

### YEARLY STATUS REPORT - 2022-2023

Part A			
Data of the	Data of the Institution		
1.Name of the Institution	J C BOSE UNIVERSITY OF SCIENCE AND TECHNOLOGY, YMCA, FARIDABAD		
Name of the Head of the institution	Prof. Sushil Kumar Tomar		
Designation	Vice Chancellor		
• Does the institution function from its own campus?	Yes		
Phone no./Alternate phone no.	01292310102		
Mobile no	9463223629		
Registered e-mail	vc@jcboseust.ac.in		
Alternate e-mail address	registrar@jcboseust.ac.in		
• City/Town	NH-19, Sector -6, Mathura Road, Faridabad		
State/UT	Haryana		
• Pin Code	121006		
2.Institutional status			
University	State		
Type of Institution	Co-education		
• Location	Urban		

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Name of the IQAC Co-ordinator/Director	Prof. Ashutosh Dixit	
Phone no./Alternate phone no	01292310130	
• Mobile	9873356911	
• IQAC e-mail address	iqac@jcboseust.ac.in	
Alternate Email address	iqac.jcbust@gmail.com	
3.Website address (Web link of the AQAR (Previous Academic Year)	https://www.jcboseust.ac.in/asset s/uploads/media/3d203fd06ee8317a0 db88bb5feb55c8c.pdf	
4. Whether Academic Calendar prepared during the year?	Yes	
• if yes, whether it is uploaded in the Institutional website Web link:	https://www.jcboseust.ac.in/acade mic-calendar	

#### **5.**Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	A	3.08	2016	05/11/2016	04/11/2021
Cycle 2	A+	3.32	2022	18/10/2022	17/10/2027

#### **6.Date of Establishment of IQAC**

22/09/2015

## 7.Provide the list of Special Status conferred by Central/ State Government-UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/ Depart ment/Faculty	Scheme	Funding agency	Year of award with duration	Amount
University	12 (B)	UGC	2012 1825	7000000
University	TEQIP III	MHRD	2017 1095	7000000
University	RUSA	MHRD	2018 1095	20000000

8.Whether composition of IQAC as per latest NAAC guidelines	Yes
Upload latest notification of formation of IQAC	View File
9.No. of IQAC meetings held during the year	1

11.Significant contributions made by IQAC during the current year (maximum five bullets)		
If yes, mention the amount		
10. Whether IQAC received funding from any of the funding agency to support its activities during the year?	No	
(Please upload, minutes of meetings and action taken report)	View File	
The minutes of IQAC meeting and compliance to the decisions have been uploaded on the institutional website.  (Please upload, minutes of meetings and action taken report)	Yes	

1. Conduct of orientation program for newly appointed faculty and staff as and when required.2.Conduct of orientation/induction program for newly admitted students 3. Conduct of otherworkshops/seminars/training for students faculty and staff in association with otherdepartments/offices/branches 4. Conduct of Feedbacks on curricula and follow-up action. 5. Conductof Academic and Administrative audit.

12.Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year

Plan of Action	Achievements/Outcomes	
Conduct of orientation program for newly appointed faculty and staff as and when required	Done	
Conduct of orientation/induction program for newly admitted students	Done for UG and PGprogrmmes	
Conduct of other workshops/seminars/training for students faculty andstaff in association with other departments/offices/branches	Done	
Conduct of IQAC meeting	Done	
Constitution of next IQAC Composition	Done	
Conduct of AAA	Done	
Conduct of Feedbacks on curricula and follow-up action	Done	
Conduct of 360 degree feedback through departments	Done	
Verification of API score for Promotion under CAS as and when required	Done	
13.Whether the AQAR was placed before statutory body?	Yes	
Name of the statutory body		
Name	Date of meeting(s)	
IQAC and Executive Council	23/04/2024	
14.Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to Assess the functioning?	No	
15.Whether institutional data submitted to AISHE		

Year	Date of Submission
2021-22	19/01/2023

#### **16.**Multidisciplinary / interdisciplinary

J.C. Bose University of Science and Technology, YMCA, Faridabad erstwhile YMCA Institute of Engineering, Faridabad was established in the year 1969, as a joint venture of the National Council of YMCAs of India, Govt of Haryana, and the Central Agencies for Development Aid, Bonn, Germany. The University offers 4-year B.Tech degree course in various disciplines i.e Computer Engineering, Information Technology, Computer Engineering specialization in Data Science, Electronics and Instrumentation Control, Electronics and Communication Engineering, Electrical Engineering, Mechanical Engineering, Civil Engineering, Electronics and Computer Engineering, Robotics & Artificial Intelligence and Environmental Engineering. The University also offers other courses i.e. MCA, MBA, M.Tech (Computer Science and Engineering, Computer Engineering, Electronics and Communication Engineering, VLSI Design, Power Electronics and Drives, Mechanical Engineering (Manufacturing Technology and Automation, Energy and Environmental Engineering, M.Sc. (Physics, Maths, Chemistry, Environmental Sciences, Biotechnology, Microbiology, Botany, Zoology, Animation and Multimedia), M.A. (Mass Communication and Journalism, English), B.Sc. (Physics, Maths, Chemistry, Animation and Multimedia, Life Sciences), BA, B.Com, BCA, BBA, B. Voc, PG Diploma, Diploma and Ph.D. courses. The University stands apart from other Institutions of Haryana in the sense that right from the very beginning at the institutional level, it has emphasized greatly on practical work related to the industry.

#### 17. Academic bank of credits (ABC):

The National Education Policy 2020 (NEP 2020) is envisioned for the paradigm shift in the entire education system of India with the learning process starting from pre-primary education to higher education and continuing the entire life to achieve the ultimate goal of one's life that is liberation. At J. C. Bose University of Science and Technology, YMCA, the sub-committee wholeheartedly worked out to understand and explore the possibilities of the scheme of Academic Bank of Credits (ABC) for the benefit of our stakeholders, and to our society. The ABC scheme will be implemented in a phase-wise manner in line with the National Credit Framework (NCrF): The Report of the High-Level Inter-Ministerial Committee on National Credit Accumulation & Transfer Framework released in September 2022. The NCrF provides for certification of all learning

and assignment, accumulation, storage, transfer & redemption of credits, subject to assessment; removes distinction and establishes academic equivalence between vocational & general education; enables mobility within & between them, and its operationalizing through the Academic Bank of Credits (ABC).

#### Short Term Goals:

- 1. Registration of students admitted in 2021 & 2022 on portal for Academic Bank of Credits (ABC)Portal /Creation of ABC Ids of Stakeholders -Institute and students on https://abc.gov.in/.
- 2. Establishment of Regional/State level state of the art infrastructure for creating online courses.
- 3. ABC implementation may be started from Integrated /Honors Courses / Social Work /Management Courses.
- 4. Multi-Exit and Multi-Entry (MXME) may be followed as per guidelines of HEIs. Scope for flexibility in earning academic credits through different modes of learning to enable MXMEs may be explored.
- 5. Initiating Industry relevant courses.
- 6. Formation of Equivalence and Admissions Committee (EAC).
- 7. Opportunities for strengthening unexplored domains of the faculty.
- 8. Setting up the regulations in accordance with National Innovation Startup Policy (NISP), enabling the students to take up start-up activities, in lieu of academic credit points.
- 9. Keeping the National Credit Framework (NCrF) as a broad enabling framework for all regulatory organizations, University may notify its detailed implementation guidelines within this Framework through various regulatory bodies. University may create imaginative and flexible curricular structures; and creative combinations of disciplines and other special needs.

#### 18.Skill development:

J.C Bose University of Science and Technology, YMCA has been in existence for the past 50 years and consistently been contributing towards creation of competent engineering professionals and entrepreneurs. An Institution that had a humble beginning as a post diploma institution and famous for generating skilled technical human resource for the industry has been elevated in 2009 as University of Science and Technology to further create competent human resource in diversified areas of Science & Technology. The competence of the University has been recognized at various levels by the agencies like UGC (grant of 12B status), accreditation (NAAC Grade 'A'), NIRF (best ranking amongst State Engineering Universities in Engg. Category) Apart from creating highly qualified professionals, we are involved in imparting basic technological

skills. We work with students to design customized educational plans that meet their individual goals. In a rapidly advancing world around us, new technologies are emerging and rapidly discarding the old ones. People with new perceptions are pursuing the ambitions for better world. We, in JCBoseUST, are aware of this and endeavouring our outmost to participate in these changing processes. We teach, train and prepare the students to a level where they can handle any circumstances independently to attain advanced degree of brilliance in professionalism. The University is committed to promote modern innovations in teaching learning processes, cultivate research & development culture. The contemporary design of our skill labs, smart classrooms, conference rooms, research and teaching areas etc., is an integral expression of our assurance to creating a physical environment that can uphold the fabrication of Skill, learning and acquaintance in the 21st century. As we look into the future, one thing is certain - Skilled manpower will be a key resource and will be highly sought after within India and around the Globe. Our challenge in University is to generate ideas that will ultimately benefit the Society by providing quality skill development and to train people to work in fields where they will be valued for their specialized knowledge and skill. University promotes creativity, innovation, provides opportunities for experimentation, critical analysis and learning by doing real work. We strive to achieve excellence in education with the objective to bring glory to our Nation. Our mission is to maintain a dynamic balance between theoretical knowledge and practical training, as also between professional ethics and technical expertise. For this various Skill Development Workshops are organized in the University from time to time.

## 19.Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course)

University is focused on the establishment and effective utilization of a system of holistic learning, with the objective of achieving students' success in terms of professional development and personal development, with a strong foundation and undercurrent of ethics and values. The cross-cutting issues relevant to gender, environment & sustainability, human values and professional ethics, yoga and meditation, Constitution of India, Message of Bhagwat Geeta, etc. have been duly incorporated into the curricula of different courses being run in the University for the holistic development of students. Gender Equality No one should have poorer life chances because of the way they were born, where they come from, what they believe, or whether they have a disability. Upholding the commitment of JCBoseUST to provide gender neutral environment, Women

Empowerment cellis functioning in the University to empower the female students and staff members and enlighten them with their rights and duties. Also University has many courses related to this as a part of various UG and PG programmes Human values and ethics JCBoseUST, have brought out the fundamental goodness of human beings through the engagement of students in mandatory courses like Human Values& Professional Ethics and Universal Human Values: Understanding Harmony. These courses have been introduced so that students provide sustainable solutions while keeping human. The University is running as many as 99 courses related that aim to inculcate values, ethics and socially responsible qualities in the students. VIVEKANAND MANCH', is the social and cultural club that strives to sensitize the future engineers, scientists, technocrats, entrepreneurs and business leaders from the university towards their social responsibilities as good human beings. Students of the club organize various events like street plays, awareness campaigns, debates, charity for poor etc. at regular intervals. B.Tech Program in Hindi has been introduced in the University in the academic year 2020-2021 to preserve and disseminate Indian culture and values in the students. University has also introduced Human Values and ethics as a mandatory subject in PhD.

#### 20. Focus on Outcome based education (OBE): Focus on Outcome based education (OBE):

The University strives for excellence in all facets and contributes to the development of science and technology by synthesizing teaching, research, and creative activities. The University makes every effort to realize its mission to provide an enviable research environment and state-of-the art technological exposure to its scholars. The design and development of the curriculum is a democratic process with the entire faculty contributing to the introduction, innovation, and revision of the syllabi. Outcome based methodology is incorporated in all the programs. The curriculum and instructional strategies are reviewed periodically at defined stages to meet the ongoing market demands. Programme Outcomes are assessed to identify educational and operational gaps and strategic action plans are prepared accordingly. Teaching-learning processes are continually improved based on student's feedback and interactions.

Feedback on Curricula is taken from all the stakeholders of the university with the aim to incorporate the suggestions in designing its curriculum. More than 90% of courses are based on skill development or generate employability/ entrepreneurship. The university is committed to effective curriculum delivery through

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well planned and documented process that undergoes scrutiny through various bodies. Board of Studies and Academic Council. These bodies ensure that the curriculum is regularly updated to meet the ongoing continuous evolution in the culture, society, academia, and technology. All academic and research programs are in tune with the vision admission statements of the University. JCBUST has welldefined procedures to design new curricula and revise/amend the existing curricula. For this purpose, the apex body is the Academic Council well supported by bodies including the faculty concerned, Board of Studies of the concerned subjects and the Departmental Committees. The learning activities are designed through Outcomebased approach with an aim to equip the students with knowledge, skill, values and attitude has been implemented. Departmental Committees along with various experts from industry and academia review the feedback obtained from various stakeholders to imply the cross-sectional relevance of the curricula ranging from local to global needs. University has developed curriculum along with welldefined POs, PSOs, COs for all programs. The outcomes as stated have been integrated in curriculum and displayed on the University website to facilitate access to various stakeholders, including the teachers and students. The entire effort has been made in line with the broad guidelines of the statutory bodies such as UGC, AICTE, etc. The University has also incorporated courses like Artificial Intelligence (AI), Internet of Things (IoT), blockchain, robotics etc. in the curricula which are in line with the emerging technologies identified by AICTE.

#### 21.Distance education/online education:

In pandemic, University developed its own Digital Learning Management System (DLMS) to continue its teaching-learning process in online mode. It is integrated with University's ERP portal and can be accessed by students and teachers with their login. The links of some important platforms like Library e-Portal, National Digital Library, SWAYAM, NPTEL, e-Resources, Google Classrooms, etc. Have also been integrated with the DLMS. It is having the facility to upload study material by teachers in the form of recorded lectures, study notes, assignments and online resources. Students can have 24×7 anytime, anywhere access to study material. Other additional features are: Online assignment submission, Online audio-textual group discussion forums for teacher-student interaction, Mail broadcasting facility for targeted groups, News/announcements broadcasting, Online test facility-Objective and subjective tests, Online scheduling facility of official meetings and live lectures, overall administrative control on study material. The live online classes were conducted through DLMS and G-suite.

University also adopted continuous assessment process for internal assessment in which regular assignments and a series of tests were conducted.

J.C. Bose University of Science and Technology, YMCA, Faridabad has been featured consecutively sixth time in the top 100 institutions on SWAYAM-NPTEL Local Chapters. The University has shown consistent performance in the National Programme on Technology Enhanced Learning (NPTEL) and ranked9th among more than 4000 institutions across the Country enrolled on it. The University has shown remarkable performance and enrolment on NPTEL, and scored highest "AAA" Grade on SWAYAM-NPTEL Local Chapters. As per the latest rating issued by NPTEL, J.C. Bose University is the only Educational Institution in Haryana which has secured its place in the top 100 SWAYAM-NPTEL Local Chapters (Jan- Dec 2021).

University also procured and launched its e-library Portal to provide e-books and study material toits students in online mode. The e-Library serves over 5 lacs text resources (e-books, e-journals, e-resources), provides e-books to students in this lockdown when physical books are unavailable, it provides single-window search facility to provide all the required learning contents via portal and its mobile App Students of the university also continued their learning through SWAYAM-NPTEL platform for credit transfer and upgrading their skills. More than 2000 students earned credits through SWAYAM, which were also transferred to their transcripts.

Extended Profile		
1.Programme		
1.1		74
Number of programmes offered during the year:		
File Description Documents		
Data Template		View File
1.2		14
Number of departments offering academic programmes		
2.Student		
2.1		6677
Number of students during the year		

File Description	Documents	
Data Template	<u>View File</u>	
2.2		1488
Number of outgoing / final year students during the	e year:	
File Description	Documents	
Data Template		View File
2.3		5671
Number of students appeared in the University exa the year	mination during	
File Description	Documents	
Data Template		<u>View File</u>
2.4		131
Number of revaluation applications during the year		
3.Academic		
3.1		1950
Number of courses in all Programmes during the year	ear	
File Description	Documents	
Data Template		<u>View File</u>
3.2		213
Number of full time teachers during the year		
File Description	Documents	
Data Template		<u>View File</u>
3.3		234
Number of sanctioned posts during the year		

File Description	Documents	
Data Template	<u>View File</u>	
4.Institution		
4.1	7897	
Number of eligible applications received for admiss Programmes during the year	sions to all the	
File Description	Documents	
Data Template	<u>View File</u>	
4.2	1114	
Number of seats earmarked for reserved category as per GOI/ State Govt. rule during the year		
File Description	Documents	
Data Template	<u>View File</u>	
4.3	86	
Total number of classrooms and seminar halls		
4.4	1211	
Total number of computers in the campus for academic purpose		
4.5	3089.69	
Total expenditure excluding salary during the year (INR in lakhs)		
Part B		
CURRICULAR ASPECTS		
1.1 - Curriculum Design and Development		
1.1.1 - Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the University		

JCBUST has well-defined procedures to design new curricula and revise/amend the existing curricula grounded by outcome-based approach in consultation with industry and academic experts. University has developed curriculum along with well-defined POs,

PSOs, COs for all programs. Efforts has been made in line with the broad guidelines of the statutory bodies such as UGC, AICTE, etc. The University has incorporated courses like AI, IoT, blockchain, robotics etc. as identified as emerging technologies by AICTE. University is also offering various courses like B.Tech. CE with specialization in Data Science, EE with specialization in the Internet of Things (IoT), Electronics & Computer Engineering. Keeping in view of 'Skill India' University has launched various B. Voc. and PG Diploma programs. University has made significant contributions by imparting value-based quality education for the country's multicultural society, with emphasis on Natural Resources & Environment, Science and Technology, Social Justice & Women Empowerment. Curricula addresses: Digital India, Swatch Bharat Abhiyan, Unnat Bharat Abhiyan, Women Empowerment, and Skilling India missions. The MoUs and research links established with international universities for mutual visits, joint courses and supervision of research, organization of events and collaborative research. Through focused interventions the curricula is more relevant to newly introduced National Education Policy.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

#### 1.1.2 - Number of Programmes where syllabus revision was carried out during the year

23

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

## 1.1.3 - Total number of courses having focus on employability/ entrepreneurship/ skill development offered by the University during the year

## 1.1.3.1 - Number of courses having focus on employability/ entrepreneurship/ skill development during the year

1950

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 1.2 - Academic Flexibility

## 1.2.1 - Number of new courses introduced of the total number of courses across all programs offered during the year

530

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

## 1.2.2 - Number of Programmes in which Choice Based Credit System (CBCS)/elective course system has been implemented during the year

74

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 1.3 - Curriculum Enrichment

1.3.1 - Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum

No one should have poorer life chances because of the way they were born, where they come from, what they believe, or whether they have a disability. Upholding the commitment of JCBoseUST to provide gender neutral environment, Women Empowerment cell empowers the female students and staff members and enlightens them with their rights and duties. Also University has many course related to this as a part of various UG and PG programmes. JCBoseUST, have mandatory courses like Human Values & Professional Ethics and Universal Human Values. The University is running 99courses that aim to inculcate values, ethics and socially responsibility in the students. VIVEKANAND MANCH', is the social and cultural club to sensitize the future engineers, scientists, towards their social responsibilities as good human beings. In order to sensitize students about the environment and sustainability issues, a number of activities such as seminars, workshops, guest lectures and industry visits were organized for students. Many courses related to environment awareness are incorporated in the curriculum at UG and PG level. The University has imbibed different types of courses in the curriculum to inculcate general competencies like climate change,

humanitarianism, character-building, holistic development for the students.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

## 1.3.2 - Number of value-added courses for imparting transferable and life skills offered during the year

12

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 1.3.3 - Total number of students enrolled in the courses under 1.3.2 above

## 1.3.3.1 - Number of students enrolled in value-added courses imparting transferable and life skills offered during the year

860

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

## 1.3.4 - Number of students undertaking field projects / research projects / internships during the year

1344

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 1.4 - Feedback System

1.4.1 - Structured feedback for design and	•	All	4	of	the	above	
review of syllabus – semester wise / is received							
from Students Teachers Employers Alumni							

File Description	Documents
Upload relevant supporting document	<u>View File</u>

## 1.4.2 - Feedback processes of the institution may be classified as follows

• Feedback collected, analysed and action taken and feedback available on website

File Description	Documents
Upload relevant supporting document	<u>View File</u>

#### TEACHING-LEARNING AND EVALUATION

#### 2.1 - Student Enrollment and Profile

#### 2.1.1 - Demand Ratio

#### 2.1.1.1 - Number of seats available during the year

2984

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

## 2.1.2 - Total number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per applicable reservation policy during the year (Excluding Supernumerary Seats)

#### 2.1.2.1 - Number of actual students admitted from the reserved categories during the year

606

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 2.2 - Catering to Student Diversity

2.2.1 - The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners

The university assesses the learning levels of the students through the following programmes:

- Induction and orientation programmes are conducted for newly admitted students.
- Mentor-ship/Counselling system.
- Each faculty assess the students by interaction during class hours through tests, assignments, presentations, seminars, project work, practical examinations etc.
- The mentor-mentee mechanism helps in identifying the slow learning issues.
- The faculty, understands the strengths and weakness of the students related to speaking skills, performing skills, writing skill, MCQ, demonstrations etc.,

Programs to overcome slow learning issues include:

- The add-on and remedial courses are conducted through evening/weekend classes.
- · Special assignments and notes are also provided to slow learners.
- Special programmes are being conducted for nurturing/refining the communication skills.
- · As a part of the curriculum, credits can also be earned through MOOCs (Massive Open Online Courses) via the SWAYAM platform. Slow learners can pace up their studies by adopting MOOCs of their choice and can study anytime, anywhere.

Programs enabling advanced learning:

- Free coaching and guidance for students, who aim to prepare for civil services examinations, is provided.
- E-journals and e-books in library
- Encouragement to participate in institutional level activities such as to participate in ERP/DLMS/Projects etc.
- · Bright students are motivated to pursue MOOC courses.

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Link For Additional Information	Nil

#### 2.2.2 - Student - Full time teacher ratio during the year

Number of Students	Number of Teachers
6677	213

File Description	Documents
Upload relevant supporting document	<u>View File</u>

#### 2.3 - Teaching- Learning Process

2.3.1 - Student centric methods, such as experiential learning, participative learning and problemsolving methodologies are used for enhancing learning experiences

For enhancing the learning experiences of students several Experiential Learning and Participative Learning methods are used by the University. Students have to undergo Internship programs as a part of their curriculum. Apart from pursuing certificate programs during summer breaks they can also participate in live field projects, workshops, simulations, prototyping, global immersions, case studies, seminars, etc. Students learn and execute their skills in a healthy competitive atmosphere through participation in events like Digi-Fiesta, Hackathon, Quiz Competitions etc. The Incubation Centre, of the University, acts as a facilitation centre for the students. Employment and Training Office (ETO) provides coaching not only on basic employability skills and business communication but also on personal productivity skills like Time Management, Problem Solving, and Managerial Skills. Students also get a chance to learn dance, meditation, yoga professionally through the designated clubs. Students get all Information and Communications Technology (ICT) support. The IQAC (Internal Quality Assurance Cell) of the University is engaged in quality enhancement on a continuous basis to promote the holistic development of students. The university has well-equipped labs in all departments. Special assignments/projects related to practical problems are given to students. Value Added Courses related to Industrial/research problems have been introduced for students.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

## 2.3.2 - Teachers use ICT enabled tools including online resources for effective teaching and learning processes during the year

ICT enabled facilities available in the University include Digital Classrooms, Interactive boards, LCD Projectors, Video Conferencing facility, Computer labs, seminar halls, auditorium, multimedia center, smart classrooms and conference rooms. A separate Lecture Capturing System (LCS) facility to record good quality lectures of faculty members is also established.

The campus is fully connected with Wi-Fi and LAN with a capacity of 1 Gbps. Another BSNL line of capacity of 100 Mbps is also operational.

University Digital Learning Management System (DLMS), has the facility to upload recorded lectures, study notes, assignments, audio-textual group discussion forums, mail broadcasting facility, quick access to important e-learning platforms, objective and subjective tests facility and live lectures. The live online classes are also being conducted through G-suite. The faculty members are trained on Digital Pedagogies and Digital teaching-learning.

The University has its e-library Portal having e-books, e-journals, e-resources and study material for the students.

Students earn additional credits through the SWAYAM-NPTEL platform. The University has tied up with the Indian Institute of Remote Sensing Dehradun, and EdX for online outreach courses. The University is the Nodal Centre of Virtual labs by the Ministry of Education.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

#### 2.3.3 - Ratio of students to mentor for academic and other related issues during the year

#### 2.3.3.1 - Number of mentors

234

File Description	Documents
Upload relevant supporting document	<u>View File</u>

#### 2.4 - Teacher Profile and Quality

#### 2.4.1 - Total Number of full time teachers against sanctioned posts during the year

#### 213

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

## 2.4.2 - Total Number of full time teachers withPh.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D'Lit. during the year

#### 137

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 2.4.3 - Total teaching experience of full time teachers in the same institution during the year

#### 2.4.3.1 - Total experience of full-time teachers

2084

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

## 2.4.4 - Total number of full time teachers who received awards, recognition, fellowships at State, National, International level from Government/Govt. recognised bodies during the year

23

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 2.5 - Evaluation Process and Reforms

## 2.5.1 - Number of days from the date of last semester-end/ year- end examination till the declaration of results during the year

44

## 2.5.1.1 - Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the year

44

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

## 2.5.2 - Total number of student complaints/grievances about evaluation against total number appeared in the examinations during the year

113

File Description	Documents
Upload relevant supporting document	<u>View File</u>

2.5.3 - IT integration and reforms in the examination procedures and processes (continuous internal assessment and end-semester assessment) have brought in considerable improvement in examination management system of the institution

In the University IT integration and reforms in the examination procedures have brought in considerable improvement in examination management system.

Through the registration and logins of students on the ERP, the students can access their records at any time without the intervention of any office. Further, filling the attendance of students on the ERP, online uploading of internal awards on ERP, online filling of examination and re- evaluation forms by the students on ERP, display of tentative date sheet on University website, online generation of admit card/hall tickets through ERP,

processing of answer sheets, online display of results, reevaluation forms through the web portal, universityLogins for management, availability of Course Syllabi, Gazettes, Result Branch Contact Information and Examination Notifications have improved the system.

The NAD project of the Ministry of Human Resource Development (MHRD) has been implemented in the University since2017. NAD enables issuance of Detailed Marks Card (DMCs) and Degrees through the securedigital portal of MHRD, which not only curbs/eliminates the fake degrees but also provides onlineverification of the authenticity of awards to the prospective employers.

During COVID-19 situation the University has conducted examinations and evaluations in online mode using both in-house developed Learning Management System and outsourced platform.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

## 2.5.4 - Status of automation of Examination division along with approved Examination Manual

A. 100% automation of entire division & implementation of Examination Management System (EMS)

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 2.6 - Student Performance and Learning Outcomes

2.6.1 - The institution has stated learning outcomes (generic and programme specific)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents

The Program Educational Objectives (PEOs) are formulated by taking the interests of all their stakeholders into consideration. Program Outcomes (POs) and Program Specific Outcomes (PSOs) are also prepared in synchronization with PEOs keeping in mind the main objective that what a learner should know or can do after completing the specific program. The POs and COs provide the proficiencies and abilities that students acquire along with the firm elementary concepts. These POs and COs are developed through Bloom's

taxonomy. The Teaching-Learning methodologies are planned out for ensuring the fulfilment of these outcomes. The continuous monitoring of the performance of each student is carried out through direct and indirect methods of assessment at every level of learning, to find out to what extent outcomes have beenachieved. Multiple direct and indirect methods are used to evaluate the outcomes of the students. POs, PSOs and COs for all the Choice Based Credit System (CBCS) courses are stated clearly in the preamble of the course curricula, and these are compiled in the form of syllabi booklets available at departmental library and University website. The PEOs of the courses are also made visible at the prominent places/classrooms in the specific department.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

## 2.6.2 - Attainment of Programme outcomes, Programme specific outcomes and course outcomes are evaluated by the institution during the year

The University evaluates the attainment of Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs). The POs are achieved through a curriculum which has mandatory courses as well as elective courses. Each course has defined COs that are mapped with the POs based on their mutual relevance in the form of a matrix for each course. To ensure the attainment of the POs and PSOs, various direct and indirect assessment methods like assignments, exams, interviews of stakeholders and surveys are followed. The direct assessment is composed of two sessional examinations, assignments and end-term examination is taken for evaluating the COs. The continuous assessments have a weightage of 25% while the weightage of end term examination is 75%. The average attainment of COs, are mapped with particular POs and PSOs, this gives direct attainment of PO and PSO which are then compared with a predefined attainment targets of POs and PSOs. The indirect assessments are carried out by taking various survey questionnaires from students, parents, alumni, and employers. The survey information is evaluated to determine the strength of attainment level of POs & PSOs. Overall POs' attainment is calculated as 80% of direct assessment added with 20% of the indirect assessment. The Academic Audit of the faculty members ensures that these assessments become the part of a continuous process.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

#### 2.6.3 - Number of students passed during the year

## 2.6.3.1 - Total number of final year students who passed the university examination during the year

1488

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 2.7 - Student Satisfaction Survey

## 2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a web link)

https://jcboseust.ac.in/students-satisfaction-survey-report

#### RESEARCH, INNOVATIONS AND EXTENSION

#### 3.1 - Promotion of Research and Facilities

3.1.1 - The institution Research facilities are frequently updated and there is well defined policy for promotion of research which is uploaded on the institutional website and implemented

The University has well defined Research Policy and the same is uploaded on the University Website.

JCBUST, YMCA Faridabad has inclination towards research and development of innovative technologies, and committed to provide best research environment and state-of-the-art technological exposure to its scholars. To foster research culture, JCBUST has been updating its Research Policy from time to time. With the aim in pursuit of excellence the existing research policy has been framed in 2020 duly passed through 20th meeting of Academic Council dated 31/8/2020.

JCBUST has introduced the following support schemes for UG/PG, PhD scholars and faculty members for enhancing research

- 1.University Research Scholarship
- 2. Provide seed money to carry out pilot studies and encourage faculty / researchers to identify funding sources for further research.
- 3. Research Award policy for motivating the faculty/students for outstanding research MoUs with International Institutions

#### The following initiative has been taken by the University

- 1. The University has established Research & Development Cell as per guidelines of UGC
- 2. As per UGC Guidelines, a Research Advisory Committee (RAC) is being constituted for each Ph.D. scholar.
- 3. To invite foreign examiners for evaluation of Ph.D. thesis.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

#### 3.1.2 - The institution provides seed money to its teachers for research (amount INR in Lakhs)

20

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

## 3.1.3 - Number of teachers receiving national/international fellowship/financial support by various agencies for advanced studies/ research during the year

0

File Description	Documents
Upload the data template	No File Uploaded
Upload relevant supporting document	No File Uploaded

## 3.1.4 - Number of JRFs, SRFs, Post-Doctoral Fellows, Research Associates and other research fellows enrolled in the institution during the year

22

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

# 3.1.5 - Institution has the following facilities to support research Central Instrumentation Centre Animal House/Green House Museum

A. Any 4 or more of the above

#### Media laboratory/Studios Business Lab Research/Statistical Databases Moot court Theatre Art Gallery

File Description	Documents
Upload relevant supporting document	<u>View File</u>

## 3.1.6 - Number of departments with UGC-SAP, CAS, DST-FIST, DBT, ICSSR and other recognitions by national and international agencies during the year

6

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 3.2 - Resource Mobilization for Research

# 3.2.1 - Extramural funding for Research (Grants sponsored by the non-government sources such as industry, corporate houses, international bodies for research projects) endowments, Chairs in the University during the year (INR in Lakhs)

0

File Description	Documents
Upload the data template	No File Uploaded
Upload relevant supporting document	No File Uploaded

## 3.2.2 - Grants for research projects sponsored by the government agencies during the year (INR in Lakhs)

#### 1117

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

## 3.2.3 - Number of research projects per teacher funded by government and non-government agencies during the year

12

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 3.3 - Innovation Ecosystem

- 3.3.1 Institution has created an eco-system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge
- J. C. Bose University of Science and Technology, YMCA, Faridabad has taken a significant step by establishing the J. C. Bose Technology Business Incubator (JCB-TBI). The university has created an ecosystem for innovation including JCB-TBI, supported by other initiatives including IoT Lab, Coworking Space, 3D printing setup for prototyping and testing, for creation and transfer of knowledge. JCB-TBI stands as a pillar of support for our entrepreneurial community, offering an extensive range of technical, strategic management, and business mentoring services The establishment of our Incubation Center has been made possible through a grant of 30 lakhs from the Higher and Technical Education Department, Haryana. Furthermore, we've secured an additional 27 lakhs from MV Mobility, a company founded by our alumnus, Mr. Mohit Vohra. With these funds, we have set up an IoT Lab, which serves as a pre-incubation facility.

04 start startup has graduated and exited since the inception of the Incubation Centre named CYNDI, Smart MFP 3D Printer, Automated Vertical Planter and Smart Parking.

The Incubation Center at J C Bose University of Science and Technology, YMCA, Faridabad, had an eventful year in 2022-2023, marked by a series of initiatives aimed at fostering innovation and entrepreneurship among students and faculty members. The activities conducted in 2022-23 include National Youth Day Celebration, Workshop on critical thinking, design thinking, and contemporary India's challenges, seminar on recent innovations in power systems, expert lecture on "Achieving Problem-Solution Fit and Product-Market Fit", Ideathon and Business Plan competition etc.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

## 3.3.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year

70

3.3.2.1 - Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development year wise during the year

70

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

- 3.3.3 Number of awards / recognitions received for research/innovations by the institution/teachers/research scholars/students during the year
- 3.3.3.1 Total number of awards / recognitions received for research/innovations won by institution/teachers/research scholars/students year wise during the year

18

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 3.4 - Research Publications and Awards

- 3.4.1 The institution ensures implementation of its stated Code of Ethics for research
- 3.4.1.1 The institution has a stated Code of Ethics for research and the implementation of which is ensured through the following
- A. All of the above
- 1. Inclusion of research ethics in the research methodology course work
- 2. Presence of institutional Ethics committees (Animal, chemical, bioethics etc)
- 3. Plagiarism check
- 4. Research Advisory Committee

File Description	Documents
Upload relevant supporting document	<u>View File</u>

# 3.4.2 - The institution provides incentives to teachers who receive state, national and international recognitions/awards Commendation and monetary incentive at a University function Commendation and medal at a University function Certificate of honor Announcement in the Newsletter / website

#### C. Any 2 of the above

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 3.4.3 - Number of Patents published/awarded during the year

#### 3.4.3.1 - Total number of Patents published/awarded year wise during the year

7

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 3.4.4 - Number of Ph.D's awarded per teacher during the year

#### 3.4.4.1 - How many Ph.D's are awarded during the year

2

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

## 3.4.5 - Number of research papers per teacher in the Journals notified on UGC website during the year

392

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 3.4.6 - Number of books and chapters in edited volumes published per teacher during the year

#### 3.4.6.1 - Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings during the year

69

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 3.4.7 - E-content is developed by teachers For e- D. Any 2 of the above PG-Pathshala For CEC (Under Graduate) For **SWAYAM For other MOOCs platform For** NPTEL/NMEICT/any other Government **Initiatives For Institutional LMS**

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 3.4.8 - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed

Scopus	Web of Science
12793	5928

File Description	Documents
Any additional information	<u>View File</u>
Bibliometrics of the publications during the year	<u>View File</u>

#### 3.4.9 - Bibliometrics of the publications during the year based on Scopus/ Web of Science - h-**Index of the University**

Scopus	Web of Science
49	37

File Description	Documents
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	<u>View File</u>
Any additional information	<u>View File</u>

#### 3.5 - Consultancy

3.5.1 - Institution has a policy on consultancy including revenue sharing between the institution and the individual and encourages its faculty to undertake consultancy

The University has a well-defined consultancy Policy and the same is uploaded on the University The Universityhas a well-defined consultancy Policy and the same is uploaded on the Universitywebsite.

#### **PREAMBLE**

J.C. Bose University of Science and Technology, YMCA, Faridabad has excellent teaching faculties who have in depth knowledge of their fields. More than 100 research scholars are currently doing research on various domains of engineering, technology and sciences. University wants to utilize their resources and highly qualified faculties for solving real life challenges by providing the consultancies services to the industries. With the aim to pursuit of excellencethe existing consultancy policy has been framed in 2020 duly passed through 19th meeting of Academic council dated 06/04/2020.

#### SCOPE OF THE POLICY

University actively encourages its faculty members and other academic staff members to undertake consultancy with industry and other comparable institutions of higher learning in order to create new knowledge and widening the research profile of its faculty and staff members.

#### OBJECTIVE OF THE POLICY

The primary objective of this policy is to establish a framework to support consultancy activities in University and to promote academic, industry and research interaction and to encourage and facilitate faculty to provide knowledge inputs sought by industry, government agencies or other academic / research organizations.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

## 3.5.2 - Revenue generated from consultancy and corporate training during the year (INR in Lakhs)

## 3.5.2.1 - Total amount generated from consultancy and corporate training during the year (INR in lakhs)

#### 15.22

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

#### 3.6 - Extension Activities

3.6.1 - Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the year

#### Response:

In University, there are many clubs/societies which are organizing different type of activities or events at the adopted villages so that the people residing in these villages may take benefit of the same. The teams working on this are NSS(National Service Scheme), NCC(National Cadet Corps), UBA(Unnat Bharat Abhiyan), Eco Club etc. These clubs also organizes some of the activities/events in association with other departments of University for overall development of villages. Along with University deputed a Director Social Responsibilities under DSW office to work towards social responsibilities of the University. Each and every club/team of University is consisting of number volunteer students of University working under Page 53/116 16-09-2022 10:27:00 Self Study Report of J.C. Bose University of Science and Technology, YMCA, Faridabad guidance of faculty members who are In-charge/Coordinator of that particular club. Student participates in all activities considering their social responsibility towards community. Following activities have been organized by University in the community.

University has adopted five following villages-

- i. Alipur Sikargah
- ii. Sehrawak
- iii. Tillori Khaddar
- iv. Dungarpur
- v. Tajpur

File Description	Documents
Upload relevant supporting document	<u>View File</u>

- 3.6.2 Number of awards received by the Institution, its teachers and students from Government /Government recognised bodies in recognition of the extension activities carried out during the year
- 3.6.2.1 Total number of awards and recognition received for extension activities from Government / Government recognised bodies during the year

38

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.6.3 - Number of extension and outreach programs conducted by the institution including those through NSS/NCC/Red cross/YRC during the year(including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs)

100

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

## 3.6.4 - Total number of students participating in extension activities listed at 3.6.3 above during the year

#### 8917

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 3.7 - Collaboration

- 3.7.1 Number of collaborative activities with other institutions/ research establishment/industry for research and academic development of faculty and students during the year
- 3.7.1.1 Total number of Collaborative activities with other institutions/ research establishment/industry for research and academic development of faculty and students during the year

4

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

# 3.7.2 - Number of functional MoUs with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the year

10

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

#### INFRASTRUCTURE AND LEARNING RESOURCES

#### 4.1 - Physical Facilities

4.1.1 - The institution has adequate facilities for teaching - learning. viz., classrooms, laboratories, computing equipment, etc.

The University is spread over a lush green campus area of 20 acres

which is lined up with teaching, non- teaching blocks and other amenities. There are 86classrooms/ICT enabled seminar halls and 80 laboratories in the University enabled with modern equipment/machines to provide a hands-on experience to students. The Language Lab is another important asset. There is a fully furnished computer center and media center in the University. It has designed its own Digital Learning Management System (DLMS) which proved to be a boon for both the students and teachers especially in this pandemic time. There is seamless service of internet connectivity University wide which is via 2 Leased Lines (1GBPS NKN & 100 MBPS BSNL). There are sophisticated IT facilities like 1211Computers, 70 laptops, 178Printers, 49Projectors, 91 UPSs ,5 Smart TVs, 16 Smart Boards, 15 Wi-Fi Routers with 45 access points and 13scanners. The University has a well-furnished library with 89548books to provide effective learning resources to the students. Digital Library is accessed by students and faculty to access the required e-content. All the facilities specified are compatible with national and international standards as prescribed by regulatory bodies like AICTE and UGC

File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.1.2 - The institution has adequate facilities for cultural activities, yoga, games (indoor, outdoor) and sports. (gymnasium, yoga centre, auditorium, etc.)

All the extracurricular, cultural and technical activities are conducted under the domain of the office of Dean Student Welfare (DSW) that serves as an interface between students and administration and works for the all-round personality growth of the students.

#### Sports & Games

The University has a large playing field and numerous sports equipments to support a wide variety of games, such as Cricket, Football, Volleyball, Handball, Hockey etc. There are also dedicated spaces for Indoor sport, including Table Tennis, Badminton, Chess and Carrom. A Multi- Purpose Hall (Shakultalam)has been developed to conduct cultural and sports activities at regular intervals. Separate gymnasium facilities in both boys' and girls' hostels which are well equipped with numerous modern machines for these exercises.

Cultural Activities

The University has as many as 18 technical and cultural clubs each of which is headed by two teacher coordinators and is run by a student committee consisting of secretaries and joint secretaries. The University has a spacious, majestic, fully air-conditioned auditorium equipped with all modern gadgetry and amenities. The University has dedicated practice rooms, green rooms etc. and it also motivates its students for participation in cultural events by providing them financial assistance for renting dresses, instruments etc.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

#### 4.1.3 - Availability of general campus facilities and overall ambience

The University is connected to the national capital city both via road as well as rail. The Metro train is very easily accessible as the Metro station is at a distance of 200 meters from the University. There is a transport facility for day scholars from Palwal, Ballabgarh in cooperation with the State Transportation Department. The University administration is committed

to provide a healthy and safe environment to all its stakeholders. The security of students is carried through CCTV cameras installed at different locations in the campus. There are numerous fully functional fire extinguishers installed in the University. All the departments of the University have well-furnished cabins for the faculty members. The University is centrally equipped with Wi-Fi facility. It has an Incubation Center which offers a wide range of Technical, Strategic Management and Business mentoring support by the expert faculty and experts from various industries. There are 5 centers of excellence in the University. There is a a well- equipped medical center to cater the medical emergency situations of both students and staff members. The University has a spacious auditorium, dedicated playground and well-maintained cafeteria. There is a separate hostel for both boys and girls in the University.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

## 4.1.4 - Total expenditure excluding salary for infrastructure augmentation during the year (INR in Lakhs)

#### 3089.69

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 4.2 - Library as a Learning Resource

# 4.2.1 - Library is automated using Integrated Library Management System (ILMS) and has digitisation facility

Pt. Deen Dayal Upadhyay Central Library is well equipped with modern technologies like automation of library routine activities using ILMS, use of RFID technology, Remote Access facility, Federated Search, e-Library portal, Mobile App for e-Library, Institutional Repository, IRINS instance etc.

Central Library has automated its routine activities using internationally known Web based Integrated Library Management System KOHA. Koha is a full-featured Open-Source ILMS.

Web OPAC (Online Public Access Catalogue) facility is available to know the availability status of books and its position in the library. Users can search books through various approaches such as author, title, subject, ISBN etc. It can be accessed at anytime from anywhere.

Library is also equipped with RFID technology which provides self check-in/ checkout of books using Book Drop facility and Self Check Out kiosk. RFID enabled gates are also available for security check of documents. Books can be returned round the clock through Book Drop.

The Central Library is also subscribing more than 3500 e-journals from the reputed publishers. More than 7400 titles of e-books with unlimited access from McGraw-Hill, Pearson Education, Tritech, CBS, Elsevier and EBSCO are also accessible to the users. The Library is also the member of DELNET and e-Shodh Sindhu consortia.

Library has digitization facility through Institutional Repository and E-Library portal. Library has its e-Library Portal which provides the access of variety of e-resources.

E-Library Portal provides 24\*7 accesses to more than 6 lakh e-

resources (subscribed by the university as well as relevant eresources available in open domain) from anywhere through Remote Access facility.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

#### 4.2.2 - Institution has subscription for e-Library resources Library has regular subscription for the following: e – journals ebooks e-ShodhSindhu Shodhganga Databases

A. Any 4 or all of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

# 4.2.3 - Annual expenditure for purchase of books/ e-books and subscription to journals/e-journals during the year (INR in Lakhs)

102.36

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

# 4.2.4 - Number of usage of library by teachers and students per day (foot falls and login data for online access)

835

File Description	Documents
Upload relevant supporting document	<u>View File</u>

#### 4.3 - IT Infrastructure

# 4.3.1 - Number of classrooms and seminar halls with ICT - enabled facilities such as LCD, smart board, Wi-Fi/LAN, audio video recording facilities during the year

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

# 4.3.2 - Institution has an IT policy, makes appropriate budgetary provision and updates its IT facilities including Wi-Fi facility

The University has an IT policy for ensuring: proper use of IT resources and bandwidth; effective control on the activities taking place on the university's network, whether related to university or not; and security of university's IT-based resources. Following are the objectives of IT policy:

IT for Teaching-Learning Process and research & Development Activities IT for Governance Process

IT for Resource Sharing, Collaboration & Communication

All the computers owned by the University, whether purchased out of University's own resources or out of research projects funds and their users are covered by the Policy. Further, the faculty, the students, the staff, the authorised visitors/visiting faculty and others who may be granted permission to use the University's IT infrastructure, shall comply with the guidelines enshrined in the University' IT Policy. There is a well formulated IT cell which is responsible for all the tasks in accordance with the IT policy. The major ones are listed below:

Campus Network Backbone Maintenance Network Services Maintenance

Physical Connection of Campus Buildings to Campus Network Network Updation and Expansion

File Description	Documents
Upload relevant supporting document	<u>View File</u>

#### 4.3.3 - Student - Computer ratio during the year

Number of students	Number of Computers available to students for academic purposes
6677	1211

### **4.3.4** - Available bandwidth of internet connection in the Institution (Leased line)

• ?1 GBPS

File Description	Documents
Upload relevant supporting document	<u>View File</u>

# 4.3.5 - Institution has the following Facilities for e-content development Media centre Audio visual centre Lecture Capturing System(LCS) Mixing equipment's and softwares for editing

A. All of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Upload the data template	<u>View File</u>

#### 4.4 - Maintenance of Campus Infrastructure

# 4.4.1 - Total expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the year

#### 934.61

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

4.4.2 - There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

The University ensures proper maintenance and effective utilization of all of its infrastructural resources. Academic Support Facilities

- ? Mentoring : Each faculty mentor adopts 25 students and looks after them regarding all the academic aspects.
- ? Library: The central library of the University has a good collection of print and digital information resources which are well maintained.
- ? Infrastructure facilities &Computers: All the scientific equipment, computers, servers etc. are maintained by the manufacturer till the warranty period and later by technicians,

qualified System Administrators and System Engineers.

- ? ClassRooms : The university has a sufficient number of classrooms which are adequate in relation to academic requirements
- ? Laboratories :All labs of the University adequately meet the academic requirements including teaching, research, innovation and entrepreneurship and are kept updated from time to time.

Physical Support Facilities

- ? Maintenance of Campus: Regular maintenance of electrical, plumbing, housekeeping and infrastructure in the entire University is supervised by the Executive Engineer SDE (Civil).
- ? Fire Fighting/Resisting Kits: Fire safety equipments are installed at all locations as per government norms.
- ? Separate Hostel for Boys and Girls: There are separate hostels for boys and girls with sufficient facilities for students.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

#### STUDENT SUPPORT AND PROGRESSION

#### **5.1 - Student Support**

5.1.1 - Total number of students benefited by scholarships and free ships provided by the institution, Government and non-government agencies (NGOs) during the year (other than the students receiving scholarships under the government schemes for reserved categories)

883

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

# 5.1.2 - Total number of students benefited by career counselling and guidance for competitive examinations offered by the Institution during the year

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

# 5.1.3 - Following Capacity development and skills enhancement initiatives are taken by the institution Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) Awareness of trends in technology

A. All of the above

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

5.1.4 - The Institution adopts the following for redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organisation wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

• All of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

#### **5.2 - Student Progression**

- 5.2.1 Number of students qualifying in state/ national/ international level examinations during the year (eg:NET/SLET/GATE/GMAT/CAT/ GRE/TOEFL/Civil Services/State government examinations)
- 5.2.1.1 Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 5.2.2 - Total number of placement of outgoing students during the year

559

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

# 5.2.3 - Number of recently graduated students who have progressed to higher education (previous graduating batch) during the year

79

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 5.3 - Student Participation and Activities

# 5.3.1 - Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter -university/state/national/international events (award for a team event should be counted as one) during the year

138

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 5.3.2 - Presence of Student Council and its activities for institutional development and student welfare

Student Council was constituted through elections in this University as per the decision of the state government in session 2022-23. Members of the council have always tried to maintain positivity in the University campus by solving out students' problems The purpose of the student council is to give students an opportunity to develop

leadership by organizing and carrying out activities at the university level. They help share studentideas, interests, and concerns with the University-wide community. The student council along with other students are continuously conducting the activities for institutional development such as coordinating in promoting values, ethics, and harmony. Students of this council also conduct various cultural, technical, sports activities and also perform duties related to social responsibility at the university level as well as participate in various outside University/Institutions activities.

Roles of the Student Council:

- 1. To officially represent all the students of the University.
- 2.To promote and encourage the involvement of students in organizing University activities.
- 3. To organize educational and recreational activities forstudents.
- 4. To propose activities to the University administration that would improve the quality of life in the University.
- 5. To maintain good relations, out of mutual respect, with the University staff

File Description	Documents
Upload relevant supporting document	<u>View File</u>

# 5.3.3 - Number of sports and cultural events / competitions organised by the institution during the year

54

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 5.4 - Alumni Engagement

5.4.1 - The Alumni Association/Chapters (registered and functional)contributes significantly to the development of the institution through financial and other support services during the year

YMCA MOB Alumni Association was established in 1985. It works to

connect alumni and build an unforgettable Institute experience through a diversity of events. MOB, (Meet Old Buddies), the Alumni Association is a dynamic, member-focused organization directed towards connecting the University community locally, nationally as well as globally, promoting a spirit of unity and loyalty among former students, and associates. Alumni & Corporate Affairs Cell in collaboration with YMCA MOB has organized a number of Alumni Meets and many events that provided a platform for university alumnus/alumna to reunite with their batchmates, current students, and teaching faculties to share their views, experiences, feedback that played a vibrant role in designing policies, curriculum for betterment of student's progression and placements. The YMCA MOB Alumni Association is contributing their Alma Mater through Financial and nonfinancial means for the development of the university.

Non- Financial Contribution:

Designing and refining the academic curricula as per the industrial needs either through their feedback or as members of the Board of Studies.

Experiential knowledge sharing

Participation as resource persons/ speakers in the various university and student related activities to spread awareness of the latest industrial trends.

Financial Contribution:

1. Providing Financial assistance for EWS/Needy Students.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

# 5.4.2 - Alumni contribution during the year (INR in Lakhs) A. ? 5Lakhs

File Description	Documents
Upload relevant supporting document	<u>View File</u>

#### GOVERNANCE, LEADERSHIP AND MANAGEMENT

#### 6.1 - Institutional Vision and Leadership

6.1.1 - The institution has a clearly stated vision and mission which are reflected in its academic and administrative governance

"J. C. Bose University of Science & Technology, YMCA, Faridabad aspires to be a nationally and internationally acclaimed leader in technical and higher education in all spheres which transforms the lives of students through the integration of teaching, research, and characterbuilding". MISSION To contribute to the development of science and technology by synthesizing teaching, research, and creative activities. To provide an enviable research environment and state-of-the-art technological exposure to its scholars. To develop human potential to its fullest extent and make them emerge as worldclass leaders in their professions and enthuse them towards their social responsibilities. The vision and the mission of the University are focused on the establishment and effective utilization of a system of wholesome and holistic learning. The institution has come a long way since its inception in 1969. The Institute has been upgraded to University status by Haryana State Legislature Act No. 21 of 2009. The Vision and Mission is defined keeping in view the objectives of the University enshrined in its Act. As per the provisions in the University Act, academic governance is carried out through various Deans, Chairpersons, and other officers to fulfill the Vision and Mission of the University. The University is planning and implementing developmental initiatives in tune with NEP 2020. Highly qualified and competent leaders at different levels of the University in the light of a welldefined system and organizational structure consistent with the Act, Statutes, and Ordinances of the University improve the academic and administrative effectiveness.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.1.2 - The effective leadership is reflected in various institutional practices such as decentralization and participative management

The top leadership of the University plays a role model to make a positive impact on all levels of functionaries by providing academic autonomy to its departments. Faculty representation on all the important decision-making bodies - the Court, the Executive Council, Academic Council, and Finance Committee- has been provided for. An effective internal coordination monitoring system is practiced through the Deans of various Faculties, Dean Academic Affairs, Dean

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Student Welfare, Chief Hostel Warden, Heads of the Teaching/ Administrative Departments, and other functionaries. In addition, different committees are constituted/nominated by the Vice Chancellor from time to time to guide and administer the University functioning both at the academic and administrative levels. At the departmental level, faculty are actively involved in academic decision- making. Decision-making through decentralization and participative management is also evident through faculties and students being well represented in various committees and cells. Committees and Cells are Central Purchase Committees, Building and Works Committee, Research Promotion Board, Library Committee, SC/ST Cell, etc. The University has created a governance plan that embodies its values of transparency, accountability, and efficiency. It is important for the University's Governing Bodies to be accountable to one another in order to ensure institutional good governance.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

#### 6.2 - Strategy Development and Deployment

#### 6.2.1 - The institutional Strategic plan is effectively deployed

The targets were chosen to align with the standards set up by NAAC, NIRF and as per NEP. Further, the strategic plan was formulated after considering the experiences and expectations of the stakeholders that further also aligns with the department objectives. The combined efforts towards a goal were key to achieve the feat, with the focus on promoting research culture and innovation.

There is no doubt that the University represents 50 years of long legacy in the field of technical education. In the year 2015, there were only 6 Departments, broadly representing the Engineering disciplines and only 2 Science Courses at PG level out of the total 18 Courses at UG and PG level. Considering the need to introduce more courses from Science and other disciplines to promote diversity in courses, the University prepared and implemented plans in a phased manner by introducing new courses. As many as 45 new programs have been introduced at UG and PG levels in the last five years. The University has not only introduced new programs but also upgraded the ongoing programs in line with the skill requirement of the Industries like Data Science and IoT. Inter-disciplinary programs have been introduced at PG Level and stress is being given on

#### Interdisciplinary research in Science and Technology.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.2.2 - The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, etc.

The University has a well-designed and efficient institutional mechanism to achieve the organizational objectives. Each and every activity of the University is governed by the Act, Statute, and rules/regulations/ordinances. As per the University Act the various authorities of the University are involved in decision making for implementation of its vision and mission. The Court reviews the broad policies and programs of the University and suggests measures for its improvement. The Executive Council is the principal executive body of the University. It administers the revenue, property, and funds of the University. It appoints/promotes various faculty members and other academic staff. The Academic Council exercises general supervision over the academic policies of the University. The Finance Committee examines the accounts and scrutinizes the proposals for expenditure and submits the annual budget to the Executive Council for approval. There are 7 faculties in the University comprising 15Departments. Faculties coordinate the teaching and research work of the University and recommend courses and syllabi to the Academic Council. Every department has two boards of studies, namely: 'Board of UG Studies' and 'Board of PG Studies'. The boards recommend courses, schemes, and syllabi of studies and the appointment of paper setters/examiners. The University promptly attends to the general grievances and women's grievances through Grievance Redressal Cells. Recruitment and promotions are made following an established and transparent process as per UGC/Haryana Government norms.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

#### 6.2.3 - Institution Implements e-governance in its areas of operations

# **6.2.3.1 - e-governance is implemented covering following areas of operation**

A. All of the above

- 1. Administration
- 2. Finance and Accounts

#### 3. Student Admission and Support

#### 4. Examination

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### **6.3 - Faculty Empowerment Strategies**

6.3.1 - The institution has a performance appraisal system, promotional avenues and effective welfare measures for teaching and non-teaching staff

Yes, the University has a performance appraisal system, promotional avenues, and various welfare schemes for teaching and non-teaching staff. It follows Haryana Government rules for various welfare schemes. Apart from this, the University also has instituted its own schemes for welfare.

The University has put in place a well-designed and convenient self-appraisal system for its faculty. Each faculty member is required to submit a self-appraisal report (SAR) annually on the basis of parameters such as teaching hours, the number of subjects taught, research papers/articles/books published, conferences attended, papers presented in the conferences etc.

The University has Annual Confidential Report (ACR) system for the workshop staff and administrative staff. The chairpersons/heads of their respective departments critically study the SAR /ACR submitted by them and advise them on the areas in which they require guidance.

Welfare Measures for the Teaching & Non-teaching staff:

- 1.Advance from GPF for the construction/purchase of houses and vehicles.
- 2.Interest-free loan to employees for the purchase of wheat.
- 3.Marriage loan at concessional interest rates.
- 4.Reimbursement of expenditure of school education of two children @ 1125/- p.m. per child.
- 5.Pension scheme and defined pension scheme for employees in the service of the University before and after 2006.

- 6.Leave Travel Concession (LTC).
- 7.Six months maternity leave to female employees.
- 8.Child Care Leave for female employees for two surviving children up to the age of 18 years.
- 9.Full medical reimbursement for indoor treatment of employees/dependents of employees in the University impaneled hospitals.

#### 10.Paternity leave.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

# 6.3.2 - Total number of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

20

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

# 6.3.3 - Number of professional development / administrative training Programmes organized by the institution for teaching and non-teaching staff during the year

12

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

# 6.3.4 - Total number of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the year(Professional Development Programmes, Orientation / Induction Programmes Refresher Course, Short Term Course)

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 6.4 - Financial Management and Resource Mobilization

#### 6.4.1 - Institutional strategies for mobilisation of funds and the optimal utilisation of resources

The University is poised to grow and make its mark in the global scenario by providing requisite funds and optimal use of resources. Since it is State Government University, the main sources of funds are student fees and Grant- in- aid from the State Government as per budgetary allocations. However for meeting the upcoming requirements for research and teaching-learning resources, the University also mobilizes its resources through Grant under section 12 B of UGC, Funded projects from AICTE, Research projects from BARC Mumbai, DST Government of India and DST Haryana, Funds from RUSA, Funds TEQIP III, Funds generated through consultancy offered, Industry linked laboratories and through the Alumni, who provide financial and nonfinancial support for various activities in the University. The University also mobilizes its resources from funds generated from self-financing and vocational courses run by the University. Funds received from the State government are spent on the payment of salary of teaching and non-teaching staff of the University and other activities. The budget is prepared to keep in mind the developmental criteria of the University; accordingly, provisions are made in the budget, which is prepared by a team of experts under the supervision of the Controller of Finance of the University and then approved by the Finance Committee before the fund is sanctioned. It is then deployed on different Heads of Expenditures in accordance with the approval.

File Description	Documents
Upload relevant supporting document	No File Uploaded

### 6.4.2 - Funds / Grants received from government bodies during the year for development and maintenance of infrastructure (not covered under Criteria III and V) (INR in Lakhs)

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

# 6.4.3 - Funds / Grants received from non-government bodies, individuals, philanthropists during the year for development and maintenance of infrastructure (not covered under Criteria III and V)(INR in Lakhs)

0

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

#### 6.4.4 - Institution conducts internal and external financial audits regularly

Yes, the University has an audit department namely the local audit department, Haryana, under the administrative control of the finance department, Government of Haryana which conducts pre-audit as well as post-audit on day- to-day basis through a resident audit scheme headed by the Deputy Director (Audit) and other subordinate staff under the statutory provision of the act of the University. Internal audit of accounts of the University was introduced w.e.f. 01.04.11 vide govt. of Haryana, FD memo no. 14/100/2010-3FA dated 03.04.2010 and Director Local Audit, Haryana Chandigarh vide memo no. 14/100/2010-3FA dated 14.10.2010. Pre-audit and post-audit both are done by the Internal audit team. They audited University records from 2011 and submitted their yearly report to the Local Audit Department, Chandigarh, Haryana, and University authorities. The last audit report was submitted for 2019-20. Further, external audit is being conducted by AG Haryana on annual basis under the provision of Comptroller and Auditor General (CAG) of Indian guidelines in the form of a post-audit and also submit its reports through Principal Accountant General (PAG) Haryana. External Audit is held within a period of 2-3 years. The First AG audit was held for the financial year April, 2011 to March, 2014. The last AG audit was held for the period April '16 to March'19. AG audit team submit their report to AG, Haryana, DGTE, and University authorities. The external audit is also done by Chartered Accountant appointed by University authorities.

File Description	Documents	
Upload relevant supporting document	No File Uploaded	

#### 6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes by constantly reviewing the teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes by constantly reviewing the teaching learning process, structures & methodologies of operations and learningoutcomes at periodic intervals The Internal Quality Assurance Cell (IQAC) of the University contributes significantly in coordination with other departments/branches by carrying out activities such as the conduct of AAA and analysis of responses for improvement, providing inputs for best practices in administration, collecting taking online/offline feedback from stakeholders that encompass all aspects of the university's functioning. The IQAC composition is as per the guidelines of the NAAC and it meets regularly. IQAC prepares Annual Quality Assurance Report (AQAR), verifies API score for CAS cases, and contributes to accreditation processes. As an initiative of IQAC, various policies have been prepared and implemented in the university in order to channelize the various university functions. Two of the practices institutionalized as a result of IQAC initiatives are academic and administrative audit (AAA) and Curriculum Feedback.

Additional information about the same is given in supporting document.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.5.2 - Institution has adopted the following for Quality assurance Academic Administrative Audit (AAA) and follow up action taken Confernces, Seminars, Workshops on quality conducted Collaborative quality initiatives with other institution(s) Orientation programme on quality issues for teachers and studens Participation in NIRF Any other quality audit recognized by state, national or

A. Any 5 or all of the above

# international agencies (ISO Certification, NBA)

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting documnent	<u>View File</u>

6.5.3 - Incremental improvements made for the preceding during the year with regard to quality (in case of first cycle) Post accreditation quality initiatives(second and subsequent cycles)

University has taken necessary steps to enhance quality in the academics, research, governance, and administrative domains. The post accreditation quality enhancement initiatives implemented progressively during the last five years in the University include the following:

- 1.Establishment of new classrooms with ICT facilities, laboratories with modern equipment, new Centre's of Excellence and media Centre has taken place. State of the art Central Instrumentation Facility has been developed under RUSA grant.
- 2.Research papers published in high quality SCI/WoS/Scopus Journals has increased significantly.
- 3.Secured NIRF Ranking.
- 4.Digital Learning Management System (DLMS) has been developed indigenously. E-library facility is available to faculty members and students.
- 5. Efforts have been made to improve the working of various cells like Career and Counselling, Women Welfare, Alumni Affair, International Affair, Grievance Redressal, etc. Registered Alumni Association is actively engaged in various University activities.
- 6.Vertical expansion of infrastructure has beendone in terms of Science Block, Residential Block, Controller of Examinations office, New office spaces and Expansion of Girls' hostel. The State Government has allotted an 18-acre piece of land to University for campus expansion.
- 7. Facilities like spacious university auditorium, multimedia conference hall, Shakuntalam (a multipurpose hall have been constructed.

File Description	Documents
Upload relevant supporting document	No File Uploaded

#### INSTITUTIONAL VALUES AND BEST PRACTICES

#### 7.1 - Institutional Values and Social Responsibilities

#### 7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

Safety and Security

The University has a campus of 20 acres with a boundary wall all around its perimeter. Two gates, various blocks and hostels are manned by security guards at all times. All hostels and academic areas have CCTV installed to check any untoward incidents. A fully functional Health Centre is in place to offer medical care for minor issues and first aid. Further, there is availability of ambulance and University vehicles to transport sick girl-students to nearby hospitals. Every girl student installed the DURGA Mobile app.

#### Counselling

The University is an active promoter of gender-equity initiatives and has conducted a number of extra-curricular activities (as detailed in the attached document) for promoting the same. The university has an Internal Complaint Committee (ICC) to check the menace of sexual harassment and violence against women and girls. University has provided the facility of counselling from psychologists, counsellor and psychiatrist.

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Annual gender sensitization action plan(s)	https://jcboseust.ac.in/Women-Welfare-Cell
Specific facilities provided for women in terms of: a. Safety and security b. Counseling c. Common rooms d. Daycare Centre e. Any other relevant information	https://jcboseust.ac.in/Women-Welfare-Cell

# 7.1.2 - The Institution has facilities for alternate sources of energy and energy

A. Any 4 or All of the above

conservation Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ powerefficient equipment

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

University policy on Waste Management and Green Initiatives revolves around 4Rs (Reduce, Reuse, Recycle and Recover) and supports Sustainable Development Goals SDG -3 'Good Health and Well- being' and SDG - 6 'Clean Water and Sanitation to All'. University follows 'Waste Hierarchical Approach' to manage its waste. University has installed a Biogas Plant with 0.75 cubic meter capacity. University has established a sewage treatment plant of 50KLD capacity based on MBBR Technology to treat the sewage generated in campus and an effluent treatment plant to treat wastewater containing chemicals coming from laboratories. Biomedical waste generated is collected in color-coded dustbins in University Health Centre as per Biomedical Waste Management Rule, 2016. University follows guidelines of Ewaste Management Rules 2016 for management and disposal of old and obsolete tele-communications and computing/IT products, electronics items, etc. The biodegradable wastes are processed, treated and recycled through composting and biogas plants within the premises by converting them into compost, biogas and liquid fertilizer. Department of Environmental Science and Engineering has developed an in-house composting unit. There is no radioactive waste generation in the premises. Further, the University has done MoU's with various authorized agencies for collection, treatment and disposal of garbage and E-waste management.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the

A. Any 4 or all of the above

#### campus

File Description	Documents
Upload relevant supporting document	<u>View File</u>

#### 7.1.5 - Green campus initiatives include

# 7.1.5.1 - The institutional initiatives for greening the campus are as follows:

- A. Any 4 or All of the above
- 1. Restricted entry of automobiles
- 2. Use of bicycles/ Battery-powered vehicles
- 3. Pedestrian-friendly pathways
- 4. Ban on use of plastic
- 5. Landscaping

File Description	Documents
Upload relevant supporting document	<u>View File</u>

#### 7.1.6 - Quality audits on environment and energy are regularly undertaken by the institution

- 7.1.6.1 The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:
  - 1. Green audit
  - 2. Energy audit
  - 3. Environment audit
  - 4. Clean and green campus recognitions/awards
  - **5. Beyond the campus environmental promotional activities**

A. Any 4 or all of the abo	ove
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File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.7 - The Institution has a disabled-friendly and barrier-free environment Ramps/lifts for easy access to classrooms and centres. Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts

A. Any 4 or all of the above

Assistive technology and facilities for persons with disabilities: accessible website, screen-reading software, mechanized equipment, etc. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading materials, screen reading, etc.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities (within a maximum of 200 words)

The University promotes various activities to inculcate tolerance and harmony towards cultural, regional, linguistic and communal socioeconomic diversities among students and staff members. University celebrated Vaisakhi, popularly known as Baisakhi - the festival of harvest, with great fervor and gaiety to acquaint the students with the rich culture and heritage of India. The University fraternity contributed towards the upliftment of underprivileged children of construction labours engaged in various development projects of the University. Kargil Vijay Diwas was organized to commemorate the Azadi Ka Amrit Mahotsav. On the occasion of 130 th birth anniversary of the father of library science in India, Padmashri Dr. S. R. Ranganathan, Pt. Deen Dayal Upadhyay Central Library, University celebrated Librarian's Day. The university organised cultural events and activities. University conducted blood donationCampaign.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.9 - Sensitization of students and employees of the institution to constitutional obligations: values, rights, duties and responsibilities of citizens:

The J.C. Bose University of Sciences and Technology, YMCA, undertakes different initiatives by organizing various activities to sensitize all stakeholders to the constitutional obligation: Values, Rights, Duties and responsibilities of the citizen. On 26th November Constitution Day is celebrated at the university campus to sensitize about fundamental rights, duties, values and responsibilities of the citizens as stated in the Constitution of India. The University has introduced a Subject on the Constitution of India at the UG level

across all engineering disciplines to create awareness and sensitize the students and employees towards constitutional obligation. Republic day is Celebrated on 26th Jan by organizing activities highlighting the importance of the Indian Constitution. The Student Induction Program is organized for newly admitted students of UG and PG students every year. There were lectures on Universal Human Values, Gita, Career Readiness, Role of Youth in community and self-management. University organized Blood Donation Camp in the University Campus through YRC and NSS.On the occasion, speakers also sensitized students about the importance of donating blood for the cause of saving valuable human lives and stated that blood donation is a life-giving act that saves many lives.

7.1.10 - The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard. The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on Code of Conduct are organized

All of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

### 7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

The J.C. Bose University of Sciences and Technology, YMCA has aimed to inculcate values and nationalism in the students and staff by celebrating the national and international commemorative days and birth anniversaries of great Indian personalities. DSW office celebrated Republic Day and Independence Day in the university campus. Netaji Subhas Chandra Bose Birth Anniversary is celebrated on 23rd January as Parkarm Diwas to pay tributes to Netaji Subhas Chandra Bose. NSS and DSW office of university celebrated There are other events like Foundation day, Constitution day, Guru Parv Celebration, etc. organized in the university campus. Faculty of sciences celebrated "National Science Day" on 28 February. The International Women's Day was celebrated in the University campus and various events were organised to mark the occasion. The Department of Environmental Sciences celebrated International Mother

Earth's Day in the university campus and organizes several activities including declamation, quiz, poster making competition and expert lectures.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

#### 7.2 - Best Practices

7.2.1 - Describe one best practice successfully implemented by the Institution as per NAAC format provided in the Manual

University has a dedicated web-based Learning Management system named "Digital Learning Management System (DLMS)" which is in house developed. The key objective of this practice is to host and track online learning. Providing a virtual hub where learners can access course materials, DLMS aims to make contents accessible to remote learners, support blended and flipped learning environments; and provide a central location for learning across the university. This system provides a full suite of modules that supports a range of users, acts as a platform for online content creation and delivery in both asynchronous and synchronous modes. It offers classroom management, where teachers may curate and integrate course materials, articulate learning goals, align content and assessments, track studying progress, and create customized tests for students. It is used to manage all types of study material including lecture contents in the form of Power Point Presentations (PPTs), Portable Document Format (PDFs), assignments and video lectures. At the student end, the system provides facilities to view the shared content, submit due assignments & tests, track their studying progress, and interact with their teachers. On the other hand, teachers can manage courses, schedule their time table, assess the assignments & tests, interact with the students, and schedule online classes.

#### 7.3 - Institutional Distinctiveness

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

The identity of J.C. Bose University of Science & Technology, YMCA, Faridabad lies in imparting cutting-edge technological education and Institute Industry connect. The importance of the Entrepreneurship and JCBUST Alumni network is visible from the fact that most of the industries in Faridabad region have been set up by the University Alumni. As a result of the initiatives taken by the University,

alumni as early as 1985 had set up a registered alumni association by the name of YMCA MOB (Meet Old Buddies, www.ymcamob.com) Alumni Association, the registered University alumni database has already reached 10000 marks. The initiativesby the Alumni are coordinated via the Alumni and Corporate Affairs Cell and Training and Placement Cell of University. Various companies like Cadence Design System, Noida, Eicher Tractor, Bhopal, ETA Engineering, Tamil Nadu, etc. are our recruiting partners where our alumni are at senior positions. The companies of our alumni have signed or are in the process of signing MoUs, like Daikin Air-conditioning India Pvt. Ltd, Advanced Silicon Pvt. Ltd., CE Comfort Pvt. Ltd., Prime Electronics, etc. to help in capacity building process in terms of acquiring skills and calibration training.

#### 7.3.2 - Plan of action for the next academic year

#### Academic Activities

- Start new PG program
- Extending Central Instrumentation Laboratory: addition of more equipment's.
- •Organise FDP/ Conference/Seminar/ Workshop/STC in various teaching departments
- •Industry Interaction: At least one industrial visit per semester per class and inviting industry experts.
- •Inculcation of Soft skills: Provision for session/training to every student.
- •Bridging Gender Social Gap: Provision for coaching for competitive exams such as GATE etc., PDP sessions
- Recording Room: Recording room for online lecture creation Exam reforms as continuous process
- Library: Addition of resource, Greater Access to e-resources including ebooks, Journals etc.

#### Administrative Activities

- Conduct of Administrative Audit
- Conduct of Student Satisfaction Survey

- Advertise the faculty vacancy to improve the faculty student's ratio
- Improvements in Existing Infrastructure Plan: The University plan to convert more existing class rooms into smart class rooms, renovation of girls and boy hostel and upgrade central canteen. In addition, the institute plans to organise various online/offline activities for students including Students Induction Program, Culmyca (A regular extra/ co-curricular activities' event)