

SHIVAJI UNIVERSITY, KOLHAPUR

DEGREE OF MASTER OF SCIENCE COURSE

Effective From June, 1999

Ordinances :

O. M. Sc. 1 :

- 1.1. Any person who has taken the degree of B. Sc./B. A. of this University or the Degree of any other statutory University recognised as equivalent, and has kept four semester terms in the University as a post-graduate student be admitted to the examination for the degree of Master of Science in any of these subjects mentioned in R. M. Sc. No. 3.
- 1.2. A student shall be held eligible for admission to the M. Sc. Course provided he/she has passed the B. Sc. / B. A. examination either with a principle subject or with a subsidiary/interdisciplinary/applied/allied subjects and has passed the entrance examination conducted by the University.
- 1.3. The students with B. Sc. / B. A. (General Course) from other universities shall be eligible if they qualify through entrance examination and they score minimum 55 per cent B+ marks in the subject at the B. Sc. examination.
- 1.4. While preparing the merit list for M. sc. admission, the performance at B. Sc. III/B. A. III or B. Sc. II/B. A. II, as the case may be, and the performance at the entrance examination will be given equal weightage (50.50).

O. M. Sc. 2 :

- 2.1 In case of Mathematics, external student shall be registered and admitted to the examination of the degree of M. Sc. by papers provided the Student.
 - a) has passed the B. Sc. / B. A. examination of this University with Mathematics at B. Sc. III/B. A. III or B. Sc. II / B. A. II with at least 55 per cent B+ marks or an examination of any other statutory University.
 - b) has registered as an external candidate for the examination and as laid down in O. 123.
- 2.1 The student can register himself for Semester I and III Exams to be held in October/November every year and for Semester II & IV Exam to be held in April/May every year.

O. 123 :

Registration as External Candidates for an examination shall be open to :

1. Persons residing in the Maharashtra state or in the state of Goa or the Districts of Belgaum or Karwar at the time of Registration
- OR
2. Women residing at any place
- OR
3. A graduate of this University desirous of taking the Post-graduate Examination externally irrespective of his place of residence at the time of Registration.
- OR
4. Persons who are domiciled in the state of Maharashtra and have passed first year or Part-I examination of this University provided they are in service of the Central Government or the Maharashtra State Government.
- OR
5. Marathi speaking persons who are residing outside the Jurisdiction of the Shivaji University.

Definition No. 1 : For purpose of this ordinance the expression 'residing' means continuously residing for a period of one year immediately preceding the date of Registration as an External Candidate.

For M.Sc. (Mathematics) Programme :

Percentage of Continuous Assessment is 25% and
Percentage of End Semester is 75%.

M.Sc. (Mathematics) Programme Term End Examination has
90 (75%) marks theory & 30 (25%) marks internal assessment.

Verified



Director

Centre for Distance And Online Education
Shivaji University, Kolhapur.



Definition No. 2 : The term 'Marathi Speaking persons' used in rule 5 above shall mean persons whose mother tongue is Marathi.

REGULATIONS

R. M. Sc. 1

- 1.1 Candidates registered for M. Sc. (Mathematics) Degree examination as External students shall be exempted from regular attendance and keeping of the terms of the University.
- 1.2 The course of studies, and the standard of passing etc. at the M. Sc. (Mathematics External) examination will be identical with those at the M. Sc. (Mathematics Regular)
- 1.3 Candidates shall have to take the examination Semesterwise.

R. M. Sc. 2

The M. Sc. Degree will be awarded only after successful completion of written and practical university examinations.

R. M. Sc. 3

The examination for the M. Sc. Degree shall be in the following subjects.

1. Mathematics
2. Chemistry
3. Physics
4. Botany
5. Zoology
6. Geography
7. Geology
8. Statistics
9. Microbiology
10. Biochemistry
11. Electronics
12. Physics (Applied Electronics)
13. Polymer Chemistry
14. Environmental Science
15. Industrial Chemistry
16. Agrochemicals and Pest Management
17. Sericulture
18. Electronics Sciences.

R. M. Sc. 4

- 4.1 The entire course of M. Sc. shall be of 2400 marks so that each semester shall have 600 marks i.e., 400 Theory + 200 Practical (except Mathematics and Statistics). M. Sc. courses in Physics, Biochemistry, Physics (Applied Electronics) and Electronics Sciences shall have five theory papers (each 80 marks) for each semester, while for M. Sc. in Mathematics shall constitute five theory papers of 120 marks each. For the subject Statistics, there shall be five theory papers of 100 marks each and a practical of 100 marks.
- 4.2 The examination for the M. Sc. Degree shall be split up into four Semesters.
- 4.3 The commencement and conclusion of each semester shall be notified by the University from time to time.
- 4.4 There shall be a University examination for theory and practicals at the end of each Semester. The evaluation of theory & Practical examination be done by internal and external examiners 50 : 50.

- 4.5 (a) In each Semester there shall be 5 theory courses for Physics, Bio-chemistry, Physics (Applied Electronics), ~~Electronic Sciences, Statistics and Mathematics~~ while there shall be 4 theory courses for other subjects. Each paper shall be of three hours duration. The Semester theory examination shall be conducted as under :

October/November Semester I, III and IV

April/May Semester II and IV

There shall be no Semester II examination in October/November and Semester I and III in April/May.

(b) There shall be no internal evaluation in any subject as far as the theory is concerned.

- 4.6 A student who has passed in Semester examination shall not be allowed to take the examination in the same Semester again.
- 4.7 Each theory papers in each Semester as well as each practical course shall be treated as separate head of passing.
- 4.8 The student is allowed to keep term in the IIIrd Semester even if he/she has failed in two papers (I & II) taken together.
- 4.9 The result shall be declared at the end of each semester examination as per University Rules.

R. M. Sc. 5 :

On a new application being forwarded, a candidate who has passed the examination of the M. Sc. Degree may present himself again for the same on subsequent occasion, subject to the following condition :

If he/she has passed in one subject, he/she may appear in another subject. The conditions regarding keeping of four terms and choice of subject specified in O. M. Sc. 1 shall apply for every such reappearance also.

R. M. Sc. 6 :

On a new application being forwarded and fresh fee paid, a candidate who has once passed the M. Sc. examination will be allowed to appear in additional papers or optional group of special papers, provided he/she keeps fresh terms of the new papers. A student passing in this manner shall be awarded only a certificate to that effect and shall be considered competent in the respective specializations.

R. M. Sc. 7 :

Two more chances within the span of two years following the regular batch examination of the old course will be given to the students.

R. M. Sc. 8 :

Person who hold a pass or second class at the M. A./M. Sc. Degree and wish to appear for the same examinations in the same subjects in order to improve their class to secure B+ class shall be allowed to do so as per the following provisions.

- 8.1 The concession to reappear will be available only to :
- (a) the holders of the Master's Degree of this University irrespective of their residence.
 - (b) any Higher Secondary School/Junior College/Senior College Teacher working in the Shivaji University area, irrespective of the University of which he/she holds the degree.
- 8.2 Persons holding M. A. / M. Sc. Degree of this University in the pass class or second class and desirous of reappearing for the same examination for improvement of class shall be given three chances to do so within a period of six years from his/her passing the said examination in the pass class or second class. The Teacher in Junior College intending to reappear under these rules will have three chances to improve his/her class within a period of six years from the date of his/her appointment.
- 8.3 Where the examination is held in parts, appearance for all the four semesters at a time is not allowed. A student in Science subjects shall have to appear for Semester I, III and IV in October/November and Semesters II and IV examinations in April/May.
- 8.4 The result shall be declared at the end of each Semester.
- 8.5 If a person appears for the first part/Semester I and III and fails, or obtains less than the required marks, he/she will either have to appear for the second part/Semester II and IV and obtain the

necessary marks for the improvement of the class in the whole examination or will have to declare that he/she has lost one chance.

- 8.6 A candidate intending to re-appear at M. Sc. / M. A. examination under these rules, shall be allowed to do so without keeping fresh terms.
- 8.7 a) For Science subjects in which Semester system is implemented, a candidate intending to re-appear at the M. Sc. examination under these rules, may appear for Semester I and III examination in October and for Semester II and IV examination in April provided he/she will have to complete his semester II and IV examination within a period of six years from his passing the examination in the pass class or second class. a candidate will have to appear for the Semester I and III examinations first under this scheme.
- b) A candidate shall have to appear for the practical examination also along with the theory papers of the concerned Semester examination.
- c) A candidate who has passed M. A. / M. Sc. examination held in the month of October/November shall not be allowed to register his name for the immediate next April examination under this scheme.
- 8.8 a) A candidate intending to re-appear for the M. A./M. Sc. examination of this University under these rules shall be governed by the rules and regulations relating to the course and syllabi which may be prescribed by the University from time to time. It is entirely the responsibility of the candidate to ascertain that the papers he chooses are a part of a syllabus in force and are actually taught for the said examination.
- b) A candidate is required to get his/her name registered as external student by submitting the prescribed registration form along with the necessary certificates and fees within the prescribed date under this scheme.
- 8.9 a) The result of the candidate appearing for the M. A. / M. Sc. examination under these rules will be declared only if he passes the whole examination in a class higher than the class he possesses. The marks obtained by the candidate whose class is not improved will be made known to him on request and on payment of the prescribed fees. So also, the statement of marks for his/her Semester examination will be issued on payment of prescribed fees.
- b) A candidate offering eight papers at a time will not be allowed to claim credit of any one part for any of the future chances and exemption of the papers is not allowed under this scheme.
- c) The answer books of the candidates appearing under this scheme can be verified and revalued as per the University rules.
- 8.10 A candidate re-appearing for M. A. / M. Sc. examination under these rules and obtaining B+ class shall not be eligible to appear again for the same examination in the same subject or subjects for securing a class higher than the B+.
- 8.11 A candidate passing any of the Post-graduate examinations mentioned above under these rules shall not be eligible to receive any prizes, scholarships, etc. instituted by the University and he/she shall also not be entitled to a merit certificate from the University.
- 8.12 If a candidate is unable to get a higher class under this scheme, his/her previous performance in the corresponding examination shall hold good.
- 8.13 A candidate who improves his class under this scheme shall have to surrender his 'Pass Class Degree Certificate' to the Shivaji University. In the absence of this the Degree under the 'Improvement of Class Scheme' will not be conferred on him.

R. M. Sc. 9 - Standard of Passing

The candidate securing minimum of 40% marks in each head of passing shall be declared as successful candidate and the grade/class shall be as follows :-

The percentage of marks	Class
i) 40-49%	... Pass Class
ii) 50-54%	... Second Class

iii) 55-59%	...	B+ Second Class
iv) 60-69%	...	First Class
v) 70% and above	...	First Class with Distinction.

R. M. Sc. 10

Pattern of Question Paper

The question paper of (80-100 marks) should cover the entire syllabus and should consist of objective type, essay type, long/short answer type questions. There shall be total seven questions of 100 or 80 marks for three hours. The student has to attempt five questions inclusive of objective questions. Each question may have subquestions. The combinations should inculcate the habit of indepth studies among students. The question paper may be divided into two parts. The syllabus may also be divided broadly into four or five parts. The examinee should be asked to answer at least one question from each of these parts. Therefore, there may be internal choice for questions in each part.

Objective type Questions :

The weightage of 20 per cent marks should be given to objective type questions. These 20 marks are to be allotted at the rate of one mark per objective question or one mark for two objective questions. For objective type question paper, question paper and answer sheets should be one and the same.

Essay type Questions :

There should be essay type questions of 50 to 60 percent. These questions may be of 8 to 20 marks each. The length of the answer to essay type questions will be proportionate to the number of marks allotted.

Short answer type Questions :

There should be short answer type questions of 30 to 20 per cent and each question may be of 2 to 6 marks.

Allocation of marks

At the top, the question paper should bear the title of the question paper and should have clear instructions to the candidates stating the duration, number of questions and compulsory questions to be attempted during the prescribed time period.

- Marks allotted to each questions may be indicated on the question paper. The length of answer of each question/sub-question should depend on the number of marks allotted to the question/sub-questions.
- The distribution of practical marks and duration will be decided by the respective P. G. Department since it related to the nature of the subject. The question paper as a whole be handed over in the beginning. Moreover the time for solving objective type questions should be fixed as 30 minutes and at the end of the stipulated time limit i.e. 30 minutes, the questions/answer sheets of the objective types should be withdrawn from the candidates first.

Size of the Answer books : The answer book of 30 pages be supplied for post-graduate students. Where examination is conducted in parts as Section-I and II, in such cases, the answer book of 16 pages per Section be supplied to the candidates for all examination centres. The supplimentry answer book should not be provided to the candidates.

Instructions to Paper-setters/Examiners :

- The paper setter be asked to provided keys to each question.
- He/She should also specify the broad points expected in answer of short questions as well as essay type questions and suggest the definite marks accordingly.
- The keys of objective questions be submitted along with the question paper but in a separate envelope.
- The chairman, Board of question paper setters/examiners in a subject shall be responsible to complete the examination work as per University rules.

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Shivaji University, Kolhapur
A Report of the Sub-committee under the Faculty of Science

The sub-committee under the chairmanship of Dr. C. J. Khilare the Dean, Faculty of Science was appointed to frame the policy and prepare the Draft Rules for Common Syllabus pattern & examination pattern for M.Sc Courses to be implemented from the Academic year 2013-14. The meeting of this committee was held and finally the committee prepared following policy and the draft rules with its recommendations to the respective university authorities, i.e. Faculty of Science and the Academic Council.

1. Implementation of semester system - It was decided that common syllabus & examination patterns be implemented for M.Sc courses as mentioned below -

M.Sc. Part – I (Sem-I & Sem-II) from Academic year 2013- 14

M.Sc. Part – II (Sem-III & Sem-IV) from Academic year 2014- 15

2. Pattern of examination system – It was decided to accept 80:20 pattern for all science subjects except mathematics and 90:30 pattern for mathematics for semester examinations.

3. Scheme of internal assessment - The committee took note of the UGC guidelines and recommended to have continuous internal assessment for M.Sc. Programme. Internal Examination will be compulsory for all students. If a student fails/remains absent in internal Examination then he / she will have to clear the internal Examination in three subsequent attempt/s.

The following scheme for internal assessment was prepared.

A) For all science subjects/specialisations except Mathematics: The Question paper in each semester (for each paper) shall be of 100 marks wherein 80 : 20 pattern is accepted.

For this purpose, following shall be the pattern for internal assessment scheme

M.Sc. Part – I & II - There shall be one objective type test (with following options viz. Fill in the blanks/Match the following/MCQ type questions/ True or False/Answer in one sentence) of 20 marks each for First, second, third and fourth semester.

This scheme of internal assessment shall be applicable to Home Science subject/specialisation except the practical related papers.

B) For the subject/specialisation Mathematics: The Question paper in each semester (for each paper) shall be of 120 marks wherein 90 : 30 pattern is accepted.

For this purpose, following shall be the pattern for internal assessment scheme

M.Sc. Part – I & II - There shall be one objective type test (with following options viz. Fill in the blanks/Match the following/MCQ type questions/ True or False/Answer in one sentence) of 30 marks each for First, second, third and fourth semester.

(The 90:30 Pattern shall also be applicable to Distance education students, wherever applicable. However there shall be Home assignment of 30 marks for each paper of all semesters for internal assessment.)

C) For the subject/specialization Home Science the scheme shall be as per Social Science Faculty.

4. Duration of semester examination for each paper - The duration of semester examination for each paper of 80/90 marks shall be of three hours.

5. Equivalence of papers and chances for the students in 100/120 marks for theory paper - Two additional chances shall be given for the repeater students of the 100/120 marks theory paper. After this, the concerned students will have to appear for examination as per the equivalent paper given under semester system.

6. Standard of passing- The Standard of passing shall be 40% where the student shall have to score 32 marks out of 80 and 8 Marks out of 20 in each paper for all science subjects except mathematics and the student shall have to score 36 marks out of 90 and 12 Marks out of 30 in respect of mathematics. There shall be a separate head of passing for Theory, Practical and Internal Examination. However ATKIT rules shall be followed in respect of Theory and practical only.

7. Result - The result of each semester shall be declared as Pass or Fail.

8. Choice based credit system - The choice based credit system (CBCS) is applicable to M.Sc. Course as prescribed by University authority.

10. Revised Ordinance and Rules - The committee has revised the ordinance and rules as common syllabus and examination policy. Draft ordinance and rules are enclosed herewith for the approval of the respective university authorities. These revised ordinance and rules will be gradually implemented with effect from the academic year 2013 -14 for M.Sc. programme.

Dr. C.J.Khilare.

Chairman

Dean, Faculty of Science.