Regulations

for Courses affiliated to the

Kerala University of Health Sciences

Thrissur 680596

M.Sc. VRIKSHAYURVEDA

Course Code:

(2023-24 Academic year onwards)

2023

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1. GENERAL REGULATIONS

Names of the course which come under these Regulations include:

1. M.Sc. Vrikshayurveda

1.1 Eligibility for Admission

- a. A candidate must possess a BAMS degree from a recognized University.
- b. A candidate should qualify for an Entrance Examination as per the existing Rules of the Kerala University of Health Sciences

1.2 Mode of selection to the course

The selection of students for the Ayurveda M.Sc. course shall be made based strictly on merit as decided by the Kerala University of Health Sciences from time to time.

1.3 Number of seats in one unit of admission:

The number of seats in one unit of admission is 10.

1.4 Reservation of seats

As stipulated by Government of India/Government of Kerala from time to time.

1.5 Minimum Academic Requirements for conduct of the course

Only a Department, defined as an independent academic entity of a teaching Institution, having the minimum facilities as per Norms of the KUHS shall be permitted to commence a training programme to qualify for the award of a M.Sc. Minimum requirements for conducting a M.Sc. Course, bed strength in the clinical Department, facilities in out-patient Departments, laboratory facilities, equipment, prescribed strength of faculty, and number of students to be admitted are in accordance with provisions given in the Regulations of KUHS in force time to time.

1.6 Registration of students to university

The KUHS shall admit students to Ayurveda M.Sc. courses to the institutions affiliated/ recognized by KUHS for that particular course.

- a) Every College/ Institution shall upload the basic details of the admitted students on or before 12.00 midnight on the cut-off date notified by KUHS in accordance with the decisions from time to time. The Principal/Head of the Institution shall be responsible for the contents in the statements.
- b) A candidate on admission to the Ayurveda M.Sc. course shall apply to the University for Registration by making a formal application in the prescribed format along with:
 - I. Original degree certificate and marklists of qualifying examination.
- II. Original Registration certificate from Kerala State Medical Council, if applicable
- III. Allotment letter from the competent authority.
- IV. Eligibility and migration certificate wherever needed.
- V. Original SSLC/equivalent certificate to prove age and date of birth.
- VI. Transfer certificates from the previous institution.
- VII. The fees prescribed for the course.
- VIII. For students under Socially and Educationally Backward Community (SEBC), valid non-creamy layer certificate from competent authority issued before the date of admission, along with caste certificate (wherever applicable).
- IX. Caste Certificate issued by the competent authority for students under the SC & ST Category (wherever applicable).
- X. Any other documents as prescribed by KUHS from time to time.

1.7 Fees:

As stipulated by the KUHS from time to time.

1.8 Medium of instruction

Medium of instruction and examinations shall be English.

1.9 Attendance and course period

- The period of training for obtaining M.Sc. courses shall be 2 completed academic Years [(365 x 2 days or 24 months)] including the period of examination.
- On completion of each year (365 days) each resident shall be promoted to the next year by the Head of Institution on recommendation of the Head of Department.
- The M.Sc. students are eligible for 20 days casual leave in an academic year and it cannot be carried over to the next year. Any leave taken above this will have to be compensated by extension of course in the corresponding year.
- For appearing for University examination candidate should secure 80% attendance in each academic year. The provisional/ permanent diploma certificate shall be issued only after obtaining the course completion certificate from Head of concerned institution.
- <u>Special Situation</u> The students who had extension of course due to more than 20 days leave in the first and second year the attendance of the final year will be calculated on the date of uploading in such a way that, they should have 80% attendance of the number of days completed by the students in final year without extension. For example if a student without any course extension, in the final year M.Sc. completes 320 days in the final year on the date of uploading of attendance, he should have 256(80%) days of attendance to write the examination. A student having extension also shall have a minimum of 256 days in the third year to write the examination. They will have to complete the course of 365 days even after examination excluding 20 days of casual leave. This is to ensure that a student undergo three years course completely without any break.

1.10 Condonation of shortage of Attendance

No Condonation of shortage of attendance is granted for M.Sc. courses.

1.11 Leave, Holidays etc.

As prescribed by the KUHS from time to time. See clause 1.9

1.12 Monitoring Learning Progress:

It is essential to monitor the learning progress of each candidate through continuous appraisal and regular assessment. It not only helps the teachers to evaluate the students, but also gives an opportunity for the students to evaluate themselves. The monitoring shall be done by the department based on the participation of students

in various teaching / learning activities. It may be structured and assessment be

done using checklists that assess various aspects.

The learning outcome to be assessed should include:

- (i) Personal Attitudes,
- (ii) Acquisition of Knowledge,
- (iii) Practical and laboratory skills and
- (iv) Teaching skills.
- i) Personal Attitudes. The essential items are:
 - Caring
 - Initiative
 - Organizational ability
 - Potential to cope with stressful situations and undertake responsibility
 - Trustworthiness and reliability
 - Understanding and communicating intelligibly with patients and others
 - Behaving in a manner which establishes professional relationships with patients and colleagues.
 - Ability to work in team
 - A critical enquiring approach to the acquisition of knowledge

The methods used mainly consist of observation. It is appreciated that these items Require a degree of subjective assessment by the guide, supervisors and peers.

ii) Acquisition of Knowledge:

The methods used comprise of 'Log Book' which records participation in various teaching / learning activities by the students. The number of activities and the presentations are made are to be recorded. The log book should periodically be evaluated by the supervisors.

Journal Review Meeting (Journal Club):

The assessment is made by the faculty members and peers attending the meeting using a checklist.

Seminars/Symposia: The topics should be assigned to the student well in advance to facilitate in depth study. The ability to do literature search, in depth study,

Presentation skills and use of audio-visual aids are to be assessed using a checklist **Clinico-pathological conferences (Where applicable)**: This should be a multidisciplinary case study of an interesting case to train the candidate to solve diagnostic and therapeutic problems by using an analytical approach. The presenter(s) are to be assessed using a check list similar to that used for seminar.

Medical Audit (Where applicable):Periodic morbidity and mortality meeting be held. Attendance and participation in these must be insisted upon.

iii) Practical and Laboratory skills

Day to Day work: Skills in outpatient and ward work should be assessed periodically. The assessment should include the candidates' sincerity and punctuality, analytical ability and communication skills

Clinical meetings: Candidates should periodically present cases to his peers and faculty members. This should be assessed using a check list

Procedural skills: The candidate should be given graded responsibility to enable learning by apprenticeship. The performance is assessed by the faculty by direct observation. Particulars are recorded by the student in the logbook.

iv) Teaching skills:

Candidates should be encouraged to teach undergraduate medical students and paramedical students, if any. This performance should be based on assessment by the faculty members of the department.

v) Periodic tests:

The concerned departments may conduct two tests, one at the end of first year and the other in the third quarter of the second year. The tests may include written papers, practicals/clinicals and viva voce.

Log Book- Every candidate shall maintain a log book to record his/her participation in the training programmes conducted by the department such as journal reviews, seminars,etc. Special mention may be made of the presentations by the candidate as well as details of clinical or laboratory procedures, if any conducted by the candidate.

vi) Records:

Records, log books and marks obtained in tests should be made available to the University as and when required.

1.13 Transfer during course

Transfer of students undergoing any Ayurveda M.Sc. course shall not be permitted under any circumstances

1.14 Duration permitted for completion of the course

The duration of the course is two years.

The course shall be successfully completed within double the duration of the stipulated period of the course (i.e. four years).

1.15 Internal assessment [Conducted by College]

Not applicable.

1.16 Examinations

AS per KUHS Academic Regulations

a) Thesis/Dissertation/Project

The process of submission of synopsis, conduct of the research, submission and evaluation of thesis/dissertation/project shall be governed by the guidelines issued by the KUHS in this respect.

1.17 Criteria for pass

- The M.Sc. examination consists of theory and practical /clinical including viva and the candidate should pass both components simultaneously i.e. theory, practical/clinical including viva simultaneously. A candidate who has secured minimum of 50 percent marks for theory examination (40 percent separate minimum for each theory paper) and 50 percent separately for Clinical/ Practical including viva shall be declared to have passed the examination.
- If a candidate fails in a particular examination either in theory only or practical /clinical including viva or both together, he/she shall appear for both theory, practical /clinical including viva in the subsequent examination.

1.18 Grace Mark

No Grace mark is awarded for M.Sc.

1.19 Criteria for promotion to next year

If a student fails in the preliminary examination, he/she can continue the course but shall have to pass preliminary examination at least 90 days before appearing final year examination.

1.20 Carry over benefit

Not applicable.

1.21 Issuance of Mark List and Certificates

Consolidated marklist will be issued by the University on request and on remittance of the requisite fee. Provisional degree certificate will be issued after successful completion of the course and final degree certificate will be issued after convocation

1.22 Declaration of class

Below 50%	Failed
50% to below 65%	Passed with Second Class
65% to below 75%	Passed with First Class
75 %and above	First Class with Distinction

1.23 Declaration of rank

- a) First, Second and third rank holders in shall be declared by the KUHS.
- b) The total number of students attending the examination shall be specified in the rank certificate.
- c) Rank will not be granted for students clearing exams in supplementary examinations.
- d) Rank shall be granted to only those students successfully completing the course in the minimum duration of the course and passing the same in the regular examination of that year.

1.24 Attempt/ Chance

If a student registers for an examination and fails to attend the whole examination, that

Appearance will not be considered as an attempt/chance.

1.25 Partial Appearance in Examination

Partial appearance is not permitted.

1.26 Condonation of Break of Study

- A Candidate who discontinues the course is eligible for Condonation of Break of as given below:
- If a candidate is not appearing in the College for more than six months, he / she, on the recommendation of the Head of the Institution should get permission from the University for Condonation of Break of Study.
- 3. Break of study of genuine medical ground or similar genuine ground can be condoned on recommendation of Dean of Faculty of Ayurveda. The candidate may be permitted to re-join the same course in the same institution at the point where she/he left subject to the condition that the entire duration of the course starting from the date of original joining to the possible end of the course does not exceed double the duration of the course. The period of break of study thus condoned shall be excluded while calculating the maximum period prescribed for passing a course.

1.27 Internship

Not applicable.

1.28 Transcript

The official transcript shall be issued in the model format approved by the University or the requesting agency by the Head of the Institution where candidate studied. The University will endorse the same only if specifically requested.

1.29 Stipend

As per the norms of the KUHS made from time to time.

1.30 Eligibility for award of Degree

A candidate who passes examinations of the entire subjects of the course shall be eligible for the award of degree during the ensuing convocation. Degree is awarded by the Ayurveda faculty of the University. Note: Wherever these Course Regulations are silent on any particular aspect of this Course, the stipulations made in the Academic Regulations of KUHS shall apply mutatis mutandis

SYLLABUS

for Courses affiliated to the Kerala University of Health Sciences Thrissur 680596

M.Sc. VRIKSHAYURVEDA

Course Code:

(2023-2024 Academic year onwards)

2023

2. COURSE CONTENT

2.1 Title of course and description:

M.Sc. Vrikshayurveda

2.2 Objectives:

- The knowledge of plants and its diseases and their management in natural way will be helpful to reduce the use of chemical fertilizers and chemical pesticides.
- This will reduce the presence of chemical toxins in our food and help for a healthy Nation.
- They may get more job opportunities in herbal gardens and plantations and vegetable farms.

2.3 Medium of instruction:

The medium of instruction of the course is English

2.4 Course outline

a. The student shall have to undergo a study for a period of two completed years including the examination period.

b. The students shall have to attend at least 80% in theory and practical of total lectures and practicals and seminars to become eligible for appearing in the examination, every year as prescribed by KUHS.

c. The students shall have to perform duties as may be assigned to them during the course of study.

d. The students shall have to attend special lectures, demonstrations, seminars, Study tours and such other activities as per curriculum prescribed programme.

e. The students shall participate in all the teaching and training programmes and other activities of the Department.

f. The institution shall conduct at least one Seminar in a week and every student should participate in that Seminar. Every student shall make presentation on identified subject and at least ten seminars should be presented to make eligible to appear in the final year examination.

2.5 Duration

2 years.

2.6 Subjects

Given under curriculum clause no.2.10

The concept of health care counseling shall be incorporated in all relevant areas.

- 2.7 Total number of hours Given under curriculum Clause No 2.10
- 2.8 Branches if any with definition Not applicable

2.9 Teaching learning methods

Lecture classes, complation works, seminars, paper presentations, group discussions, assignments, clinical / lab training etc.

2.10 Content of each subject in each year

(The changes proposed by the Apex Council of Ayurveda shall be incorporated in this syllabus as and when the same is notified by the Apex Council)

Syllabus

First Year

Theory (Two Papers) – Maximum Marks - 100 Each Practical (One) - Maximum Marks - 100

PAPER – I

Vrikshayurveda

Theory – Marks - 100

- 1. Meaning and scope of Vrikshayurveda
- 2. Emergence of Vrikshayurveda as a science
- 3. Ancient authorities of Vrikshayurveda
- 4. History of Vrikshayurveda
- 5. External morphology
- 6. Internal morphology
- 7. Ecology of three regions, Jangala, Anupa and Sadharana
- 8. Application of Vrikshayurveda
- 9. Method of propagating seeds
- 10. Method of plantation
- 11. Soil nourishment
- 12. Diseases of Plants
- 13. Treatment of plant diseases
- 14. Procedure for a garden

REFERENCE

Lallanji Gopal, Sundeep Prakasan New DelhiVrikshayurveda in Ancient India Girija, Prasanna Manjudar, Published by University of Culcutta Vanaspati **PAPER II**

Plant Physiology and Microbiology

- 1. Principles of plant physiology
- 2. Mechanism of water uptake by roots and transportation
- 3. Physiological and metabolic functions of mineral elements
- 4. Physiology of water stress
- 5. Plant developmental biology
- 6. Plant biodiversity, concept of evolution of plants
- 7. Hormonal regulation of plant growth and development
- 8. Physiology of crop plants
- 9. Photochemical process, photosynthesis
- 10. Growth and differentiation
- 11. Principles of microbiology
- 12. Study of major groups of bacteria
- 13. Viruses morphology, classification, replication of plant viruses
- 14. Immune response
- 15. Microbial physiology and metabolism
- 16. Microbial genetics
- 17. Soil microbiology
- 18. Food microbiology
- 19. Bacteriophages
- 20. Environmental microbiology

Practical

- 1. Preparation and sterilization of liquid and agar bacterial nutrient media; Assessment of generation time in the log-phage bacterial cultures. Handling of microorganisms for genetic experiments;
- 2. Study of insect segmentation, various tagmata and their appendages; preparation of permanent mounts of different body parts and their appendages of taxonomic importance including male and female genitalia. Sense organs.
- Dissection of different insects to study comparative anatomical details of different systems;
- 4. Types of distributions of organisms. Methods of sampling insects, estimation of densities of insects and understanding the distribution parameters
- 5. Familiarization with equipment used in insect pathology laboratory. Identification of different groups of insect pathogens and symptoms of infection.
- 6. Soil solarization, Preparation of botanicals and antiviral principles(AVP)

REFERENCE

David BV & Ananthkrishnan TN. 2004. General and Applied Entomology. TataMcGraw Hill, New Delhi.

Duntson PA. 2004. The Insects: Structure, Function and Biodiversity. Kalyani Publ., New Delhi.

Gupta RK. 2004. Advances in Insect Biodiversity. Agrobios, Jodhpur.

Jayaraman J & Verma JP. 2002. Fundamentals of Plant Bacteriology.Kalyani Publ., Ludhiana. Fox RTV. 1993. Principles of Diagnostic Techniques in Plant Pathology. CABI Wallington.

Chaube, H.S. and Pundhir, V.S.2005. Crop Diseases and their management. PrenticeHall India, New Delhi.

Singh RS. 2000. Diseases of Fruit Crops. Oxford & IBH, New Delhi. Walker JC. 2004. Diseases of Vegetable Crops. TTPP, India.

Second Year

Theory (Two Papers) – Maximum Marks - 100 Each Practical (One) – Maximum Marks - 100

PAPER III

Ayurveda – Dravyaguna & Bhaishajyakalpana

Theory – 100 Marks

- 1. Fundamental principles of Ayurveda
- 2. Dravyaguna vigyana Rasa, guna, veerya, vipaka & karma
- 3. Brief information of karma
- 4. Audbhida gana (vegetable origin) Parthiva gana, Jangama gana
- 5. Bheshaja pareeksha vidhi
- 6. Purification of dravya
- 7. Adulterants, substitutes
- 8. Incompatibility of dravya
- 9. Introduction to nighantu
- 10. Yantras used for Bhaishajya Kalpana.
- 11. Preparation of Ayaskriti Arka, Avaleha, various Kwathas, Swarasas, Choornas, Gudikas, Lehyas, Vartis and their different quality testings.
 - 12. Sodhana of various drugs.
- 13. Method of classification of plant kingdom with brief account of plant nomenclature and taxonomy.
- 14. General morphology and anatomy of plants with special reference to flowers, fruits, roots, leaves, stem (bark, wood), seed.
- 15. Cultivation, conservation, preservation, storage of medicinal plants
- 16. introduction to pharmacology
- 17. Detailed knowledge of plants

- 18. pharmaceutical chemistry organic
- 19. pharmaceutical chemistry inorganic

Practical

- 1. Morphological identification of medicinal plants and microscopic identification of leaves, stem, flowers and roots
- 2. Microscopic measurements of cells and cell contents: starch grains, calcium oxalate crystals and phloem fibres
- 3. Records of Herbarium sheets of 50 medicinal plants field knowledge and procurement of plant species.
- 4. Preparation of various, Kwathas, Gudikas, Choornas Rasayanas, their Standardization and quality testing.

REFERENCE

- 1. Abhinav Buti Darpan (Vol.1-2) : Vd. Roop Lal Vaishya
- 2. Aushadha Vigyana Shastra : Acharya Pt. Vishvanath Dwivedi
- 3. Ayurvediya Aushadhkarma Vigyana : Acharya V.J. Thakur
- 4. Bedi Vanaspati Kosha : Prof. Ramesh Bedi
- 5. Bhaishajyaguna Vigyana : Dr. Alakhnarayan Singh
- 6. Bhav Prakash Nigantu (English) : Shreekanthamurti
- 7. Bhav Prakash Nighantu with commentary : Vd. Krishna Chandra Chunekar
- 8. Bhrihad Dravyagunadarsha : Mahendra Kumar Shastri
- 9. Classical Uses of Medicinal Plants : Acharya Priyavrata Sharma
- 10 Introduction to Dravyaguna : Acharya Priyavrata Sharma
- 11. Kriyatmaka Aushadi Parichaya : Acharya Pt. Vishvanath Dwidevi
- 12. Materia Medica : Acharya Ghosh
- 13. Nighantu Adarsh (Vol. 1-2) : Vd. Bapa Lal
- 14. Pharmacological basis of Medical Practice : Goodman & Gillman
- 15. Pharmacology and Pharmacotherapeutics : Satoskar Bhandarkar & Ainapure

PAPER IV Science of Agriculture, vegetables and Medicinal plants

- 1. Agricultural botany
- 2. Agronomy
- 3. Agronomy of medicinal plants
- 4. Basic plant breeding, plant genetics
- 5. Agricultural entomology
- 6. Toxicology of insecticides
- 7. Basic Horticulture
- 8. Plant pathology
- 9. Agricultural chemistry
- 10. Soil science, ecology

- 11. Plant biochemistry
- 12. Irrigation management
- 13. Agronomy of major cereals and pulses
- 14. Advances in crop production
- 15. Organic farming, organic production technology
- 16. Breeding, growth and development of vegetable crops
- 17. Seed certification, processing, storage
- 18. Advance research in biomedicine, nutraceuticals and natural herbs
- 19. Indian herbal wealth, scientific validation of herbs
- 20. Principles and guidelines of GAP, GCP, GMP
- 21. Medicinal crops- Amalaki, Aswagandha, Asoka, Kumari, Sarpagandha etc

PRACTICALS

- 1. Identification of crops based on morphological and seed characteristics
- 2. Cultivation techniques of medicinal and aromatic plants
- 3. Raising of herbarium of medicinal, aromatic and under-utilized plants
- 4. Quality characters in medicinal and aromatic plants and value addition.
- 5. Methods of analysis of essential oil and other chemicals of importance in medicinal and aromatic plants
- 6. Determination of soil pH, EC, organic C, total N, available N, P, K and S in soils
- 7. Determination of total N, P, K and S in plants
- 8. Interpretation of interaction effects and computation of economic and yield optima
- 9. Direct and indirect methods of soil moisture determination using tensiometer, and pressure plate and membrane apparatus and resistance blocks
- 10. Soil-moisture characteristics curves and its importance
- 11. Water flow measurements using different devices, Calculation of irrigation efficiency
- 12. Determination of irrigation requirements of crops
- 13. Determination of infiltration rate of soils and hydraulic conductivity, Study of micro irrigation systems and their layout in field crops
- 14. Phenological studies at different growth stages of crop
- 15. Estimation of crop yield on the basis of yield attributes
- 16. Formulation of cropping schemes for various farm sizes and calculation of cropping and rotational intensities Judging of physiological maturity in different crops
 Intercultural operations in different crops
- 17. Aerobic and anaerobic methods of making compost
- 18. Efficient use of biofertilizers, technique of treating legume seeds with Rhizobium cultures, use of Azotobacter, Azospirillum, and PSB cultures in field
- 19. Visit to an organic farm

REFERENCE

- 1. Alvin, P.T. and Kozlowski, T.T. (ed.). 1976. Ecophysiology of Tropical Crops. Academic Publications, New York Balasubramaniyan, P. and Palaniappan, S.P. 2001. Principles and Practices of Agronomy. Agrobios, Jodhpur.
- 2. Lenka D.1999. Irrigation and Drainage. Kalyani publishing House, Ludhiana.
- 3. Das, N. R. 2007. Introduction to Crops of India. Scientific Publ.
- 4. Chadha, K. L. and Gupta, R. 1995. Advances in Horticulture. Vol. II. Medicinal and

Aromatic Plants. Malhotra Publ.

 Aldrich, R.J., Kramer, R.J. 1997. Principles in Weed Management. Panima publ. Ashton, F.M and Crafts, A.S. 1981. Mode of Action of Herbicides (2nd Ed). Wiley inter Science.

Journals Print

- 1. J-AIM Journal of Ayurveda and Integrative Medicine –ISSN: 0975 9476
- 2. Journal of Indian Medical Heritage ISSN: 0975-430X
- 3. Journal of Research in Ayurveda and Siddha -ISSN: 0254-3478
- 4. Annals of Ayurvedic Medicine ISSN 2277-4092
- 5. Journal of Ayurveda ISSN:2321-0435
- 6. International Journal of Applied Ayurveda Research ISSN 2347 6362
- 7. Biomedical and Biotechnology Research journal ISSN -2588-9834
- 8. International Journal of Ayurveda and Alternative Medicine ISSN: 2395-3985
- 9. International Journal of Ayurvedic and Herbal Medicine ISSN: 2249-546
- 10. AYU Research Journal-ISSN: 0974-8520
- 11. Ancient Science Life ISSN: 0257-7941
- 12. Journal of Indian Systems of Medicine ISSN: 2320-4419
- 13. Indian Journal of Traditional Knowledge ISSN 0972-5938
- 14. Indian Journal of Natural Products & Resources ISSN: 0976-0504
- 15. International Journal of Ayurveda Research ISSN: 0974-925X
- 16. International Journal of Advanced Ayurveda, Yoga, Unani, Siddha and Homeopathy, ISSN: 2320 0251
- 17. Aryavaidyan, ISSN: 0976-4086
- 18. JREIM The Journal of Research and Education in Indian Medicine. ISSN 097
- **2.11** No: of hours per subject (lecture-tutorial-seminar-group discussion) Given under Clause No. 2.10
- 2.12 Practical training given in labs/supervision (No: of hours for each exercise/training) Given under Clause No. 2.10

2.13 Records Relevant records are to be maintained

2.14 Dissertation: Guide/Co-Guide/ Change of Guide Not Applicable

2.15 Specialty training if any

Given under Clause No. 2.10

2.16 Project work

1. Details of the project work shall be submitted to the concerned department head by the M.Sc. scholar within 6 months of starting of the course.

- 2. A guide shall be allotted to each scholar by the concerned department head.
- **3.** The guide or supervisor shall be a person of status of a Professor or Associate Professor or Assistant professor with five years University approved teaching experience in the subject.
- 4. Project shall be practical oriented and helpful in the competence in respective specialties. The subject of the project work shall have relation with the subject matter of the specialty.
- 5. Project reports shall be of minimum 100 and maximum 120 pages.
- **6.** Project must be submitted to the concerned department head 6 months before the final examination.
- 7. The scholar shall submit 5 copies of project work 1 for PG Diploma scholar, 1 for Guide, 1 for Department Library, 1 for College Library and 1 for University.

2.17 Any other requirements [CME, Paper Publishing etc.]

Every student shall make presentation on identified subject in the institution and at least ten seminars should be presented to make eligible to appear in the final year examination.

2.18 Prescribed/recommended textbooks for each subject Given under clause No. 2.10

2.19 Reference books

Given under clause No. 2.10

2.20 Journals

<u>Print</u>

- 1. J-AIM Journal of Ayurveda and Integrative Medicine ISSN: 0975 9476
- 2. Journal of Indian Medical Heritage ISSN: 0975-430X
- 3. Journal of Research in Ayurveda and Siddha -ISSN: 0254-3478
- 4. Annals of Ayurvedic Medicine ISSN 2277-4092
- 5. Journal of Ayurveda ISSN:2321-0435
- 6. International Journal of Applied Ayurved Research ISSN- 23476362
- 7. Biomedical and Biotechnology Research journal ISSN -2588-9834
- 8. International Journal of Ayurveda and Alternative MedicineISSN:2395-3985
- 9. International Journal of Ayurvedic and Herbal Medicine ISSN: 2249-546
- 10. AYU Research Journal-ISSN: 0974-8520
- 11. Ancient Science Life ISSN: 0257-7941
- 12. Journal of Indian Systems of Medicine ISSN: 2320-4419
- 13. Indian Journal of Traditional Knowledge ISSN 0972-5938
- 14. Indian Journal of Natural Products & Resources ISSN: 0976-0504
- 15. International Journal of Ayurveda Research ISSN: 0974-925X
- International Journal of Advanced Ayurveda, Yoga, Unani, Siddha and Homeopathy, ISSN: 2320 – 0251
- 17. Aryavaidyan, ISSN:0976-4086
- 18. JREIM-TheJournalofResearchandEducationinIndianMedicine.ISSN0970-7700

- 19. International Journal of Ayurvedic Medicine(IJAM). ISSN 0976-5921
- 20. Journal of Ayush: -Ayurveda, Yoga, Unani, Siddhaand Homeopathy. ISSN: 2321–6484
- Planta Medica- Journal of Medicinal Plant and Natural Product Research. ISSN 0032-0943
- 22. International Journal of Medicinal and Aromatic Plants (IJMAP). ISSN-2249-4340
- 23. Journalof Medicinal Plants Research (JMPR). ISSN: 1996-0875
- 24. European Journal of Medicinal Plants. ISSN: 2231-0894
- 25. Journal of Sanskrit Samhita and Siddhanta. ISSN No 2454-3926
- 26. Journal of Research in Ayurvedic Sciences. ISSN: 2456-5601
- 27. Journal of Drug researchin Ayurvedic Sciences. ISSN: 2279-0357
- 28. Journal of Evidence-Based Integrative Medicine. ISSN: 2515690X
- 29. The Journal of Alternative and Complementary Medicine. ISSN:1075-5535
- 30. Journal of Ayurvedic and Herbal Medicine (JAHM). ISSN: 2454-5023
- 31. Advances in Integrative Medicine. ISSN: 2212-9626
- 32. International Research Journal of India. ISSN: 2454-8707
- 33. Journal of Traditional and Folk Practices. ISSN: 2278-5906
- 34. Kerala Journal of Ayurveda. Published by Akhila Kerala Govt Ayurveda College Adhyapaka Sanghatana. e-mail: ayushkamya@gmail.com
- 35. Bhishak, Published by VPSV Ayurveda College, Kottakkal.
- 36. Dhanwantari Journal of Ayurveda Published by PNNM Ayurveda College, Cheruthuruthy, Shornur,Kerala.
- 37. Glitters of Ayurveda, Published by Sree Narayana Institute of Ayurvedic Studies and Research, Puthoor, Kollam, E-mail-snayurveda@gmail.com.

E-Journals

- 1. Ancient Science of Life. eISSN: 2249-9547
- 2. Indian Journal of Traditional Knowledge (IJTK). eISSN: 0975-1068
- 3. Journalof Ayush: -Ayurveda, Yoga, Unani, Siddhaand Homeopathy. eISSN:2278-2214
- 4. Journalof Research in Ayurvedic Sciences. eISSN: 2581-9895
- 5. Journal of Drug research in Ayurvedic Sciences. eISSN: 2581-8295
- 6. Journal of Evidence-Based Integrative Medicine. eISSN: 2515690X
- 7. The Journal of Alternative and Complementary Medicine. eISSN:1557-7708
- 8. Journalof Researchin Traditional Medicine(JRTM). eISSN: 2455-3166
- 9. InternationalJournalofAyurvedaandAlternativeMedicineeISSN:2348-0173
- 10. Journal of Indian Systems of Medicine. e/SSN: 2455-5029
- 11. Indian Journal of Natural Products & Resources. eISSN: 0976-0512
- 12. Annals of Ayurvedic Medicine. eISSN: 2347-6923
- 13. Ayurline:InternationalJournalofResearchinIndianMedicine.eISSN:2456-4435
- 14. Advances in Applied Science Research E-ISSN- 0976-8610
- 15. International ResearchJournalof Pharmacyand Medical Sciences. eISSN: 2481-3277
- 16. Health Sciences *-healthsciences.ac.in*/Open Access Peer Reviewed E-*Journal*. Kerala University of Health Sciences, Thrissur.

2.21 Log book

Shall be maintained in all Post Graduate Courses. All academic work should be maintained and shall be countersigned by concerned HOD.

3. EXAMINATIONS

3.1 Eligibility to appear for examinations [including Supplementary]

A. Preliminary examination:

A minimum of 80% attendance and the candidate should have submitted the details of the ensuing project work in time.

B. Final examination:

For appearing final year examination 80% attendance in each theory and practical subjects separately is required

If a student fails in the preliminary examination, he/she can continue the course but shall have to pass preliminary examination at least 90 days before appearing final year examination.

3.2 Schedule of Regular/Supplementary exams

The University shall conduct not more than two examinations in a year.

3.3 Scheme of examination showing maximum marks and minimum marks

The M.Sc. course shall have two examinations in the following manner: -

1. The preliminary examination shall be conducted by the institution where student is undergoing training at the end of one academic year after admission to make the student eligible to appear in the final examination.

2. The final examination shall be conducted at the end of second year. The students will have to pass preliminary examination at least 90 days before appearing final year examination.

3. The final examination conducted by the University at the end of two years shall cover 75% of II year and 25% syllabus of I year.

4. Minimum passing marks shall be 50% in theory and practical separately.

5. If an Examination could not be conducted due to a local Bandh or any other difficulties in conducting Examination, that particular Examination shall be conducted on the next working day.

SCHEDULE OF EXAMINATIONS

a. The preliminary examination shall be conducted at the end of one academic year after commencement of course.

b. The final examination shall be conducted on completion of two academic years after commencement of M.Sc. course.

c. Examination shall ordinarily be held in the month of June or July and November or December every year.

d. For being declared successful in the examination, student shall have to pass all the subjects separately.

e. The student shall obtain minimum 50% marks in Theory and Practical separately to be announced as pass.

f. If a student fails in preliminary examination, he/she shall have to pass preliminary

Examination at least 90 days before appearing final year examination.

g. If the student fails in theory or practical in the final examination he/she can appear in the subsequent examination without requiring submit a fresh project work.

h. The M.Sc. shall be conferred after the student passes the final examination.

CONDUCT OF EXAMINATION

M.Sc. examination in any subject shall consist of theory, clinical, practical and oral.

1. **Theory**: There shall be two theory papers and two sections in each paper. One Paper out of these shall essentially consist of the basics of the concerned discipline.

2. **Clinical**: Clinical examination of the subject shall be conducted to test/aimed at assessing the knowledge and competence of the candidate for undertaking independent work as a specialist.

3. **Practical**: Practical examination shall be conducted to assess practical skill and competence of respective specialties.

4. **Viva-Voce**: The Viva-voce examination shall be thorough and shall aim at assessing the candidate's knowledge, competence, understanding of the subject and communication skill of concerned subject which shall forma part of examination.

QUESTION PAPER PATTERN

Question paper pattern will be as per recommendations of the Board of Studies. The pattern is long essay for 20 marks -one question Short essay 10 marks - Eight Questions Total 9 questions for 100 marks

3.4 Papers in each year

Given under clause No.2.10

- **3.5** Details of theory exams [include number of papers, duration, type of questions & number of questions and marks] Given under clause No. 2.10 & 3.3
- **3.6** Model question paper for each subject with question paper pattern (will be submitted after approval of Board meeting)