PROGRAMME PROJECT REPORT (PPR)

Programme Name: Bachelor of Science in Information Technology (B.Sc. IT.)

(i) Programme's mission and objectives:

The mission of the Programme is "To provide quality education & skills development in the field of Computer and". Jharkhand State Open University's School of Sciences proposes to offer Bachelor of Science Programme through Open and Distance Learning (ODL) in blended mode. In this Programme offered at a distance, we propose to offer a bouquet of subjects such as international tourism, heritage & management subjects so that our learners will

- To offer high grade value based Post graduate and Doctoral programmes in the field of computer application
- To provide conducive environment so as to achieves excellent in teaching learning and research and development activities.
- To bridge the gap between industry and academic by framing curricula and syllabi based on the industrial and societal needs.
- To facilitate students to nurture skills to practice their professions competently to met the ever changing needs of society.
- To provide students with a strong foundations in the principals and practices of computer science information technology, preparing them for careers in a verities of industry.

(ii) Relevance of the program with HEI's Mission and Goals:

The open and distance learning system provides opportunities for flexible learning and meet the need working professionals to optimise their efficiency, skills and competencies and contribute to national regeneration through growth and development of their respective organisations. As such, this system presents itself as a viable alternative for higher education and training to all those who were deprived of the benefits of higher education in their formative years due to financial, social geographical, family or gender disadvantages. Through inclusion all such deprived groups, the University will strive to achieve its mission to provide equitable access to quality education to all. To maintain quality of education, the University has adopted the same Curriculum and Syllabus as has been prescribed by the UGC under its NEP-2020for F2F students under regular mode.

- Global career Options.
- A multi faceted career options.
- Lucrative Career Prospects.
- Multiple Specializations Available.
- Paid internships at Top IT Companies.
- Great Networking Opportunities.
- Great Foundations for Higher Studies.
- Prepare Industry ready professionals.
- Governments Employment Opportunities.

(iii) Nature of prospective target group of learners:

- Working adults deprived admission in the regular Mode due to its limited capacity, inflexibility in timing to learn, financial, social, geographical, family or gender disadvantages;
- For the candidate from Rural & Remote Areas; and
- Drop outs.

(iv) Appropriateness of programme to be conducted in Open and Distance Learning and/or Online mode to acquire specific skills and competence:

This programme will help the learners to

- Improve skills as tourist guides and develop communication skills particularly suited to Tourism Industry
- Enable them to create newer jobs in Tourism Industry

(v) **Instructional Design:**

a) **Introduction:** The materials for the BA programme have been developed in self-instructional learning package mode.

b) **Course Structure:**

SEMESTER – I

Code No.	Paper	Credits	Internal Marks	End Semester Exam	Total marks
BSC.IT-101	Programming for Problem Solving Using 'C/C++'	5	30	70	100
BSC.IT-102	Discrete Structures	5	30	70	100
BSC.IT-103	Fundamentals of Information Technology & Office Automation	5	30	70	100
(Choose Any One) 104A/104B					
BSC. IT-104	Environmental Studies	5	30	70	100
BSC. IT-105	NCC	5	30	70	100
BSC. IT-106	Programming for Problem Solving Using 'C/C++' Lab	5	30	70	100
BSC. IT-107	Fundamentals of Information Technology & Office Automation Lab	5	30	70	100

Credit Score – 30

SEMESTER - II

Code No.	Paper	Credits	Internal Marks	Internal Marks	Total marks
BSC.IT-201	Database Management Systems (DBMS)	5	30	30	100
BSC.IT-202	Data Structures	5	30	30	100
BSC.IT-203	Computer Graphics	5	30	30	100
(Choose Any One) 104A/104B					
BSC.IT-204	English	5	30	30	100
BSC.IT-205	NCC	5	30	30	100
BSC.IT-206	Database Management System (DBMS)Lab	5	30	30	100
BSC.IT-207	Data Structures Lab	5	30	30	100

Credit Score – 30

SEMESTER - III

Code No.	Paper	Credits	Internal Marks	End Semester Exam	Total marks
BSC.IT-301	Operating System	5	30	70	100
BSC.IT-302	Programming in Java	5	30	70	100
BSC.IT-303	Design and Analysis of Algorithm	5	30	70	100
BSC.IT-304	Information Security	5	30	70	100
BSC.IT-305	Network Programming	5	30	70	100
BSC.IT-306	Digital Electronics	5	30	70	100
BSC.IT-307	Operating System Lab	5	30	70	100
BSC.IT-308	Programming in Java Lab	5	30	70	100
BSC.IT-309	Internship Assessment	5	30	70	100

Credit Score - 45

SEMESTER – IV

Code No.	Paper	Credits	Internal Marks	End Semester Exam	Total marks
BSC.IT-401	Computer System Architecture	5	30	70	100
BSC.IT-402	Software Engineering and Testing	5	30	70	100
BSC.IT-403	Theory of Computation	5	30	70	100

BSC.IT-404	Computational Linguistics	5	30	70	100
BSC.IT-405	Digital Image Processing	5	30	70	100
BSC.IT-406	Machine Learning	5	30	70	100
BSC.IT-407	Computer System Architecture Lab	5	30	70	100
BSC.IT-408	Software Engineering and Testing Lab	5	30	70	100

Credit Score - 40

Total Credits - 145

c) **Detailed Syllabus:** Syllabus as per the courses offered by Jharkhand State Open University is appended.

d) **Faculty & Support Staff requirement:**

Faculty:

Sl. No.	Faculty	Work at (HQ/RC)	Number
1	Professor	Prof.(Dr.) Rajesh Kumar	01
2	Associate Professor	NA	00
3	Assistant Professor	Khemlal Rajak	01
		Shalini Shekhar	01
		Amit Kumar	01

Support Staff:

Sl. No.	Office Staff (Designation)	Work at (HQ/RC)	Number
1	Junior Assistant	Umesh Ranjan Gope	01
2	Junior Assistant Cum Typist	Sirum Emeliya Aind	01

Instructional Delivery Mechanisms:

Mode of Delivery/ Types	Delivery Mechanisms	Provided (Yes/No)	Detailed Information (Please Mention the Activity Hour)
Face to Face Mode	PCP	Yes	1st July, -20 July, 2024 / 1st December, – 20th December, 2024
	Tutorials/ Special Classes/ Remedial Classes/ ECP	Yes	Tutorial/Special Classes/remedial classes/ ECP shall be scheduled to allow students to attend classroom lectures for suitable duration of time.
	Seminar/ Research Colloquium	Yes	
Self- Learning	SLMs	Yes	Study materials in the form of printed books (SLM) as well as e-book from shall be provided to each student at the beginning of academic session.

	Reference Books	Yes	
ICT/ Digital Wellness of students	Online (Web driven/Mobile App)	Yes	The University is in process of developing a dedicated dynamic LMS for ODL Learners.
	Offline DVD/SD Card/USB Drive	Yes	The USB Drive /SD Card shall be provided to student to explain intricate details.
	Telecommunications	Yes	The University is in process of developing Telecommunications.
Blended	Smart Classrooms	Yes	The University is in process of developing smart class rooms.
	Flipped Learning	Yes	The University shall provide Flipped Learning contents also.

(vi) Procedure for admissions, curriculum transaction and evaluation:

Admission –The admission process shall be initiate in August and shall be kept open till September end for the first semester. The admission shall be finalised by October end and SLMs shall be distributed in November. The minimum eligibility condition shall be 50% marks in 10+2 from any State board or CBSE Board.

Curriculum transaction –

Activity Planner: The exercise of preparing an activity planner will be the responsibility of the affiliated under graduate colleges and the nodal person shall be the principal of the college as well as the Coordinator approved by Jharkhand State Open University advisory committee.

Evaluation – The continuous component shall comprise 30% and the term-end shall comprise 70%. The continuous evaluation shall be in the form of Tutor Marked Assignments or mid-term examinations. In order to pass a course, a learner must secure minimum 40% Marks in each course/paper. All examinations shall be conducted by the Controller of Examination as per examination Rules and Regulations in the Jharkhand State Open University.

(vii) Requirement of laboratory support and Library Resources:

College library (affiliated as Study Centre) shall be made available to the students under ODL mode and this arrangement has already been communicated to each study centre.

(viii)   Cost estimate of the programme and the provisions:

Name of the Programme	Duration	Year	Degree	Admission Fees	Tuition Fees	Exam Fees	Total
IT	3-4 Years	1	Under Graduate	1000	3500	1000	5500
		2			3500	1000	4500
		3			3500	1000	4500
Total							14500

(ix)   Quality assurance mechanism and expected programme outcomes:
Expected Programme Outcome:

The University has established CIQA, which would be responsible for continuous monitoring the quality of teaching-learning of all courses in close cooperation with the Director, School of Social Sciences. In fact, the monitoring mechanism put in place at the Jharkhand State Open University for all courses.