### M. Sc. (Ag.) ORDINANCE

**Preamble:** As per suggestions from the UGC, ICAR and the Academic Council, Visva-Bharati (vide Ref. No. Aca. S-19.2/174/2009-10 dt. 08.05.09 on introduction of Semester System including the Choice Based Credit System wherever possible) at the Post-graduate Level the New Ordinance has been set forth.

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**Notes:** Adhyaksha- Principal/ Dean; Bhavana- Institute of Agriculture; HOD- Head of the Department; BOS- Board of Studies; PPW- Plan of Post-graduate Work; ORW- Outline of Research Work; GP- Grade Point; OGPA- Overall Grade Point Average.

#### 1. General:

- a. There shall be subjects of studies for the Master of Science in Agriculture *i.e.* a) M. Sc. (Ag.) in Agronomy, b) M. Sc. (Ag.) in Soil Science and Agril. Chemistry, c) M. Sc. (Ag.) in Agril. Extension, d) M. Sc. (Ag.) in Plant Protection and e) M. Sc. (Ag.) in Horticulture at Palli Siksha Bhavana (Institute of Agriculture), Visva-Bharati, Sriniketan. Introduction of any new subject(s) of studies in PG Level at the Institute will be made in due course without modification of the ordinance Part- I: (Rules and regulations).
- b. The Post-graduate Degree courses of two-year duration comprising four semesters will run under "Course and Credit System".
- c. A candidate seeking admission to M. Sc. (Ag.) Programme is required to produce a certificate that he / she has passed the four-year B. Sc. (Ag.) Honours degree examination of Visva-Bharati or equivalent examination recognized by the ICAR and/or the UGC. The other eligibility criteria like percent of marks, OGPA etc. will be decided as per University guidelines, which may vary from time to time. However, for the ICAR nominated candidates, the eligibility criteria adopted by the ICAR will be followed as such.
- d. The candidate admitted for admission to the M.Sc. (Ag.) Programme in various disciplines shall abide by the regulations regarding the course curricula and the academic standards as prescribed by the University from time to time.
- e. The medium of instruction and examination shall be in English.

**Department and major field of specialization**: Palli Siksha Bhavana (Institute of Agriculture), Visva-Bharati offers Master's degree in the following programmes with major studies in:

M. Sc. (Ag.) in	Major subject(s)
Agronomy	Agronomy
Soil Science & Agril. Chemistry	Soil Science and Agril. Chemistry
Plant Protection	Agril. Entomology / Plant Pathology
Agricultural Extension	Agricultural Extension
Horticulture	Fruit Science / Vegetable Science

# 2. Standing Committee (PG Programme):

- a. A Standing Committee (PG Programme) shall be formed for examining the issues related to M. Sc. (Ag.) Programme of the Institute.
- b. The composition of the Standing Committee (PG Programme) shall be
  - i. Chairman: A Senior Professor appointed by the Principal of the Institute.
  - ii. Head(s) of the Department(s).
  - a) Vice-Principal: may act as liaison to the Principal and other members.
  - b) PG Coordinator of each M. Sc. (Ag.) Programme (*i.e.* Agronomy, Soil Science & Agricultural Chemistry, Plant protection, Agricultural Extension and Horticulture).
- c. Function of Standing Committee (PG Programme) may include:
  - i. Looking after the general work of M. Sc. (Ag.) Programme of the Bhavana.
  - ii. Reviewing academic standards including syllabus, examinations etc.
  - iii. Looking after matters related to examinations, evaluation etc.

# 3. PG Coordinator:

- a. BOS / Departmental Committee of the concerned Department offering M. Sc. (Ag.) Programme(s), may select a faculty member as a PG Coordinator for each course.
- b. The PG Coordinator(s) will look after smooth running of M. Sc. (Ag.) Programme of the concerned Department (s).

### 4. Academic Session and Semester Calendar:

- a. The duration of M. Sc. (Ag.) Programme(s) shall be of two academic years consisting of four semesters. The maximum allowable semesters for completion of any M. Sc. (Ag.) Programme is eight (8).
- b. The academic year of M. Sc. (Ag.) Programme shall be in terms of two semesters in a year. The odd semesters (*i.e.* First and Third) shall run in the first half of an academic year and even semesters (*i.e.* Second and Fourth) shall run in the second half of the same academic year. The broad schedule of two semesters is

Odd semesters (I & III) : July to December Even semesters (II & IV) : January to June

- c. The commencement of each semester in a particular academic year shall be decided by the Standing Committee (PG Programme) from time to time.
- d. There shall be no semester break but summer and autumn recesses and enlisted holidays will be followed as prescribed by the University.

#### 5. Courses:

- a. Code: Each course shall bear a distinguishing code (three letters and three digits) that identifies the discipline from which it is being offered.
- b. Code numbers:
  - i. All Master's level courses shall ordinarily belong to 500-series.
  - ii. Credit seminar shall be designated by Code No. 591
  - iii. Master's research (Thesis) shall be designated by Code No. 599.
- c. There shall be two types of courses, "**credit courses**" and "**non-credit courses**". Grade points obtained only in 'credit courses' will be considered for the classification of results. Performance in non-credit courses including Thesis will be as "Satisfactory / Non-satisfactory"
- d. There shall be four types of credit courses, "only theory courses", "only practical courses", "composite courses" and "credit seminar". The composite courses will consist of both theory and practical components.
- e. The distribution of marks in various courses of M. Sc. (Ag.) shall be:

i.	For 'Only theory courses'		
	Semester Terminal Examination	:	80
	Internal Assessment	:	20
	Total	:	100
ii.	For 'Only practical courses'		
	Semester Terminal Practical Examination	:	80
	Internal Assessment	:	20
	Total	:	100
iii.	For 'Composite courses' i.e. Theory & Practical (70:30)		
	Semester Terminal Theory Examination	:	50
	Internal Assessment (Theory)	:	20
	Semester Terminal Practical Examination	:	30
	Total	:	100
iv.	For 'Credit seminar'	•	100

### f. Internal assessment:

Internal assessment will be done in the form of **Continuous Evaluation** having at least two tests of different forms (tutorial, class test as objective, essay, viva-voce, quiz type, assignment / term paper, class seminar, group discussion, interaction, small projects etc.) per course. The tests should be spread throughout the Semester but 15 days before the commencement of Terminal Examination. At least 50 % weightage should be on written form of tests. In case of the student who fails to appear in the Terminal examination of a given semester but appears in Internal Assessment (continuous evaluation) of the courses, marks of internal assessment of the student will remain valid during his/her next chances but if a student remains absent or scores low or nil marks even in internal assessment, he/she will not be permitted to reappear for internal assessment after the semester is over.

Within 15 days of conducting the Tests, the Course Leaders will submit marks in the prescribed form in duplicate to the HOD who will sign on both the copies, keep one copy for office use and forward the other copy to the Deputy Registrar (Examinations). The marks of the Internal Assessment should be displayed in the concerned Department for at least seven days before forwarding the same to the Deputy Registrar (Examination). Once the marks of

the Internal Assessment are submitted to the Deputy Registrar (Examination) by the Department, the marks cannot be corrected or changed.

g. Marks scored in Internal Assessment are to be mentioned separately in the Mark sheet.

#### h. Courses:

- i) **Major courses**: The discipline in which the student shall pursue major study in his/her Master's Programme.
- ii) **Minor courses**: The discipline closely related to a student's major discipline. Split minors will be permissible.
- iii) **Supporting courses**: It could be any discipline excluding major considered relevant for student's research work or necessary for building his/her overall competence.
- iv) **Non-credit compulsory courses**: Courses are of general nature and are compulsory for M. Sc. (Ag.) Programme. Students' require to complete six courses as stated below:

CODE	COURSE TITLE	CREDITS
PGS 501	Library and Information Services	0+1
PGS 502	Technical Writing and Communication Skills	0+1
PGS 503	Intellectual Property and its management in	1+0
(e-Course)	Agriculture	
PGS 504	Basic Concepts in Laboratory Techniques	0+1
PGS 505	Agricultural Research, Research Ethics and Rural	1+0
(e-Course)	Development Programmes	
PGS 506	Disaster Management	1+0
(e-Course)	Disaster Management	

i. One credit hour indicates one hour lecture or two hours practical work per week for the entire semester.

# 6. Credit Requirements:

- a. A student is required to complete a minimum of 60 credits of which 40 credits shall be of course work and 20 credits shall be allocated for the research (Thesis) work. In addition six (6) non-credit compulsory courses as mentioned in 5 h iv are required to be completed.
- b. A student's programme of studies shall not be more than 25 credits in any semester.
- c. The total course and credit requirements for obtaining Master's Degree shall be:

Particulars	Minimum Credits
i) Course Work	
Major courses	25
Minor courses	09
Supporting courses	05
Non-credit Compulsory courses	06
Seminar	01
Total	46
ii) Comprehensive Examination	Non-credit
iii) Thesis	20

d. In addition to above a candidate may be permitted to opt for required number of credits from optional major courses and minor or supporting courses as suggested the Chairman of Advisory Committee.

### 7. Course Regulation:

- a. The courses to be offered in a particular academic year or semester shall be decided by the BOS /HOD based on available facilities and faculty strength.
- b. Allotment of courses, designating faculties as Course Leader and Course Associates shall be decided by the BOS /HOD well in advance of the commencement of a semester. The Course Leader will be in rotation considering the workload of each teacher associated with a particular course.
- c. Towards introduction of a new course or revision of course, University rules will be followed.
- d. There shall be no rigid rule or guideline regarding the minimum number of students required for offering a course. The course will be offered even for a single student.
- e. There shall be the provision of inviting the Guest Lecturers to deliver lecture on some highly specialized topics if required.
- 8. Course Registration: The students will have to submit their choices for course(s) for a particular Semester in writing (in prescribed format) to the HOD through the Major Advisor and PG Coordinator of concerned Department at least one week before the commencement of classes of the said Semester. Students intending to change the Course opted for once will be allowed to do so in the same process within 15 days after the initial Registration.

# 9. Advisory Committee:

- a. The Advisory Committee consisting of at least three members from both major and minor subjects shall be constituted for each student.
- b. Every student shall have a Major Advisor who shall be from the Major Field to which the student has been admitted. The Major Advisor shall function as the Chairman of the Advisory Committee.
- c. The nomination for Chairman of the Advisory Committees of all newly admitted students shall be completed within four weeks of the first Semester by the HOD.
- d. The Advisory Committee of the student should meet frequently to monitor the progress of the student.
- e. A proposal for the formation of the students' Advisory Committee along with the Plan of Post-graduate Work (PPW) shall be forwarded in the prescribed proforma to the HOD for approval within six weeks from the date of admission of the student.
- f. The Major Advisor will select other members of the student's Advisory Committee (with the knowledge and consent of the members concerned). Co-advisor shall be from the major field of study / specialization of the concerned Department; Member(s) one each from the Department(s) offering Minor Courses; and Member(s), from any discipline, if Major Advisor feels it necessary for the student's Thesis work.
- g. Co-advisor will act as the Major Advisor of the concerned student if the original Chairman is not available due to one or more reasons (death, leaving the university, prolonged absence, ill health etc.)
- h. Replacement of members of the Advisory Committee: The Chairman of the concerned student after consultation with the HOD can replace any member of the Advisory Committee due to one or more reasons as stated in Para 9. g above.
- i. In case of newly admitted students, the HOD will discharge the functions of the Chairman of the Advisory Committee till the Chairman is selected as per procedure prescribed above.
- j. A faculty member having a minimum of one year teaching/ research experience or Doctoral degree can be the Chairman of the Advisory Committee.

## 10. Plan of Post-graduate Work (PPW):

- a. The programme of studies indicating the PPW of each student in prescribed format shall be finalized by his / her Advisory Committee to provide considerable latitude in the choice of courses, taking into account the requirement for research in that particular field.
- b. The broad research topic of every student will be mentioned at the time of preparation of PPW. The Advisory Committee should finalize PPW within six weeks of the first Semester.

### 11. The Outline of Research Work (ORW):

- a. The ORW in prescribed format will have to be approved by the Advisory Committee and forwarded by the Chairman of the Committee to the HOD through the PG Coordinator.
- b. The ORW will be presented in the Departmental Seminar for discussion and suggestions.

#### 12. Attendance:

a. Candidates should have an average attendance of 75% in every Semester to be eligible to appear for the Terminal Examination of a given Semester. Candidates having 60% and more but less than 75% attendance may be allowed to appear in the Semester Examination after paying the requisite fine as decided by the University from time to time.

## 13. Paper setting and Evaluation:

- a. In the Semester Terminal examination question papers for fifty percent of the major courses in each semester shall be set externally but evaluated internally. But for only practical courses evaluation will jointly be made by the external and internal(s) examiners. For minor course(s) concerned BOS will make appropriate arrangement.
- b. In case any external examiner fails to arrive in the practical examination, the concerned HOD may exercise the option to appoint himself or any other teacher of the University or an expert available in the vicinity other than internal examiner(s).
- c. For all the non-credit compulsory courses the paper setting as well as evaluation will be made internally.

### 14. Examination and Regulation:

- a. Semester Terminal examinations for odd Semesters shall ordinarily be held in December while for even Semesters be held in the month of June in every academic year. Standing Committee (PG Programme) will fix the period of every Semester Terminal examination preferably at the beginning of the semester. It is also expected that the Semesters of all M. Sc. (Ag.) Programme in the Institute will commence at the same time.
- b. The candidates shall be required to pass all the courses mentioned in his/her PPW. He/she also needs to complete required Thesis credit hours within the stipulated period i.e. not more than eight (8) Semesters.
- c. Before appearing in the end semester theory and/or practical examinations (both theory and practical examinations for composite courses) the student must pass all the backlog paper(s).
- d. There shall be the provision for **Review System** and the evaluation will be done internally. The BOS will recommend the names of three members (HOD and other two members excluding the first examiner) for Review Examination. In case the HOD has evaluated the course, Adhyksha will act as a member in the Board replacing the HOD.

e. The duration for semester Terminal examination of different courses shall be as follows:

i. For theory courses : 3 hours

- ii. For practical courses : 3 hours or more
- f. The candidates appearing in each Semester Terminal examination of M.Sc. (Ag.) Programme shall: (i) produce a certificate from the HOD that he/she has attended at least 75 % of the in-campus classes. Relaxation, if any, will be guided by the University Ordinance; (ii) produce a certificate from HOD that his/her conduct has been good and that he/she is fit and proper candidate for the examination.
- g. A student found adopting unfair means at the examination will be treated heavily and stringent action will be taken as per University rules.
- h. No 'make up' examination shall be permitted in lieu of the missed Terminal theory and/or practical examination.
- i. If a student fails to appear in any final theory and /or practical examination or does not secure pass marks in any course, he/she requires fresh registration for the course during the next available Semester with that course but the candidate has to complete the degree programme including all the repeat courses within eight (8) Semesters.
- j. If a candidate is compelled to drop a Semester on medical ground he/she will be allowed to repeat in the next available Semester. However, he/she has to complete all the courses within eight (8) Semesters.
- k. If a student has to drop a course on medical ground but having less than 75 % attendance the student shall be given 'I' grade, i.e. "incomplete", and will be allowed to repeat the course in the next available Semester. The 'I' grade shall be entered in the transcript also. In all other cases dropping of course will be declared 'Fail' in the course.

## 15. Fees and other Charges:

Student admitted to PG Programme shall pay examination fees (as per University guidelines) for each Semester Terminal Examination at the time of filling up of form for the purpose.

### 16. Moderation:

- a. A Moderation Committee consists of at least three members may be appointed as per University rule but excluding an external moderator, shall do moderation of question papers for the Terminal Theory Examinations.
- b. Separate Moderation Committee shall be formed for each M. Sc. (Ag.) Programme and that may act under the Chairmanship of HOD.

## 17. Scrutiny:

- a. There shall be a Scrutiny Committee consisting of HOD and two other teachers of the Department to scrutinize the results of internal assessment, Terminal as well as Review examinations before finalization. The BOS of the concerned Department will approve the Committee.
- b. Each PG Programme will have separate Scrutiny Committee that will act independently.

# 18. Credit Seminar:

- a. Each student shall be required to deliver a Seminar during the course of studies on a topic relevant to the concerned discipline.
- b. Code No. 591 shall be assigned for Credit Seminar.

- c. PG Coordinator shall act as Seminar Leader. Otherwise, HOD of concerned Department himself or may select any faculty member as Seminar Leader.
- d. Departmental students' Credit Seminar will be an open Seminar.
- e. The Seminar Leader in consultation with the HOD shall fix the schedule for the Seminars.
- f. The Seminar topic shall not be within the purview of the student's Thesis instead should cover a subject of topical interest.
- g. Each student will prepare and distribute copies of 'Abstract' to the persons attending the Seminar. The Abstract (within 300 words) should precisely state the main theme of the talk.
- h. **Seminar write-up:** The student shall prepare a full account (not normally exceeding 3000 words) on the topic covered in the seminar and submit to the Seminar Leader on or before the date of presentation of the Seminar.
- Seminar evaluation: Seminar Leader and the members of the Advisory Committee will
  evaluate the performance of the students, taking into account all the relevant factors like,
  Introduction, Review of Literature, presentation of subject, capacity to draw general
  conclusion from literature and ability to answer questions raised and will award marks to the
  student.

## 19. Comprehensive:

- a. Every student has to appear at Comprehensive Examination to be conducted by the Advisory Committee.
- b. A candidate should be allowed for comprehensive examination after completion of 75% course work separately in major and minor subject(s) but before the submission of Thesis.
- c. Written comprehensive examination consists of one paper in major courses and one paper in minor courses each of three hours duration having 100 marks.
- d. Paper setting and evaluation will be done internally.
- e. Qualifying marks will be 50% and grading will be Satisfactory/Unsatisfactory. If the performance of a student becomes unsatisfactory he/she has to appear again to a maximum of three more attempts within eight (8) Semesters. Repeat comprehensive test(s) shall be conducted at least with a gap of 30 days of the previous test.
- f. The results of comprehensive examination shall be forwarded by the HOD to the Examination Section for record. The grade obtained will not be reflected in the Final transcript.

## 20. Thesis:

- a. The thesis for the Master's Degree shall indicate student's potentialities for conducting research.
- b. The topic of Thesis will be within the Major field of specialization under the Code No. 599.
- c. The subject of the Thesis should be approved by the student's Advisory Committee and the HOD at the time of formation of the student's PPW and then ORW.
- d. The Thesis shall be based on the results of the student's own work. A certificate to this effect from the Major Advisor shall accompany the Thesis.
- e. The Thesis shall preferably follow the following: chapters on Introduction, Review of literature, Materials and Methods, Results, Discussion, Conclusion and Summary, Future scope of research and References.
- f. **Thesis Seminar**: A student shall deliver a seminar on the research problem before the submission of Thesis and all the faculty members may be invited to participate in the discussion and make constructive suggestions on the Thesis.

- g. **Thesis submission:** After fulfilling the prescribed courses, residential requirements and minimum semester requirements (4 Semesters) and successfully completing the research work to the level of full satisfaction, a student shall submit the Thesis.
- h. The Chairman of the student's Advisory Committee shall ensure that all members of the Advisory Committee are duly consulted before submission of the manuscript of the Thesis.
- i. Each student shall submit three copies of the Thesis within the date notified by concerned HOD, one copy to deposit to the Institute Library, another to the Departmental Library, third to the Major Advisor.
- j. The Thesis shall accompany a certificate to the effect that the work has not been submitted in part or full for any other degree or diploma.
- k. The candidate shall submit the Thesis to the concerned HOD along with "no dues certificate" and other formalities.
- 1. **Thesis Viva-Voce:** An External Examiner shall examine the Thesis. An arrangement for *viva voce* shall be made by the concerned Department by an Examination Committee consisted of External Examiner, HOD and the members of the Advisory Committee of the candidate. The student shall be awarded "Satisfactory" (*i.e.* pass) or "non-satisfactory" (*i.e.* fail) in Thesis Viva-Voce.
- m. The grade obtained (*i.e.* Satisfactory / Non-satisfactory) shall be shown in the final transcript but shall not be included for the purpose of calculation of OGPA.
- n. In case, the External Examiner suggests modification / re-submission, the student may be permitted to defend his/her thesis in final *viva-voce*, and as such of modifications as are finally agreed upon may be carried out after the *viva-voce*.
- o. Re-examination: If a student fails (*i.e.* non-satisfactory) in Thesis he/she may be permitted to continue the work and/or rewrite the Thesis as per comments of the Examination Committee and resubmit it to the HOD with the recommendation of the Chairman of the Advisory Committee for permission to appear a second time. Re-examination shall not take place earlier than three months after the final semester examination but within eight (8) Semesters and as far as possible the Committee as previously constituted, will conduct it. No further re-examination is permissible and a student failing to secure 'satisfactory' grade a second time shall not qualify for the degree.

## 21. Rights on Thesis:

- a. The Thesis submitted by a student shall become the property of the Institute.
- b. Whenever, an extract from the Thesis is published, there should be an acknowledgement in the form of footnote stating that the results are from the Thesis submitted for the degree from the Institute of Agriculture, Visva-Bharati.
- c. All patents, designs and inventions derived from the Thesis research work shall belong to the Institute which may, at its discretion, allow or direct any benefit thereon to be retained by or given to the author of the Thesis.
- d. Copies of the Thesis submitted to the Institute Library or in the Departmental Library shall not be issued on loan for a period of two years from the date of submission.
- e. In case where student does not take care to publish the Thesis work even after three years of completion of the degree, there stands no objection of the student to publish papers/ articles by the Chairman, Advisory Committee of the concerned student.

# 22. Grading System:

- a. There will be a ten point grading system of evaluation with grade point (GP) equals to percent marks obtained divided by 10.
- b. The conversion formula will be: Percent of marks =  $10 \times OGPA$
- c. Minimum requirement: Grade point (GP) of 5.00 for passing a course and an Overall Grade Point Average (OGPA) of 5.00 for completing the M. Sc (Ag.) Programme. A candidate failing to secure minimum OGPA (5.00) will not be considered for the award of degree and shall be declared as 'failed'. If a candidate fails to secure 40 % marks in Practical examination of composite course he /she will be declared as 'fail' in the concerned course.
- d. A candidate failing to obtain minimum GP (5.00) in not more than three courses, in a Semester, will be allowed to repeat the failed course(s) afresh not more than two times in next available Semesters. A candidate failing in more than three courses in a Semester has to repeat the Semester. In any circumstance the student is to complete the degree Programme including all the repeat courses within the maximum of 08 Semesters.
- e. Symbols to be used in the Semester Transcript:

I = Incomplete

S = Satisfactory

NS = Non-Satisfactory

R = Repeat

Specialization of the candidate needs to be mentioned in the Semester Marksheet/Transcript.

#### 23. Residential Norms:

- a) Residential requirement shall mean presence of the student continuously in working days/hours in the Institute/University (class room for classes, laboratories for practical and/or research, farm for field work, library for collecting information or placed somewhere on duties etc.).
- b) The minimum residential requirement shall be of four Semesters from the date of admission to the University. However, with the prior written permission of the HOD / Adhyaksha, PSB through the Chairman a student may be allowed to discontinue after completion of two consecutive Semesters and renew studies even after two Semesters. Completion of semester shall mean clearing of all examinations as scheduled. He /she has to pay annual fees for the University for retention of the studentship.
- c) A student may be allowed for discontinuance only by one break and he/she shall have to complete all courses including submission of Thesis within eight semesters from the date of admission to the University, failing which his/her studentship shall be treated as cancelled.
- d) A student appealing discontinuance for one or two semester(s) has to vacate hostel accommodation.

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