



The College Handbook

**Government Dungar College,
Bikaner**





DECLARATION UNDER RIGHT TO INFORMATION (RTI) ACT

STATUTORY DECLARATION UNDER RTI ACT

Government Dungar College, Bikaner is a Higher Educational Institute governed by the State Government Rajasthan. It runs as per rules and regulations made by the Govt. of Rajasthan. The College is affiliated to Maharaja Ganga Singh University, Bikaner, offering UG and PG courses in Arts, Commerce and Science, M.Phil in 10 Subjects and Ph.D. in 17 Subjects. The website covers the statutory declaration under Section 4 (1) (b) of RTI Act 2005.

The power and duties of its officers and employees is as per RSR (Rajasthan Service Rules), GF &AR, and MHRD and UGC. **The Principal** is the head of the institution and performs the duties related to over all administration, monitoring, planning and implementation. **The teaching faculty** performs teaching, assessment, professional development and all the other duties as assigned by the Principal. **The Office staff** helps in administration, student services, staff records and procedures, accounting and reporting, etc. **The Library** staff manages library, maintain records, and handle transactions, procurement and management of stocks. **The Laboratory staff supports** laboratory work and maintains laboratories.

The College has different committees, administrative committees, co-curricular committees and extra-curricular committees to maintain discipline and smooth functioning of the college. Details of committees are available on the college website.

All information about the college under Section 4 (1) (b) of RTI Act 2005 is open for public and can be obtained by a citizen of India.

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Institution: Government Dungar College was established in the year 1912 as Dungar Memorial College by the then Maharaja of the erstwhile State of Bikaner, Shri. Ganga Singhji, but it resorted to College level teaching only in the year 1928. In 1937 the Intermediate College was raised to Graduation level and by 1942 it started imparting Graduate and Postgraduate level teaching in various faculties. By 1951, at the time of constitution of the State of Rajasthan, it owned the prestige to be one among the five postgraduate colleges of the State.

Right since its inception, the vision of the College has been to impart quality education, inculcate moral values and nurture ethics and traditions in its pupils. The College has always tried to maintain its ideals and is actively engaged for the cause of excellence through its competent and efficient team of sincere, highly qualified, devoted and dedicated staff. Over the period of time there has been a steady progression in all areas, may it be its curricula, infrastructure, teaching aids, playgrounds, ICT, human resources and what not!

Being accredited with “A” grade twice consecutively bears testimony to its illustrious and glorified history, growth, development and achievements over the years.

Institutional Distinctiveness

Catering to need based student centric education of both rural and urban students ensuing fair and equal access to them and also providing social equity to diverse group of students is the most distinctive feature of Govt Dungar College.

Other than this the College is highly conscious towards environment and issues related to environment and environment awareness. Significant days like Earth Day, Nature Conservation Day, Ozone Protection Day and Pollution Prevention Day and other days of important issues are celebrated and extension lectures by faculty and experts are also organized. The NSS, NCC, Women Cell also conduct Awareness programmes, debates and rallies on Road Safety, AIDS, Seasonal Diseases, female infanticide, water conservation, save girl child, and human values regularly. YDC, Placement cell, and Skill development cell organizes lectures for skill enhancement, career guidance, placements, coaching for competitive exams, research, innovations and social service. Medical Camps, blood donation camps, Swachh Bharat and various awareness programmes are also among the best practices of the institute.

Vision: Our commitment to impart cost effective and student centric education has been a determinant factor behind our expansion and growth as an esteemed college of the region. We strive to create a constructive learning environment and promote high quality research in the thrust areas of regional and social relevance and aspire to be known as an institution where academics are combined with a holistic approach to quality education.

Mission: Our mission is:

- to provide equal opportunities for the fostering of potentials.
- to shape impressionable young minds with moral and human values.
- to integrate skill development and in-depth knowledge through innovative pedagogies.
- to instill integrity, discipline, perseverance and confidence through a propitious teaching learning environment.
- to ensure intellectual stimulation and best support for quality research.
- to produce self-reliant responsible citizens.

Quality Policy

The College lays emphasis on shaping impressionable young minds with moral values and leadership qualities, achieving excellence by imparting in-depth knowledge and expertise through innovative methods of teaching and learning and rendering broad-based knowledge to face current competitive world.

Core values: We lay thrust upon:

Commitment

- Support the mission and vision of the institution.
- Focus on teaching inside and outside the classroom and subject knowledge beyond the curricula
- Continuously analyze and evaluate our overall objective and improve upon them.

Quality and Excellence

- Lays emphasis on quality education by highly qualified teaching staff.
- Updating the curriculum as per suggestions and needs.
- Encourage creativity and innovation.
- Encourage the feeling of self-worth by promoting the students to participate in co- curricular and extra-curricular activities.

Local need of the area

- Catering to the need of local students.
- Ensuring fair and equal access to students from rural and urban backgrounds.
- Providing social equity and strengthening diversity of students.
- Promoting girl education.

Profile of the College

Govt. Dungar College, Bikaner, located at Sagar Road is recognized by UGC under 2(f) and 12 (B) in the year 1972. It has been re-accredited by NAAC with “A” grade (II cycle). It is a Government funded co-educational institute. The Commissionerate of College Education Rajasthan recognized it as a “College with Potential for Excellence” in the year 2007.

The campus area of the College is approximately 370000 sqm. The College has a good quality infrastructure required for pursuit of academic excellence. At present the institute is offering 22 subjects at Under-graduate, Post-graduate level and nearly the same at Ph.D. level and 10 at M.Phil level. The infrastructural facilities besides classrooms include lecture theatres, practical laboratories, smart classrooms, Smart Science Lab, GPS lab., Zoological Museum, Geological Museum, Herbarium, Central Library, Animal house etc. The campus also has a Hall “The Pratap Sabhagaar”, a Video Conference Room, Sports Complex, Playgrounds and a Girls Hostel.

The College has highly qualified teachers of eminence, most of them holding a Ph.D. degree, all dedicated and committed towards the vision and mission of the College. Presently nearly 9500 students are enrolled and pursuing for different degrees in various disciplines. It has a glorified academic record as the pass outs have earned laureates and brought honors to the Institute. Adding on, many of these have been contributing as Alumni.

The Institute has a congenial atmosphere for sports and cultural activities too. The students have been playing various sports at Inter-college, State and National level. NCC and NSS are other such co-curricular activities wherein the cadets have brought laurels by participating at National & State level Camps and RD Parades. A feather in the cap was added by a Girl cadet who conquered the Mt. Everest and established a bench mark.

The institute regularly organizes State, National and International Seminars, Conferences and Workshops. Many of the faculty members are either Conveners or members of BOS's and curriculum up-gradation and enrichment is done on a regular basis by them.

The very distinctiveness of the College is that it caters to educate the rural youth. At present more than 70% of the pupil studying in the institute come from adjoining villages with a rural background and the fraction is nearly the same during each academic year. The Strategic planning therefore concentrates towards overall development of the student in such a way that the pass outs are able to fulfill their dreams in the best possible way, once they leave the campus. Students are given option to pursue their education by choosing subjects from a vast array of subject combinations to gain knowledge of specific domain and skill. The entire spectrum of staff works in such a coordinated and committed manner to fulfill the vision and mission of this par excellent academic institute.

Code of Conduct for Students

- Students must maintain discipline; in case of violation disciplinary action would be taken.
- Should be polite, respectful and well mannered.
- It is expected that a healthy and decent relationship is exhibited among all students.
- Once the student enters the premises, they should have a concern towards each and every property, like handling of furniture, caring for plantations etc.
- Whenever the students are free from classes they are advised to use the library or engage themselves in some extra or co-curricular activities.
- When in the campus students should always have with them their college i-cards
- Ragging and eve-teasing is totally taken as a serious offence and students are advised not to indulge in any such activities.
- Students must stay away from anti-social activities.
- The campus must be kept clean. Students should refrain from scribing on walls and black boards.
- Consumption of tobacco in any form, drug etc. is completely prohibited.
- Indulging in malpractices during examinations is taken as a serious offence.
- Zooming on vehicles is completely restricted.
- Overall, the college with its code of conduct to students wishes to inculcate moral values and produce an overall educated citizen to the society.

Code of Conduct for Teaching Staff

- First and foremost, teaching being a noble profession it is expected of the teacher to uphold the honor and dignity of the Profession.
- Being a government servant they are advised to abide by the 'Government Rules & Policies'. (Rajasthan Service Rules)
- They must provide quality education.
- Be impartial, friendly, help, guide, encourage and assist the students and enact as good counselors and facilitators.
- A teacher must be devoted and honest towards his/her duty exhibiting utmost loyalty and sincerity towards the best interests of the College.
- Teachers are essentially required to observe the scheduled working hours, must be present at the place of work performing their duties especially related to students mentoring.
- Prior permission is to be sought by the teacher in case of taking leave.

Code of Conduct for Non-Teaching Staff

- Must report to duty on time and remain present during college hours.
- Follow strictly the rules and regulation laid down under 'Rajasthan Service Rules'.
- Exercise self-discipline, honesty and integrity.
- Take utmost care and maintain secrecy pertaining to official documents and must not divulge, alter or forge them.
- Must take prior permission before availing any leave.
- Must respect and maintain hierarchy in administration

Salient features of the Campus

- ✓ Quality infrastructure required for the pursuit of academic excellence
Individual Departments with well -equipped laboratories, classrooms and library
- ✓ An extensively spacious and rich Central library
- ✓ Good playground facilities and upcoming Sports Complex
- ✓ A green campus amidst arid area with rain water harvesting and solar street lighting
Drinking water huts in all blocks, a necessity of the region
- ✓ Wi-Fi enabled campus
- ✓ Smart classrooms and initiation of Smart Laboratory
- ✓ Girls Hostel

Salient features of curriculum design and development

- Wide choice of elective papers at undergraduate as well as postgraduate level
- Faculty as Convener and member of BOSs make sure to enrich and upgrade the curriculum regularly
- Introduction of new papers and topics in order to incorporate local and recent developments
- Need based and job oriented courses
- Emphasis on field trips, tours, case studies, seminars as an opportunity for self -learning

Educational Programs offered by the College

Undergraduate Programs

- B.A.
- B.Com.
- B.Sc.

Post Graduate Programs

Arts

- Drawing and Painting
- Economics
- English Literature
- Geography
- Hindi Literature
- History
- Philosophy
- Political Science

- Public Administration
- Rajasthani
- Sanskrit Literature
- Sociology
- Urdu Literature

Science

- Chemistry
- Botany
- Geology
- Geography
- Mathematics
- Physics
- Zoology (Regular+ SFS)

Commerce

- Accountancy and Business Statistics(ABST)
- Business Administration
- Economic Administration Financial Management (EAFM)

M.Phil.

- Chemistry
- Botany
- Zoology
- Mathematics
- Geography
- History
- Political Science
- Hindi Literature
- English Literature
- Sanskrit Literature

Ph. D.

- Economics
- Geography
- History
- Philosophy
- Political Science
- Public Administration
- English Literature

- Hindi Literature
- Sanskrit Literature
- Urdu Literature
- Mathematics
- Chemistry
- Botany
- Geology
- Physics
- Zoology
- Economic Administration Financial Management (EAFM)

Stakeholder's Expectations

Stakeholders of an institution are the foundational stones and therefore they play a very significant role in attaining the objectives and goals set up the institution. Dungar College being the largest College of the division from the perspective of student strength and infrastructure availability, shoulders a mammoth responsibility in catering to the needs, demands and expectations of its learners. The College leaves no stone unturned in fulfilling the expectations of its stakeholders.

Administration

- Overall, good governance and transparent financial management
- Quality teaching-learning environment
- Social responsibility and reputation
- Centre for Academic Excellence

Staff

- Good academic and working ambience
- Academic independence and support
- Exposures through orientation and refresher courses
- Organization and Participation in Conferences, Seminars and Workshops

Students

- Good academic and research ambience
- Support for co-curricular & extracurricular activities
- Quality infrastructure with good classrooms and laboratories
- ICT facility
- Sports facilities
- Career guidance and quality placement

Parents

- Disciplined, qualified and learned citizens
- Good job opportunities and placements

Industry

- Strong Industry-Institution interaction
- Collaborative research and consultancy

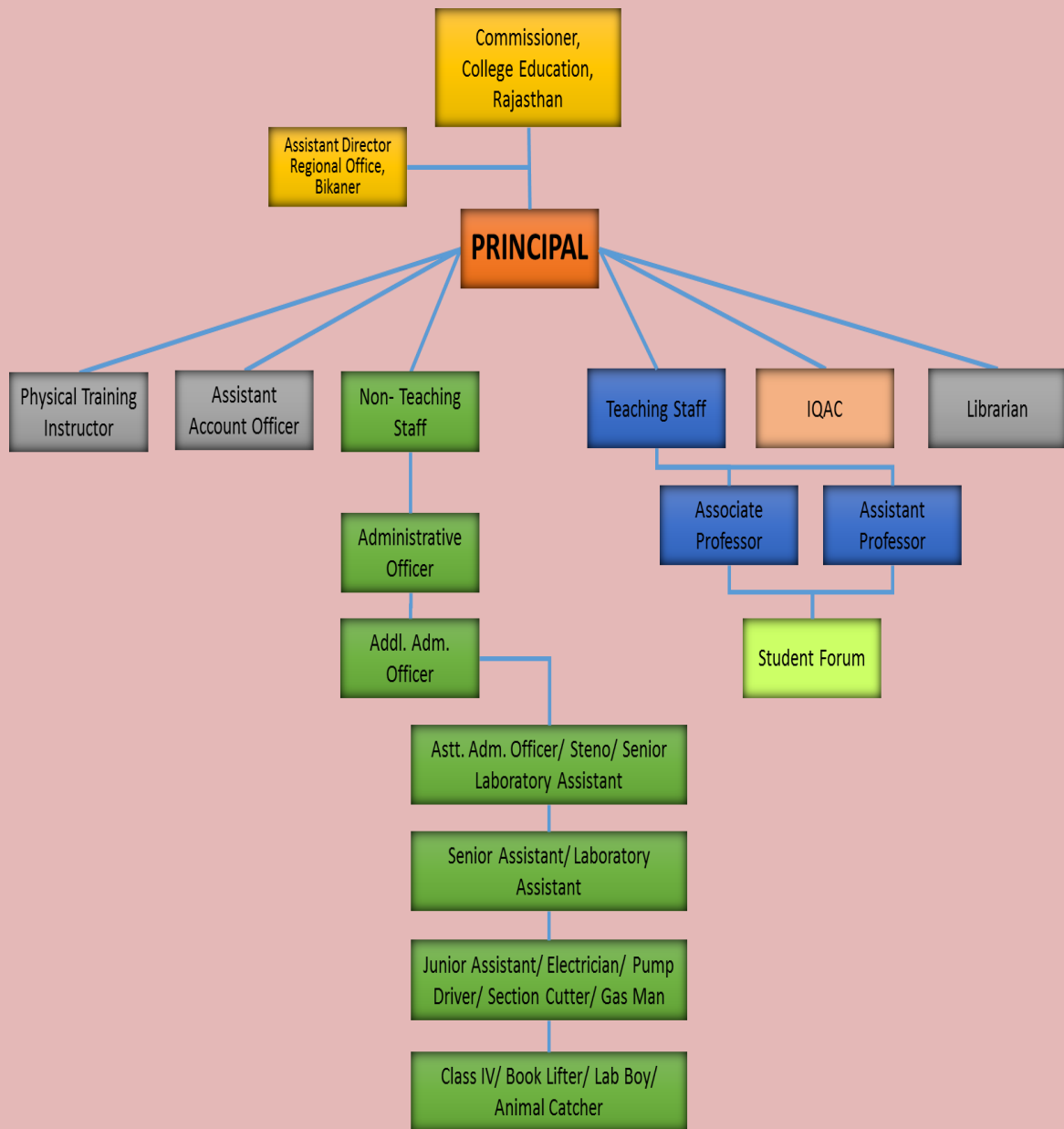
Society

- Accountable citizens serving the Society and contributing towards the development of the Nation

Institutional Strategic Goals

Good Administration

The college comes under the Commissionerate of College Education Rajasthan; Jaipur headed by the Commissioner. The Commissionerate manages and administers the Government Colleges of the State. The Principal works under the general control and administration of the Commissioner of College Education but at the college level he is the Head of the Institution. The Principal believes in decentralization and therefore the senior faculty members are given charges of Establishment section, Accounts section and Academic section. They supervise their respective assigned work and further plan out in delegating functional responsibilities. The Heads/ In charges of various departments are so by virtue of their seniority and work for the improvisation of the Departments. The Principal constitutes different committees for proper functioning. Just as the session begins, a Staff Council meeting is held where the outlines of the plans to be followed are discussed and suggestions from all the staff members are invited to ensure the best outcomes. The college has also framed different redressal cells/Committees. Besides, a committee called Legal Cell is also constituted to look into court cases. The performance of every employee, whether teaching or non-teaching, is appraised by the Principal and reviewed by the competent authority on annual basis covering various aspects of working/ behavior and overall performance. This helps in assessing the overall conduct of the employee and keeping in check anomaly, if any.



Financial Management

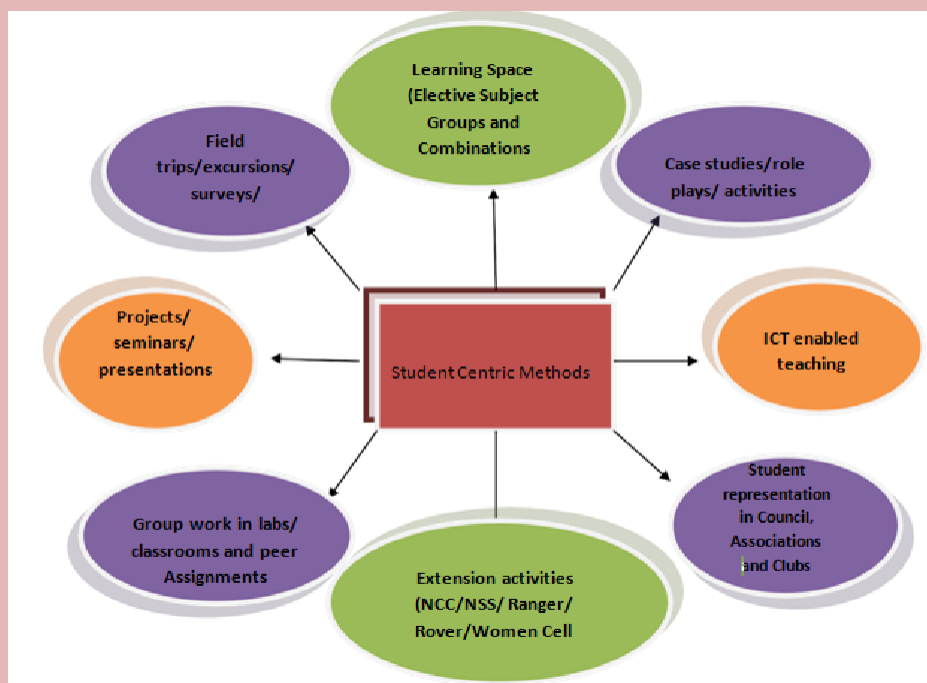
Being a Government Institute, the College receives grant from the State, besides other funding agencies, major being the UGC and RUSA which provides grants towards infrastructure development, books, equipments, construction, maintenance etc. The institute also generates its own funds through Self Finance Schemes in the form of fee deposited to College Development Committee. Funds are also generated through College Development Committee (*Vikas Samiti*). The funds received are properly allocated and distributed for the purpose meant and utmost care is taken that they are properly utilized. The AAO maintains the details with regards to accounts. The other office staff of the accounts section maintains proper ledger with details of the financial support received and utilized under different heads from various agencies. Every year an Audit from the Directorate/ State checks and verifies the accounts for irregularities, if any. The funds are utilized based on government policies. Purchases are made following GF & AR of the State. Whenever required, the CA also audits the account. Governing and Monitoring Bodies Board of Governors (BOG) and Project Monitoring Unit (PMU) monitor the progress of projects sanctioned by RUSA.

Physical Infrastructure

The college is constantly extending and expanding its resources in terms of construction, IT infrastructure, equipments, classroom furniture, Library, and other campus facilities. The institution makes optimal use of buildings and also ensures sufficient space for all departments and common facilities. The college has a land holding of 3.70 lakh sqm where different building blocks are constructed. Besides the main building which harbours the Administrative, Academic and Establishment Sections, Chambers of Principal and Vice Principal, Department of Social Science and Humanities, Department of Physics, Department of Commerce, the campus also embodies of separate Chemistry Block, a Science block comprising of Departments of Zoology and Botany, a Geology and Drawing & Painting Block, a Central Library, a Hall- the Pratap Sabhagar, a Women's Hostel, NSS and NCC block, a Youth Development Centre, playgrounds, an upcoming Sports Complex, a Botanical Garden, Cafeteria etc. There are traditional class rooms, lecture theatres, Practical Laboratories, a new Smart Science Lab, Smart Classrooms with Interactive Boards, Research Laboratories, including a Remote Sensing Lab, a Staffroom, a girls' common room, an independent Women Cell, UGC Cell, Career Counseling Cell, and a Student's Union office. All the blocks also house proper and separate wash rooms / toilets for girls and boys, drinking water points fitted with water coolers.

Teaching-learning environment

Teaching and learning are the foundation stones of any educational institution. The college was established with a holistic and inclusive approach to impart education in its true sense, to cater to the needs of socio- economically backward sections of the society and above all enhance accessibility to knowledge. This objective is effectively accomplished with the help of qualified faculty and zealous students. Besides developing a scientific temper through research, the institution offers a platform to inculcate creative and critical thinking. It believes in creating a constructive learning environment with an aim to trace and trap the hidden potential especially of students coming from rural backgrounds. Teacher's knowledge of the subject matter, active involvement of the teacher and interaction between the two are the three essential components of enhancing learning. Holistic development and meaningful learning is the motto of Dungar College and this is made possible through an atmosphere of support and students-teacher interaction. Every effort is made towards the active involvement of students in the whole process of teaching and learning. Besides creating an atmosphere of mutual trust and respect inside and outside the classroom, knowledge is imparted in a way which conditions and orients the mindset of students to grow as responsible citizens. As is well known, teaching- learning process is not linear but is a dynamic one, created and nurtured in a constructive/ conducive environment. Students learn in different ways and vary in their abilities. Keeping this in mind, the teachers first identify the needs of the learners and then modify teaching strategies as per their learning styles and requirements. The performance and the learning outcome of students have always been recognized by the society and the students have proved themselves as successful administrators, entrepreneurs, teachers, and scientists.



Curriculum up-gradation

Curriculum of any educational institution is the total learning experience encompassing the course content, methods and strategies employed and the values portrayed through its vision and mission. Curriculum comprises of Core subjects to impart common knowledge foundation and Electives to pursue their own educational interests. The design, development, implementation, and enrichment of the curriculum are executed through resources and processes, materials and methods to ensure the overall development of the student. The College is affiliated to Maharaja Ganga Singh University, Bikaner and follows the curriculum formed as per the guidelines of University Grants Commission, approved by the Board of Management of the University. The active role and participation of the college is evident in the large number of faculty representation in Academic Bodies like Academic Council and Board of Studies as Conveners/members. The Curriculum design not only offers a wide range of subjects but also ensures to cater to the diverse needs of local and regional learners. The curriculum is constantly reviewed, revised, and updated. Relevant and specific suggestions offered and feedback received from the students, teachers, and stake holders are incorporated.

Library

Today in the modern world with advanced technologies coming up and with the growing popularity of internet one may not agree to this and may talk about its decreasing relevance. Nevertheless, none can deny the fact that knowledge is acquired through books and they add to what has already been learnt. To cater to the needs of the student, the college offers good reading material in the form of books, periodicals, encyclopedias, magazines, newspapers etc. It is a place which is used not only for acquiring knowledge, gathering information but also for recreational purposes. The college library is well stocked with very good number of books more than 1, 50,000 which are systematically arranged in almirahs, racks and shelves and is automated. The college library is neat and clean and with comfortable furniture. It provides a peaceful and scholarly environment which is an incentive to study. There are separate reading and reference rooms. Undoubtedly, the college library is a boon to students' in this region as the college has maximum number of students from rural background and poor economic status. The library of the college has acted as a ladder and students have achieved their goals by climbing on it. Underprivileged students lacking internet accessibility have benefitted the most from this learning resource and have attained success in their endeavours and projects. After 2014 as per suggestion of NAAC suggestion automation of library is completed. In order to modernize library, to develop e-contents and to promote R&D activity infliplibnet facility has been provided to all supervisors and research students. Similarly, in order to develop and maintain ethical codes facility to check plagiarism,

access to plagiarism checker software *Urkund* has been provided. The facility of inflibnet is available at departmental as well as at individual level.

ICT

We have moved into the information age and the use of technology in education, presentation, demonstration, interaction and collaboration cannot be denied. Technology not only facilitates learning across the curriculum and allows us to communicate globally, but is also used to create, store and disseminate knowledge. In the recent past, the college too has expanded its Information Technology infrastructure, not with an aim to substitute technology for the teacher but to enrich the traditional classroom instruction. This makes the use of technology more teacher-centric in the context of teaching learning process. It has established an ICT Lab and a Smart Science Lab. The college has more than 100 computers in various departments and offices; all equipped with internet connection, networked through Wi-Fi and LAN.

Procedures and Policies

Being a State Government College, Dungar College does not enjoy autonomy in direct governance as far as structure, system and policy matters are concerned. But it has operational freedom in the implementation of available resources, be it physical or financial. The College takes direct initiative in the maintenance and upkeep of infrastructure and support facilities **through the various committees constituted at the beginning of academic session for effective planning and implementation.** The college building and maintenance committee not only monitors the quality of maintenance of existing infrastructure, equipments but also proposes requirements. The State Government, CCE and RUSA allocate a specific amount to Govt. Colleges for maintenance. The proposals for other requirements related to maintenance are submitted to College Development Committee, UGC and sometimes also to the Alumni association. **Governing and Monitoring bodies in the form of Board of Governors (BOG) and Project Monitoring Unit (PMU) are there for monitoring the progress of project.**

Laboratory: The in- charges of labs and Heads of Departments monitor the maintenance of the Labs. Supporting Staff and Lab Assistants help and support the faculty and students during practical lab sessions. Lab equipments are also strictly inspected by lab assistants before the commencement of practical classes and examinations. Logbooks and users register are maintained and the Instruments are used in the presence of teachers. Funds procured from State/Central Governments, UGC, Lab fee and RUSA are utilized for lab maintenance. Electrically sensitive equipments are provided with necessary back up to ensure steady functioning In case of disruption in power supply, the diesel generator having a capacity of 125 KVA functions as the substitute source.

Library: Library facilities are open to the students from 9am to 5pm. Maintenance and utilization of library resources are done strictly following the library rules. The library is situated in a separate independent building which includes two reading halls, one reference room and one room with computer facility. The whole library is facilitated with Wi-Fi network and is completely automated. The librarian not only monitors but also maintains the library infrastructure, funds and utilization of funds.

Sports: There is a post of PTI but since his superannuation the post is lying vacant. Presently college sports committee works like all other committees. It monitors the maintenance of playgrounds and sport events

Computers: The computers in departments are maintained and looked after by respective departments. The ICT lab is maintained and monitored by the ICT committee. External agencies are called in case of any repair beyond the scope of the system administrator or In-charge.

Class Rooms

The class rooms are well maintained and looked after by supporting staff monitored by the office. Most of the departments maintain departmental libraries with proper stock and issue register.

Extension Activities

Education is the process of facilitating learning, acquisition of knowledge, skills, values, beliefs, and habits. Other than classroom teaching and curriculum various extension activities are organized by the college for community development focusing on civic responsibilities, social awareness, value based education and personality development. The various cells and platforms not only provide an exposure but also help the college administration take corrective measures related to complaints, suggestions and development.

National Cadet Corps (NCC)

The NCC Unit of the college comprises of one Company and one Platoon with 213 cadets. The complete course tenure this year onwards is three years and students based on their participation are given 'B' and 'C' Certificates. Regular parades and camps are organized and it is mandatory for every cadet of first year to attend at least 23 parades and second and third year cadets to attend 27 parades respectively. In addition, every candidate also has to attend one camp each for 'B' and 'C' Certificates. Besides theory classes, lectures on burning and social issues of state and national relevance are also organized which include topics related to environmental awareness, wild life conservation, female infanticide, national integration, impact of IT etc.

NCC under Officer Kumari Nutan of Dungar College NCC Company successfully reached Mount Everest Summit on 22 May 2016. For this great achievement she was awarded the ***Raksha Mantri Padak*** and her achievement was recorded in the Limca Book of World Record. In 2017 and 2019 Cadet Senior under Officer Vipul Sharma and Manoj Delu participated in Republic Day Camp at New Delhi. In the Month of Sept 2018 Cadet under Officer Mallika Sharma and Sergeant Aaina Jakhar participated in prestigious ***Thal Sainik Camp***. On April 13 2019 Lt. Dr Rajendra Kumar Purohit was promoted as Captain by DG NCC. Dr. Shweta Nehra has been appointed as care taker of NCC Girl Division from April 2019 onwards.

National Service Scheme (NSS)

NSS Unit has been working in Dungar College since 1973, at present there are four Units in the college. Dr S N Jatolia is Programme Officer of Unit 1, Dr Sandeep Yadav, Programme Officer Unit 2, Mr. Mahendra Singh Solanki, Programme Officer Unit 3, Mr. Omprakash Bana, Programme Officer Unit 4. Plantation, Blood Donation, Water conservation, Voter awareness, awareness regarding Road safety, Important Day celebrations are the main areas of working. NSS special camps are being regularly organized by all Units. Recently 50th anniversary of NSS has been celebrated as NSS day on 24 Sep 2019. Every year three one day camps and one seven-day camp is organized by each unit and camped at the adopted nearby village as the outward activity of the institution to fulfill its promise to reach in the nearby areas and spread awareness in the society about the selected social drives.

Extra and Co-Curricular Activities

The ultimate motto of the college is to impart quality education and overall development of personality. Creative and Critical thinking is nurtured through different co-curricular and extra - curricular activities in which the students' participation is regularly promoted by the institute. Besides the week ***Sumanglam*** comprising of literary and cultural events for the college students, regular activities are organized by different cells on days of relevance and issues of social concern. The events include quiz, essay writing, debate, extempore, poetry recitation, mono acting, dance and song competitions. The college also publishes its magazine called ***Manisha*** which is available in print and on its website also.

Youth Development Centre

A Youth Development Centre (YDC) was established in Government Dungar College in 2009, with the basic objective to inculcate employability skills in the college students, to acquaint the students about new avenues of employments, to prepare them to face interviews and make them suitable for the jobs in future.

The centre runs two broad types of activities-

1. A20 hr capsule training programme for all final year graduate students on various job skills, personality development skills, self -management skills, soft skills, ICT skills and employability skills
2. Compiling and providing information about opportunities for higher studies, job vacancies, scholarships etc.

Beside these activities additional activities are organized from time to time and they include career counseling, Aptitude testing, Skill testing, Personality tests, Group Counseling, organizing Seminars, campus interviews, Debate and essay competitions, skill up-gradation courses, Brainstorming sessions, personality improvement classes, setting up help desk at the time of admissions in college, making employment related newspapers available, organizing placement drive/fairs and providing platform for successful alumni to interact and motivate the students. Special emphasis is given to train the students in making CV's and for the preparation of interviews, etc. The aim of these activities is to help student overcome and make them confident and competent for the job market. There is a separate room with the capacity of approx 150 students for conducting the activities of YDC; well equipped with the facility of internet, audio-visual facility, interactive board facility, separate display boards, and two Computers with printer. Computer and printer facility is also available for the students along with the books and career related magazines. There is a separate room for the members of the YDC to conduct the activities of the YDC throughout the year.

Sports

Physical health is equally important as mental health is and therefore the aim of an educational institute is justified only if it nurtures both. Sports play a significant role in the life of a person. It inculcates the spirit of sportsmanship, teaches goal setting and planning, develops the concept of winning and sharpens competitive edge. A sport not only elevates physical ability but also provide mental agility. A set of rules are always laid down for playing any sport or game and this helps inculcating a sense of discipline within an individual. Winning or losing also gives strength to fight for success.

The College provides facilities for indoor as well as outdoor games. Various sports played by the students of the College include Hockey, Football, Cricket, Tennis, Volley ball, Basket -ball, Kho-Kho, Kabbadi, Boxing, Wrestling, Shooting, Archery, Cycling, Athletics, Table tennis, Chess, Carom and Swimming, the facility of a few although being not available in the College premises are played elsewhere for which a prior official arrangements are made by the Institute. Most of the students of this College although are from rural background but as do well in their academics they perform well in sports too can be confirmed by the medals won by them in different events. The students participate at different levels beginning from inter-class followed by inter-college, state level, inter- university and reach up to national level. The college has earned proud recognition in the following sporting events and students have won individual/group medals and shields.

The College within its campus has 6 sports grounds and facilities for indoor games like carom and table tennis. The College has facilities for indoor as well as outdoor sports and the students have been securing positions at National Level Tournaments like All India Inter-University Track Cycling event: Individual as well as Group; All India Inter- University Road Cycling event, All India Inter-University Weightlifting event etc. But looking at the students' strength, interest and aptitude towards sports, the students and staff of the College had been constantly trying hard for a mega sports complex as an enterprising step towards honing sports culture and equipping sports competence of the students. The request for the same was forwarded to the Commissionerate but, being a Govt. College; many a times there are constraints in executing some works especially where finance is involved. The dreams of the students and staff came into existence during the visit of the then CM Smt.Vasundhara Raje Sindhya to the college. A special grant was announced by her for the construction of sports complex. The College definitely leaves no stone unturned to fulfill its objectives, is hence proved.

“**Sports Complex**” in the College is now at a stage of completion and would be a very good addition to the sports facility. It includes Multipurpose Indoor Hall of size 60X40m, Volleyball Court of 24X17m and Basketball Court of 30X17m (with portable Goal unit), all of high international standards having synthetic (acrylic) surface laid over an Asphalt base, along with proper Referee Chair.

Skill Development

In addition to subject knowledge, classes and activities for skill development like computer applications, language teaching and personality development are regularly organized by YDC, Women Cell, and NCC. The Commissionerate of college education Rajasthan has constituted a cell for innovations and skill development. Some of the programs organized are as follows:

- employment Rojgar Mela was organized in collaboration with National Skill Development Corporation New Delhi from 28-9-18. During this event 2012 students were given offer letters
- From 3rd June 2019 to 30th June 2019, summer camp was organized on photography, communicative English, yoga and meditation.
- Workshops related to RACE, DRAC, AAP/CAP were organized.
- Applications were invited under MMYKY scheme for two courses viz spoken English and communication and organic grower cum greenhouse operator.
- Dialogue between Parents, students, teachers and college administration under Community connect programme to discuss and analyze college development issues.
- e-lectures related to the use of e-library
- Lectures were organized on interdisciplinary topics under IDEA (Interdisciplinary Educational Association)
- PDP (Pratiyogita Dakshta Programme) free coaching for competitive exams.

Alumni Involvement

Alumni and its participation is undoubtedly the key to sustainable philanthropic support and long term success of any educational institute. The Alumni Association of Govt. Dungar College is a registered body under the name “*Purv Chatra Dungar Mahavidyalaya Vikas Samiti*”. It has regularly been promoting the general welfare of the Institution by its services. The Old students of the College not only support their parent institution’s goals but also try strengthening the ties between alumni, the community, and the parent college. As mother promotes a child’s well-being so does an educational institute and therefore one feels proud on giving something back to its Alma Mater.

To be an Alumnus of this prestigious College owes oneself a feeling of pride and because of this he is held in high esteem, which is even more than achieving a high position. Nevertheless, the alumni have added laureates to the college by attaining top positions at State, National and International levels. They have represented in all disciplines and every sphere including education, sports, medical and defense services, industries, literature, administration, art & culture, politics so on and so forth and served the nation.

Placement & Career

The placement Cell of the college provides opportunities for jobs to the students through various activities like induction program by professionals from companies. A job fair is organized almost every year. In 2018 the Rozgar Mela was organized in collaboration with National Skill Development Corporation, New Delhi and more than 4000 students were given offer letters. Youth Development Centre of the College also extends its support by guiding students for career and job opportunities.

Student Council

Democratic process finds its roots in the academic institutions. Students Council known as Student's Union is formed in the college as per the guidelines laid down in ***Lingdoh Committee*** recommendations and the government of Rajasthan orders and notifications time to time. There are direct elections for the post of President, Vice-president, General Secretary and Joint Secretary and C.R(class representative) .The indirect elections are held for the post of Cultural Secretary ,Literary Secretary, Games Secretary, Common Room Secretary , UG representative and PG representative. The role and responsibilities of student Council with reference to academic and administrative bodies is reflected in the following endeavors:

- ✓ Student Union representatives play a major role in planning and execution of all the developmental activities related to academics and administration of the college. President of the student union is the member of '***Mahavidlaya Vikas Samiti***' by virtue of being the students' representative. He proposes various works to be undertaken on behalf of students and protects the rights of students. Student's union acts as an important channel for generation of feedback, responses and grievances of the students at large. This helps the college administration to work in the areas demanding immediate attention and resolving of issues.
- ✓ Student's union plays important role in the conduct of cultural week '***Sumanglam***' where every potential of artistic personality is explored through cultural and literary competitions. Cultural secretary plays a vital role in this activity. Games week is also organized where the role of games secretary is very important. He is an integral part of conduct committee of all games and sports interclass and open competition. The secretary also plays a pivotal role in the participation of college teams in inter-college competitions.

Research

Imbibing an aptitude for research is very essential and the college aims to do the same through its teaching learning process and various research oriented activities, The Institution imparts research skills keeping in mind the need, problem, context and significance and fostering intellectual stimulation to make the students self reliant. The faculty too is constantly engaged in intensive and extensive research pursued with the objective of attaining deeper knowledge, application of knowledge , update and upgrade themselves and to recommend solutions and changes. The college offers M. Phil. in 10 and Ph.D. in 17 subjects and enjoys the privilege of having the maximum number of research supervisors among the affiliated colleges of the state. The research undertaken by the students and faculty has always aimed towards making a contribution of knowledge and improvisation of evidences, concepts, and theories.

The Institution has gained recognition and has been acknowledged in the society for its involvement and contribution in research oriented activities. Erudition of the faculty has been recognized at National/International levels which have added new dimensions to the reputation of the college. The college encourages research related to issues and topics of contemporary relevance as well as global significance among students. The faculty and students of the college are engaged in active research which can be fruitful or successful only when the research findings benefit the society. The Departments of Humanities, Social Sciences and Science all contribute in their own way by sharing and transmitting their information and knowledge. These consultancy services provided verbally are in a way directly beneficial to Industry and society and no revenue is generated out of these services. Some of the consultancy services rendered by the faculty are as follows:

- **Green Chemistry Research Centre** is making a significant contribution by developing Green chemical technology for sustainable development. The center has developed and filed process patents as well as designed new instruments like Green Microwave Biochemical Reactor, Ultrasonic reactor. Major Fields are Food and Drug research, Biophysical Chemistry, Bioinorganic Chemistry, Green Chemistry and AR-VR based Computational Chemistry.
- The **Department of Botany** houses one of the best Herbariums compiling of local flora acting as reference resource for the students of botany. The faculty also helps and provide consultancy to doctors in identifying plants whose pollen cause allergic reactions resulting into bronchial asthma.
- The desert area is rich in resources and the faculty members of **Geology Department** provide their technical know-how and expertise to Industries and teams that come for geological explorations.

- The group associated with Entomology, Radiation Biology Lab, Environment Science Lab, Wild life Management Lab and Fisheries etc. of the **Department Zoology** extends consultancy to medical practioners in connection with cancer doses.
- Case Studies and periodical social surveys conducted by students of the **Department of Sociology** report some significant findings which are disseminated for the benefit of the society. The data collected proves to be of great help to the Government Sector.
- The **Department of English** extends their consultancy by modifying the curriculum of other universities and a specific example being, contributing for a course in Life Skills and Meditation and also extend consultancy as resource person for Soft Skills and Phonetics.
- Courses are reviewed and training modules for school lecturers for IASE are framed by the faculty members of the **Department of Geography**.
- *Academic Bodies for PG students:* There are academic bodies for PG students of various subjects like **Planning Forum, Science Association, Chemical Society, Botanical Society, Zoological Association** etc. For PG students of Botany, Zoology, Geology, Geography, Chemistry and many other subjects, educational tours are organized which give them practical knowledge of their subject. The PG students of Humanities and Social Sciences conduct surveys taking various aspects of society and its behavior. Importantly, the results and findings of these activities are conveyed to the state/central governments and other related agencies Also results and findings are published in various national/international research journals.

Innovations & Best Practices

The College has always aspired to attain new heights and make a name for itself. It has also been identified by the State Govt. as an institution with potential for excellence. For the institution, innovation is an ongoing process of bringing about new ideas, best and healthy practices and application of better solutions that can have a positive and productive impact on the society. This is accomplished through its teaching-learning process, curriculum, skill development programmes, employability skills development programmes, services, resources and implementation of ideas. The college not only believes in developing values but also in providing solutions to meet new needs and maximizing its educational objectives. Innovation and best practices of the college is reflected in its research, faculty, team work, and consultancy and in all its endeavors of social relevance. The innovation and best practices in the college are nurtured and nourished by the qualities imparted and inculcated and these include:

- ✓ Accountability
- ✓ Integrity
- ✓ Leadership
- ✓ Research aptitude
- ✓ Social responsibility and concern
- ✓ Healthy practices
- ✓ Comprehensive approach
- ✓ Fostering the spirit of education
- ✓ Generating awareness towards issues

Environmental Consciousness

The campus of the College is spread over 3 lakh 70 thousand -sq. meter area, and this includes building blocks, canteen, a hall (Pratap Sabhagar), Sports and Games centre and play grounds. The class rooms and laboratories in each block are designed as per the standards appropriate for an educational institution. All class rooms and labs are well illuminated, aerated and ventilated. There are gardens with small lawns attached to each block.

The plantation is done all around the campus. There is a Faculty Eco Club, run and funded by the faculty members. The Club has done a large number of plantations and takes care of all the plants. All plants are growing well and making the Campus green. Like any other academic institution there is no substantial hazardous emission or solid waste. So green auditing is not a big problem. The waste of Chemistry and other labs is disposed with utmost care which is mostly in washing i.e. in liquid form. The plant litter and waste are collected in pit to make natural manure. The gardener and the faculty members also put in efforts to take care of the plants. The plants used as a material for the practical classes in Botany are cultivated in Botanical cum Herbal Garden. Since the computerization has just begun so there is no substantial e-waste in the campus and whatever is produced, is disposed of by standard methods.

Familial Forestry Division

Objectives: Environmental conservation, afforestation, combating desertification and malnutrition, increase in biodiversity by domestication of trees and making people Eco-civilized.

The Context: Arid climate of western Rajasthan is a biggest challenge to forestation. Stray cattle and lack of awareness make situations worse as far as forestry's and conservational activities are concerned. Malnutrition and less biodiversity are the byproduct of arid climate. Familial Forestry was formulated to address these challenges, as it advocates domestication of fruit plants. In this way it not only ensures proper safety and care of planted saplings but becomes a source of fruit availability to the concerned family also. This domestication makes family climate sensitive as trees has central role in applied environmental education.

The Practice: Familial Forestry makes an emotional connection with nature, the concept of familial forestry was developed by Mr. ShyamSunder Jyani, Associate Professor in Sociology at Govt Dungar College, Bikaner in 2006 that deals with domesticating trees by families to increase green cover, conserve biodiversity, and address food shortage issues. Today, the concept has been replicated by over 4,00,000 Indian families. More than 4000 desert villages in north-west Rajasthan have witnessed the planting of over one million trees, turning familial forestry into a mass movement. Keeping in mind the difficulty to grow trees in the arid environment of Rajasthan, Jyani strived to ensure the survival of the plants by making every family aware and sensitive towards them.

Evidence of Success: Since the year 2006, till date, the concept of familial forestry has connected millions of families planting of around one million saplings and a dense forest on 5 hectares of land in the Dungar college campus has been developed with the participation of students which is termed as Institutional Forest. This forest has a people's nursery from where 100,000 saplings of fruit plants have been provided free of cost to nearby districts. Due to the arid desert conditions of Rajasthan, it is very expensive and challenging to develop large forests here. Therefore, by developing institutional forest using familial forestry technique and by developing small networks of ecological systems on the available vacant lands in educational institutions and other state campuses, Rajasthan can be transformed into a green space.

As a model of institutional forest, Jyani set up a forest in his own Dungar College campus and established a public nursery, adding environmentally loving teachers of state schools of over 150 villages of Bikaner division this year, on the 150th birth year of Mahatma Gandhi. To develop these 150 Gandhi fruit gardens saplings of berries, lime, pomegranate, amla, beel leaf, mulberry, drumstick, tamarind, guava, sitaphal, ramfal, arjun, curry leaves, lasora, plum, net, khejdi, rosewood, neem, bakayan, Malabar neem Rohida, Peepal, Banyan, Churel, Karanj, Gulmohar, Semal, Amlatah have been planted through Familial Forestry. This division not only

provided free saplings to these schools but personally planted these saplings, the teachers of these schools also made arrangements at their level for the safety of these plants and proper management of water. In many schools the teachers are burning their own pockets to take proper measures for the safety of plants like protection and water tankers. According to the World Hunger Index 2018, India is ranked 103 in the list of 119 countries, which shows the worrying level of malnutrition in us. The institutional fruit forests are an exercise to include the fruits in the mid-day meal of our children with the aim of eradicating Child malnutrition.

People from 45 countries are connected to @FamilialForestry page on Facebook. Plantations done with this technique reduces the death rate of the plants. Geo tagging of all these Gandhi gardens has also been done through the Familial Forestry App and he has also started organizing Green Dialogues in prayer sessions every Saturday in all schools with the prime objective of mobilizing Environmental socialization of students. Familial Forestry is rapidly becoming an indispensable part of local religious fares, saplings are being offered as devotional offerings in rituals and festivals.

For example, despite being a social scientist, he made his foray into agricultural research by developing a unique technique of in-situ budding of native desert plants like *Prosopis cineraria*, *Ziziphus jujuba*, and *Cordia gharaf*. His technique transforms these plants into high-yielding varieties that help farmers produce fruits in the absence of any additional water source than rainfall. Implementation of the technique is associated with multiple benefits like increasing forest cover, supporting biodiversity, and meeting the livelihood and nutritional demands of the locals. Jyani also set up hundreds of micro-nurseries in villages to grow and nurture the saplings for the planting drives.

Familial Forestry is not limited to village homes but also to schools. Thousands of them have enhanced their green cover through familial forestry institutional forest drives. A biodiverse institutional forest of 5 hectares in our college campus with the aid of students have been developed .A people's nursery established in this forest has supplied 100,000 of saplings to surrounding areas free of cost.

A Revolution in the Making

The concept of familial forestry that arose from sociological understanding of the family as a basic unit of society, is today taking Rajasthan by storm. This selfless devotion to the cause of environment conservation has established him as a relatable role model for those working at the grassroots level. Jyani has also been successfully using social media to spread awareness in and beyond Rajasthan. His awareness programs have borne fruit and people have now started integrating festivals and rituals with plantation drives. Children have been influenced to celebrate Green Diwali by shunning crackers. Now, religious groups in different parts of India have started distributing saplings as devotional offerings. Youth are now gifting saplings in their marriage

ceremonies. Independence Day in schools is celebrated with the distribution of saplings along with sweets. The Limca Book of Records has also thrice acknowledged familial forestry plantation drive as a national record. A state university has included the concept in their post graduate syllabus. Various media houses have also covered Jyani's story of Familial Forestry. His work has been recognized by the Chief Minister of Rajasthan and he has been felicitated by the honorable President of India.

Problems Encountered and Resources Required

Lack of awareness in community and doubt about innovation in bureaucracy are the main hurdles to overcome from these issues Jyani decided to run Familial Forestry drive through his own resources initially his devotion and sociological intervention made people aware resulting to it after a decade people started to endorse familial Forestry as their familial responsibilities. Although Jyani is continually doing his job at his own but engagement of people is new addition to the drive.

Notes: The explicability of Familial Forestry makes it a universal practice than can be replicated in any institute, the Institutional Forest is best way to replicate it.

Laboratory Waste Water Neutralization Plant

Title of the Practice: Laboratory Waste Water Neutralization Plant

Objectives of the Practice:

- The prime objective of the practice is to control water quality deterioration being created due to experiments performed in institutional laboratories
- To train students for water analysis and create environmental concern among them.
- To design experiments from waste water and performing the task of recovery of heavy metals
- To check the effect of laboratory waste water on different plants, particularly desert plants
- To develop solar distillation plant for the preparation of distilled water from laboratory waste water.

The Context:

It is well known fact that laboratory waste particularly of Chemistry lab waste involves several toxic and hazardous chemicals including mineral acids like hydrochloric, sulfuric and nitric acid. These acids, alkalis and other chemicals come out with waste water and if disposed directly to environment without neutralization, these not only degrades the underground water quality but also deteriorate the soil quality drastically when exposed for prolonged period of time. When we are talking about waste water management, the disposing / recycling, pollution control and Green campus etc. are also included. It is important to make sense of waste water treatment and recycling in colleges and / institution laboratories.

The Practice:

It is being taught regularly and periodically that acidic, alkaline waste and other wastes disposals coming out from laboratories are toxic, hazardous and dangerous. Further pH calculations and determination of in the labs

Evidence of Success

The project has been designed in three parts.

In part I of the project, the waste water produced is collected from the lab, its pH is measured daily and accordingly a calculated amount of neutralizer is added to maintain its pH thereafter it is released. This part of the project is running successfully.

In part II of the project, estimation, pre-concentration and removal of metals and toxic materials present in laboratory waste water is being done and this part is in process.

In part III of the project, preparation of distilled water from laboratory waste water is planned, for this purpose a solar distillation plant has been designed and fabricated in chemistry department.

The project is first of its kind and not only a good source of teaching – learning methodology but also a Green chemical Technology step toward Green Auditing. The data collected from the year 1.07.2018 to 30.01.2019 has been presented in the form of a poster during national conference held at Bikaner by a group of students. On the development of process and functioning of complete plant a science film has been produced by the students named as “Saviours of Water”. The movie has been awarded as special jury award during IISF 2019 held at Kolkata in Oct 2019.

Problems Encountered and Resources Required

- (a) Collection of waste water in a separate neutralization tank was initial problem because it requires a separate construction and repair work.
- (b) Neutralization material and its finalization was one big challenge because it should have following specifications – economic material, non hazardous material and its end product should be useful.
- (c) After the filling of end product in the water tank its removal from the tank was a problematic task which requires resource mobilization.
- (d) Designing of solar plant and implementing it for the preparation of distilled water.

Notes (Optional)

A unique initiative of chemistry department was to develop a pilot project of laboratory waste water neutralization plant. The liquid waste produced in the chemistry and other laboratory is highly toxic and hazardous to both life and land and equally deteriorate the quality of soil. In order to solve this problem on the basis on twelve principles of Green chemistry a pilot project was initiated. The pilot project is to neutralize the toxicity and hazardousness was conceived developed and executed in M.Sc. (P) lab of the chemistry department.

It is important to note that 1 ml of laboratory grade acid requires approximately 20000 liter of water to neutralize without addition of neutralizer.

Kalam Learning Center

(A platform for learning by doing programe)

Objectives: To improve the teaching ability and understanding the topic of the subject by the Students via developing the experiment him/herself and to provide maximum practical understanding of the concepts.

The Context: There is a popular Chinese proverb; actually it was the basis of our old teaching methodology as:

**I listen I forget
I see I remember
“I do I learn”**

‘Learning by doing’ –a self-service project for Students.

- We have developed about 15 experiments of important topics of Physics and 07 experiments of important topics of Chemistry which are the part of curriculum of B. Sc. Classes in Physics and Chemistry both, which are the fundamental in nature and useful in daily life.
- The understanding of such topic by Student makes him/herself strong in grasping the subject knowledge.

The Practice:

- We have developed about 15 experiments of important topics of Physics and 07 experiments of important topics of Chemistry which are the part of curriculum of B. Sc. Classes in Physics and Chemistry both and are the fundamental in nature and useful in daily life.
- **By recording the said Experiments, the recorded matter is being provided to students residing in remote area too.**
- **Organized several workshops/ training programmes**
- **The list of developed experiments is as follows:**

Experiments for Physics

- Power Generator- principle-working
- Motor- principle-working
- Generator and Motor Inter conversion
- Determination of Density of water
- Determination of Density of mercury
- Determination of Density of steel block
- Determination of Density of wood block
- Archimedes principle with Steel block and Mercury.
- Principle of Galvanometer, its construction and its conversion in to Ammeter and Voltmeter.

- Linear expansion of metallic rod
- Interference of sound wave and determination of wave length
- Radiation pressure
- Formation of 3D image of magnetic lines of force.
- Collision of Bodies
- Concept of Pressure with variation in no. of particle and temperature
- **Experiments for Chemistry**
 - Formation of electrochemical cell
 - Visualization of magnetic particles
 - Preparation of Nano-particles
 - Preparation pH solution
 - Preparation of pH paper
 - Determination of pH of common edibles like tea, coffee, milk, lemon etc.
 - Determination of soap value for edible oil

Evidence of Success:

- Dedicated teams consisting of faculty members and students headed by Dr. Ravindra Mangal and Dr. H. P. Vyas-Ex. - Director DRDO, New Delhi have imparted the knowledge to about 10,000 Students in The State and Out Side the State.
- In the College establishment of the center in the memory of Dr. A. P. J. ABDUL KALAM as “KALAM Learning Centre” with the aim of ‘Learning by doing’ activities and to inculcate Scientific Temper among students and also uplift the underprivileged students.

Problems Encountered and Resources Required

At present the center is run by own financial resources but laboratories and other infrastructure have been provided by the institute. A proposal for financial grants has been submitted to CCE, Jaipur.

Bikaner Interdisciplinary Research Consortium (BIRC)

Title of the Practice: Bikaner Interdisciplinary Research Consortium (BIRC)

Objectives of the Practice: In 2005 a new concept of Interdisciplinary research has been started in the Govt Dungar College Bikaner in terms of BIRC. Motives of the BIRC

1. To develop a *Centre for excellence in the field of research and development* and to provide a common platform to scientists and academicians from different branches of science and technology
2. To develop interdisciplinary scientific approach in order to solve the problem.
3. To investigate the potential utilization of desert land and resources for the sustainable development
4. To motivate students for the development of interdisciplinary approach and attitude towards the solution of problems of the present era
5. To develop novel and exotic composites and Green technologies which are need of the present society.
6. To inculcate the spirit and culture of research amongst faculty and students.
7. To enhance interaction and cooperation between researchers for interdisciplinary and multidisciplinary work.
8. To forge academic and research collaborations with national and international universities, government agencies and industries.
9. To establish links with various R&D organizations and funding agencies for sponsored and contract research.
10. To take up problems faced by local industry and provide solutions to them.

The Context

It is believed that modern days research can not be of high quality until unless it is a combined effort from different disciplines where a specialized researchers can not only provide his/her expertise to solve the problem but can also peep into other areas with a new and different dimension to address the issue. The BIRC comprises of faculty members from various departments of the institute provides this opportunity and a forum for interdisciplinary research and or interfaculty research and discussions. It also helps to organize research promotion events like conferences, seminars, workshops, invited lectures; webinars etc. which can motivate young students and faculty members for doctoral and post doctoral research further also encourage students and faculty to undertake research projects in thrust areas in science and technology with funding from various national and international agencies.

The Practice

To fulfill above motives, a novel concept designed by founder members and applied first time in the institution of Rajasthan, they have identified their major areas of research. Initially researchers from three departments i.e. Physics, Chemistry and Botany were involved later on Researchers from Geology and Zoology have also started working.

The work process is being performed as –

1. Identification of the Problem
2. Finding possibility of interdisciplinary research if required
3. Project designing
4. Implementation at pilot scale
5. Initially following three projects were started (a) Green composites (b) Nanocomposites

Beneficiaries

1. Students of PG, Research scholars
2. Faculty
3. Institution
4. Society / environment

Present work with Topics

| S.N. | Names | Field |
|------|---|---|
| 1 | Dr. N. Bhojak & Dr. R. Mangal | Green Composites and nanotechnology |
| 2 | Dr. A.K. Sharma, Dr. Partap Singh, Dr. M.C. Mali, Dr. Anil Arora & Dr. Sumanlata Tripathi | Biodiversity and sustainable development |
| 3 | Dr. R. Mangal, Dr. G.P. Singh, Dr. Smita Sharma, Dr. S.K. Verma and Dr. Uma Rathore | Experimental designing for Learning by Doing demonstrations |
| 4 | Dr. Shishir Sharma, Dr. B.L. Sharma, Dr. H.S. Bhandari and Dr. N. Bhojak | Ceramic Technology and use of ceramic waste |
| 5 | Dr. Meera Srivastava, Dr. Deepti Srivastava and Dr. N. Bhojak | Green extractions and their applications as pesticidal formulations |

Evidence of Success

Achievements

1. Motivated students and young faculty members to present interdisciplinary research during conferences, seminars, workshops etc. More than twenty students presented their research work during conferences and few of them have been awarded.

2. Industrial collaboration has not only enriched knowledge but has also opened job avenues for students.
3. *Green composites and learning by doing* presented during Edufest-Jaipur in 2017 it was well appreciated by Honorable Central Minister Shri Prakash Javedekar and Honorable Minister Higher education Mrs Kiran Maheswari
4. Green composites and learning by doing presented during Suraj Mela at Bikaner and awarded as First prize
5. Green composites has been demonstrated as a research papers by students who has been awarded best poster award during National conferences.

(Photographs are attached)

Problems Encountered and Resources Required

Initially it was difficult to involve people from different disciplines at college level hence it was started with a very small group from three departments. Later all science department become the part of it and now social science departments and even languages have also initiated to work on this model.

Future work

1. Preparation of Biocomposites and Green Ceramics
2. Identification of Desert flora and fauna for sustainable development of Biodiversity.
3. Development of Green chemical Biotechnology
4. Preparation of magnetically induced silica based nanocomposites from the desert soil/sand.
5. Utilization of ceramic waste for water purification
6. Development of Herbal formulations for paste control

Some Other Best Practices

- ✓ Celebrating important days having cultural, social and historical significance.
- ✓ Anti-Smoking Committee has been constituted in the college to check the use of cigarette, bidi and other tobacco products in the campus. Awareness programmes are organized to generate awareness among the students regarding the harmful medical and social impacts of Smoking and chewing tobacco. In these programmes students take oath to quit such habits. A committee including faculty members, SHO, Vyas colony Police station and President, Student Union of college has been constituted as per the guidelines from Directorate, College Education, and Rajasthan. The College has been declared as tobacco free campus. A notice board has been displayed at the main gate of college indicating warning against sale of tobacco products within limits of 100 meters of college boundary. Several small boards indicating “No Smoking” have been displayed at various places in the campus. Regular inspection is done to check the canteen and nearby areas.
- ✓ Mandatory wearing of laboratory coats as a symbol of discipline, hygiene and equality masking the heterogeneous clothing in dept. of Zoology.
- ✓ Cleanliness drives in the college and the nearby areas, blood donation camps by NSS unit.
- ✓ The Department of Zoology in addition to regular M Sc. Course is also running M Sc. under SFS. The faculty has shown a humble gesture by declining any honorarium towards the same.
- ✓ The Zoological Association has more than 500 reference books collected and funded by the faculty members. The Association also organizes lectures and seminars. The funds are generated by the contribution made by faculty and students.
- ✓ The college has taken initiative to start courses to enhance employability skills. Few of these courses includes, a course for lab technicians, short term course in career grooming, a course in functional English, certificate in Accounting Technicians and M Phil. programmes in almost 10 subjects under SFS scheme.
- ✓ Traditional practices of introduction/fresher’s/farewell parties by students.
- ✓ Many of the faculty member work for NGOs and regularly extends their services in adjoining areas.
- ✓ Ragging free Campus: Negligible complaints are registered against ragging.
- ✓ Online admission facility has been provided by the College.
- ✓ Internal Committees are constituted by the Principal for efficient and smooth functioning of the college.

Internal Quality Assurance Cell (IQAC)

The quality hallmark for the Institution has been given a paradigm shift in the last few years keeping in mind the growing demand for skill and capacity building and linking it with entrepreneurship, development and employability. **The College does not offer professional courses and so there is greater responsibility of equipping the students for better job prospects. The IQAC works towards realizing the goals of quality enhancement and sustenance.** Suggestions made by IQAC have been executed also at the levels of developing IT Infrastructure, effective teaching, proper allocation and maintenance of funds, research and student support. Every effort is made towards the **active involvement of students in the whole process of teaching and learning.** IQAC periodically reviews and suggests measures to upgrade the quality of teaching-learning process by way of enhanced academic research, effective training and innovative pedagogies. Some of the measures are taken to review the teaching learning process, operational strategies and learning outcomes:

- **Teaching -Learning and Evaluation:**

- ✓ **The curriculum is constantly reviewed, revised, and updated.** Relevant and specific suggestions offered and feedback received from the students, teachers, and stake holders are incorporated.
- ✓ **Two compulsory subjects Computer Science and Environmental Studies** at the first year level expose the learners to latest technology and generate awareness for social and environmental issues.
- ✓ **Progression / performance of students are adjudged after every academic session** based on their results of annual examination. If there is a decline in the pass % measures are suggested by the Cell to ensure improvisation in the forthcoming session.
- ✓ **Measures are taken to make class room teaching more student-centric.** Besides creating an atmosphere of mutual trust and respect inside the class room, emphasis is laid on interactive sessions, field studies, and community activities. This can be supported by the fact that field trips and reports are mandatory not only in Science subjects but since last session an Optional paper on Case Study has been introduced at PG level in all subjects.
- ✓ **Tutorial /extra classes for slow learners** and embedding skills development in academic programs to open up additional possibilities to shape their future.
- ✓ **State of art laboratories and innovative research projects** are the exclusive features of the college.
- ✓ **The college also promotes women centered activities under the aegis of Women Cell to provide an extra edge to female students.** This cell was established with an objective to generate an awareness about women related social issues and problems.

- ✓ **Besides class room teaching and curriculum, the college also offers activities and programs that complement learning and learning experiences.** It is mandatory for students seeking admission at the first year level to opt for any of the extra-curricular activities offered by the college. Co-curricular activities are undertaken with an aim to move beyond the realm of formal learning and foster creative and critical thinking. Extra-curricular activities that fall outside the educational curriculum are a regular feature in the college and are conducted by Youth Development Centre (YDC), Women Cell, NSS, NCC, Ranger, Rovers etc.
- **Structure and methodologies of operation:** The planning procedures and implementation of IQAC initiatives in the area of teaching learning is reflected in the following:
 - ✓ **The feedback procedure** in the college is in the form of a questionnaire separate for parents, teachers, students and alumni to render their advice on all aspects related to the development of the college. **Feedback regarding curriculum** obtained from students/ teachers/ alumni/ parents/ employers is analyzed by IQAC and discussed with the conveners and members of BOS in the college and later on placed before the Board of Studies meeting in the affiliating university. Feedback **from students** and student's council is also taken during the NSS camps, seminars and symposiums of the departments.
 - ✓ **The academic calendar** is prepared by the departments for weekly/monthly/ quarterly tests and seminars. This helps in identification of learning abilities and modifications in teaching strategies accordingly. The seminars conducted by the departments' exhibits research aptitude and fields of specialization.
 - ✓ Despite the limited resources, **optimal use is made of the ICT facilities** available and for this all the ICT enabled classrooms are effectively used by the teachers for open access and available e resources. With the advent of new technologies, the institute has readily adapted to the use of technology in teaching. Smart class rooms, interactive e-boards, LCD, slide projectors, DVD players, computers, and internet connectivity has facilitated the learning process.
 - ✓ **Learning outcomes** are displayed on the college website and reviewed by IQAC. The same is also discussed with in-charges of various departments and mentors. The college is an affiliated one but it has defined course/ programme and /programme specific outcomes for student support in selection of electives and with reference to their abilities and goals.
 - ✓ **The Students Advisory Bureau** of the college provides academic, personal, psycho-social guidance and counseling to the students. Prospective students seeking admission in various courses are also extended counseling related to election of subjects and their prospects, availability of subject related material and books and financial assistance.
 - ✓ The College showing concern towards the ever increasing demand of the region for main stream regular courses which otherwise are not available, has come forth by

putting up a regional study centers of **Vardhman Mahaveer Open University (VMOU) Kota and IGNOU.**

- ✓ The learning process of students is facilitated by congenial academic environment prevalent in the campus. There is a good central library with reference books, besides departmental libraries which initiate the learning process.
- ✓ The Cell also motivates the faculty to adopt Innovative processes and e resources in Teaching like NPTEL, Shodhganga, Swayamprabha, National Digital library, use of Usage of OHP, Power Point presentations, Models/charts, smart class-rooms, conduct of Co-curricular activities like *Sumanglam*, conduct of coaching classes helps the students to improve skills to face competitive examinations, conduct of remedial classes and special classes for slow learners so as to improve the learning skills of the student.

Management Information System

- Notices and circulars regularly displayed and circulated among students, faculty and staff members for day to day execution of works of importance.
- Admission: online admission process for UG and PG students implemented by Commissionerate College Education, Rajasthan. The admission module on the college website also provides essential link and information to complete this process. Merit is also generated online and uploaded on the website.
- Attendance: centralized management information system to record the biometric attendance of faculty and staff and also of research scholars availing fellowships.
- Accounts and Finance: Monthly salary bills of all employees through Pay Manager Portal
- E tendering module helps in procurement of goods and items and placing orders.
- E prospectus uploaded on the website gives information related to subject combinations, academic calendar, admission policy and code of ethics.
- Examination forms, permission letters, course outcomes all through centralized university module on the university website
- Examination conducted through in house software developed indigenously.
- LAN for access of data base of students' academic performance and other queries.
- Various Govt and citizen apps and modules on SSO give access to the facility of property return, provident fund, profile of employees and also applying for leave.
- Faculty service records updated and available on IIHRMS and HTE portals.
- Payment of fellowships and scholarships of UGC, ICSSR, CSIR etc through PFMS.
- Payment of various Scholarships through SSO module

Mahavidalaya Vikas Samiti (College Development Committee)

Govt. Dungar College Bikaner

Date of establishment- 27-09-2001

Organizational structure:

Principal-

Chairperson M.P.-

member

M.L.A. - member

Zila Pramukh- member

Representative of District collector – Member

Representative of Director of College Education- Member

Two local educationists nominated by the Principal-

Member

Two learned Citizen nominated by State Government –

Member Vice Principal- Member Secretary

President of student Union/Representative of students nominated by the principal-

Member Faculty Member nominated by the Principal- Treasurer

Two Guardians of students-

Member Donor/Trustee- Member

Administrative Structure:

Principal- Chairperson

Representative of District collector – Member

Representative of Director of College Education-

Member Treasurer- Member

Two Educationists and Two Learned Citizens nominated by Development Committee-Member

Vice Principal- Member Secretary

Functions:

To provide and maintain Basic Infrastructure for overall development of the college

Rules:

The committee has its own constitution in which rules are mentioned and in all financial activities GF & AR rules are followed.

Procedure:

Proposals related to the committee are passed in general body meetings and Principal executes according to the decision taken by the committee.

Important Links

College Website: <https://dungarcollege.ac.in/>

Admissions (online portal): <http://dceapp.rajasthan.gov.in/>

College Prospectus: <https://dungarcollege.ac.in/media/college-prospectus.pdf>

Scholarship: <http://hte.rajasthan.gov.in/scholarship.php>

M.G.S University, Bikaner: <https://mgsubikaner.ac.in/>