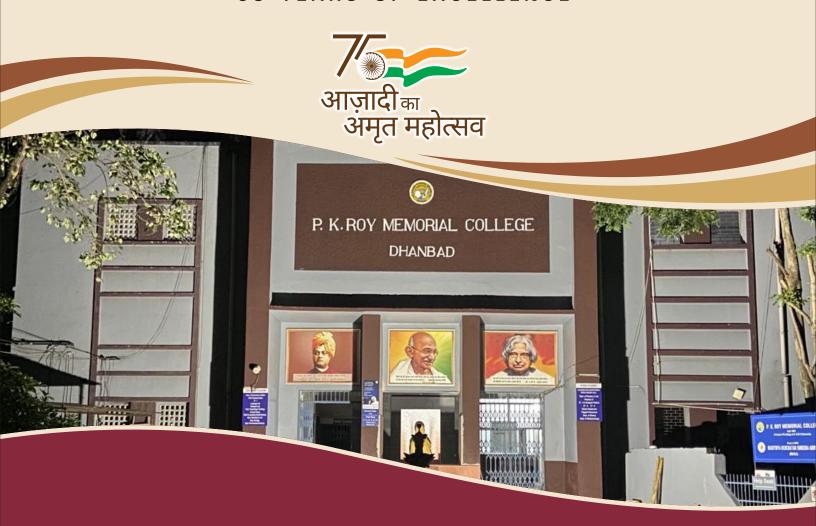


स्थापना का 65[®] वर्षगाँठ 65[®] ESTABLISHMENT ANNIVERSARY



SOUVENIR

65 YEARS OF EXCELLENCE



P. K. Roy Memorial College

(A Premier College of B B M K University, Dhanbad, Jharkhand)

Saraidhela, Dhanbad, Jharkhand 826 004 Phone: 0326-220 7639, Email: principalpkrmc@gmail.com

www.pkrmc.ac.in







Our Beacon of Light



Late Prasanna Kumar Roy





स्थापना का 65 वर्षगाँठ 65th ESTABLISHMENT ANNIVERSARY



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www.pkrmc.ac.in







पी. के. राय स्मारक महाविद्यालय, धनबाद का

''प्रतीक-चिह्न''

पी. के. रॉय स्मारक महाविद्यालय, धनबाद के प्रतीक-चिह्न में समस्त शिक्षा-दर्शन समाहित है। इसमें महाविद्यालय का ध्येय वाक्य - 'विद्ययामृतमश्नुते' अंकित है। यह वाक्य 'विद्या' की समानता 'अमृत' से स्थापित कर रहा है। जिस प्रकार अमृत-पान से भौतिक अमरत्व की प्राप्ति होती है, उसी प्रकार ज्ञानामृत का पान करने वाला व्यक्ति अमर ख्याति को हस्तगत करता है।

प्रातःकालीन सर्य का बिम्ब अज्ञानता के अन्धेरे पर ज्ञान के आलोक की विजय को प्रतिबिम्बित कर रहा है। इससे निस्सरित कुल बारह किरणें वर्ष के बारहों महीनो की ओर इंगित कर उपलब्ध कालखंड के सदुपयोग का आहवान कर रही हैं।

श्वेत - कमल श्चिता, पवित्रता, बोध और विवेक का प्रतीक है। यह ऐसे ज्ञान की अभीप्सा जगाता है, जिसमें नीर-क्षीर के पार्थक्य का सामर्थ्य हो।

जहां लेखनी और मिस-पात्र सतत् रचनात्मकता के द्योतक हैं, वहीं दोनो पार्श्व में मुद्रित शंख प्राप्त ज्ञान के उद्घोष एवं उसके प्रसार को संकेतित कर रहे हैं।

Vision

"To make this college a centre of excellence in higher education with inclusiveness of different sections of society to create an ecosystem for promoting innovative knowledge, while tapping the potentials of teachers and students."

Mission

- To ensure quality education with equity, excellence in teaching and innovation in research
- To reach unreached and empower youth of rural and backward areas by promoting skill-oriented education
- To use ICT as tools to equip all stakeholders with career-oriented skills through vocational education and training to make them employable, accountable, useful and indispensable for society and nation
- To impart education with a view to groom a philanthropic self and ensure holistic growth contributing to reformation of nation and mankind.









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रमेश बैस



राज्यपाल, झारखंड

राज भवन रांची - 834001 झारखंड



संदेश

यह अत्यंत हर्ष का विषय है कि पी0 के0 रॉय मेमोरियल कॉलेज, बिनोद बिहारी महतो कोयलांचल विश्वविद्यालय, धनबाद अपनी स्थापना की 65वीं वर्षगांठ मना रहा है । इस अवसर पर मैं महाविद्यालय परिवार से जुड़े सभी सदस्यों को बधाई देता हँ।

किसी भी शिक्षण संस्थान का स्थापना दिवस समारोह उल्लास व उत्साह का अवसर होने के साथ-साथ आत्म-चिंतन का भी अवसर होता है कि स्थापना के उद्देश्यों को मूर्त रूप प्रदान करने की दिशा में कितनी सफलता अर्जित कर पाये हैं, यदि किन्हीं क्षेत्रों में किमयाँ रह गई हैं, तो उन्हें चिन्हित कर उस ओर विशेष ध्यान दिया जाय। पी0 के0 रॉय मेमोरियल कॉलेज जैसे पूराने शिक्षण संस्थान का और अधिक दायित्व होता है कि वे विद्यार्थियों को गुणात्मक शिक्षा प्रदान करने एवं उनके भविष्य निर्माण हेत् सदा प्रयत्नशील रहे, उनका बेहतर मार्गदर्शन करें ताकि हमारे विद्यार्थी अपनी प्रतिभा से देश-विदेश में सफलता अर्जित कर महाविद्यालय एवं राज्य व देश के गौरवान्वित करें तथा अन्य युवाओं के लिए प्रेरणास्रोत बनें । महाविद्यालय विद्यार्थियों को एक जिम्मेदार वह बेहतर नागरिक के रूप में राष्ट्र के विकास में अपनी महत्वपूर्ण भूमिका का निर्वहन करने के लिए भी प्रेरित करें।

में इस महाविद्यालय की निरंतर प्रगति एवं विद्यार्थियों के उज्ज्वल भविष्य की कामना करता हूँ।

(रमेश बैस)









HEMANT SOREN
CHIEF MINISTER



Message

I am pleased to know that P.K. Roy Memorial College is celebrating its 65th Establishment Anniversary and to mark the occasion a souvenir is being published. Over the past 65 years the college has grown exponentially and provided holistic and quality education.

I am confident that with its commitment to excellence, the college will achieve newer heights in future. I congratulate the college fraternity on the occasion of 65th establishment anniversary celebration and wish them all success in their future endeavors.

Hemant Soren

Kanke Road, Ranchi - 834008 (Jharkhand)

Tel.: 0651-2280886, 2280996, 2400233 Fax.: 0651-2280717, 2400232

E-mail: chiefminister.jharkhand19@gmail.com







65 YEARS OF EXCELLENCE

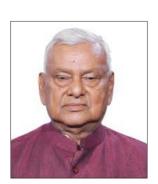
पशुपति नाथ सिंह

संसद सदस्य (लोक सभा)

सदस्य:

- कोयला और इस्पात संबंधी स्थायी समिति
- परामर्शदात्री समिति-सड़क परिवहन, राजमार्ग व जहाजरानी मंत्रालय





12, विंडसर प्लेस नई दिल्ली-110 001 दुरभाष : 011-23782666

मोबाइल : 09431115697

शुभकामना संदेश

बड़ा ही हर्ष का विषय है कि पी0 के0 रॉय मेमोरियल कॉलेज, धनबाद, झारखण्ड (नैक द्वारा दूसरे चक्र में पुनः मान्यता प्राप्त ग्रेड बी') की 65वीं स्थापना वर्षगाँठ जुलाई 2022 में मना रहा है। यह कार्यक्रम 20 जुलाई, 2022 से शुरू होकर 31 जुलाई, 2022 को अंतिम औपचारिक समारोह के साथ समाप्त होगा। इस अवसर पर कॉलेज परिवार एक स्मारिका का विमोचन करने जा रहा है।

इस स्मारिका में जितने भी विचार आयेंगे, उसका व्यापक और सकारात्मक प्रभाव इस समाज के युवा छात्र/छात्राओं पर पड़ेगा तथा समाज सशक्त, सक्ष्म,शिक्षित और समृद्ध बनेगा।

यह कॉलेज अपने स्थापना काल से ही उच्च शिक्षा में उत्कृष्टता की मिसाल रहा है और नित्य नई ऊँचाईयों की ओर अग्रसर है । साथ ही उत्तम उत्साह के साथ जिले की उच्च शिक्षा की जरुरतों को भी पूरा कर रहा है ।

इसके लिए डाॅ0 ब्रज किशोर सिन्हा (प्राचार्य) एवं उनके सहयोगी बधाई के पात्र हैं ।

मैं पी0 के0 रॉय मेमोरियल कॉलेज, धनबाद, झारखण्ड के प्राचार्य, शिक्षक/शिक्षिका एवं छात्र/छात्राओं की उज्ज्वल भविष्य का कामना करता हूँ एवं कॉलेज द्वारा आयोजित होने वाले इस समारोह की सफलता व भव्यता के लिए आशीर्वचन करता हूँ ।

(पशुपतिनाथ सिंह)

अनुग्रह नगर, धनसार, धनबाद (झारखण्ड) ● दूरभाष : 0326-2307544

(iv)







राज सिन्हा

सदस्य झारखण्ड विधान सभा, राँची।



आवास :

21, ओल्ड डॉक्टर्स कॉलोनी जगजीवन नगर, धनबाद 9431122272 (मोबाईल) 0326-2202272 धनबाद आ० 0651-2480221 राँची आ०

पत्रांक :.....DHN/MLA/1746



28.07.2022

Message

I am delighted to know that the 65th Establishment Anniversary of P. K. Roy Memorial College (reaccredited Grade 'B' in 2nd cycle by NAAC) is being celebrated in the month of July-2022. A week long programme, which has started from 20th July-2022 will end with final Ceremonial function on 31st July-2022.

I congratulate the Principal Dr. Braj Kishore Sinha for having succeeded in organizing this ceremony.

At a personal level, I feel happy in every small achievement of this college, but this one the organization of the 65th Establishment Anniversary is a big event.

I convey my best wishes to the Principal and his entire team for success of the event. May the College reach newer height of success.

Warm wishes once again,

Raj Sinha







Prof. (Dr.) Sukadev Bhoi Vice-Chancellor



Binod Bihari Mahto Koyalanchal University Dhanbad-828130, Jharkhand



शुभकामना संदेश

यह जानकर काफी प्रसन्नता हो रही कि पी0 के0 रॉय मेमोरियल कॉलेज, धनबाद अपनी स्थापना का 65 वॉ वर्षगाँठ 31.07.2022 को मना रहा है। इस प्रकार का आयोजन महाविद्यालय के सर्वागीण विकास का सूचक है । महाविद्यालय परिवार की ओर से इस अवसर पर स्मारिका का प्रकाशन भी गर्व का विषय है । स्मारिका का प्रकाशन संस्था के सृजनात्मक क्षमता का परिचायक होता है । स्मारिका आने वाले युवा पीढ़ी के लिए प्रेरणा स्रोत्त भी होता है। महाविद्यालय उत्तरोत्तर उन्नति के मार्ग पर अग्रसर हो, ऐसी हमारी सहृदय कामना है।

> **Sukadev Bhoi** (कुलपति) बि.बि.म.को.वि., धनबाद







Sanjoy Kumar Verma **Finance Advisor**



Binod Bihari Mahto Koyalanchal University Dhanbad-828130, Jharkhand



शुभकामना संदेश

मुझे यह जानकर काफी प्रसन्नता हो रही है कि इस झारखंड की धरती पर, सबसे प्रीमियम महाविद्यालय, अपनी 65 वीं स्थापना दिवस मना रहा है।

इस अवसर पर मैं इस महाविद्यालय के प्राचार्य, समस्त शिक्षकगण, शिक्षण कर्मचारीगण का इस अवसर के आयोजन हेतु बधाई एवं शुभेच्छा व्यक्त करता हूँ।

इस समस्त टीम को बधाई देता हूँ।

Sanjoy Kumar Verma (वित्त सलाहकार) बि.बि.म.को.वि., धनबाद

(vii) PKRM 2022











Binod Bihari Mahto Koyalanchal University

Dhanbad-828130, Jharkhand Mob.: 9431125023



Message

I am extremely happy to know that P. K. Roy Memorial College celebrates its 65th Establishment Anniversary in a week long programme commencing on 20th July 2022. During all these years as a premier institution PKRM College has rendered quality education and shaped the careers of thousands of students.

I congratulate Principal, teachers, non-teaching staff members and students of the college in this auspicious movement. I wish them all success.

Dean, Students welfare BBMKU, Dhanbad







Dr. Shailendra Kumar Sinha

Dean, Faculty of Science

Binod Bihari Mahto Koyalanchal University
Dhanbad-828130, Jharkhand



Message

Education is one of the most powerful forces shaping the contemporary world. Since the independence of the country, a great emphasis was laid on the development of centres of higher education in India. The role of Indian higher educational institutes such as colleges has been to provide quality based education in the field of education, research etc to empower youth for self-sustainability. In the contemporary world, institutions of higher education have the added responsibility of imparting global perspective to the learners.

P. K. Roy Memorial College has been a gateway to higher education to a large number of students since its inception. The college has been at the forefront of shaping the citizens of the nation. The students of the college have excelled in different area such as art and literature, sports and business, science and research.

It's a matter of great happiness that P. K. Roy Memorial College is celebrating 65th year of its establishment. On this occasion, the statue of the scion of the illustrious Roy family, Prasanna Kumar Roy after whose name the college is named – would also be unveiled.

I wish all success to the ceremony and wish all the best to all the stakeholders of the college in their future endeavour.

Shailendra Kumar Sinha Dean, Faculty of Science BBMKU, Dhanbad







Dr. B. N. Sinha Dean & Head **University Faculty of Commerce**



Binod Bihari Mahto Koyalanchal University Dhanbad-828130, Jharkhand



Message

It gives me immense pleasure to know that P.K. Roy Memorial College, Dhanbad, a premium educational institution in the district of Dhanbad and a Constituent unit of B.B.M.K. University is celebrating its 65 years of successful and glorious competition.

It is a pride moment not only for the college but also for all those who are associated with the college in the past and present.

Being associated with the college indirectly, I felt great joy and I conveyed my whole hearted congratulation. During this 65 years of successful running the college achieved numerous landmark in academic, sports and cultural activities.

I wish that the college will achieve more and more success in the future also with the collective efforts of all staffs.

B. N. Sinha

Dean & Head university faculty of commerce BBMKU, Dhanbad

 (\mathbf{x}) PKRM 2022







Dr. Seema Sinha **University Head Dept of English DEAN**, Humanities



Binod Bihari Mahto Koyalanchal University Dhanbad-828130, Jharkhand



Message

It is a great pleasure to write a congratulatory message on the occasion of the 65th establishment day of the PK Roy Memorial College.

PK Roy Memorial College is one of the leading colleges of Dhanbad. It's imparting education and value based training to the students for the last six decades.

It has produced great achievers and will continue to do so.

I extend my best wishes and regards to the entire college and the Principal Dr. B.K. Sinha.

Seema Sinha University Head Dept of English DEAN, Humanities BBMKU, Dhanbad

PKRM 2022 (xi)









Dean, Social Science



Binod Bihari Mahto Koyalanchal University Dhanbad-828130, Jharkhand



Message

I am glad to know that P.K Roy Memorial College, Dhanbad, A premium education institution, is celebrating its 65th years of successful completion.

Kindly accept my heartiest congratulations on the auspicious occasion.

The institution has transversed a glorious journey with numerous landmark achievements in the field of academics, sports, cultural activities etc.

It also gives me immense joy and pride that I have also been directly associated with the college for a long time of my professional life.

I hope that the collective effort of all associated with the college will enable it to greater heights in the future. I complement the college on the auspicious occasion and wish the commemorative volume of success.

Puspa Kumari Dean Social Science BBMKU, Dhanbad







Sudhinta Sinha

M.Phil. (D.M.&S.P.), Ph.D (Psy) Proctor Binod Bihari Mahto Koyalanchal University Dhanbad



Mob.: 9006125883 Email: sudhintasinha@gmail.com



Message

I am glad to know that P. K. Roy Memorial College, Dhanbad (A constituent unit of Binod Bihari Mahto Koyalanchal University, Dhanbad) currently known as 'Premier College' of Jharkhand is going to celebrate its 65th Establishment Anniversary in the month of July 2022.

I hope this will provide a good opportunity to the students to give expression to their thoughts and hidden potentialities is in the shape of Essay, Quiz, Debate competitions and other cultural activities and their teachers will motivate and encourage them to come forward in this regard.

I express my best wishes on this occasion for the effort being taken by P. K. Roy Memorial College family and hope it would succeed in spreading knowledge and inspiration in the broader spectrum.

(Dr. Sudhinta Sinha)











Binod Bihari Mahto Koyalanchal University Dhanbad-828130, Jharkhand



Message

I felt highly delighted to know that P. K. Roy Memorial College is celebrating 65th Anniversary of its Establishment Day in the month of July, 2022 to be concluded with a ceremonial function on 31st July, 2022. The College is also publishing a souvenir on this occasion.

A souvenir of a college is a rich repository of the past memorable events. It also showcases the creative activities of the students, which is indeed a matter of pride for the college.

I congratulate the Principal and his team on this occasion and wish the anniversary function a great success.

Vikas Kumar

Registrar BBMKU, Dhanbad









Dear

Governing Council, Professors, Students, Alumni, and the people of Dhanbad,

It gives me immense pleasure to participate and witness the grand celebration of the 65th Anniversary of the foundation of P.K. Roy Memorial College. On this occasion, as we inaugurate the statue of the legendary Shri Prasanna Kumar Roy, it reminds us of his bold dream of building a modern India through higher education, training, and entrepreneurship.

The Roy family and its subsequent generations have played an important role in shaping the future of Jharkhand's youth and of the city of Dhanbad by establishing this abode of learning. Continuing with this tradition, the Roy family is announcing today the setting up of P.K. Roy Foundation which will be awarding the P.K. Roy Outstanding Student Award every year to encourage students to perform their best in this institution.

Regards,

Dr. Someshwar Roy







Dr. Sharmila Rani Pricipal



Shree Shree Lakshmi Narayan Trust Mahila Mahavidyalaya, Dhanbad



Message

It is a matter of great pleasure for me to congratulate all the present and exstudents parents, staff and the teachers on 65th Foundation day P.K. Roy Memorial College, Dhanbad.

Wish to acquire higher peaks of success for achieving aims and objective of your college.

Play a bigger role in days to come.

Dr. Sharmila Rani Principal SSLNT MM Dhanbad











Message

I am happy to know that PKRM College, a premier post-graduate unit of Binod Bihari Mahto Koyalanchal University, Dhanbad is going to publish a souvenir to Commemorate the 65th anniversary of the college. I am sure this souvenir will provide ample opportunity to the students to showcase their literary interests.

I extend my best wishes to the entire team of PKRM College, Dhanbad on this special occasion of publishing the souvenir.

Dr. Sanjay Prasad
Principal
G. N. College, Dhanbad









A Journey of 65 years for Excellence and Quality Higher Education My best wishes for 65th anniversary of establishment of the college!

Establishment of an educational institution is a milestone in a civil society. Roy family of Katrasgarh, a visionary philanthropist of coalfield area, did a yeoman service while establishing a degree college in Dhanbad to facilitate and bring higher education reachable for the poor people of this part of the country. The society is highly obliged to the family of the late Prasanna Kumar Roy for establishing a first-grade degree college with a piece of land, and sufficient fund as grant to start the college. The college was established on 20th July 1957 and later it was affiliated by the Ranchi University in 1960 and rest is the story, which has been scribbled in black and white several times.

Prasanna Kumar Roy Memorial College as it has been ascribed in a registered deed by the Roy family by which the college came into its existence latter came to know as PK Roy Memorial College. The college is not only the first choice of the students for science stream but also equally opted for social science and study for commerce course up to degree level. In the year 1977 the college was made constituent unit of Ranchi University, Ranchi.PG teaching was started at as early as in the year 1984 Bihar Government in some of the subjects of arts. PG teaching in Zoology was started from the academic Session 1987-89 by the Ranchi University and was continued after bifurcation of Ranchi University in the year 1992 and the college became the part of Vinoba Bhave University, Hazaribag. Further, the College was made PG Centre in Dhanbad for teaching PG in all the three faculties (thirteen subjects including Urdu and Bengali, which was not taught at VBU, Hazaribagh) by the Jharkhand Government in the year 2004.

First time, in the year 2014, the college got accreditated by the NAAC with PG teaching and was awarded Grade B with CGPA 2.58. Again in the year 2021 the college was reaccredited by the NAAC with grade B.

After 22 March 2020, not only India but whole of the globe witnessed unprecedented lockdown consequent upon the sudden outbreak of covid-19 pandemic. PKRM College too came forward and took the challenge to address the new type of problem. The faculty members and support staff with little experience or training on online/ virtual classes, organised classes and reached the students and study materials were delivered to them. The handy smart phone of the teachers and students became powerful tool in this period to cope with the challenge. Limitations were there like - internet speed, internet connectivity and power supply. But every challenge is an opportunity and we did it.

The College was having a plan to take care of its students and decided not to compromise with the quality of education as well as their personality development. The college organised an online competition "Fighting Corona with Creativity", which was a grand success. During the pandemic period college developed its strong digital infrastructure and created an ecosystem for future teaching and learning system. Informative college website, interactive flipped, blended and hybrid classrooms with You Tube channel with customised video tutorial of a few subjects, were developed.

Three state-of-the-art computer laboratories with 50, 20, and 15 nodes, internet and wi-fi facilities with and interactive panel for teaching attracts BCA and BBA students to study vocational courses. The College has six self-financing Vocational courses (five degree and one certificate course in foreign language – German). This year Amant course will be started. Four Years Integrated B. Ed. Course in science and arts will be added from next academic year. Photography and Nature Clubs are other







Estd 1957 65 YEARS OF EXCELLENCE

attraction for the students. Start-up supports and incubation centre have been created with help of IIT ISM, Dhanbad. Placement and counselling cells help students to get employment. Cultural society bring out the hidden talents of the students and give them opportunity to blossom. Spoken tutorial of IIT Bombay, EXCEL programme of TISS and Language laboratory with Orell Tell software help development of skill and outcome based learning for the regular students. E-learning centre is an add attraction for the students visiting to the new central library of the college, which is housed in two floors in the B+G+7 academic building. This B+G+7 academic building was constructed by the Government of Jharkhand along with an Indoor Sports Complex (construction delayed because of pandemic) was the part of scheme of the Government to elevate the college as a premier college of Jharkhand. Two open universities – IGNOU and Nalanda Open University reachto the out of reach students and contribute in the improvement of the state GER in higher education.

A good contingent of highly qualified and talented teachers, smart and trained support staff (Grade II &IV) meet the concurrent and contemporary requirements of the higher education. They cater to the needs of the students and prepare them as best human beings of the country. We are serving some ten thousand students – local with adjoining districts of Dhanbad and neighbouring state West Bengal. Our alumni are extra ordinary and show their presence in every part of the country. They are serving the nation in different capacities. Many of our students are in different parts of the world working in different scientific research institutes.

College is creating an ambience for quality higher education. Seminar, conferences and workshops are not only organised regularly but our teachers participate actively in other organisations in the state or out of the state. Our Physics department is a flagship department and its publication of research papers of very high standards and having good impact factors.

College has academic audits in the year 2021. The peer team of the Academic audit evaluated the college on all seven parameters (developed by NAAC) and appreciated the efforts taken by the college for quality higher education. They visited the hybrid classroom of the college which is a model flipped classroom developed by the college.

Although playground is a limitation of the college but our students have shown their perseverance and excelled on different state and national level of sports and games competitions. Further, the college has been assigned several times to organise inter college athletics meets by the university.

There are four units of NSS, two battalions of NCC in the college. NSS make the students responsible and commitment for the society whereas NCC prepares students for taking any challenge in a situation of emergency faced by the country.

Land is a big constrained for the college for its future expansion. College is approaching the local administration and Higher and technical education department Government of Jharkhand to give some 20 acres of land or expansion of the college. This year college was able to get its 71 dismil land back from IIT ISM, which has been allotted by the Government of Jharkhand for construction of Multipurpose Examination Complex. A state-of-the-art Multipurpose Examination Complex will come up there a, proposal has been prepared and it has been submitted to the Government of Jharkhand for approval and grant for the construction. Approach road of the college is another limitation. Further, the glory of the college will be restored by getting its PG teaching back from the current academic session. In the course of its journey to reach this stage the college has faced many hiccups. Above all the P K Roy Memorial College, is the pride of the Dhanbad city and State of Jharkhand. It has become a brand name in quality higher education.

Once again, I congratulate all students – regular and alumni, my fellow colleagues, and other stake holders of the college on the occasion of 65th Anniversary of establishment of the college.

(Dr. Braj Kishore Sinha)
Principal









Message

I feel rare gratification to be the part of the celebration of the 65th Establishment anniversary of P.K. Roy Memorial College. The college has carved out an abiding niche in Koylanchal region imparting quality education in both traditional and vocational UG and PG courses enabling the stakeholder to explore the unexplored region of academy with unfailing access to the multiple job arenas. Hope, the college keeps its march on towards higher destination true to the trust and expectations of the youth of koylanchal, Dhanbad.

Dr Mantosh Kumar Pandey

Johnshier.







College Profile



P. K. Roy Memorial College came into existence on 20th July 1957 by a registered deed by the philanthropist Roy family of Katrasgarh. Initially, a humble start, in the year 1960 with affliation of Ranchi University, Ranchi and later made constituent unit of the Ranchi University in 1970. Initially the teaching was up to honours degree in many subjects of Arts, Science and Commerce. Gradually the college grew and established its credentials among its stakeholders and in the year 1984 the college was given permission to start Post Graduate classes in some popular subjects.

The college is in the very heart of the Dhanbad city and is easily accessible to its students, by road and rail, which made the college popular among the students, especially the girl students and their parents. The location of the college is not only the reason for its popularity but also due to quality education and use of modern tools and technology in teaching and learning by its highly qualified, dedicated and committed faculty members and friendly supportive staff.

Catering to the needs of fifteen thousand (approx) students, coming from Dhanbad neighbouring areas of Dhanbad and adjacent state West Bengal, the college starts in the morning and remains active till late in the evening. Big magnificent old double storey science building, icon of the college, has large, airy, well lighted lecturer theatres, laboratories, General Library, Computer Lab and Language Lab that facilitate students in their career building and personality development programmes. The College has an Administrative Building, Social Science Building and a MP Hall with an auditorium, sitting capacity of 200 students where cultural activities, seminars and conferences are held. The built-up area is about in three acres and ample open space for play-ground. The college campus is green and clean creating ambience and environment for quality higher education. The College has MoU with HCL Company for employment of students. Many companies are thronging to employ our graduate. Our students are excelling in the sports and other social activities.

Along with regular university under graduate and postgraduate programmes the college also runs vocational self-financing courses in a few subjects and houses two distance learning university's centres – Indra Gandhi National Open University (IGNOU) and Nalanda Open University (NOU).

In the year 2021 the college was reaccredited grade 'B' with CGPA 2.28 by the National Assessment and Accreditation Council, Bangalore establishing its (college) credentials as an institute imparting quality higher education to its students and other stake holders.

The college has been identified by the State Government, to elevate it as a Premier College of Jharkhand and there has been high inputs of resources to renovate the old structures and create new academic and sports complexes to cope with the space crunch and make the college a Premier institution of higher education in Jharkhand.

To achieve the three cardinal principles of education policy viz. access, equity and quality, PKRMC as it is commonly known, has SwayamPrabha Classes, MOOCs and is taping other facilities of Digital India programme. The college is an institutional member of National Digital Library of India and provides access to more than 61 lakh digital books to its students and teachers. The INFLIBNET facilities make the faculty members and other research scholars to have access to substantial number of National and International e-journals. A strong, dynamic college website is students friendly, and keeps all updated information of the college and its activities.

The college has EXCEL programme of TISS to facilitate students in development of soft skills and make them employable. The Language Laboratory and the Computer Centre of the college are also other common facilities for the students that help them in improving their skills. Over and above the Placement Cell of the college helps them in getting employment in different companies. The college has started its own centres for incubation of innovations and start-ups. IIT (ISM) has come forward to facilitate this programme.







65 YEARS OF EXCELLENCE



P. K. Roy Memorial College: On a journey towards Zenith

"Education is the manifestation of perfection present already in man"
- Swami Vivekananda

"By education, I mean an all round drawing of the best in child and man in body, mind and spirit."

- Mahatma Gandhi

Kicking off in a sapling mode in July 1957, P.K. Roy Memorial College, Dhanbad has today grown like a Banyan tree with its branches of various academic programs spread well over the past 65 year of time span benefiting a huge mass in pursuit of Higher Education in Dhanbad coalfield region. Established by the illustrious Roy family in July 1957 under 'Prasanna Kumar Roy Trust' on the sweet venerated memory of one great philanthropist Prasanna Kumar Roy and run by a Governing body, the college kept its chequred journey as an affiliated unit in 1960 under then Ranchi University until it's take over in the year 1977 by the then Government of Bihar and since then this college has continued its march onward seamlessly with a lot of progress and academic promises. Soon, the college became people's choice both for its being in the hub of the coalfield and also by virtue of the committed academics trying every store to strengthen the foundation of the college with their vision and innovative working style. The students from far and wide thronged the college and it became a challenging task for the college management to manage the burgeoning strength taking care of the academic need of the students. A Co-educational college P. K. Roy Memorial College has become a ready choice of both the male and female students on equal footing. Apart from graduate programs in all the three streams - Science, Commerce and Arts this college also started teaching of Post- Graduate courses in all the streams from 2005 seamlessly. The PG students brought glory to the college by being University toppers in many departments every year under Vinoba Bhave University. The college is proud of the alumni who shine globally holding envious positions in their respective domains. Brilliant performances by the students and faculty members resulted into increase in its popularity index and the intake numbers around 11 to 12 thousand today.

Traversing its journey unimpeded, P. K. Roy Memorial College got its accreditation by NAAC with grade 'B' first in the year 2014 under the tutelage of ex-Principal Late Dr. D. K. Verma. The reconstruction and edification of classrooms buildings began that very period.

The golden era of the college triggered in 2017. The first job fair was successfully organized under the stewardship of Principal Dr. B. K. Sinha, well supported by the faculty members and other staff. The college was felicitated by the Government of Jharkhand as the first college to ensure job in the highest number in Jharkhand state. The spirit and enthusiasm in the campus for holistic development of the college continued. Construction of new buildings, enhancement of infrastructure of the state-of-art level and launching of numerous vocational courses aimed at creating employability ambience propelled the college to a dizzy height. Apart from the traditional courses, the college today boasts of running the programmes like Bachelor in Bio-technology, Environmental Science, BCA, BBA, Certificate course in German language. The language laboratory of the college got established now a decade is meant to enable the stakeholders attain proficiency at communicative skill in order to fit in the fold of global job arena. In all, P. K. Roy Memorial college has developed an ecosystem where students find their future secured having offers and opportunities of job through campus selection round the year.

Combating the crunch of adequate land, imbalance of students - faculty ratio: - P. K. Roy Memorial College is all set to keep its flame of wisdom aloft trying every bit- both in curriculum and Co -curriculum activities - advancing towards higher state.

The cultural fest 'Putus' organized in 2019-20 narrate the tale of the rich cultural repository of P. K. Roy Memorial college and add another vibrant chapter to the glory of its status as Colossal Institution dedicated unconditionally to the upliftment of student and humanity at large.

The bygone years when the college was under V. B. University, Hazaribagh, records with pride the winners trophies in the possession of the students of P. K. Roy Memorial College. The students have been proving their mettles in virtually

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all spheres of academic, sports and cultural activities. The laurels of the past years hold out examples and inspirations to the students to perpetuate the same in the more committed manners in posterity.

P. K. Roy Memorial College also feel gratified of being one among the colleges in Jharkhand, which came out with innovated digital mode of teaching in the crisis-ridden Covid-Pandemic era when practice of offline classes was lost in oblivion and the teacher- taught chemistry was badly disrupted. The college devised a golden mean of steering clear of this phase of unbeatable challenge by introducing online classes, setting a trend for other colleges in the state of making it convenient for the students in their respective colleges. The IT cell of the college also prepared and preserved, uploading the lectures of the faculty members of different departments in YouTube. Exploring new ideas in digital teaching - learning mode still continues with a view to overcome any further untoward challenges in future with the consistant, ceaseless efforts, P. K. Roy Memorial college know no complacency and has kept its mission of betterment believing in the Veda's precious phrase - "चरैवेति" "चरैवेति" The poetic lines of Lord Alfred Tennyson set the formula of college running on the path of progress -

"For Man may come and Man may go

But I go on for ever".

The newly envisioned and launched academic structure NEP 2020 has filled the college inmates with the added zeal to begin yet another chapter in the Saga of holistic advancement. The onset of 4 year integrated B.Ed course in the upcoming session (2023 – 24), and multiple offer vocational courses, certificate and diploma courses in foreign language (German, French, Japanese et al) and many other job-conducive academic programmes in the offing, must add to the enrichment of the ecosystem of the college. All faculty members, students and supporting staffs under the able and dedicated captaincy of Principal Dr. B. K. Sinha has been working tirelessly focusing on its primary goal of attending autonomy in the years ahead. The students with different unconventional approach and access to academics will be permitted to have their free choice of areas of their interest and expertise. The Photographic club, The Nature club started by the college is indicative of the amenities made available to the students for their proper grooming. P. K. Roy Memorial College treat the students as their children and they are counseled and motivated to be veritable Indian citizens learning and inculcating a life style which ultimate help them to be an accountable National ready to serve humanity cutting across all kinds of man- made myopia. There is no end to the visions and imaginations strained and no stopping with any single achievement. The college family is all set to keep the stone of the academic as well as co-academic pursuit rolling towards further excellence.

The very poetic stanza of Robert Frost keep disturbing every inmate of P. K. Roy Memorial College -

"The woods are lonely, dark and deep,
But I have promises to keep,
Miles to go before I sleep,
Miles to go before I sleep."

(Stopping By woods on A snowy Evening)

(Dr. Mantosh Kumar Pandey) HOD English,

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65 YEARS OF EXCELLENCE



Striving for Quality

P. K. Roy Memorial College, Dhanbad has established the Internal Quality Assurance Cell (IQAC) in the year 2013. The IQAC being an integral part of the college works towards realizing the goals of quality enhancement by developing a system for conscious, consistent and catalytic improvement in different aspects in the functioning of the college.

The IQAC P. K. Roy Memorial College, Dhanbad is proud and happy to celebrate 65th Anniversary of Establishment of college by the blessings of Late Prasanna Kumar Roy. Today the college has achieved a prestigious position and has completed the second cycle of NACC accreditation and graded 'B'.

The IQAC assures the stakeholders i.e., students, parents, teachers, staff, management, funding agencies and society in general – of the accountability and transparency in the quality management system of the institution and its concern for ensuring quality of education being imparted.

Internal Quality Assurance Cell is a step towards excellence. The IQAC of PK Roy Memorial College, organises various programmes for faculty, administrative staff and quality circle members. It conducts open forum to provide interface between students and officials of the college. It conducts staff assessment to provide valuable feedback for quality sustenance and improvement in teaching, learning and research experiences in the college. It documents and reports various activities of the college for various higher education requirements. A continuous follow up has been made on infrastructural resources of the college to assure adequate, appropriate and better facilities to assure conducive and enabling environment for teaching, learning and research. Through all these measures IQAC happens to be one of the important components of the college which ensures quality and continuous improvement in all the units / aspects of the college.

With Best Wishes.

Mrs. Kiroom Rashmi Topno **IOAC** Coordinator

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Importance of AISHE for Higher Education Institutions

These AISHE reports give a detailed analysis of the data collected in the concerned year and lay out the important estimates on higher educational indicators such as enrolment, gender parity, pupil-teacher ratio, infrastructure, etc., which helps in providing a detailed picture of the higher education scenario in India.

The Ministry of Education, Government of India, launched the All-India Survey on Higher Education (AISHE) in the year 2011 under the scheme of Higher Education Statistics and Public Information System (HESPIS). It is to understand the state of higher education in India and create a robust database of the educational institutions providing higher education in India. The survey is web-based and conducted on an annual basis through the portal http://aishe.gov.in.

The objective of the survey:

The survey is conducted with the following objectives:

- 1. to identify all institutions providing higher education; and
- 2. to collect data concerning various educational statistics.

Collection of Data:

Under the survey, data from institutions imparting higher education is collected in a prescribed format basis the following parameters:

- 1. Educational Institution's basic details;
- 2. Availability of infrastructure;
- 3. Details of students' enrolments:
- 4. Details of education finance:
- 5. Teachers' details:
- 6. Details of non-teaching staff;
- 7. Financial information such as receipt and expenditure under various heads;
- 8. Programme conducted under various faculties/schools & departments/centres;
- 9. Students enrolled in these programs;
- 10. The examination result of a terminal year of each of these programs; and
- 11. Scholarships, loans & accreditation.

Based on the data collected, various indicators of educational development such as institution density, gross enrolment ratio, pupil-teacher ratio, gender parity index, etc., are calculated. These indicators form an important basis for making informed policy decisions and research for developing the education sector in India.

Duration of the Survey:

The survey commences every year on 1st January, and the data collection process continues up to 15th August every year. Thereafter, the information is reviewed, and reports are prepared.

Dr Sagar Kumar Swain Nodal Officer, AISHE

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A Glimpse of Vocational Course at P. K. Roy Memorial College, Dhanbad

P. K. Roy Memorial College, a premier college of Jharkhand need no introduction. It is the first preference of students of coal field area for admission in different streams be it Arts, Commerce, Science, or Vocational course. Students hailing from Dhanbad, Bokaro, Giridih Districts of Jharkhand along with neighbouring areas of West Bengal are enrolled in this College. It has a glorious past and thriving present and ambitious future

Keeping in view of the need of students the college has introduced academic courses providing opportunities and facilities to pursue them which are not run in another college. Two vocational courses-BSc. in Bio Technology and B.Sc in Environment Science were started in 2007 with an intake capacity of 32 students each. Since the inception of the courses students have been professionally nurtured and prepared to compete confidently with other students in the country and abroad. Many of pass-out students have got employed in reputed institutions, completed Master's and Ph.D. Degree.

There are multiple job opportunities evolving every day with evolution of IT Industry. Computer Science degrees are providing job opportunities across the globe. Under the able leadership and guidance of Dr. B. K. Sinha, Principal of the college the following vocational programs were started in the college. Considering the demand of the time two Vocational Course – BCA and BSc. in Computer Science were started in the academic year 2019 and 2021 respectively with intake capacity of 60 Students in each programme. Similarly BBA Programme was introduced in the academic year 2019 in order to produce management graduates who are in great demand in the present in management field with an intake capacity is 60. These courses have got overwhelming response from the students. Besides, the vocational courses Certificate Course in Germen language was started in the college in 2021, and P k Roy Memorial College can boast of being the first college of the university to start this course. The college has an approval to start Amanat/Amin course from the session 2022-23. The process to start Four Year Integrated B.Ed course from the year 2023 has been initiated.

To develop the competency among students in their respective fields, the college provides all infrastructural facilities. The college has state of art computer lab, especially for BCA, BSc. in Computer Science and BBA students. The collage has the state of the Art Language Lab where students admitted in vocational courses are enrolled for developing communications skills among students. Maximum students are listed in N'List so that they can access online sources of study materials. Besides, dedicated and well qualified faculty members are the strength of the departments. They render proper guidance to our students. By organising hybrid class they easily help the students who are absent in the class

Not only we impart vocational education, but also provide platform for employment through Placements Drives organized time to time, inviting various reputed companies such as Wipro, HCL, etc. In the month of December 2021 HCL and Jay Balajee visited our collage and picked up many students for employment. In March 2022 again HCL and ICIC Bank were invited and a good number of students got job opportunities.

To train and give professional exposure BBA students and Industrial visit to BTPS Chandrapura was organized in the month of June 2022. Again students of BBA Sem-III or VI are enrolled for six week Internship.

The college management is marching ahead with ambitious plans to develop infrastructural facilities as per the need of the New Education Policy 2020. We will have separate campus for vocational programmes and also hope that more need based vocational programmes will be introduced to cater the needs of students.

> Dr. Mohan Lal Mahto Coordinator, BCA & BBA

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Hall Current

Dr. Nasim Ahmad HoD, Dept. of Mathematics

In an ionized gas if the density is low and/or the strength of the magnetic field is very large, the charged particles can gyrate round the magnetic lines of force several times before suffering collisions with other particles. This results in a drift of charged particles (say electrons) at right angles to the direction of magnetic field and electric current. Due to drifting of charged particles currents are generated, known as Hall currents which reduce the electrical conductivity normal to the magnetic lines of force so that electrical conductivity becomes anisotropic. The Hall currents play significant role in many astrophysical and geophysical problems as well as in flows of plasma through MHD power generators.

It can be considered that a fully ionized gas is a mixture of two different gasses, one consisting of positively charged ions and other negatively charged electrons. The mass of the electron is very much less than that of ions, the velocity \vec{q} of the ion gas can be taken as the velocity of the whole mixture. The current density of the ionized gas can be represented by

$$\vec{J} = -e \cdot n_e \vec{v} \tag{1}$$

where -e is the charge of an electron, n_e is the number of electrons per unit volume and \vec{v} is the velocity of the electron gas relative to the ion gas. At each collision of an electron with an ion, the electron looses a quantity of momentum equal to the mean momentum $m_e \vec{v}$ relative to the ion gas, where m_e is the mass of the electron. The collision of an ion with an electron can be supposed to be smoothed into a continuous force. If τ_e be the mean interval between two successive collisions of an electron with ions, the total momentum loss by the electrons due to the collisions with ions is $n_e m_e \vec{v} / \tau_e$ per unit volume and time. Due to this loss of momentum the electron experience a drag force $-n_e m_e \vec{v} / \tau_e$ per unit volume. The various forces acting on electron gas are







- (i) the drag force due to the collisions i.e. $n_e m_e \vec{v} / \tau_e$,
- (ii) the gradient of the electron pressure p_e i.e. $-\nabla p_e$,
- (iii) the electromagnetic force i.e. $-en_e(\vec{E} + \mu_e \vec{q} \times \vec{H} + \mu_e \vec{v} \times \vec{H})$ and
- (iv) the force due to gravity i.e. $n_e m_e g$.

Since the electrons are of negligible mass, therefore, the force due to gravity is negligible and the other three forces can be considered to be in equilibrium.

Thus we have
$$0 = \nabla p_e - e n_e \left(\vec{E} + \mu_e \vec{q} \times \vec{H} + \mu_e \vec{v} \times \vec{H} \right) - \frac{n_e m_e \vec{v}}{\tau_e} \tag{2}$$

In the equation (2) ion slip and thermo-electric effects are not included. The equation (2), with the help of (1) reduces to

$$\frac{\mathbf{m}_{e}}{\mathbf{e}\tau_{e}}\vec{\mathbf{J}} = -\nabla \mathbf{p}_{e} + \mathbf{e}\mathbf{n}_{e}(\vec{\mathbf{E}} + \mu_{e}\vec{\mathbf{q}} \times \vec{\mathbf{H}}) - \mu_{e}\vec{\mathbf{J}} \times \vec{\mathbf{H}}$$
(3)

The equation (3) can written in the following form as

$$\vec{J} = \sigma \left[\vec{E} + \mu_e \vec{q} \times \vec{H} - \frac{1}{en_e} \left(\mu_e \vec{J} \times \vec{H} - \nabla p_e \right) \right]$$
 (4)

where $\sigma = e^2 n_e \tau_e / m_e$ is the conductivity of the ionized gas. For partially ionized gas the electron pressure gradient ∇p_e is negligible and equation (4) reduces to

$$\vec{J} = \sigma \left[\vec{E} + \mu_e \vec{q} \times \vec{H} - \frac{\mu_e}{en_e} \vec{J} \times \vec{H} \right]$$
 (5)

where in the equation (5) Hall currents are represented by $\frac{\mu_e}{en_e}\vec{J}\times\vec{H}$ (6)

The equation (5) may also be presented in the following form (see Cowling [30])

$$\vec{J} + \frac{\omega_e \tau_e}{H_0} (J \times \vec{H}) = \sigma [\vec{E} + \mu_e \vec{q} \times \vec{H}]$$
 (7)

(8)







A Soldier's Gratitude

Mother, thy blessings are my strength. Trading the thorns bring no pain, Braving icy climes gives no strain, Rather trials embolden my life's length.

I'm to serve my motherland. It's sole goal of mine, Drops of sweat that shine Promise sovereignty of our land.

I burdened thy weak shoulder with duty to care my bride and offspring. But gleefully thou hold them in a string, And shower thy love and supreme care.

I can't pay the debt I woe.
Thy old time arrests my presence near.
But thou assigned me the task bigger
To serve in boarder that I vow.

Our Mother, Mother of millions, is in fear. The foes-inner and outer Threaten to ripple her.
But I'm ordained to see her in cheer.

I'll keep my promise that's due. Thy son will not dishearten you. With strength rare he'll fight the foe. Dear Mother, Adieu!

Dr. M L MahtoAssistant Professor
Department of English

जीवन -Total Confusion

जीवन है बहुरूपिया, पल-पल बदले रूप। कभी सुहानी साँझ है, कभी चटकती धूप।।

समरस रहता है नहीं, क्षण-क्षणबदले चाल। शांत कभी आकाश सा, कभी लहर उत्ताल ।।

कभी जेठ की दोपहर, कभी सुखद मधुमास। कभी नयन का नीर है, कभी छलकता हास।।

सपने सा लगता कभी, कभी सत्य-आभास। कभी कभी गंभीरतम, कभी कभी परिहास।।

कभी पटक दे भूमि पर,कभी सैर आकाश। कभी सुजन का गीत है, कभी सियापा-नाश।।

कभी विंदुसम लघु लगे, कभी सिंधु-विस्तार कभी कभी उपहार सा, कभी - कभी धिक्कार।

सभी रंग हैं काम के, करना नहीं चुनाव लहरों से लडना नहीं, खेतेरह ना नाव।।

साधन करके ध्यान का,खोजें इसका मूल। सहज सहस दल कमल से, मिले किनारा कूल।

साक्षी बन लेते रहें,क्षण - क्षण का आनंद। परदा गिर सकता कभी, खेल तमाशा बन्द।।

सहस दल कमल - आत्मज्ञान परिहास - मज़ाक सियापा - रोना

> प्रो. डी. के. चौबे हिन्दी विभाग











Tachyons: The theoretical particles that travel faster than light and move backward in time?

The speed of light is a fixed, fundamental speed limit in the Universe and that no material objects can ever attain or exceed this crucial speed.

However some theoretical physicists have speculated on the possible existence of particles of matter which always travel faster than light, avoiding the complications of acceleration past the cosmic speed limit. A tachyon or tachyonic particle is a hypothetical particle that always moves faster than light. Most physicists believe that faster-than-light particles cannot exist because they are not consistent with the known laws of physics. Physicist Gerald Feinberg even gave them a name, tachyons (from the Greek takhus, meaning "fast", and the English "-on" meaning "elementary particle". There is a history of particle physics predicting the existence of theoretical particles needed to fill gaps in our knowledge which are later discovered to be real, neutrons being the classic example. Could this happen with tachyons?

If they existed tachyons would be really, really bizarre things. For example they would always be moving faster than light, dropping to less than 300000 km/s would be as impossible for them as exceeding this speed is to us. Stranger still, their mass would be imaginary. In Einstein's theory of relativity, the mass of an object increases as it goes faster, becoming infinite at the speed of light, so it takes an infinite amount of energy to reach the speed of light. This is why special relativity says we cannot go faster than the speed of light. So what we talk about in physics is the mass of the object when it is sitting still, the rest mass. If an object has a positive rest mass, it goes slower than the speed of light; if it is like light with a zero rest mass, it moves at light speed. In a Lorentz invariant theory, the same formulas that apply to ordinary slower-than-light particle must also apply to tachyons. In particular the energy—momentum relation:

 $E^2 = (pc)^2 + (m_o c^2)^2$

(where p is the relativistic momentum of the tachyon and m is its rest mass) should still apply, along with the formula for the total energy of a particle:

 $E = \frac{m_{\circ}c^2}{\sqrt{1 - \frac{v^2}{c^2}}}$

This equation shows that the total energy of a particle (tachyon) contains a contribution from its rest mass (the "rest mass-energy") and a contribution from its motion, the kinetic energy. When v is larger than c, the denominator in the equation for the energy is "imaginary", as the value under the radical is negative. Because the total energy must be real, the numerator must also be imaginary: i.e. the rest mass m must be imaginary, as a pure imaginary number divided by another pure imaginary number is a real number. "Imaginary" is used in its mathematical sense, meaning a multiple of the square root of -1. Not only that, adding kinetic energy to a tachyon would make it slow down, but it would take infinite energy to drop its velocity down to the speed of light! Conversely, a tachyon shedding energy would continuously accelerate. This leads to a subtle argument against tachyons existing.

Cherenkov radiation (also, and more correctly, known as Čerenkov radiation) emission occurs when charged particles pass through a medium at a speed greater than the velocity of light in that medium. For example, the speed of light in water is about three-quarters of its speed in free space. Beta particles emitted in an operating nuclear reactor whizz though the surrounding water at speeds exceeding this (but still lower than the speed of light in free space), and Cherenkov radiation is produced as a by-product, appearing as an eerie blue glow. Assuming tachyons are electrically charged as they move though space they would continuous lose energy as Cherenkov radiation emission. As tachyons losing energy accelerate, they would get faster still, give off yet more Cherenkov radiation, accelerate more and so on. Basically this feedback loop would mean that by now any tachyons would be travelling at almost infinite velocity and the whole Universe ought to be filled with the blue glow of their passing. Obviously we have never observed anything like this.







Estd 1957 65 YEARS OF EXCELLENCE

As a final piece of weirdness, tachyons would propagate backwards in time, being destroyed before flying around space until they were created. This implies signals sent with tachy could be received before they are transmitted, either opening up a Pandora's Box of paradoxes or conclusively proving the whole idea of tachyons as physically real objects to be hopelessly unfounded.

Physicists played around with the concept of tachyons in the 1960s through to the mid-70s, and a few performed experiments to detect tachyons in cosmic ray showers. The idea was that ultra high-energy cosmic ray particles collide with air molecules in the upper atmosphere creating a secondary shower of billions of daughter particles, some of which can be detected with ground-based instruments. Possibly tachyons could be also be created in these high altitude (about 20 km overhead) collisions, and would obviously race ahead of their slower than light siblings. Some of the tachyons could be observed as detection events some 60 microseconds or so ahead of the main secondary shower (which is composed of particles moving at just under the speed of light). In 1973 two Australian researchers, Roger Clay a Philip Crouch, claimed successful detection of a tachyon but no one has ever been able to duplicate this result, and Clay has subsequently concluded "No positive evidence has been found using conventional scintillation detectors for producing a tachyon signal".

After the flurry of scientific interest in the early to mid-1970s, the existence of tachyons was looking unlikely, nevertheless tachyons spread rapidly to the pages of science fiction. They have been used as a standby mechanism upon which many science fiction authors rely to establish faster-than-light communication. The word *tachyon* has become widely recognized to such an extent that it can impart a science-fictional connotation even if the subject in question has no particular relation to superluminal travel .Beams of tachyons were used to make telephone calls between the stars. Mighty star ships leapt across the galaxy and still got back home in time for tea thanks to the Tachyon technology.

Do tachyons exist? Unlike neutrons, tachyons are not actually required to exist by any physical theory and indeed their existence would raise more problems than it would solve (special relativity would be wrong for a start). Although it is possible to describe them mathematically it would appear certain that tachyons do not exist in the real Universe. Little has been written about them in scientific publications recently apart from some fevered speculations in 2011 when CERN researchers thought they had observed neutrinos moving faster than light, results later found to be in error. Beyond science, tachyons still show up all the time in comics and TV shows.

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आजादी का अमृत महोत्सव और कर वृद्धि

एक ओर जहाँ हम लोग आजादी का अमृत महोत्सव मना रहे हैं वहीं दूसरी ओर भारत में लगातार करो में वृद्धि की जा रही है जिसका प्रभाव अर्थव्यवस्था पर पड़ रहा है ।

कर वृद्धि से उत्पादन पर प्रभाव :-

कर वृद्धि से काम करने की इच्छा पर प्रतिकूल प्रभाव पड़ता है, क्योंकि कर लगते ही लाभ घट जाता है और उद्यमी निराश हो जाते हैं।

कर वृद्धि से बचत एवं विनियोग करने की इच्छा पर प्रतिकूल प्रभाव पड़ता है, क्योंकि कर वृद्धि से लाभ घट जाता है, लाभ घटने से आय घट जाती है, इसलिए बचत एवं विनियोग करने की इच्छा पर प्रतिकूल प्रभाव पड़ता है । साथ ही साथ कर वृद्धि से बचत एवं विनियोग करने की योग्यता घट जाती है, योग्यता घटने से निवेश संभव नहीं हो पाता है ।

स्वास्थ्य के लिए हानिकारक वस्तु जैसे- शराब, सिगरेट आदि पर कर लगता है तो समाज पर अच्छा प्रभाव पड़ता है, क्योंकि इन वस्तुओं पर कर वृद्धि से उत्पादन घट जाती है और उद्यमी स्थानांतरित होकर आवश्यक वस्तु पर अपना निवेश करने लगते हैं, जिससे आवश्यक वस्तु के उत्पादन में वृद्धि होने लगती है।

कर वृद्धि से वितरण पर प्रभात :-

प्रत्यक्ष कर लगने से वितरण पर अनुकूल प्रभाव पड़ता है,क्योंकि धनवान पर अधिक कर लगाई जाती है, मध्यमवर्ग पर कम कर लगाई जाती है और गरीब पर कर छूट रहती है, जिससे आय की विषमता में कमी आती है। लेकिन अप्रत्यक्ष कर सभी व्यक्ति पर समान रूप से लगता है जिससे समाज में अमीर और गरीब की खाई बढ़ती जाती है। दुर्भाग्य की बात है कि अभी हाल में खाने के समान जैसे आटा, चावल, दाल आदि पर भी GST लगा दी गई है, जिससे मुद्रास्फीति की स्थिति और दैयनीय होने की आशंका है।

कर वृद्धि से रोजगार पर प्रभाव : -

कर वृद्धि से उद्यमी हतोत्साहित होता है और वह विनियोग घटा देता है जिसके फलस्वरूप रोजगार में कमी होती है।

करछूटसे उत्पादन और रोजगार पर अच्छा प्रभाव पड़ता है, इसलिए वर्तमान समय में विश्व के अधिकांश देशों में कर घटाने की प्रवृत्ति रही है। भारत में भी नई आर्थिक नीति के तहत सन 1991 ई0 में कर सुधार कार्यक्रम शुरू हुआ और करके दर घटाए गए इससे विनियोग पर अनुकूल प्रभाव पड़ा और रोजगार में वृद्धि हुई। आज भी आवश्यक है कि राजकोषीय माध्यम से कर एवं कर की दर में कमी की जा।

अजीत नारायण दास

विभागाध्यक्ष, अर्थशास्त्र

(12)













आजादी का अमृत महोत्सव और पी. के. रॉय मेमोरियल कॉलेज

आजादी के 75 साल में प्रगतिशील भारत द्वारा विभिन्न क्षेत्रों में प्राप्त उपलब्धियों के गौरवशाली इतिहास को मनाने के लिए आजादी का अमृत महोत्सव मनाया जा रहा है इसी प्रकार पी. के. रॉय मेमोरियल कॉलेज, धनबाद का 65 वां स्थापना दिवस मनाया जा रहा है ।

आजादी के बाद भारत ने विकास के नए आयाम स्थापित किए हैं, और समाजवादी विचारधारा के अनुरूप समाज के सभी वर्गों के विकास हेत् नीतियां व कार्यक्रम बनाएं गए और उन नीतियों का सफलतापूर्वक क्रियान्वयन भी किया गया, जिसका प्रत्यक्ष प्रभाव भारतीय समाज पर पड़ा ।

आजादी के बाद भारत सरकार ने गुणवत्तापूर्ण शिक्षा प्रदान करने हेत् समय-समय पर शिक्षा नीति लागु की गई और इसी का परिणाम है कि आजादी के समय भारत की कुल आबादी का 18% लोग शिक्षित थे जो बढ़कर वर्तमान में 74% हो गया है।

धनबाद जैसे सुद्रवर्ती प्रदेश के लोगों को उच्चतर शिक्षा प्रदान करने हेतु स्वर्गीय प्रसन्न कुमार रॉय के द्वारा साठ के दशक में पी. के. रॉय मेमोरियल कॉलेज की स्थापना की गई थी जो आज विनोद बिहारी महतो कोयलांचल विश्वविद्यालय, धनबाद का एक महत्वपूर्ण घटक महाविद्यालय है जहां विभिन्न विषयों में इंटरमीडिएट, स्नातक व परास्नातक पाठ्यक्रम की गुणवत्ता पूर्ण शिक्षा दी जाती है।

पी. के. रॉय मेमोरियल महाविद्यालय के अंतर्गत राजनीति विज्ञान विभाग का गौरवशाली इतिहास रहा है। राजनीति विज्ञान विभाग के कई अध्यापकों ने अपनी योग्यता का लोहा राष्ट्रीय स्तर पर मनवाया है । सरकार द्वारा बनाई गई शिक्षा नीति का अनुपालन बेहतर तरीके से करने का सफल प्रयास किया गया है। भारत सरकार की नई शिक्षा नीति NEP-2020 जिसमें बुनियादी शिक्षा व कौशल विकास पर जोर दिया गया है, का अनुपालन प्रक्रियाधीन है।

राजनीति विज्ञान विभाग, पी. के. रॉय मेमोरियल कॉलेज भविष्य में निम्न योजनाओं पर कार्य करना चाहेगा:-

- 1 डिपार्टमेंट का जर्नल का प्रकाशन ।
- 2. डिपार्टमेंट का डिजिटलाइजेशन
- 3. डिप्लोमा इन ह्यूमन राइट्स का कोर्स प्रारंभ करना।
- 4. डिप्लोमा इन पब्लिक एडिमिनिस्ट्रेशन का कोर्स प्रारंभ करना।

मनोज कुमार विभागाध्यक्ष,राजनीति विज्ञान

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Geology Department at a Glance

Dr Sagar Kumar Swain, HoD, Geology Department

About Geology Department

The Geology department was established in the year 1961 to cater to the needs of the students of coal field region. It has spacious class-rooms and well-equipped laboratories. The department has growing, dynamic, and research &teaching oriented faculty having broad range of research interests.

Vision

To make the Geology department a nationally acclaimed center of excellence for higher learning that will serve as a source of knowledge with encompassing social values, scientific interests among the students and be a preferred destination for undergraduate and graduate studies.

Mission

To impart knowledge with blend of traditional basics of Earth Sciences and the emerging cutting-edge techniques of geological importance. To promote higher standard of excellence in Teaching and Research. To promote the ethics of higher education for empowerment of rural youth and neighboring areas, progress of society, nation and mankind at large.

Objectives and Scope

To provide quality education to enable students in becoming effective teachers and researchers in Geology and to contribute to the needs of the society by providing an environment of learning and knowledge. To expand the program from graduation to the Post-graduation level, so that students from this department will serve the nation with ease and pride in different capacities at various scientific organizations like ISRO, CSIR, GSI, DRDO, DAE etc. To aspire and encourage the younger generation in taking up the academic career Geoscience through various outreach program.

Geological Field visit around Dhanbad:



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65 YEARS OF EXCELLENCE

National Workshop held on 18th Dec-2020:



Visit of Hon'ble VC, BBMK University and Former Director, CSIR-CIMFR Dhanbad to newly established Geological Museum on 6th Aug-2021:



International Workshop held on 6th & 7th Aug-2021:



National Webinar Series: Online Link: https://www.youtube.com/watch?v = zTjQ0FYTlgg:https://www.youtube.com/watch?v = -7YcjFBGU4A









He is the one....

In the darkest night when nothing seems right He is the one who is always there by your side

In the Bhagwat Gita he said, Karma is everything For the alive or dead The thing that you sow, Is the thing you would reap

The one who sows right, Is the one who bears the fruit of bright The one who sows wrong, Is the one who is stressed prolonged

Leave everything to him, he is the mightiest one Meditate on him, You will get inner peace, which is ultimately desired by everyone

There are many ways to get closer to him, But the easiest way is to chant his holy name throughout dawnand dim

Struggle of life can never be completely eliminated, But when he is with you life becomes automatically elevated

When is the charioteer of your life, In the dim of darkness also, everything seems bright

The life cycle is an endless process that continues from one body to another,

But once you understand that you are part of him, The endless life cycle ends and you get merge in him

He is the most natoriousone
He is the who taught us the real meaning of love
He is the one who for some people is in nothing,
but for me he is in everything
He is our loved one - *KRISHNA*

Rumpa Kumari Department – English Roll no. - 54

Second To None

There is a voice that calls me within.

It is not the same as the common din.

For it invokes me a sort of passion.

It appeals to me to leave a lasting impression.

And to chase my dreams for seeking all the fun.

It is the desire to be second to none.

There were times when I fumbled on my track.

And made the mistake off looking back.

Capitalizing on the opportunity the competitors flourished.

And any hopes of victory had almost perished.

Then the inner voice instigated me to continue the run.

It is the desire to be second to none.

The moving water tells me to move on.

And let bygone be bygone.

The soothing breeze bring a mesmerizing scent.

And sways me into becoming complacement.

But the inner voice compels me to shine like the sun.

It is the desire to be second to none.

I enjoyed the pain in inner voice brings to me.

This torture shall help me reach where? I want to be.

The desire shall stir me to shatter every hurdle.

In this torment imagining, all the odds shall I be able to handle.

I shall definitely get the job done.

And accomplish my desire to be second to none.

Deepshikha Roy BA, 2nd Sem Roll no. - 33







National Cadet Corps (NCC)

The NCC in India was formed with the National cadet corps Act of 1948. It was raised on 15 July 1948 The National cadet Corps can be considered as a Successor of the university officers Training Corps (UOTC) which was established by the British in 1942. the world war II the UOTC never came up to expentations set by the British. This led to the idea that some better schemes should be formed, which could train more young man in a better way, even during peace time. A committee headed by Pandit H.N Kunzru recommended a cadet organization to be established in school and college at a national level.

"The National Cadet corps" is the Indian military cadet corps with its head Quarters at New Delhi. It is open to school and college students on a voluntary basis. The National Cadet Corps in a voluntary organization which recruits cadet from high school, colleges and Universities all over India. The cadet are given basic military training in small arms and parades. The officers and cadet have no military service once the complete their course are given preference over normal during selection based on the achievements in the crops.

Motto NCC Unity Unity and Discipline (Ekta Aur Anushasan)

Aims of NCC

- To develop qualities of character courage, Comradeship, discipline, leadership, a secular outlook Sport of adventure and sportsmanship and the ideals of selfless service among the youth to make them careful citizen.
- To create a human resource of organized trained and motivated youth to provide leadership in all walks of life including the Armed Forces.

Advantages of Joining NCC

- NCC is a highly reputed body which is also a second line of defence. In India many youngster are trained in line with defence in case the need arise.
- Other than just military the cadet also learn several other valuable thing t such as honesty decipline, hard work.
- NCC cadet learn to take the pride in them and the training also strengthness the sprit of begin India. Other than SSB they also get prefence over other in the CRF and BSF.

The Defence service for the NCC 'C' certificate holders.

- INDIAN ARMY The Indian Military In every regular course If the Academy (IMA), 32 vacancies are reserved for the 'C' certificates holder. The cadet with C certificate are exempted for CDS examination conduct by UPSE.
- Indian Navy In Indian Navy, the NCC 'C' certified candidates get 6 extra marker for sailor job and 15 extra mark for Antificier Apprentices.
- Indian Air force- In Air Force the NCC 'C' Certified candidate get the advantage of 5 marks in pilot course total 10% vacancies are reserved.
- Thus the NCC develop qualities of character courage discipline smart out look in cadet which will be a great thing which a cadet should have.

CDT - Akash Kumar Gupta Reg. No. - JH21SDA 307091 College - P. K Roy Memorial College 36 JH BN Dhanbad







Destiny and Duty: The Legends and The Myths

In deep within the walls of Old Carthage, Still burns with grudge the wailing queen, But it is her longing for Aneas that assuage, As she waits by the saltwater serene.

Beautiful as she was, Helen of Troy One in millions, yet tricked by love, Saw flourishing wealthy cities destroy, Such trouble is being blessed by dove.

Once resided in ancient Dwarika a fated deity, Bound to his reasons and providence, Taught humans to challenge critical ambiguity, And serve mortality with benevolence.

With his feet firm and mind determined, Once an adventurer set for sail, Transcending the oceans, flowing with wind, He left behind a historical trail.

Once in the eastern land of earliest mornings., A princess descended from the land of moon, The folklore sings Kaguya's mournings, For her divine beauty caused her doom.

Over the bridge of the little flying magpies Meet the heavenly weaver and cowherd Driven apart by the divinity which denies The purer love, for generations earnestly heard. As true as the shroud of turin. Is the seraphic flesh that once existed, Preaching knowledge, with his healing skin, He cured millions with whom he coexisted.

Young and blooming was the girl named Anne, But suffering through such horror in her youth, And very loud, far and wide her words ran, As she recorded them in her diary, her truth.

Captivated by love were Juliet and Romeo, Could not move past the hate of their reality, Their tale sings of their misery and sorrow, When fate played with their vitality.

Adam and Eve, gifted with immortality of Eden, Detested by evil, provoked to the first sinning, Disobeying the Almighty, eating the forbidden, As the entirety is fated since the very beginning.

> - Surbhi Nupur Tulika Tudu 2nd vear. B. A. English Honors







Impact of Covid-19 on Education

The impact of pandemic Covid-19 is observed in every sector around the world the education sector of India as well as world are badly affected by this However impact of Covid-19 on education has few positive outcomes apart from the many negative aspect of the pandemic - this is a crucial time for educational sector as the exam of different levels postponed and admission process got delayed .The pandemic has significantly disrupted the higher education of the people who want to enrol in universities abroad especially in countries worst affected by the pandemic the USA, UK, Australia and China and many more .

After the crisis is over, thinks are not going to remain the same .many people have lost there job and the institutions priority will be to put back there people into employment first the out break also impact greatly the structure of schooling and learning including teaching and assessment methodologies leading to a transition of learning to online platforms and the use of technology as a means to extend education for all, but not all teachers and students are good at it and they are not even ready for this sudden transition from face to face learning. only a handful of a private school and college could adopt online teaching method. on the other hand, low income private and government schools have completely shut there activities for not having access to e-learning solution. It has some positive impact also. it has accelerated adoption of digital technology to deliver education. There are few positive as well as negative impact on education duration Covid-19:-

*POSITIVE IMPACT OF COVID-19 ON EDUCATION:-

Covid -19 has accelerated adoption of digital technology to deliver education . education institutions moved to ward blended mode of learning in encouraged all teachers and students to become more technology savvy.

The pandemic situation included people to learn and use digital technology and resulted in increasing the digital literacy Learning materials are shared among the students easily and the queries are resolved through email, sms, phone calls and using different social media like whatsapp and facebook student are able to manage there time more efficiently in online education during pandemic. Teacher have also adopted new methods of teaching like through ppts, videos, video conferencing which are considered as one of the best and fast learning medium teaching students are able to analyzed more effected what they are being taught and definitely learn new computer skill as they have to do lots of assignments through computer and laptop only even those who are preparing for competitive exam are being provided with an opportunity to with an opportunity to avail to get huge discount on online crash course.

NEGATIVE IMPACT OF COVID-19 ON EDUCATION:-

Education sector has suffered a lot of due to the outbreak of Covid-19 it has created many negative impact on education — Classes have suspended an exam of different level postponed admission process got delay. Most of the vacancy got postponed due to Covid 19. Placement for students may also be affected with company delaying the on board of students. unemployment rate is expected to be increase due to this pandemic. Other problem is also that not all teachers/students are good at it or atleast not all of them were ready for this sudden transition from face to face learning online.

Technology paves the way for education, thus helping the students and teachers to connect virtually through online classrooms, webinars, digital exams, and so on. But the sad truth is that it is not available to many students all over the nation. Everything is happening for the well-being of the students so that they can stay safe at home without getting affected by the life- threatening virus. We are not ready for this, but it came, so we have to go through this together, but we have to update the infrastructure and should think of ways to undertake the situation and providing education to every child amid the pandemic if we face something precisely like this in the future to aid the forthcoming generation. Stay home. Stay safe.

CONCLUSION:-

The COVID-19 pandemic is proving to be a constructive disrupt or, giving an opportunity for restructuring the present conventional, classroom based educational system. The quick transitions to online mode assisted in keeping continuity of optometry education programs, effectively fitting in the purpose of completion of the current academic year. The rapid transition to online education has not only benefitted optometry students but also has created a momentum of continued education for practicing optometrist in the country.

R. No.- 52 (English Hons.)







IQAC Activities, NAAC Peer Team visit, Placement Drive





NAAC Peer Team Visit



NAAC Peer Team Visit



Placement Drive



IQAC Activities



NAAC Peer Team Visit



NAAC Peer Team Visit



Placement Drive

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Different Academic Activities of the College



Academic Audit



External Peer Team Visit



International Work Shop organized by Geology Department



Republic Day



Academic Audit



External Peer Team Visit



International Work Shop organized by Geology Department



Republic Day

PKRM 2022 (21)







Events conducted during week long celebration of 65th Establishment Anniversary





Poster making Competition



Photography Competition



Painting



Quiz Competition



Poster making Competition



Photography Competition



Rangoli

(22) PKRM 2022







Events conducted during 65th Establishment Anniversary

65 YEARS OF EXCELLENCE



Rangoli



Debate Competition



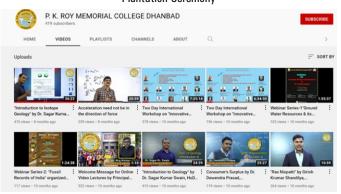
Debate Competition



Plantation Ceremony



Plantation Ceremony



College YouTube Channel



महला प्रकोष्ठ



PKRM 2022 (23)







COLLEGE INFRASTRUCTURE

The college has ample number of classrooms, which are properly lighted and well ventilated with spacious stitting arrangements. In many of these classrooms, conventional as well as advanced teaching aids are used for teaching learning process.



All science departments have separate laboratories with Smart Board. There are 10 laboratories for UG and PG programmes that includes Biotechnology and Environmental Science Laboratories. All science laboratories are ICT enabled.

Other teaching-learning facilities include Language Laboratory, Computer Lab and Computational Centres / IT Zones with net connectivity for students.

Botany, Zoology and Geology Departments have museums with rich collection of specimens and scientific models.





College has a few digital classrooms. Endeavour is to make more digital class rooms to attain the target of Digital India.



Swayam Prabha - LT3

Swayam Prabha is an admirable step forward in direction of making available renowned academicians of international standing to the students of the college. The College has the facilities of it for the benefit of the students.



Flipped Classroom / Blended Classroom / Hybrid Classroom - LT4



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smartclass Room





STUDY CENTRE





The College also runs the study centers of Distance Education mode. They include IGNOU and Nalanda Open University (NOU). These help the students pursue jobs to have their degrees and studies from the





The college runs Vocational Courses / Add-on courses such as B.Sc Hons in Bio-technology, Environmental Science, BCA, BBA, B.Sc Hons in Computer Science, Certificate/Deploma Course in Foreign Languages (French, Spanish, German & Japanese), STTP Certificate course in Soft Skills etc. These courses are intended to make education job-oriented. Language Lab helps students develop fluency in communication, which is a pre-requisite in the contemporary job market.



BBA: (60 Seats) Bachelor in Business Administration is a three years undergraduate degree course introduced from the session 2019-22 to cater to the need of the students of Dhanbad district and neighboring state West Bengal. It opens new avenues for students who opt career in the field of business administration.

BCA (CBCS): (60 Seats) Bachelor in Computer Applications is a three years undergraduate degree course introduced from the session 2019-22. This course offers opportunities to the students who wants to excel in computers and want to make career in the field of computers. After completing the degree course aspirants can pursue higher education in the field of computer science.

BSc (Hons) in Computer Science: (60 Seats) Bachelor in Computer Science is a three years undergraduate degree course introduced from 2021.

VIDEO CONFERENCING



Video Conferencing facilities are available for online teaching through Go to Meeting, Zoom, Goggle Meet etc.



PKRM 2022 (25)







Estd 1957 65 YEARS OF EXCELLENCE

Spoken Tutorial Project Programme

STPP, IIT Bombay

Coordinator: Dr. Sayantan Sil, Department of Physics

TISS-EXCEL Programme

Employability Excellence with College Education and Learning(EXCEL) in collaboration with Tata Institute of Social Science





Programme aims at enhancing the employability of students wherein students will be skilled in Management and Soft Skills in various Domains, in addition to their Graduate Degree, through an engaging and practical training methodology that imparts competencies required to work successfully in an interdependent world. The programme helps students who have completed their 12th standard or graduation by giving them an integrated Programme in Soft Skills to make them employable in that Domain.



Coordinator: Dr Sanay Kumar Singh



Placement Cell of P. K. Roy Memorial College creates a platform where students can showcase their talents which different companies seek to explore and utilise. The College successfully placed a large number of graduates and post-graduates into several national and multi-national companies. Several companies visit our college for Placement every year.



This year especially, the performance of this cell has been overwhelming and P. K. Roy memorial College was awarded Best College in Placement in Jharkhand. The Principal of the college Dr. B. K. Sinha received this prestigious award by Chief Minister of Jharkhand Sri Raghubar Das and Central Minister of Petroleum and Natural Gas Mr. Dharmendra Pradhan in Skill Summit held on, 12th January, 2018 (Youth Day) at Ranchi.

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65 YEARS OF EXCELLENCE



Coordinator : Dr. M. L. Mahto, Department of English The College has a rich library with institutional membership to National Digital Library of India (NDL - https://ndl.iitkgp.ac.in) and INFLIBNET. Being member of NDL, the college provides its students access to 61 lakhs e-books and through INFLIBNET both students and teachers can have access to about 60 thousand e-journals (JSTOR), Blackwell etc).

Teachers and researchers can have access to Research Gate and Academia also through our Library. The college Library is completely digitalized and operates on SOUL Software.



Facilities	Support
OPAC (On Line Public Access Catalogue) available for users	O5 computers are made available in the library for this purpose.
Electronic Resource Management package for e-journal	Available through N-LIST INFLIBNET 6300+e-Journals
In-house/remote access to e-publications	Available through N-LIST INFLIBNE
Library Automation	Services fully automated (Bar Code
Total number of computers for student and teacher access	Five
Total numbers of printers for Student & Teacher access	Two
Internet band width/ speed	100 Mbps Optical Fibre of Jio
Institutional Member of National Digital Library (NDL)	Access to 61 lakh e books to students through computer centre
Video Conferencing Facilities for 40 Students, at a time, is available	
Gandhian thought Corner	
Xerox Machine for reprographics fafilities	
e-learning Centre / Auditorium	

PKRM 2022 (27)



पर्यावरणीय और सामाजिक सतत वृद्धि प्राप्त करते हुए देश को ऊर्जा सुरक्षा प्रदान करने और कोकिंग कोल

आवश्यकताओं को पूरा करने के प्रति प्रतिबद्ध



बीसीसीएल कोल इंडिया लिमिटेड की एकमात्र कंपनी है जिसने वर्ष 2021-22 के लिए कोयला उत्पादन और प्रेषण दोनों ही लक्ष्यों को प्राप्त किया है। इस वर्ष पिछले 3 वर्षों की तुलना में अधिकतम उत्पादन और प्रेषण हुआ है।



खनन किए जा चुके क्षेत्रों और ओबी डंपों पर प्राकृतिक वनों को लगाने के साथ ही खनन किए जा चुके क्षेत्रों को ईको-पार्क के रूप में विकसित किया जा रहा है।



केंद्रीय चिकित्सालय धनबाद को कोविड अस्पताल बनाने के साथ ही, बीसीसीएल ने अपने कर्मचारियों, उनके परिवार के सदस्यों और संविदा कामगारों के लिए नि:शुल्क टीकाकरण की व्यवस्था उपलब्ध करायी।



बीसीसीएल में ग्रामीण महिलाओं को आमदनी का सतत एवं वैकल्पिक स्रोत उपलब्ध कराने के उद्देश्य से हथकरघा बुनाई जैसे व्यावसायिक प्रशिक्षण प्रदान किए जा रहे हैं।



भारत कोकिंग कोल लिमिटेड

(एक मिनी रत्न कंपनी) (कोल इण्डिया लिमिटेड का एक अंग)

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सीएसआईआर-केन्द्रीय खनन एवं ईंधन अनुसंधान संस्थान, धनबाद CSIR-Central Institute of Mining and Fuel Research, Dhanbad

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PKRM 2022 (31)

GAUTAM CONSTRUCTION AND DEVELOPERS PRIVATE LIMITED

Phus Bangla, Jharia, Dhanbad



भावी शिक्षकों को तैयार करता तैयब मेमोरियल शिक्षक प्रशिक्षण संस्थान

दुका होता हुआँ किया करना कहते हैं हो युका होता सँक्षण उन्हों होतों हो युका होता है है जो दूर हो यो विक्री का कर करता है है अर्कात विक्राय करना कहते हैं। दिखा में बेला हो नह अरुनते ने न कोका स्कूरिता में विक्रा का दरकारे सोने हैं मीचा करते मो में बर्ज तक वो जवतर मुक्ति बराइ है। माला में विधित बेदर बरिमामच प्रवित्तन है और तीवते वा स्वान हमेरा ही तंब्व का है। वहीं स्वात है कि भारत में अप्राप्त दूसा रिया बनक बाहते हैं। बाँद तंत्र में उपयो कर्तों को इक दिसान के रहा में हुमता किया हैना बाहते हैं, से इहारवेट के सकाद सहर में दिन्द केंचर में मीरियात सिक्त इहिस्सा टरप्यन में उपयो कर्ता को इहारेकर हिला उसके है। वह प्रशिक्षण तेरुवार मुकला कुल दिशा प्रयुग कर का है। किया ने नीरिवल विशास प्रशिक्षण रहेश्वर राजे ना सबसे पर कर उटल है।

2012 दें तथा अस्तावन के का क्षेत्रका विकास करने के का कार्या कि कार्या कर कार्या कि कार्या के कार्या कर कार्य कर कार्या कर कार्य कर कार्या कर कार्य कर कार



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हेंप्रीक्त

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