.