



# **JHARKHAND RAKSHA SHAKTI UNIVERSITY**

## **RANCHI**

### **Regulation for PG Course in Forensic Science**

#### **1. INTRODUCTION**

The M.Sc. in Forensic Science Programme of Jharkhand Raksha Shakti University follows the Semester Mode.

##### **(1) PREAMBLE:**

- (a) The regulation herein specified applies to full-time M.Sc. in Forensic Science Programme under Grading Semester System by the Jharkhand Raksha Shakti University, Ranchi, hereinafter, referred to as the University.
- (b) 'Full-time programme' are those programmes where the participants devote their entire available time for the studies as per schedule and are not employed.
- (c) 'Course' means a theory or practical subject that is described in Syllabus.
- (d) 'University' means Jharkhand Raksha Shakti University.
- (e) The 'Academic Year' of the courses shall ordinarily be from July to June.
- (f) An academic year is divided into two semesters. In each semester courses are offered in 15 teaching weeks and the remaining 5 weeks are to be utilized for the conduct of examinations and evaluation purposes. Each week has minimum 30 working hours spread over 6 days of week.

##### **(2) STRUCTURE OF SEMESTER SYSTEM AND ACADEMIC YEAR:**

- (a) There shall be two semester in every academic year.
- (b) The whole M.Sc. in Forensic Science Programme will consist of four semesters.
- (c) The M.Sc. in Forensic Science Programme of Jharkhand Raksha Shakti University shall consist of 108 credits in four semesters.
- (d) In first semester it is compulsory for all students to study five theory papers and three practical papers. The same scheme will be followed in second semester also.
- (a) The 3<sup>rd</sup> Semester has one paper on "**Research Methodology** as Compulsory Foundation paper, three theory papers and three practical papers.
- (b) The stream of specialization will start from 4<sup>th</sup> semester..

- (c) The student has to opt one specialized stream out of three specializations. There are two theory papers and two practical papers of specialization in 4<sup>th</sup> semester
- (d) One paper of dissertation.- Project work on forensically significant and need based problems on the area of specialization
- (e) Internship.- Each student shall be required to do internship in any Institute/ Research Organization/ University Prescribed for Internship Course
  - i. Core Course: - It is a compulsory paper to be studied by a candidate to complete the requirements of a degree. The core component is based on papers that are unique to the programme.
  - ii. Specialized Stream: - Every student has to choose specialization in 4<sup>th</sup> semester. Student shall be offered a specialization in that stream if the student successfully passes in all the three specialized subjects

## 2.1 **Duration of the courses**

The M.Sc. in Forensic Science as mentioned above shall cover a period of two full-time academic years and shall be known as the M.Sc. in Forensic Science .

## 2.2 **Course Fee**

A candidate found eligible for admission in M.Sc. in Forensic Science course, shall have to pay a fee of the course in each academic year in addition to the University examination fee, the quantum of which shall be decided by the Jharkhand Raksha Shakti University administration subject to revision from time to time, The University shall issue guidelines for the purpose in the beginning of each academic session.

## 2.3 **Seats**

The number of students to be admitted in the course shall be 25.

## 2.4 **Admission Procedure.**

The admission process will start in the month of May.

The admission of eligible students in this course will be done through a “Common Entrance Test”.

The “Common Entrance Test” will be conducted by the University for Admission in Semester- I in the beginning of each academic session.

The reservation as per notification issued by the Govt. of Jharkhand will be followed.

## 2.5 **Eligibility for admission**

A student may be admitted to the M.Sc. in Forensic Science course for the degree of M.Sc. in Forensic Science if he/she has passed B.Sc. (Science stream) from a University established and incorporated by law, or any other examination recognized by the University as equivalent thereto with minimum 45% marks in aggregate,

provided that for admission to the M.Sc. in Forensic Science it shall be necessary for a student to have obtained qualifying marks in the 'Common Entrance Test'.

## 2.6 Medium of Instruction and Examination

The medium of instruction and the medium of examination in all the subjects shall be Hindi/ English.

### (3) CREDIT VALUE AND CONTACT HOUR SYSTEM

- 1) For the maintenance of a standard teaching- learning system, Credit Value and Contact Hours shall be followed for assessment of the level of learners.
- 2) A Contact Hour (CH) is in correspondence to the Credit value; for example, a topic having 4 Credits shall have a minimum of 4 Contact Hours in a week. For Practical classes, every Two Hours shall make 1 (one) Contact hour.
- 3) One Contact Hour shall normally be of 60 minutes duration.
- 4) Taking into consideration 15 working weeks in a semester, a paper having 4 Credits shall have a total of  $15 \times 4 = 60$  CH.

- (4) There are total 97 credit in four semesters

**Table- 1: Summarized Credits for the M.Sc. Cyber Security Course**

Semester	Course	Full Marks	Mid- Sem		End-Sem		Credits
			Full Marks	Pass Marks	Full Marks	Pass Marks	
<b>I.</b>	Forensic Science & Criminal Justice System 101 Theory	100	30	13	70	32	4
	Scientific Aid to Crime Investigation and Quality Assurance 102 Theory	100	30	13	70	32	4
	Analytical Instruments and Techniques 103 Theory	100	30	13	70	32	4
	Forensic Psychology and behavioral sciences 104 Theory	100	30	13	70	32	4
	Essential of Mathematics and Statistics in Forensic Science 105 Theory	100	30	13	70	32	4

	Practicals 106	100	30	13	70	32	2
	Practicals 107	100	30	13	70	32	2
	Practical 108	100	30	13	70	32	2

Semester	Course	Full Marks	Mid- Sem		End-Sem		Credits
			Full Marks	Pass Marks	Full Marks	Pass Marks	
II.	Forensic Biology and Forensic Medicine 201 Theory	100	30	13	70	32	4
	Forensic Chemistry and Toxicology 202 Theory	100	30	13	70	32	4
	Forensic Ballistics and Forensic Physics 203 Theory	100	30	13	70	32	4
	Forensic Document Examination and Forensic Photography 204 Theory	100	30	13	70	32	4
	205 Forensic Document Examination and Information Security	100	30	13	70	32	4
	206 Practical	100	30	13	70	32	2
	207 Practical	100	30	13	70	32	2
	208 Practical	100	30	13	70	32	2

Semester	Course	Full Marks	Mid- Sem		End-Sem		Credits
			Full Marks	Pass Mark	Full Marks	Pass Marks	

III.	301 Pattern Evidences Theory	100	30	13	70	32	4
	302 Forensic Analysis of Drugs Theory	100	30	13	70	32	4
	303 Forensic DNA Profiling Theory	100	30	13	70	32	4
	304 Research Methodology Theory	100	30	13	70	32	4
	305 Pattern Evidences Practical	100	30	13	70	32	2
	306 Forensic Analysis of Drugs Practical	100	30	13	70	32	2
	307 Forensic DNA Profiling Practical	100	30	13	70	32	2

Semester	Course	Full Marks	Mid- Sem		End-Sem		Credits
			Full Marks	Pass Marks	Full Marks	Pass Marks	
IV.	401 Theory	100	30	13	70	32	4
	402 Theory	100	30	13	70	32	4
	<b>Dissertation</b> 403 Practical	100	—	—	100	45	5
	<b>Internship</b> 404	100	--	--	100	45	5

	405 Practical	100	30	13	70	32	2
	406 Practical	100	30	13	70	32	2

### **Specialization in Forensic Physics “A”**

<b>THEORY PAPERS</b>
<b>Advanced Forensic Physics</b>
<b>Advanced Physics</b>
<b>PRACTICAL / LAB BASED COURSE</b>
<b>Advanced Forensic Physics</b>
<b>Advanced Physics</b>

### **Specialization in Forensic Biology “B”**

<b>THEORY PAPERS</b>
<b>Advanced Forensic Biology</b>
<b>Advanced Biology</b>
<b>PRACTICAL / LAB BASED COURSE</b>
<b>Advanced Forensic Biology</b>
<b>Advanced Biology</b>

### **Specialization in Forensic Chemistry “C”**

<b>THEORY PAPERS</b>
<b>Advanced Forensic Chemistry</b>
<b>Advanced Chemistry</b>
<b>PRACTICAL / LAB BASED COURSE</b>
<b>Advanced Forensic Chemistry</b>
<b>Advanced Chemistry</b>

## **(5) EXAMINATION, EVALUATION AND DECLARATION OF RESULTS**

**4.1 Conduct of examinations:** University shall conduct the End-Semester Examinations. Internal Assessment shall be conducted by the Department. For the End-Semester examinations, questions papers shall be presented by the University.

**4.2 Examination Routine for End-Semester Examination** shall be notified by the University which shall be normally of 3 hours duration.

**4.3 Student Assessment and Progression:** The performance of a student shall be evaluated in a theory or practical paper containing 100 marks on 70:30 basis that is 70 marks for external examination and 30 marks for internal examination. In case the paper is split in 50:50 as theory and Practical section, the external marking will be 35:35 and that in the internal examination the marking will be 15:15.

**4.4 Activities for Internal Assessment Tests (Mid Semester Examinations):** The Internal Assessment for 30 marks shall be made in the following categories of activities:

Class Tests/Unit Test	=	10 Marks
Assignment	=	10 Marks
Attendance	=	05 Marks
Performance	=	05 Marks
		<hr/>
Total	=	30 Marks

Attendance: - 5 marks, on the basis of following tabulated scheme:

Attendance %	Marks
75-80	1
81-85	2
86-90	3
91-95	4
96-100	5

End semester evaluation pattern for Practical (70 marks)

- Experiment- - 40 marks
- Practical file - 10 marks
- Viva - 20marks

Mid semester evaluation pattern for Practical (30 marks)

- Experiment- - 10 marks
- Practical file 5 marks
- Viva - 5 marks
- Attendance - 5 marks
- Performance - 5 marks

End semester evaluation pattern for Internship (Semester IV)

- References and review of literature -10 Marks
- Methodology adopted -10 Marks
- Interpretation -10 marks
- Relevance of research study -10 Marks
- Presentation -10 Marks
- Viva -50 Marks

- a. The internal assessment in theory papers of the M.Sc. in Forensic Science will be based on Mid-Semester Examination of **one hour** duration per paper to be conducted by the Department. Mid-semester Examination shall be conducted usually in the month of Feb-March and August-September.
- b. If a student misses the Mid-Semester Examination due to some valid reasons (to be ascertained the University on the basis of documental proof provided by the student), the Department may arrange a special Mid-Semester Examination. It shall be held for all such cases and it will be conducted within one fortnight from the date of completion of the mid-semester examination on payment of special examination fee fixed by the University.
- c. Re-evaluation of the answer script shall not be ordinarily allowed.
- d. A student can apply for the scrutiny of his/her answer script, after paying the required fee for it, within 15 days of the publication of the results. The paper shall be scrutinized by the Examination Board of the University to see if any question (or part thereof) has been left unmarked or, whether marks obtained have been transcribed correctly.

#### 4.5 Award of Grades, SGPA and CGPA

- i. Grade Letter: - It will indicate performance of the students in a particular course/paper. It is actually the transformation of actual marks secured by student in a course paper

Range of Marks Percentage	Grade Letter	Grade Point
85-100	O	10
70-84	A	9
60-69	B	8
55-59	C	7
50-54	D	6
40-49	E	5
Less than 40	F	0

- ii. Semester Grade Point Average (SGPA):- It would be computed only when a candidate passes in all the papers and gets a minimum of 'E' Grade. SGPA will show the performance of student in a given semester. It would be calculated by



dividing the total credit points earned by a student in all courses by total number of credits assigned to the courses/papers in a semester.

- iii. Cumulative Grade Point Average (CGPA):- It would be obtained by the dividing the total credits points in all the semesters by the total number of credits in all the semesters.

The final result of the candidate would be declared in the form of CGPA.

(CGPA will be calculated only when the candidate passes in all paper of all the semesters.)

**4.6 Eligibility criteria for End-Semester Examination:** A Student shall be deemed qualified to appear at the End-Semester Examinations only if he/she secures minimum qualifying marks in the internal assessment Tests and maintains 75% attendance separately in every subject. For valid reasons, 5% relaxation of the attendance may be considered by the University Authority.

**4.7** The Students shall carry their respective Identity-cards to the examination hall and the same shall be produced on demand. Non production of the identity may result in expulsion from the examination.

**4.8** No candidate will be permitted to appear in the examination without a valid Admit Card. The **Admit card** should be presented to the invigilators/ others authorized officials for verification. The candidate's identity will be verified in respect of his/her details on the Admit Card. If the identity is in doubt, the candidate may not be allowed to appear in the examination.

**4.9 Question Paper Setting and Evaluation :**

University shall submit a list of the panel of Question Paper Setters and Answer Script Evaluators preferably in the beginning of each Semester. University shall update this panel to ensure that the right person does the right job at the right time.

**4.10 Completion of Internal Assessment:**

**4.11** Internal Assessment shall be completed well before commencement of the End – Semester Examination.

**4.12 Evaluation**

1. Internal Evaluation of Answer Scripts shall be completed at the University level after the conduct of examination for a particular paper and each evaluator shall submit the marks sheet within the stipulated period to the University for tabulation of Marks.
2. Answer Scripts of End–semester Examinations shall be submitted to the University for Completion of the necessary coding formalities and evaluation process.

**4.13 Improvement:**

Improvement may be allowed to desirous student by surrendering their previous Marks- Sheet. This option may be exercised within two academic years only. In case

the students fail to improve his / her score, marks secured in the previous examination shall be retained.

#### **4.14 The nature and type of question**

The Exam Question papers shall have multiple choice questions and descriptive type questions. The descriptive type questions will be divided into short answer questions and long answer questions. It will be preferred to have question/answer through newly adopted paperless examination system.

#### **4.15 Publication of Result.**

1. Only those students who have a minimum 100 credits in the concerned semester will be declared Pass.
2. Students who have cleared 3 or more papers and having minimum 17 credits in the concerned semester will be promoted to next semester.
3. Before appearing in IV<sup>th</sup> semester all backlog paper of previous semesters must be cleared. Without clearing all the papers of back semester he or she may not be allowed to appear in IV<sup>th</sup> semester.
4. Any Student who does not clear at least three papers in any semester shall be declared fail and may appear in commencement of corresponding semester examination next session. He/She will be back to previous semester.
5. There is no provision of supplementary exam.
6. The University shall announce results semester wise. The results will be declared semester wise in SGPA scale. In the last semester results will be declared in CGPA scale.

#### **4.16 Award of Degree**

After the successful completion of course an arts graduate will be awarded Master of Science degree in Forensic.

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