

# E-GOVERNANCE POLICY AND PLAN OF ACTION

University of Rajasthan Jawahar Lal Nehru Marg Bapu Nagar, Jaipur-302004

#### Introduction

E-Governance is the process by which conventional governance is modernized to facilitate staff, students. administration, and all other stakeholders with improved and efficient services and to ensure smooth governance using Information and Communication Technologies applications. E-Governance new ways of governance, single window operations, services, paperless transparency, and much more. The University of Rajasthan E-Governance policy has been designed to facilitate the students, employees, and all other stakeholders.

#### **Advantages of E-Governance**

The advantages of E-Governance in an educational sector are improved efficiency, increase in transparency, and accountability of educational administrative activities. It is convenient and enables faster access to services, and lowers costs for administrative services. The multi-faceted benefits of E-governance can be described as follows:

- Increase the efficiency of various departments and reduce duplication.
- Preparation of reports becomes easier and quicker.
- Students-related facilities are well defined.
- Easy and immediate online information and submission of forms and payment.
- The management, faculty members, students, and administrative staff get connected more easily leading to enhanced efficiency in delivering service by faster dissemination of information ton a reduced cost.
- Equity and access to information is provided regardless of one's physical location and physical challenges thus removing distance barriers.

 Leads to a significant reduction in transaction costs, time, space, and manpower.

The E-Governance system is designed to transform work processes, and implement and deliver certain information to decision-makers, adding an improvement in transparency and accountability levels. In the process, the possibilities of efforts are reduced as well and the University's budgeting and quality of services are improved. The need for E-Governance in areas such as Planning and Development, Administration, Finance, and Accounting is significant and obligatory.

#### **VISION**

To enhance the accuracy, efficiency & transparency of university governance to all its stakeholders.

#### **MISSION**

To develop the E-Infrastructure with the latest technology to facilitate and promote the E-Governance system in most of the University Operations.

#### **STAKEHOLDERS**

The following constitute the stakeholders of the University:

- 1 Student
- 2. Faculty and Staff.
- 3. Parents.
- 4. Industry Partners.
- 5. Society.
- 6. Educational Apex Bodies.

The University of Rajasthan E-Governance model has the primary task of delivering services and information to its stakeholders through powerful electronic means. The university believes that the use of Information Technology (IT) facilitates efficient, speedy, transparent, and proactive processes for disseminating information.

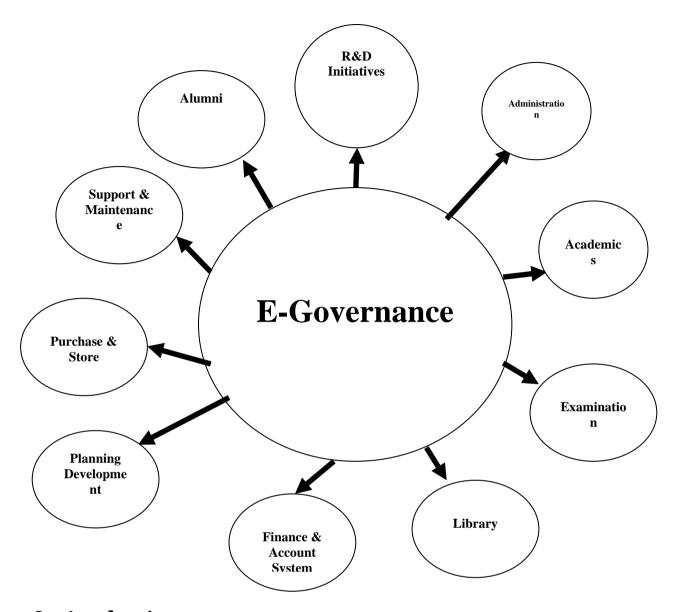
It assists in strengthening the activities of the Internal Quality Assurance Cell (IQAC) and creates a centralized data management system to support accreditation and rankings similar to NIRF, NBA, NAAC, QS, and other world rankings and so on.

The objectives of constituting E-Governance policy are:

- 1 To implement smooth functioning of the University activities.
- 2. To Promote transparency and accountability.
- 3. Facilitate online, internal, and external communication between all the stakeholders of the University.
- 4. Provision easy access to information.
- 5. Make the university globally visible.
- 6. Develop the necessary IT infrastructure.
- 7. Introduce online services for students, parents, faculty/staff, and other stakeholders.

It is observed that the introduction of e-governance in education will empower good education by providing new ways of communication between faculty members and students, faculty members and colleagues, and between students. This system will enhance and promote new methods of delivering the desired knowledge to the students and offer new insights to organize and deliver requisite services.

The University E-Governance system is a powerful medium to deliver services and perform day-to-day administrative activities in its areas of operation.



#### I. Academics:

Implementation of E-Governance in the educational system will enable effective enhancement of academic standards.

- 1 Robust and Transparent internal evaluation process.
- 2. Faculty/Staff Training.
- 3. Faculty Appraisal by the students.
- 4. Establishing an Industry ready learning centre.
- 5. Self-evaluation of Faculty.
- 6. Semester End Academic Feedback.
- 7. Enhanced Teaching Tools-online assignments, feedback, quizzes, mentoring, OAs, and many more.
- 8. Online semester registration.

#### II. Library:

Online catalogs, automated record keeping, computer-based decision-making, and so on. A digital library could provide access to an unlimited number of copies with the "touch of a button". A text or monograph, which is available in an electronic format can be obtained easily. The main benefit of digitization service is it cuts down the requirement of papers, saves office space, and cuts down the time needed to process the information. With this service, physical data can be converted to paper form, research papers, magazines, books, records, and others into a digital format that is readable by all computers and is easily processed.

#### **III. Examination**

The policy defines major points to be considered while developing the e-governance system in the examination system in the following contexts:

- Filing of regular/re-appear examination forms, and revaluation forms.
- Receiving/submission of examination papers, uploading of marks, and the like
- Maintaining Secrecy and confidentiality.
- Issuing of online admit cards to students.
- Continuous Internal Evaluation under the guidance and supervision of the Office of Controller of Examination of the University.
- Creation of multiple test categories for various subjects or courses.
- Transparent & unbiased Evaluation / Digitized Evaluation.
- Students shall be able to benefit from maximum services in online mode like Mark sheets, Transcript, and many more.

#### IV. Finance & Accounts System:

The policy defines major points to be considered while developing the finance and accounts system as specified below:

- Appropriate security measures should be taken to maintain confidentiality for payment, monetary transactions, billing process, and the like
- Training to the existing staff and updating of the existing software must be done on a timely basis.
- Fee payments and receipts generation system regarding Academics, Examination, Transport, Hostel, Dues, etc. must be developed.

#### V. Administration

The use of information technology-based systems in education will lead to increased participation of the students and increase the development and effectiveness of the learning methods. Administration may provide better service in terms of time thereby making the governance more efficient and more effective by use of Information technology. In addition, the transaction costs can be lowered and the services become more accessible. Implementing egovernance in the educational system will enable effective monitoring of academic standards.

- To improve the delivery of services to students by providing interactive services like requests for documents and certificates, issuing ID Cards, and many more.
- Visitors record management.
- Admission process.
- Activities, notifications, alerts, circulars, announcements, and advisories for students and faculty/staff.

- Online attendance and leave management system for students and employees.
- Human Resource Management System.
- E-communication mechanisms like E-mail or appbased service for internal communication.
- Setting up information channels for parents and other stakeholders.

Students will be able to obtain maximum services in online mode in the areas of:

- Admissions and registrations.
- Gate Pass.
- Transfer Certificates.
- Bonafide Certificates.
- Transcripts.
- Hostel and Logistic Management System.

The categories generated for the Information Administration System of the University of Rajasthan can be listed as under:

Student	• Usage of electronic media by
Administration	students to apply for admissions.
	• Student registration/enrolment.
	• Availability of timetable/ class
	schedule.
	Attendance records.
	Communication of academic details
	of students to their parents.
	• Notifications.
Staff	Recruitment and work allotment.
Administration	• House Allotment.
	• Automation of attendance and leave
	management of staff/Faculty
	Members.

	• Legal Cases Streamlines.
	• Performance Based Appraisal System.
	• Communication with staff through e-
	media.
	• E-circulars / Office Orders / Notices.
General	• Scheduling/allocation of seats for
Administration	examinations.
	• Dissemination of information within
	the institution through e-kiosks.
	• Processing and display of examination
	results.
	• Facility for students to make fee
	payments in online mode.

#### VI. **Purchase & Store**:

The Central Store of the University shall adopt new solutions to maintain inventory, stock, and transactions electronically. Processes like indentation, purchase orders, bill entries, issues & returns shall be done through eservices. Regular updates shall also be provisioned.

# VII. Support and Maintenance Services:

Support and maintenance services shall have a paperless system in place to receive support requests with an automatic response mechanism in place. The automated system shall keep track of all requests and responses registered by users; information to users and the concerned support department can be managed through message/e-mail, reminders, job open/ close status, remarks, reports, and many more via the central accessible web portal or Mobile Application.

#### VIII. Alumni:

To strengthen alumni interaction, a separate alumni portal must be started providing facilities like registration, information on Department prominent alumni, milestones achieved by alumni, feedback, and many other aspects. For this purpose, a dedicated cell shall be established and a separate alumni coordinator at the Departments shall be appointed to take care of the entire activities.

The annual Report of the E-Governance System of the University will be presented to the Governing Body (Syndicate) of the University, regularly. The policy is amendable based on administrative decisions and technology changes as and when applicable.

#### Work to do (Action Plan):

- 1. Constitute an e-governance Committee. One Week
- 2. Assessment of IT Infrastructure

15 days

- 3. Module development in the required areas 1 year.
- 4. Full Implementation of the policy.

1 year 6

months  $(1^{1/2})$ 

# I. **E-Governance Committee**

A committee shall be established to implement and monitor the e-governance policy. The composition of the committee shall be as follows:

- 1. V.C. Ex-Officio Chairman
- 2. All Deans Ex-Officio Members.
- 3. Two External IT Experts to be nominated by the VC.
- 4. Director, Infonet Centre
- 5. One IT Expert from the University
- 6. Registrar
- 7. CF&FA

# • Role and Responsibilities of E-Governance Committee

The e-governance committee of the institution plays an important role in the modern educational scenario. Integration of ICT with the latest infrastructure has become inevitable among factors that define a conducive learning ambiance in the present times. The committee shares the responsibility of ensuring e-governance in the institution in collaboration with other committees and stakeholders.

- The committee shall plan and strategize an effective e-governance process in the institution.
- The committee shall assess the IT needs of the stakeholders and emerging trends in the industry.
- The committee shall advise the installation of necessary passive/physical IT infrastructure and procurement/activation and renewal of licenses for various software.
- The committee shall monitor the development of the latest IT infrastructure of the institution and the updation of the existing IT infrastructure with a futuristic mindset.
- The committee shall ensure a transparent, accountable, convenient, smooth, and efficient academic process through the integration of ICT.
- The committee shall guarantee that the institution abides by the ethical norms and guidelines of the government and IT authorities.
- The committee shall ensure a secure environment for the privacy and protection of personal and institutional information.
- The committee shall adhere to environmental standards in IT integration, sustainability, and conservation as its paramount responsibilities.

#### 2. Assessment of IT Infrastructure

A state-of-the-art infrastructure with a great potential to integrate ICT in every process is the mark of a modern educational institution. Rapid changes are noticed in the teaching-learning process, evaluation, research, and all educational spaces. The institution shall update its IT infrastructure incrementally to offer the best exposure for the students and staff.

- ICT facility shall be provided in all classrooms. Courses requiring hi-tech ICT usage may be provided with smart classrooms.
- IT laboratories shall be set up with workstations/systems whose configurations are adequate for the respective software packages to deliver their optimal performances.
- The Institution shall ensure seamless internet connectivity to the users by subscribing to an adequate number of internet service providers and installing the required hardware to augment and distribute bandwidth optimally.
- Wired and Wireless LAN connectivity with suitable bandwidth distribution capability shall be provided commensurate with the growing academic and administrative needs to achieve the required transfer speeds to access data from local and global networks with the latest hardware components in the related domain.
- The institution shall set up local servers, and firewalls and subscribe to various cloud services, to handle and secure the data, during administrative and transactional affairs.
- Various campus spaces for academics, content delivery, cultural performance arena, the office of examinations, online admissions, and

administrative affairs shall have the system installed and equipped with the respective software and hardware to handle and depict the relevant data or multimedia content.

- Adequate technology infrastructure shall be installed and upgraded to provide a blend of online and offline learning experiences to the students.
- Learning resource management centre shall be instituted and maintained with an automated library and information centre, which are periodically upgraded with relevant e-resources and database subscriptions.
- Infrastructure shall be procured for media production and dissemination.
- A digital depository for the maintenance of certificates and documents shall be created.
- Adequate electrical and electronic support shall be provided for the effective functioning of IT systems.
- E-waste disposal mechanism shall be planned and installed.

#### (i) IT Human Resources

The growing IT requirements of the institution necessitate the recruitment of competent and skilled IT Staff.

- The Director, Infonet Centre will co-ordinate and monitor the activities of the IT Installation and Infrastructure.
- Adequate IT staff shall be employed to maintain adequate IT infrastructure in classrooms, laboratories, and educational spaces.
- An exclusive administrator for website maintenance shall be appointed.
- The IT Staff shall plan and implement the IT requirements of the institution.

- The staff shall ensure the maintenance and upkeep of IT resources and infrastructure.
- The staff shall liaison between the institution and IT vendors, software, and hardware agencies.
- Staff development programmes and training shall be provided to the IT Staff to update their knowledge and skills.

#### (ii) Administration

Administrative functions serve as the bedrock of academic effectiveness in an educational institution. IT integration saves time, increases convenience, enables transparency, and enhances effectiveness. The institution shall probe avenues of enabling IT integration at all levels of administration.

- IT infrastructure and ERP systems shall be developed for interconnecting administrative offices and sections.
- A systematic, well-planned timely, and transparent process shall be designed for documentation, collection, processing, and maintenance.
- An online or blended mechanism shall be followed for the collection, screening, and processing of applications for programmes (students) and job positions (teachers and staff).
- Record keeping and maintenance of students, faculty, and staff shall be digitalized.
- The administrative office shall have a mechanism for electronic liaison with the government, auditor, Income Tax department, Corporation, JVVNL, telecom companies, local government offices, etc.
- All institutional and departmental collaboration and linkages shall be led by the administrative office.

- Infrastructure planning development and maintenance shall be facilitated, monitored, and audited through e-governance by the administrative office.
- Online mechanism shall be in place for periodic inventory management.

#### (iii) Accounting and Audit

Financial management is the cornerstone of the growth and development of the institution. The egovernance of the finance section is vital for the long-run efficiency of the institution. A meticulous system with hardware and software support would enable an accountable, transparent, and efficient accounting and audit process.

- The Accounts section shall have competent staff to execute all financial and accounting processes through authorized software.
- Integrated software shall be used for the preparation of budget and filing of financial statements for auditing by external auditors.
- Adequate server support shall be provided for data maintenance, privacy, and protection.
- Staff remuneration, welfare, incentives, insurance, provident fund, loan, and grant details shall be accounted for and audited with online support.
- Student fees scholarships, concessions, and waiver details shall be accounted for and audited.

#### (iv) Admission Process

The institution attracts admissions from all over the country for academic programmes, which has gradually

increased over the years. The IT infrastructure for admissions shall enable and enhance accessibility, dissemination of information, adherence to time schedules in the conduct of counseling declaration of results, and ensure greater transparency for all the procedures.

- Dissemination of programme details and admission process shall be done through the official website and on various social media.
- The online portal shall be dynamic to accommodate the increasing number of student applications for academic programmes.
- IT infrastructure shall be provided for the admission processes such as screening of candidates, online interviews, and final selection.

# (v) Student Engagement in Classroom, Laboratory and Educational Spaces

IT shall be an integral part of student engagement in various realms of the academic process. Effective learning with lifelong impact is possible with adequate IT support.

- Smart classrooms may be provided for those courses requiring hi-tech support.
- All the classrooms shall be provided with LCD projectors/Wi-Fi projectors.
- Laboratories and educational spaces shall be provided with the latest IT infrastructure.
- Video conferencing facilities shall be provisioned in the required campus spaces as per the requirements.

#### (vi) Learning Management System (LMS)

The modern trends in IT Promise newer frontiers for the education sector. The convenience and effectiveness of IT can be harnessed for an enhanced learning experience. The institution shall move towards blended learning, flipped classrooms, and open online courses to enhance global competency.

- An exclusive LMS with a permanent license shall be procured for the use of the members. It shall be customized to meet the needs of the institution.
- All faculty members shall undertake flipped classroom pedagogy with complete integration of all course content and assignment submission through LMS.
- LMS shall be used for the introduction of Massive Open Online Courses (MOOC) for the benefit of the members of the institution and the community.

## (vii) **Examination**

Evaluation plays a pivotal role in the academic process. E-governance protocol for examinations is applicable from the time a student joins the institution till the completion of the programme. Due planning effective implementation and stringent monitoring are essential for e-governance in the examination process.

- The institution shall move towards full-fledged automation of all examination processes.
- Assignment submission schedule, examination schedule, question paper setting, the conduct of examinations, and submission of marks shall be executed online.

- Examination schedule, question setting, hall ticket, seating allotment, the conduct of examinations, valuation, and submission of marks shall be executed online.
- Database management of student evaluation shall be maintained with high security and confidentiality.
- A high level of security features shall be enabled in the ERP for the generation of marks cards, provisional degrees, and other certificates.
- Transcript creation and online document verification system shall be made available for alumni and prospective employers.
- The technological facilitation for providing the processing of the end-to-end workflow from exam enrolment request/application to the Transfer Certificate shall be provisioned as per the norms defined by the exam office.

## (viii) **Library**

The library serves as the reservoir of knowledge in a higher educational institution. It facilitates the growth of young minds beyond the curriculum. The Library and Information Center of the college shall be developed according to the needs of the times.

- An Integrated Library Management System with a permanent license shall be procured to automate and integrate the libraries in the institution.
- Access to library resources shall be through online/ERP.
- Procurement, inventory, and maintenance of books, e-resources, and databases shall be recorded through ERP.

- Seamless Wi-Fi connectivity shall be ensured for the usage of e-content and e-resources.
- The institution shall explore the interconnection of libraries and collaboration with national and international institutions for the sharing of eresources.
- Archaic and heritage literature sources shall be preserved in dematerialized form.
- The subscription to various online databases and e-journals and periodical renewal and updating to the same shall be ensured.

#### (ix) Data Centre

huge volume of information The generated necessitates systematic and well-planned a data management system. Efficient and quick functioning of management information systems is the need of the hour. Coordination between academic and administrative centers is a mark of effectiveness.

- A comprehensive data center shall be established to serve as a respiratory for storage, retrieval, and utilization of data.
- Necessary server and cloud support with ERP shall be created. Due importance has to be given to the security system.
- Adequate manpower shall be deployed for planning and monitoring the data centre.
- Efforts shall be made to convert all existing documents to dematerialized form.

# (x) Online Learning Resources

The Institution has to keep abreast of international educational standards. The policy emphasizes the need

for the creation of online learning resources incorporating global trends.

- The institution shall invest in setting up technology for creating online learning content.
- A lecture/video capturing facility shall be provided.
- Training shall be provided to the faculty and staff for the creation of online learning resources.

#### (xi) Media Production

All spheres of human development in recent times bear the indelible mark of mass media. The education sector has to utilize the rich contribution of mass media for the determination of knowledge and information.

- A full-fledged media production facility with the latest technology shall be set up for mass media creation.
- Television, radio, and social media productions of the institution shall adhere to commercial standards and legal norms.
- Due importance shall be given to copyright and intellectual property rights.
- Training shall be provided for the staff in media equipment and technology.

## (xii) Academic and Cultural Spaces

The constituent colleges shall have infrastructural spaces for academic and cultural activities that are indispensable for holistic growth. Technology shall be developed in consonance with infrastructural growth.

 Technology support for audio, video, projection, and transmission facilities with the latest configuration shall be provided in all academic and cultural spaces.  Trained staff shall be appointed for the operation and maintenance.

#### (xiii) **Maintenance**

Obsolescence and depreciation are unavoidable characteristics of equipment and technology. A strategic approach is essential for coping with obsolescence and changes in technological advances.

- An exclusive maintenance team shall function under the IT administrator for the maintenance of IT infrastructure.
- The finance committee shall have an adequate budget allocation for maintenance and upgradation of the IT infrastructure.
- Hardware and software shall be upgraded to relevant and modern versions.
- Annual Maintenance contracts with authorized agencies shall be executed with due diligence.

# (xiv) University Website and Social Media

The website serves as the face of the institution. The perception of the institution is significantly affected by the website, social media handles, and mobile app. A well-planned mechanism is important for the creation and maintenance of the website and social media handles.

- The primary source of communication of the institution shall be the website, social media handles, and mobile app. The important circulars and notices shall be announced through them.
- The institutional website shall be designed and maintained by a team of professional designers and web administrators.

- The Social media publishing shall be managed by the Public Relations Officer (PRO) of the University.
- Website and social media shall be updated daily.
- An exclusive portal shall be maintained for networking with alumni.

#### (xv) E-Waste Management

The institution shall place the highest priority on the management of e-waste generated on the campus. Efforts have to be made to reduce the carbon footprint and ensure an eco-friendly environment.

- A well-planned process shall be implemented for the collection, segregation, and disposal of ewaste on the campus.
- The institution shall maintain national standards about reducing, reusing, and recycling e-waste
- An MoU shall be signed with an authorized agency for e-waste management.

# 3 Modules of University Management System

- 1. VC & Administration Office Management.
- 2. Pre-admission.
- 3. Fee Management.
- 4. Academic & Enrollment.
- 5. Student Self-Service Portal.
- 6. Hostel Management.
- 7. Student Attendance Management.
- 8. Question Bank Management.
- 9. Choice Based Credit System/NEP.
- 10. Examination Pre-Conduct.
- 11. Examination Dispatch Management.
- 12. Examination post-conduct

- 13. Convocation Management.
- 14. Placement Management.
- 15. Alumni Management.
- 16. Student Verification Management.
- 17. Affiliation Management System.
- 18. Budgeting Management.
- 19. Bill Tracking System.
- 20. Financial Accounting.
- 21. Establishment.
- 22. Leave Management.
- 23. Employee Self-Service Portal.
- 24. GPF Management.
- 25. Pension Management.
- 26. Stores and Purchase.
- 27. Recruitment.
- 28. RTI Cell Management.
- 29. Legal Cell Management.
- 30. Guest House Management.
- 31. Grievance Management.
- 32. E-Compendium & Faculty Profile Management.
- 33. Knowledge Management Portal.
- 34. Dashboards & MIS (Monitoring & Tracking).
- 35. HRMS & Payroll
- 36. Mobile Apps for employees.
- 37. Mobile Apps for Students.