

ANNEXURE-69

BPS Mahila Vishwavidyalaya, Khanpur kalan, Sonipat
MSM Institute of Ayurveda

ORDINANCE FOR
AYURVEDA VACHASPATI

i.e. M.D. (AYURVEDA)

ORDINANCE NO. BPSMV/MSM/P.G (.....)

(Adapted from Govt. of India Gazette Notification No.4-9072016- P.G.
Regulation, dated Nov 2016 - Indian Medicine Central Council (Post
Graduate Ayurveda Education Regulations, 2016)

(Ordinance shall come into force with effect fromonwards.)

1. Short title, Commencement and Definitions:

1.1. Short title and commencement: This ordinance is based on NCISM (National Commission for Indian System of Medicine) for minimum standards and procedure for award of PG Degree regulations. No. 4-90/2016-P.G. Regulation dated 7.11.2016 The ordinance shall be applicable from academic session 2024-25.

1.2. Definitions:

1.2.1. Programme stands for Ayurveda Vachaspati, Kyachikitsa, i.e. M.D(Ayurveda)-Kayachikitsa. Nearest terminology of modern subject: Doctor of Medicine.

1.2.2. Programme stands for Ayurveda Vachaspati, Dravyaguna, i.e. M.D(Ayurveda)-Dravyaguna. Nearest terminology of modern subject: Doctor of Indian Materia Medica & Pharmacology.

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Sr.no	Name of Speciality	Nomenclature of Degree	Nomenclature of Department	Nearest Terminology of Modern Subject
1	Kayachikitsa	Ayurveda Vachaspati (MD- Ayurveda) Kayachikitsa	Kayachikitsa	Internal Medicine
2	Dravyaguna	Ayurveda Vachaspati. (MD- Ayurveda) Dravyaguna	Dravyaguna	Indian Materia Medica & Pharmacology.

1.2.3. BPSMV stands for Bhagat Phool Singh Mahila Vishwavidyalaya Khanpur Kalan

1.2.4. NCISM stands for National Commission for Indian System of Medicine.

1.2.5. MSMIOA stands for Madu Singh Memorial Institute of Ayurveda.

1.2.6. Course Work (CW) means courses of study prescribed by the University/Department/Institution to be undertaken by a student registered for the P.G Degree.

1.2.7. Plagiarism means the practice of taking someone else's work or idea and passing them as one's own.

1.2.8 Eligibility Criteria for Admission-

A citizen of India possessing the degree of Ayurvedacharya (Bachelor of Ayurveda Medicine and Surgery) after completion of compulsory rotatory internship from a recognised University or Board or Medical Institution specified in the Second Schedule to the Indian Medicine Central Council Act 1970 and enrolled in Central or State register of Indian System of Medicine shall be eligible for admission in the post graduate degree courses.

1.2.9 Only female candidates are eligible for admission in MD ayurveda , M.S.M Institute of

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Ayurveda, BPSMV.

2. Procedure of Admission:

- 2.1. A person possessing the degree in Ayurveda of a University or Board or medical institution specified in the Second Schedule to the Act shall be eligible for admission in the post-graduate degree course.
- 2.2. The admission shall be made on the basis of merit list of AIAPGET (All India Ayurveda Post Graduate Entrance Test) and centralized/state counselling as per the case may be or as per the directions of the statutory body revised from time to time.
- 2.3. Reservation for all categories shall be applicable as per State Government /Central Government Policy. Final number and distribution of seats in each categories shall be filled by SKAU, Kurukshetra.
- 2.4. Out of total seats, 25% seats will be reserved for the candidates passing or qualifying BAMS from M.S.M Institute of Ayurveda.

3. Period of Study and Attendance:

- 3.1. The student shall have to undergo a study for a period of three years after the admission.
- 3.2. The student shall have to attend at least seventy five percent of total lectures, Practicals and Clinical tutorials or classes to become eligible for appearing in the examination.
- 3.3. The students shall have to attend the hospital and other duties as may be assigned to them during the course of study.
- 3.4. The students shall have to do Resident duties in their respective departments like Pharmacy, Hospital, Herbal Garden, and Laboratory during entire period.
- 3.5. The students shall have to attend special lectures, demonstrations, seminars, study tours and such other activities as may be arranged by the teaching departments.
- 3.6. The maximum duration for completion of the course shall not exceed beyond the period of six years from the date of admission to the course. Stipend in lieu of the training period will only be payable for the regular duration i.e. 36 months only.
- 3.7. Web based centralized biometric attendance system shall be required for the attendance of post-graduate students and manual attendance at department level in which student is pursuing the post-graduate course.
- 3.8. If the PG scholar get selected for a permanent appointment in any government body during the tenure of course he/she may join the service and may continue the study after getting due

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permission from the employer within 3 months from joining of the service. If the scholar fails to resume his or her study after three months of joining, his/her admission will be deemed cancelled and he/she will be liable to refund the whole amount of stipend/ emoluments paid to him/her since his/her joining of the course along with bond amount. However, the Vice Chancellor may extend this period if deem fit. In case of rejoining the study the scholar must fulfil the criteria of 75% attendance in each year and thesis completion before appearing for the final examination. If the candidate fails to fulfill these criteria he/she will not be eligible to appear for the final examination.

3.9. The students undergoing M.D./M.S. (Ayurveda) courses are not permitted to undertake any paid or unpaid appointments/work/service or engage himself/herself in self-employment. The candidate is directed to obtain N.O.C from the university while submitting an application for any new job/appointments. The defaulters are liable for disciplinary action such as recovery of stipend and termination of admission.

4. Teaching Methodology:

4.1. Intensive training shall be provided in classical knowledge along with comparative and critical study in the respective specialty.

4.2. The emphasis shall be given on intensive applied and hand on training..

4.3. The students shall have to acquire the knowledge about the methods and techniques of research in the respective fields making use of Information Technology.

4.4. The students shall have to undertake training in teaching methodology and research methods and shall have to participate in the teaching and training programs of Under-Graduate students or interns in the respective subjects during the course of studies.

4.5. In the first year of the course, the students have to acquire knowledge in the subject of Research Methodology and Bio Statistics applied aspects of the fundamentals of Ayurveda.

4.6. In the clinical training, the student shall have to acquire knowledge of independent work as a specialist.

4.7. The M.D./M.S. (Ayurveda) students will have to work as residents. They will have to complete all the clinical records pertaining to the patients. They will have to assist the concerned physician/teacher in conducting hospital rounds and OPD. They will have to attend hospital emergency and night duties. All the students will have to attend hospital duties on Sunday and Holiday also. They shall be required to take prior permission and approval for station leave from Chairman/HOD.

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4.8. The students shall have to undergo training in the department concerned and shall maintain month-wise record (log book) of the work done during course of study in the speciality opted by him/her as under.

- a) study of literature related to speciality.
- b) Regular clinical training in the hospital in respective department.
- c) Details of surgical operations and other different procedures assisted or done independently by M.D./M.S. (Ayurveda) candidates.
- d) Practical training of research work carried out in the department, for student of pre-clinical and para-clinical subject.
- e) Active participation in various seminars, symposia and discussions.
- f) Progress of the work done on the topic of dissertation.

The record (log) books shall be checked and assessed periodically by the faculty members imparting the training.

5. Medium of Instructions: Hindi, Sanskrit or English.

6. Research advisory committee (RAC):

Research advisory committee comprising the following shall be constituted for each PG Scholar to guide her in pursuing the research smoothly and effectively:

- Research supervisor of the candidate Convener
- One faculty member from the concerned department preferably in related research area Member
- One faculty member from related / allied department / institute, preferably from same faculty Member

RAC shall have the following responsibilities:

6.1 To review the research proposal and finalise the topic of research.

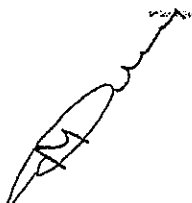


6.2 To guide the research scholar in developing the research design and methodology of research and identify the course she may have to do.

6.3 To periodically guide the research scholar.

7. Constitution of Department Research Committee (DRC):

Department Research Committee shall consist of the following:

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7.1 Chairperson of the concerned department Chairperson

7.2 All professors and associate professors of the concerned departments

7.3 One assistant professor by rotation for two years from those eligible for appointment as research supervisor

7.4 Dean of the concerned faculty

7.5 The research supervisor (in case he/she is not a member of DRC) shall be invited to the DRC's meeting as a special invitee for his/her candidate(s).

7.6 Two/fifths of the total members with at least one out of two outside experts shall constitute a quorum for the Departmental Research Committee.

7.7 Chairperson of the concerned Department, on behalf of the Department Staff Committee (DSC), shall place the application(s) for registration along with the recommendations of the DSC before the Departmental Research Committee (DRC). DRC shall invite the candidate(s) to defend their synopsis.

7.8 The DRC shall assign research supervisor to each admitted candidate. For subject of interdisciplinary/inter speciality nature, the DRC may recommend the appointment of a Joint Supervisor from other Universities/UTDs/institutes of BPSMV/Research Laboratories of recognized Indian or foreign Universities and R&D institutions.

7.9 All professors and associate professors serving in the concerned department will be eligible for appointment as research supervisor. Assistant professors with minimum five years of teaching experience shall also be eligible for appointment as research supervisor.

7.10 The ratio of guide student will be maintained as 1:3 per year in case of Professor and 1:2 per year in case of Reader or Associate Professor. The teacher student ratio shall be 1:1 in case of Lecturer or Assistant Professor having minimum of five years teaching experience.

7.11 The DRC may either reject the synopsis or may suggest suitable changes in it for reasons to be recorded. In the latter case, the candidate shall be given 02 months to resubmit the synopsis to the Department.

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7.12 The Institutional Ethical committee is a independent body whose responsibility is to ensure the protection of the rights , safety & wellbeing of human subject involved in the trial by among other things reviewing, approving and providing continuing review of trial protocol and amendments.

7.13 The Institutional Animal Ethics committee is responsible for approving & mointoring research within animal research establishments including carring out inspection of animals & facilities.

7.14 A registered student, in consultation with her supervisor, may modify the topic of her research duly recommended by the PGBoS.

7.15 Change of supervisor :

The change of research supervisor may be allowed in following circumstances:

- a) the research supervisor has expired or has left the services of bpsmv or proceed on leave/deputation of more than one year, then in this condition, head/incharge of the department will act as supervisor of the research scholar.
- b) by mutual consent of both supervisor and research scholar.
- c) in case of extreme hardship where it becomes almost impossible for candidate to work/continue her research work with allotted supervisor or in case the supervisor or the candidate request for the change of supervisor on valid/genuine grounds. The candidate/supervisor will represent to chairperson of the department who will put the matter before the departmental research committee. However the change in such cases will be allowed only after the approval of academic council.
- d) the co-supervisor can be added within two years of registration of candidate to PG program on recommendation of RAC and ratified by DRC.

8. Duration of Programme:

8.1. The duration of the programme of instruction for Postgraduate degree of Ayurveda Vachaspati. M.D. (Ayurveda) Dravyaguna Vigyan, shall be of 03 years.

8.2. The period of three years will be divided as follows:

First year – 12 months

Second year – 12 months

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Third year – 12 months

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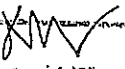
(A) **Dissertation /Thesis-**



- (1) Applicability Every student shall carry out work on an assigned research project, under guidance of recognised postgraduate teacher(s) , the result of which shall be written up and submitted in the form of a thesis.
- (2) Work for writing Thesis is aimed at contributing to the development of a spirit of enquiry, besides exposing the candidate to the techniques of research ,critical analysis, acquaintance with the latest advances in medical sciences and manner of identifying and consulting available literature
- (3) Central Scientific Advisory Post Graduate Committee appointed by Central Council of Indian Medicine shall suggest the area of Research and topics to be focused every academic year to make campaigning of evidence based Ayurveda to the need of global standards and achieve publications and the same shall be followed by University Committee while approving the Dissertation Title.
- (4) The Title of the Dissertation along with the synopsis ,along with the approval of the Ethics Committee constituted as per regulations of university ,shall be submitted to the university with in a period of six months from the date of admission to the postgraduate course.
- (5) If the student fails to submit the title of dissertation and synopsis within the period specified under the sub-regulation (4) of (A), his /her admission can be cancelled or terms for final postgraduate course shall be extended for six months or in accordance with the time of submission of the synopsis to the university .
- (6) The application for the registration of the dissertation shall clearly mention full title of the dissertation with a synopsis of the proposed scheme of work indicating the familiarity of student with the proposed theme of work , name of department and the name and designation of the guide or supervisor and co-guide , if any.

(B) **Synopsis/Protocol-**

- (1) A University Research Committee(URC) shall be constituted by the university for approving the title. The university shall approve the synopsis not later than three months after submission of the synopsis .
- (2) While selecting a topic for research and designing the research project , among other things , the following aspect should be taken care of:-
 1. The feasibility of conducting the study within available resources and time frame .
 2. In case of interventional studies involving animal or human subjects, the projects and concerned departments should fulfil the ethical and other requirements necessary for human/animal experiments and necessary approval should be obtained as required under the rules and regulations in force .
 3. The project designed should satisfy statistical requirements in respect of sample size, and proposed analysis of data .

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4. It must be ensured that the same thesis topics are not repeated year after year. The synopsis protocol must accompany a disclosure/explanation if a similar study has been undertaken already under university during last five years.
5. The subject of every dissertation shall be research oriented, practical oriented, innovative and helpful in the development of Ayurveda system and the subject of the dissertation shall have relation with subject matter of the speciality.
6. Synopsis/Protocol should be submitted in following format :

File	Page 1
Certificate from Institution	Page 2
Introduction/Background including lacunae in existing knowledge	Page 3
Review of literature	Page 4-6
Objectives of research project	Page 7
Content/Subject/Materials and Methods including plan of statistical evaluation	Page 8-10
List of references (Vancouver system of references)	Page 11-12
Appendix, if any (consent form, data sheet, etc.)	

- (3) The thesis protocol must be presented and discussed in the meeting of department concern to ensure that the design the protocol fulfils the statistical requirements, before it is finalised. The need for consideration of the protocol by Institutional Ethics Committee must be considered.
- (4) The Head of the institution, while forwarding the protocol of the university shall certify that the protocol (synopsis) fulfils all the requirements stipulated by the faculty of Ayurveda of the university.
- (5) The university shall put the protocol before the Institutional Ethics Committee (IEC) to obtain clearance from it before the consideration of University Research Committee for giving approval.
- (6) In case there is any objection(s) of University Research Committee. The protocol shall be referred back to supervisor with the observations of University Research Committee, through Head of Institution, for suggested clarifications/modifications within specified time frame. The thesis-protocols, revise thesis-protocol and related matters would be submitted to BRS for consideration and approval.
- (7) Once the title for dissertation is approved by the University Research Committee of the University, the student shall not be allowed to change the title of the proposed theme of work without permission of university.
- (8) Ten copies of the title of the dissertation along with the synopsis be submitted to the university.

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- (9) After approval of the University Research Committee the same will be sent to the Controller of Examination for approval of the Vice-Chancellor.
- (10) The University shall display the approved synopsis of dissertation on their website .

(C)

Thesis:

- (1) Five hard copies of the thesis with two copies of summary and one electronic/soft copy of the thesis should be submitted in the following general format-
- (a) Title Page : title page should mention the topic of the thesis, Degree(with discipline) for which the thesis is being submitted, name and educational qualifications of the candidate, supervisor and co-supervisor(s), name of institution where the thesis has been undertaken along with the name of the University and session. The title cover should be in standard format as specified in the ANNEXURE-1 .The colour of the title cover of the thesis shall be Neel(Shri Krishna) Varna(Torquoise Blue).
- (b) Declaration by candidate: The candidate must submit a declaration that the contents of the thesis have not been submitted earlier in candidature for any degree.
- (c) Certificate from Institution: The thesis should be accompanied by a certificate issued by the supervisor and co-supervisor, head of the department, and counter signed by the Head of institution certifying that the candidate has undertaken the thesis work in the department under the direct guidance of the supervisors and that the thesis fulfil all the requirements stipulated by the faculty of the university .
- (d) Standard structural format of the thesis –
- 1)Required certificates
 - 2)Acknowledgements
 - 3) Table of contents
 - 4) Glossary of Abbreviations
 - (e) Text of thesis-
 - 1) Introduction/ Background
 - 2) Review of literature
 - 3) Objectives of research
 - 4) Patients/Subjects/Materials and Methods
 - 5) Results/Observation
 - 6) Discussion
 - 7) Conclusions and recommendations
 - 8) Presentation of thesis results to scientific forums and publications in scientific journals , if any
 - 9) Index of references: Vancouver system of references
 - 10) Appendix

(2)Thesis must show a good academic standard, satisfactory literary presentations and format in all respects.

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(3) No student shall be allowed to submit the dissertation before six months of completion of course and the student shall continue his regular study in the institution after submission of dissertation to complete three years.

(4) The dissertation shall contain the methods and data of the research carried out by the student selected by him and completed under the guidance of the guide or supervisor approved by the university.

(5) The thesis must be typed on both sides of A4 size paper with a margin of one inch on either side. The typing should be done in font size of 12 with the fonts of Times New Roman with 1.5 line spacing. For devanagiri scripts kritidev 10 fonts in the font size of 14 with 1.5 lines spacing should be used.

(6) The dissertation shall consist of not less than 100 pages and forty thousand words.

(7) The dissertation shall contain, at the end, a summary of not more than 1500 words and the conclusion not exceeding 1000 words.

(8) To facilitate appointment of examiners each institute shall send a list of the thesis in the following format: Serial number, Institution, Department, Candidate, Supervisor, and title, one month before the last date of submission of the thesis of the faculty.


(9) Five copies of the bound dissertation along with certificate from the supervisor or guide shall reach the office of the C.O.E of the University four months before the final examination.

(10) The student shall be permitted to appear in the final examination of post graduate degree college only after approval of the dissertation by the examiners.

(11) Interdisciplinary research may be done by co-opting the guide or the supervisor from the concerned speciality.

(12) If a para-clinical or pre-clinical subject student takes a thesis topic involving clinical trials then he/she may opt clinical teacher of speciality concerned as co-guide for preparing the thesis.

(13) If the student fails in theory or practical in the final examination, he/she can appear in the subsequent examination without requiring to submit a fresh dissertation.


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10. Plagiarism Check

The following guidelines must be adhered to while submitting the plagiarism report at the time of submission of P.G. thesis:

10.1 The Plagiarism Report generated through the software authorized by the University and issued by the central library of BPSMV shall be appended to the thesis.

10.2 The central library shall submit soft copy of the thesis to INFLIBNET within a month of the award of degree for hosting in Shodh Ganga e-repository.

10.3 The awarded thesis shall be added to the institutional repository and uploaded on the University website by the central library. The related information after uploading shall be provided to the Director, IQAC of the BPSMV.

10.4 The similarity check for plagiarism shall exclude the following:

10.4.1 All quoted work reproduced with all necessary permission and/or attribution.

10.4.2 All references, bibliography, table of content, preface and acknowledgements.

10.4.3 All generic terms, laws, standard symbols, Mathematical Formula, Supervisor name, Institutional, Departments, Quotes, and standards equations

10.5 The research work carried out by the researcher shall be based on original ideas, which shall include abstract, summary, hypothesis, observations, results, conclusions and recommendations only and shall not have any similarities. It shall exclude a common knowledge or coincidental terms, up to fourteen (14) consecutive words.

10.6 Plagiarism would be quantified into following levels in ascending order of severity for the purpose of its definition:

Level 0: Similarities up to 10% - Minor similarities, no penalty

Level 1: Similarities above 10% to 40% - Such student shall be asked to submit a revised script within a stipulated time period not exceeding 6 months.

Level 2: Similarities above 40% to 60% - Such student shall be debarred from submitting a revised script for a period of one year.

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Level 3: Similarities above 60% - registration to Ph.D. programme shall be cancelled.

10.7 Regarding Self-Plagiarism or cases where published work of the student is shown as similarity in the check, a certificate (Plagiarism Self Exclusion Certificate) has to be issued by the Supervisor specifying and attaching the articles that have been published by the student from thesis work. Only these articles should be excluded from the check. No other article of the Supervisor or the student should be excluded from the check.

10.8 The final Plagiarism check from the library is essential so that the correct report is submitted at the time of thesis submission.

10.9 The Central Library will issue the Plagiarism Verification Certificate duly countersigned by the University librarian/Professor In-charge that the similarity index is acceptable as per UGC guidelines applicable from time to time and adopted by the University. The original certificate has to be included in the thesis.

11. Evaluation of dissertation:

11.1 The dissertation shall be assessed by two external examiners and two internal examiners appointed by the University.

11.2 The dissertation shall be accepted only after the approval of examiners appointed under sub-regulation (14.2) and in case of disapproval by one external examiner, the dissertation shall be referred to third external examiner approved by the University concerned.

11.3. If the dissertation is not accepted by two external examiners, the same shall be returned to the student with the remarks of the examiners and the student shall resubmit the dissertation after making necessary improvement in the light of examiners' report to the University within a further period of six months.


11.4. The student shall be permitted to appear in the final examination of post-graduate degree course only after approval of the dissertation by the examiners.

12. Examination and Assessment-


12.1. The post-graduate degree course shall have two examinations in the following manner, namely:-

12.1.1. The preliminary examination shall be conducted at the end of one academic year after admission;

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12.1.2. The final examination shall be conducted on completion of three academic years after the admission to postgraduate course;

12.1.3. Examination shall ordinarily be held in the month of June or July and November or December every year or as decided by the University.

12.1.3. Examination shall ordinarily be held in the month of June or July and November or December every year or as decided by the University.

12.1.4. The examination shall be held in written , practical or clinical & oral examination.

12.2. Eligibility to appear in the examinations-

- A student who possesses the qualification laid down in Clause-6 and produces the following certificates signed by the Chairman/Head of Department concerned and countersigned by the Head of the College/ Institution recognized by the University for M.D./M.S. (Ayurveda) Course where he/she received the training shall be eligible to appear in the examination.

In case of MD/MS (Ayurveda) preliminary examination-

- Of good character
- Of fulfillment of the condition of attendance
- Certification of Log-Book maintenance by the HOD.
- Of assessment of the work done by the student in first year

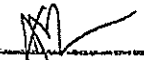
In case of MD/MS (Ayurveda) Final examination-

- Of good character
- Of fulfillment of the condition of attendance
- Certification of Log-Book maintenance by the HOD.
- Of assessment of the work done by the student in second & third year.
- Of having completed training for a period of not less than 36 months in a Department/ College/Institute.
- Of submission of thesis four months before the final examinations.

12.3. For being declared successful in the examination. student shall have to pass all the subjects separately in preliminary examination;

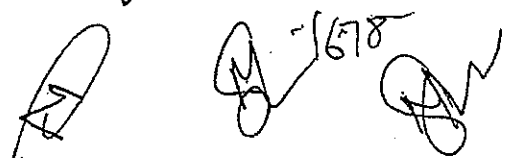
12.4. A candidate shall be declared successful in MD/MS (Ayurveda) final examination only when the thesis has been accepted and student has required to obtain minimum fifty per cent. Marks in practical and theory subjects separately to be announced as pass;

12.5. If a student fails in preliminary examination, he shall have to pass before appearing in the final examination;



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12.6. If the student fails in theory or practical in the final examination, he can appear to subsequent examination without requiring to submit a fresh dissertation;

12.7. The subsequent examination for failed candidates shall be conducted at every six months interval;

12.8. The post-graduate degree shall be conferred after the dissertation is accepted and the student passes the final examination with minimum 50% marks in theory as well as clinical/Practical & oral examinations separately. There shall be no grace marks.

12.9. The examination shall be aimed to test the clinical acumen, ability and working knowledge of the student in the practical aspect of the speciality and his fitness to work independently as a specialist.

12.10. The clinical examination shall be judge the competence of the student in Ayurveda and scientific literature of the speciality.

12.11. The viva-voce part of the practical examination shall involve extensive discussion on any aspect of subject or speciality.

12.12. Provision of three attempts has to be availed by the student within two years from the date of her admission to MD/MS Ayurveda Course.

13. Subjects of examination:

13.1. The preliminary examination at the end of one academic year after admission shall be conducted in the following subjects, namely:-

13.1.1. Paper I - Paper A - Research Methodology

Paper B – Bio or Medical Statistics

13.1.2. Paper II – Paper 'A – Applied aspects regarding concerned subjects.

Paper B - Concerned subject

13.1.3. Theory-


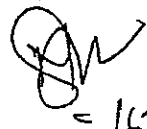
> The Preliminary Examination shall be conducted at the end of one academic year after admission, in the following subjects, namely-

Paper 1- Research Methodology and Medical Statistics

Paper 2- Applied aspects regarding concerned subjects as fundamentals of subject concerned of Ayurveda with an emphasis on applied aspects along with relevant studies of basic sciences of modern medicine.

Practicals
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Khanpur Kalan, Gurgaon

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➤ The Practical Examination of each subject shall be conducted by a team of two examiners out of which one examiner shall be external from any other University and one internal examiner from the department concerned. The internal examiner will be appointed from among the teachers on basis of seniority by rotation by the chairman/Head of the Department concerned.

The roster of internal examination shall be maintained.

13.2. The student shall have to undergo training in the department concerned and shall maintain month-wise record of the work done during the last two years of study in the speciality opted by him/her as under:-

13.2.1. Study of literature related to specialty;

13.2.2. Regular clinical training in the hospital for student of clinical subject;

13.2.3. Practical training of research work carried out in the department, for student of pre-clinical and para-clinical subject;

13.2.4. Participation in various seminars, symposia and discussions; and

13.2.5. Progress of the work done on the topic of dissertation.

13.3. The assessment of the work done by the students of first year post-graduate course during the first year as specified shall be done before the preliminary examination.

13.4. The final examination will include dissertation, written papers and clinical or practical and oral examination.

13.5. There shall be four theory papers in each specialty and one practical or clinical and viva-voce examination in the concerned specialty or group of sub-specialties selected by the student for the special study.

13.6. The student shall publish or get accepted minimum one research paper on his/her research work in one journal and one paper presentation in regional level seminar.

14. Mode of examination and appointment of examiner(s)-

14.1 Assessment-

MD/M.S. (Ayurveda) First year

(i) The Assessment of the work done during first year of students shall be carried out by all the teachers concerned collectively in the chairmanship of the chairmanship/HOD before the commencement of preliminary examination.

(ii) The assessment of the first year students shall be carried out on the basis of applicable items specified in clause -(12) of 12.

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B.P.S. Mat.
Khanpur





- (iii) The assessment shall be marked 'Satisfactory' and 'Non satisfactory'.
- (iv) Chairman / HOD shall send the assessment report of all the students to the Controller of Examination through Head of Institution before commencement Of the preliminary examination.

MD/MS (Ayurveda) Final Year

- (i) The assessment of the work done during the second and third year of the final year student shall be carried out by all the teachers concerned collectively in the Chairmanship of the Chairman/HOD before the commencement of the final examination.
- (ii) The assessment of the final year students shall be carried out on the basis of its specified in clause -(12) of 12 .
- (iii) The assessment shall me marked as Satisfactory and Non satisfactory.
- (iv) Chairman/HOD shall be sent the assessment report of all the students to the Controller of Examination before the commencement of the final examination.

14.2 Evaluation of Theory Papers -

- (i) M.D./M.S. (Ayurveda) Preliminary Examination- There shall be two section (Part -A & Part -B) of each paper .Two separate answer sheets will be provided to the candidate. The answer books of each subject shall be evaluated by two examiner ,out which one examiner shall be external from any other university and other examiner shall be internal examiner of the examination from concerned department. Part -'A' will be evaluated by internal examiner and Part -'B' by the external examiner. The answer book of Part -"B" of Research Methodo5and Biostatistics i. e. Medical Statistics will be evaluated by eligible examiner of Statistics.
- (ii) M.D./M.S. (Ayurveda) Final Examination - The answer book of final examination shall be evaluated by a team of four examiners, out of which two examiners shall be external from any other institution and two shall be the internal examiner.
- (iii) Evaluation of paper - Paper -II by one External Examiner .

Paper -III by another External Examiner

Paper-I by the Guode /Supervisor

Paper -IV by the second external examiner.

14.3 Appointment of Examiner (s) -

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Kharapur Kalan, Distt. Sonapat

- (i) The examiner shall possess at least 5 year PG teaching experience
- (ii) The External Examiners shall not be appointed for a period of more than two years at a time and may be re – appointed after interval of one year .

15. **Facilities for post-graduate students.** The stipend and contingency shall be provided at the rates decided by the Central Government for institutes of its control or respective State Government for institutes of its control or University, as the case may be.

16. **Payment of Stipend and Contingency for the Students of P.G. Course**

- a) The students admitted on stipendary seats will be paid monthly stipend as approved by the Executive Council of the University.
- b) The stipend will be paid for a period not exceeding three years (36 months) subject to his/her maintaining satisfactory attendance, research progress, conduct and hospital work.
- c) No M.D./M.S. (Ayurveda) student shall accept any paid or unpaid assignment in Government or in private firm or body during the period of his/her study.
- d) The students giving up studies in the middle of the session shall be required to refund the whole amount of stipend paid to him/her since joining the course along with the bond amount of Rs. 7,50,000 (Annexure-2). In the event of the death of a student during the study, no recovery of the stipend paid to him/her and the bond value shall be made.
- e) The contingency shall be provided as per the rates decided by the University from time to time.

17. **Discipline-**

- The student shall submit himself/herself to the disciplinary jurisdiction of the University which may be vested with the authority to exercise discipline under the rules.
- The Head of institute can remove the name of the student from the rolls in case his/her work and conduct is reported to be not satisfactory by the supervisor/chairman/Head of the Department/Institution. An undertaking to this effect shall be obtained from the student at time of admission.

18. **Teacher- student ratio.-**

18.1. The teacher-student ratio shall be such that the number of post-graduate teachers to the number of post-graduate students admitted per year is maintained as 1:3 in case of Professor and 1:2 in case of Reader or Associate Professor.

18.2. The teacher student ratio shall be 1:1 in case of Lecturer or Assistant Professor having minimum of five years teaching experience.

18.3. The maximum number of students in post-graduate course - The maximum number of students per year per specialty shall not exceed six.

19. Award of Degree- Candidates who have completed course and have been declared successful in the final examination shall be awarded the degree of Ayurveda Vachaspati (Doctor of Medicine- Ayurveda) or Ayurveda Dhanwantri (Master of Surgery- Ayurveda) subject concerned on payment of prescribed fee either in presence or absentia at his/her option at the succeeding convocation of the University.

20. Fee:

20.1. The program fee shall be paid by the candidate as per the guidelines issued by the University from time to time.

NO. OF PG SEATS	KAYACHIKITSA PG
Stipend per student per month	Aprox.- 42000/- as per analogy of SKAU, Kurukhetra
Course fee per student	250000/- per annum (7.5 lakh for 3 years)
Research fund for clinical Trial (will be sanctioned by BPSMV)	50,000/- per student, one time in three years.

21. VACATION AND LEAVES-

(A) (a) There shall be two terms in each academic year.

(b) Total vacations of 16 days each will be allowed to the students during summer

Seasons as decided by the Dean & Director/Principals of upgraded P.G. Centers of

affiliated colleges. The students will be allowed to avail these vacations in two equal halves i.e. 8 days for first half of students and 8 days for second half of students in each vacation. No any kind of leave can be attached with vacation however Director has power to sanction such leave in extra ordinary circumstances.

(B) The students will be allowed casual leave (C.L.) up to 10 days each year. This leave can be joined with the holidays/Sundays and the students can enjoy such leave maximum up to 04 days at a time including holidays. In between holidays shall be considered as holidays. The casual leave cannot be joined with vacation and medical leave.

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(C)

The students will also be allowed 10 days medical leave in a year on submission of medical certificate of a registered medical practitioner. This leave can't carry forward to the next academic year.

(D)

180 days maternity leave will be allowed once during the period of study to female students. No any kind of leave can be attached with this leave however Director has power to sanction such leave in extra ordinary circumstances. No stipend will be paid for such kind of leave which is sanctioned in extra ordinary circumstances. Maternity leaves are admissible only to candidates with less than two surviving children subject to the condition that the students will have to complete the required period of training before being allowed to appear in the examination.

(E)

The leave remaining un-availed during a particular academic year would lapse at the end of the academic year, and will not be carried over to next year of the course.

(F)

During miscarriage / abortion (induced or otherwise) total leaves of 45 days are admissible during the entire course, leaves are admissible irrespective of number of surviving children. Application should be supported by a certificate from a Registered Medical Practitioner/ Authorized Medical Attendant subject to the condition that the students will have to complete the required period of training before being allowed to appear in the examination.

(G)

Duty/Special leave shall be granted to the students who are deputed or allowed by the authority to take part in the sports, seminar etc. Such leave shall not exceed 15 days in a year. However, the leave could be extended maximum by 15 days in special case by the Vice-Chancellor only.

(H)

On absence of the student for more than 30 days without prior permission of the Chairman/ HOD concerned admission in M.D./M.S. (Ayu) will stand terminated automatically without any notice. The concerned, Head of the institution should issue a notice to the student(s), who remains absent from training without permission of competent authority (Chairman/HOD/Head of the Institution) for a period exceeding 7 days.

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(I)

Under special circumstances the candidate will be allowed to avail the sick leaves up to maximum 60 days under medical ground with the certificate from the Medical Board Subject to the condition that the students will have to complete the required period of training before being allowed to appear in examination.

(J)

The students admitted on non-stipendiary seats, if any, will also be governed by the above regulations.

Duty/Special leave shall be granted to the students who are deputed or allowed by the authority to take part in the sports, seminar etc. Such leave shall not exceed 15 days in a year. However, the leave could be extended maximum by 15 days in special case by the Director only.

18. Stipend:

18.1. Stipend for a period of not more than 36 months shall be paid to the students as per the guidelines of University/State Govt. of Haryana.

19. Post-graduate Degree to be Awarded:

After passing the final examination, a candidate shall be awarded the degree of :-

AYURVEDA VACHASPATI - KAYACHIKITSA i.e. Doctor of Medicine - M.D (Ayurveda) - Kayachikitsa.

20. General Guidelines:

20.1. Where this document is silent about any rule, the NCISM (erstwhile CCIM) guidelines/University Ordinance as amended from time to time will be applicable. Any new guidelines issued by the statutory body, i.e. NCISM shall be applicable.

20.2. Eligibility Criteria, Fee Structure, Academic Calendar, Examination Schedule, Sports the University Calendar and Cultural Calendar for the academic year shall be given in Prospectus.

20.3. Admission, teaching schedule, preparatory holidays, examination, winter, summer vacation, shall be followed as specified in academic calendar of the University.

20.4. A student is deemed to have completed the requirements for the degree and is eligible for the award of degree if:

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Karnapur Kalyan

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- 20.4.1. She has satisfied all the academic requirements as per the regulations;
- 20.4.2. She has paid all fees due from her;
- 20.4.3. There is no case of indiscipline pending against her.
- 20.4.4. Satisfied the minimum academic and residence requirements;
- 20.4.5. Satisfactorily completed the requirements for the short duration across-curricular course, industry internship and NCC/NSS as may be prescribed by the Academic Council;
- 20.4.6. A student who has completed the entire requirement listed above shall be eligible for award of degree. However, under extremely exceptional circumstances, where gross violation of the requirements is detected at any later stage, the Academic Council may recommend to withdraw the degree already awarded.
- 20.4.7. Absence of registered students from classes during a semester shall be discouraged. However, for bonafide reasons such as illness, maternity a student may be granted leave of absence as per provision of leave rules for students framed by the Academic Council.

20.5. All academic problems of the students other than those affecting the University rules and regulations framed from time to time may be looked into by a committee constituted by the Dean Academic Affairs.

20.6. A year-wise Academic Calendar shall be adopted by the Vishwavidyalaya with the exact dates for important academic events scheduled during the academic session being specified in the Calendar. In particular, the dates of the following events shall be specified: "Orientation of New Students; Registration; Late Registration; Commencement of Classes; Adding & Dropping of Courses; Last Date for Submission of Documents by New Students etc.

21. Migration:-

There will be no provision for migration.

22. The following shall be the titles of the papers in each subject:

KAYACHIKITSA			Marks		Total Marks
S.No.	Paper	Subject	Theory	Practical	
		First Year			

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Bhamburda Katan, Dist. Solapur

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② DRAVYA GUNA VIGYAN

S.No.	Paper	Subject	Marks		Total Marks
			Theory	Practical	
First Year					
1.	Paper-1 Preliminary	Research Methodology & Medical Statistics (Part 1&2)	100 (60+40)	100	200
2.	Paper2 DG	Dravya guna vigyan	100	100	200
Final Year (Third year)					
3.	DG Paper 1	Naam rupa vigyan	100		100
4.	DG Paper 2	Guna karma vigyanana	100	-	100
5.	DG Paper 3	Prayog vigyan	100	-	100
6.	DG Paper 4	Nighantu vigyan	100		100
7.	DG	Dravya guna vigyan		100	100

Syllabus:

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The following shall be the titles of the papers in each subject: **SCHEME**

① KAYACHIKITSA			Marks		Total
S.No.	Paper	Subject	Theory	Practical	Marks
First Year					
1.	Paper 1 Preliminary	Research Methodology & Medical Statistics (Part 1&2)	100 (60+40)	100	200
2.	Paper 2	Kayachikitsa	100	100	200
Final Year (Third year)					
3.	KC Paper 1	Fundamentals of Kayachikitsa	100		100
4.	KC Paper 2	Samanya Roga Chikitsa	100	-	100
5.	KC Paper 3	Vishishta Roga Chikitsa	100	-	100
6.	KC Paper 4	Advances in Kayachikitsa	100		100
7.	KC	Kayachikitsa		100	100

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SYLLABUS FOR POST GRADUATE COURSE IN AYURVED AS PER CCIM, NEW DELHI

M.D.(AYURVEDA) PRELIMINARY - PAPER-I

RESEARCH METHODOLOGY AND MEDICAL STATISTICS

PART-A

RESEARCH METHODOLOGY

Introduction to Research

- A. Definition of the term research
- B. Definition of the term anusandhan
- C. Need of research in the field of Ayurveda

General guidelines and steps in the research process

- A. Selection of the research problem
- B. Literature review: different methods (including computer database) with their advantages and limitations
- C. Defining research problem and formulation of hypothesis
- D. Defining general and specific objectives
- E. Research design: observational and interventional, descriptive and analytical, preclinical and clinical, qualitative and quantitative
- F. Sample design
- G. Collection of the data
- H. Analysis of data.
- I. Generalization and interpretation, evaluation and assessment of hypothesis.
- J. Ethical aspects related to human and animal experimentation.
- K. Information about Institutional Ethics Committee (IEC) and Animal Ethics Committee (AEC) and their functions. Procedure to obtain clearance from respective committees, including filling up of the consent forms and information sheets and publication ethics.

Preparation of research proposals in different disciplines for submission to funding agencies taking EMR-AYUSH scheme as a model.

Scientific writing and publication skills.

- a. Familiarization with publication Guidelines-Journal specific and CONSORT guidelines
- b. Different types of referencing and bibliography.

- c. Thesis/Dissertation: contents and structure
- d. Research articles structuring: Introduction, Methods, Results and Discussions (IMRAD)

Classical Methods of Research.

Concept of Pratyakshadi Pramana Pariksha, their types and application for Research in Ayurveda.

Dravya-, Guna-, Karma-Parikshana Paddhati Aushadhi-yog Parikshana Paddhati Swastha, Atura Pariksha Paddhati, Dashvidha Parikshya Bhava, Tadvidya.sambhasha, vadmarga and tantrayukti

Comparison between methods of research in Ayurveda (Pratigya, Hetu, Udaharana, Upanaya, Nigaman) and contemporary methods in health sciences.

Different fields of Research in Ayurveda

- a. Fundamental research on concepts of Ayurveda
- b. Panchamahabhuta and tridosha.
- c. Concepts of rasa, guna, virya, vipak, prabhav and karma
- d. Concept of prakriti-saradi bhava, ojas, srotas, agni, aam and koshttha.

Literary Research-

Introduction to manuscriptology: Definition and scope. Collection, conservation, cataloguing.

Data mining techniques, searching methods for new literature; search of new concepts in the available literature. Methods for searching internal and external evidences about authors, concepts and development of particular body of knowledge.

Drug Research (Laboratory-based)- Basic knowledge of the following:

Drug sources: plant, animal and mineral. Methods of drug identification.

Quality control and standardization aspects:

Basic knowledge of Pharmacopoeial standards and parameters as set by Ayurvedic Pharmacopoeia of India.

Information on WHO guidelines for standardization of herbal preparations.

Good Manufacturing Practices (GMP) and Good Laboratory Practices (GLP).

Safety aspects: Protocols for assessing acute, sub-acute and chronic toxicity studies. Familiarization with AYUSH guidelines (Rule 170), CDCSO and OECD guidelines.

Introduction to latest Trends in Drug Discovery and Drug Development

- Brief information on the traditional drug discovery process
- Brief information on the latest trends in the Drug Discovery process through employment of rational approach techniques; anti-sense approach, use of micro and macro-arrays, cell culture based assays, use of concepts of systems biology and network physiology
- Brief introduction to the process of Drug development.

Clinical research:

Introduction to Clinical Research Methodology identifying the priority areas of Ayurveda
Basic knowledge of the following: -Observational and Interventional studies
Descriptive & Analytical studies
Longitudinal & Cross-sectional studies
Prospective & Retrospectives studies
Cohort studies
Randomized Controlled Trials (RCT) & their types
Single-case design, case control studies, ethnographic studies, black box design, cross-over design, factorial design.
Errors and bias in research.
New concepts in clinical trial- Adaptive clinical trials/ Good clinical practices (GCP)
Phases of Clinical studies: 0,1,2,3, and 4.

Survey studies - Methodology, types, utility and analysis of Qualitative Research methods.
Concepts of in-depth interview and Focus Group Discussion.

Pharmacovigilance for ASU drugs. Need, scope and aims & objectives.
National Pharmacovigilance Programme for ASU drugs.

Introduction to bioinformatics, scope of bioinformatics, role of computers in biology. Introduction to Data base- Pub med, Medlar and Scopus. Accession of databases.

Intellectual Property Rights- Different aspect and steps in patenting. Information on Traditional Knowledge Digital Library (TKDL).

PART-B 40 marks

MEDICAL STATISTICS Teaching hours: 80

169/12

1. **Definition of Statistics:** Concepts, relevance and general applications of Biostatistics in Ayurveda
2. **Collection, classification, presentation, analysis and interpretation of data** (Definition, utility and methods)
3. **Scales of Measurements** - nominal, ordinal, interval and ratio scales.
Types of variables - Continuous, discrete, dependent and independent variables.
Type of series - Simple, Continuous and Discrete
4. **Measures of Central tendency** - Mean, Median and Mode.
5. **Variability:** Types and measures of variability - Range, Quartile deviation, Percentile, Mean deviation and Standard deviation
6. **Probability:** Definitions, types and laws of probability,
7. **Normal distribution:** Concept and Properties, Sampling distribution, Standard Error, Confidence Interval and its application in interpretation of results and normal probability curve.
8. **Fundamentals of testing of hypotheses:**
Null and alternate hypotheses, type I and type 2 errors.
Tests of significance: Parametric and Non-Parametric tests, level of significance and power of the test, 'P' value and its interpretation, statistical significance and clinical significance
9. **Univariate analysis of categorical data:**
Confidence interval of incidence and prevalence, Odds ratio, relative risk and Risk difference, and their confidence intervals
10. **Parametric tests:** 'Z' test, Student's 't' test: paired and unpaired, 'F' test, Analysis of variance (ANOVA) test, repeated measures analysis of variance
11. **Non parametric methods:** Chi-square test, Fisher's exact test, McNemar's test, Wilcoxon test, Mann-Whitney U test, Kruskal - Wallis with relevant post hoc tests (Dunn)
12. **Correlation and regression analysis:**
Concept, properties, computation and applications of correlation, Simple linear correlation, Karl Pearson's r correlation co-efficient, Spearman's rank correlation.
Regression- simple and multiple.
13. **Sampling and Sample size computation for Ayurvedic research:**
Population and sample. Advantages of sampling, Random (Probability) and non-random (Non-probability) sampling. Merits of random sampling. Random sampling methods- simple random, stratified, systematic, cluster and multiphase sampling. Concept, logic and requirement of sample size computation, computation of sample size for comparing two means, two proportions, estimating mean and proportions
14. **Vital statistics and Demography:** computation and applications - Rate, Ratio, Proportion, Mortality and fertility rates, Attack rate and hospital-related statistics
15. **Familiarization with the use of Statistical software like SPSS/Graph Pad**

PRACTICAL

100 marks

RESEARCH METHODOLOGY

Teaching hours: 120

PRACTICAL NAME

1. Pharmaceutical Chemistry

Familiarization and demonstration of common lab instruments for carrying out analysis as per API.

2. Awareness of Chromatographic Techniques

Demonstration or Video clips of following:

- Thin-layer chromatography (TLC).
- Column chromatography (CC).
- Flash chromatography (FC)
- High-performance thin-layer chromatography (HPTLC)
- High Performance (Pressure) Liquid Chromatography (HPLC)
- Gas Chromatography (GC, GLC)

3. Pharmacology

Familiarization and Demonstration of different techniques related to:-
Drug administration techniques- oral and parenteral.

Blood collection by orbital plexuses puncturing. Techniques of anesthesia and euthanasia.
Information about different types of laboratory animals used in experimental research
Drug identification as per API including organoleptic evaluation

4. Pharmacology and toxicology

Familiarization and demonstration of techniques related to pharmacology and toxicology.

5. Biochemistry (Clinical)

Familiarization and demonstration of techniques related to basic instruments used in a clinical biochemistry laboratory – semi and fully automated clinical analyzers, electrolyte analyzer, ELISA- techniques, nephelometry. Demonstration of blood sugar estimation, lipid profiles, kidney function test, liver function test, HbA1, cystatin and microalbumin estimation by nephelometry or other suitable techniques. Interpretation of the results obtained in the light of the data on normal values.

6. Clinical Pathology

Familiarization and demonstration of techniques related to basic and advanced instruments used in a basic clinical pathology lab. Auto cell counter, urine analyzer, ESR, microscopic examination of urine.

7. Imaging Sciences

Familiarization and demonstration of techniques related to the imaging techniques.
Video film demonstration of CT-Scan, MRI-scan and PET-scan.

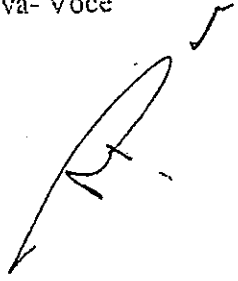
8. Clinical protocol development

II. MEDICAL STATISTICS

Practical hours: 20 Statistical exercises of examples from Topic number 4, 5, 8-12, 14,
15 Records to be prepared.

Distribution of Marks:

- | | |
|--|------------|
| 1. Instrumental spotting test | - 20 marks |
| 2. Clinical protocol writing exercise on a given problem | - 20 marks |
| 3. Records: | |
| 4. Research methodology | -10 Marks |
| 5. Medical statistics | -10 marks |
| 6. Viva- Voce | -40 Marks |



**M.D.-AYURVEDA PRELIMINARY
KAYACHIKITSA (Genral Medicine)**

PAPER-II

Theory- 100 marks

PART A

50 marks

1. Understanding of fundamental concepts of Kayachikitsa like Vriddhi and Kshaya of Dosha, Dushya, Mala with Amshaamsha Kalpana. Srotodushti, Khavaigunya, Agni, Ama (Saama and Nirama Dosha, Dhatu & Mala). Aavarana, Rogamarga, Ashayapakarsha, Dosha Gati, Kriyakala. Aushadha Sevana Kala, Anupana, Pathya-Apathya and their scientific relevance during health and disease.
2. Detailed knowledge of Rogi Roga Pariksha Including detailed history taking and systemic examination of patient. Clinical implementation of Dwividha Pariksha, Trividha Pariksha, Chaturvidha Pariksha, Panchavidha Pariksha, Shadvidha Pariksha, Ashtavidha Pariksha, Dashvidha Pariksha Bhavas and Prakriyadi Dashvidha Pariksha.
3. Principles of Kayachikitsa in disease management including Shodhana, Shamana and Naimittika Rasayana.
4. Introduction of the basic principles of Modern medicine, Homeopathy, Unani, Siddha, Tibetan Medicine, Yoga and Naturopathy and their relevance in light of the basic principles of Ayurvedic medicine.

PART B

50 marks

1. Chikitsa Siddhanta of Pranavaha, Annavaaha, Udakavaha, Rasadi Dhatuvaha, Malavaha & Manovaha Srotovikara.
2. Emergency medicine: Acute Severe Asthma, pulmonary oedema, myocardial infarction, cerebro-vascular accidents, water and electrolyte imbalance, haemorrhage, syncope, seizure, coma, hyperpyrexia, hypertensive encephalopathy.
3. Knowledge of conducting various medical procedures like infusions, tapping, lumbar puncture, Ryle's tube insertion, catheterization, tractions, water seal drainage, Cardio Pulmonary Ressucitation.
4. Basic knowledge of underlying principles of ECG, TMT, echo cardiography, vascular doppler studies, EEG, EMG, X-Ray, USG, CT scan, MRI, PET and their interpretation.

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5. Knowledge of common Ayurvedic formulations and preparations used in treatment:

Churna- Triphala, Sitopaladi, Lavanbhaskara, Hingvashtaka, Avipattikara, Gangadhara, Shaddharana, Sudarshana, Panchasakara, Ajmodadi.

Kashaya- Dashamula, Rasnasaptaka, Asanadi, Pathyadi, Phalatrikadi, Punarnavashtaka, Gojivhadi, Mahamanjishthadi, Drakshadi Kashaya.

Asavas-Arista- Amritarishta, Kanakasava, Chitrakasava, Saraswatarishta, Ashwagandharishta, Chandanasava.

Vati- Sanjivani, Chandraprabha, Agnitundi, Chitrakadi, Khadiradi, Vyoshadi, Shankha Vati, Shiva Gutika.

Guggula-Kalpana-Triphalaguggula, Kaishoraguggula, Trayodashangaguggula, Simhanadaguggula, Yogarajaguggula, Gokshuradi guggula, Kanchanaraguggula.

Rasaushadhi- Tribhuvanakirti Rasa, Arogyavardhini Rasa, Shwasakuthara Rasa, Rasamanikya Rasa, Smritisagara Rasa, Lakshmivilasa Rasa, Sutshekhara Rasa, Pravala Panchamrita Parpati, Hemagarbhapottali Rasa.

Taila- Mahanarayana Taila, Pindataila, Prasarinyadi Taila, Ksheerabala Taila, Brihat Saindhavadi Taila, Panchaguna Taila, Amritadi Taila, Marichyadi Taila, Mahamasha Taila.

Ghrita- Mahatriphaladi Ghrita, Brahmi Ghrita, Panchtikta Guggulu Ghrita, Sukumara Ghrita, Dadimadya Ghrita, Kantakari Ghrita, Kalyanaka Ghrita.

Lehya- Chyavanaprasha Avaleha, Kushmanda Avaleha, Ashwagandha Avaleha, Agastya Hareetaki Rasayana, Drakshavaleha, Vasavaleha, Amrita-Bhallataka Rasayana.

PRACTICAL

100 marks

Content:- Daily hospital duties in OPD, IPD and casualty

Bed-side case taking – 25 patients

Distribution of marks (practical):

1. Case records of 25 Patients in detail 20 marks

2. Bedside clinical case taking Long case

20 marks

31

PG Ordinance, M.S.M Institute of Ayurveda, BPSMV

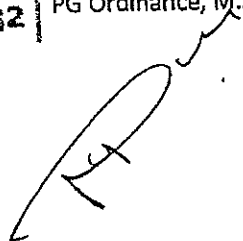
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	Short case	10 marks
3.	Medical procedures/laboratory work	15 marks
4.	Instruments and spotting	15 marks
5.	Viva voce	20 marks

REFERENCE BOOKS

- Charak Samhita -Cakrapanidutta commentry
 Sushrut Samhita -with all available commentaries.
 Ashtang Samgraha –Indu commentary
 Ashtang Hridaya –Arundutta and Hemadri commentry
 Cikitsadarsha - Pandit Rajesvardutta Shastri
 Kayachikitsa - Ramaraksha Pathak
 Rog Pariksha Vidhi - Priyavrat Sharma
 Panchakarma Vigyan - Haridas Sridhar Kasture
 Ayurved Nidan Chikitsa Siddhanta - Prof. R.H.Singh.
 Kayachikitsa Vol. I-IV. - Prof. Ajay Kumar
 Davidson's Principles and Practice of Medicine.
 API Text Book of Medicine.
 Harrison's Text Bok of Medicine.
 Cecil Text Book of Medicine.
 Relevant texts of concerned subjects.



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M.D.-AYURVEDA PRELIMINARY

2. DRAVYAGUNA VIGYANA

(Materia Medica & Pharmacology)

PAPER-II

Theory 100 Marks

PART - A

50 marks

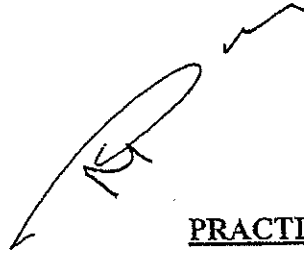
1. Panchamahabhuta siddhanta, Samanya Vishesha siddhanta, Tridosha siddhanta. Extensive study on classifications of Dravya as described in Brihatrayi.
2. Applied aspects of Rasa, Guna, Virya, Vipaka and Prabhava
3. Applied aspects of Aushdha karma with reference to Sharngadhara and Bhavaprakasha
4. Importance of Namarupa vigyan and concept of basonyms and synonyms of Dravyas
5. Applied knowledge of Bhaishajya Prayoga (marga, kalpana, matra, anupana, sevan, kala etc.)

PART - B

50 marks

6. Basic principles of Desha pravichara, Dravya sangrahana (collection), Samrakshana (preservation)
7. Evolution of Dravyaguna vigyan with special emphasis on Nighantus
8. Prashasta bhesaj lakshana

9. Profound knowledge on applied aspects of Agrya aushadha
10. Methodology of studying controversial, pratinidhi (substitute), apamishrana (adulterant) and unidentified dravya
11. Pharmacognosy and its relevance in Dravyaguna vigyan
12. An integrated study of Charakokta Bshhaj pariksha and scientific method of drug evaluation with special reference to quality, safety and efficacy
13. Brief knowledge and importance of clinical pharmacology
14. General principles of various good cultivation practices, collection practices, storage practices and manufacturing practices
15. Pharmacovigilance and ADR issues
16. Knowledge on the Ayurvedic Pharmacopoeia of India, The Formulary of India and international pharmacopoeias



PRACTICAL

100marks

Contents:

1. Field visits for the Identification of important classical medicinal plants (Minimum two visits to neighboring forest areas)
2. Macroscopic and microscopic identification of minimum two plants of each of prayojyanga (useful parts of plants)
3. Preliminary study of pharmacoepial standards (API) of minimum 5 plants
4. Minimum two experiments on Animals.

Distribution of marks (Practical)

- | | |
|---|------------|
| 1. Herbarium sheets | -10 Marks |
| 2. Practical of macroscopic and microscopic identification of prayojyanga (one part of the plant) | -30 Marks |
| 3. Practical record book of pharamcopoeial standards and animal experimentations | -10 Marks |
| 4. Spotting | -30 Marks |
| 5. Viva-Voce | -20 Marks. |

11. KAYACHIKITSA

Theory- 400 Marks (100 Each)
Practical and Viva-Voce - 100 Marks

PAPER- I

100 Marks

FUNDAMENTALS OF KAYACHIKITSA

1. Rogi-Roga Pariksha: Nidan Panchak, Trividha pariksha, Ashtavidhapariksha, Dashvidhapariksha in the light of recent advances. Clinical methods-Detailed history taking and patient examination, Shadang pariksha (Systemic examination) as per ayurveda and recent advances.
2. Interpretation of investigations: ECG, Echo cardiography, TMT, Spirometry, X-ray, USG, CT-Scan, MRI, EEG, EMG, Etc in different pathological conditions.
3. Detailed Knowledge of Principles of Chikitsa in Ayurveda. Classification of Rogas, Types of Chikitsa. Principles and practices of Rasayana and Vajikarna.
4. National Health Programmes/NRHM and prospective role of Ayurveda services and therapeutics in them with special reference to Kayachikitsa.
5. Medical ethics, Common laws and regulations applicable to clinical practice.
6. Elaborate knowledge of undertaking common medical procedures like Ryle's tube feeding, tapping, transfusions, catheterization, tractions, nebulizations, lumbar puncture, etc.
7. Ayurveda Dietetics: Importance of Pathya, Apathya and Anupana.
8. Drug-drug interactions and adverse drug reactions, Iatrogenic disorders.

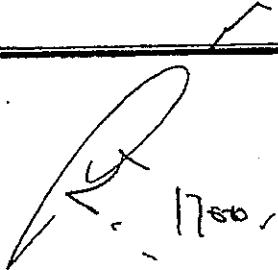
PAPER - II

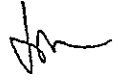
100 Marks

SAMANYA ROGA CHIKITSA

Nidana/ Chikitsa including Nidana Parivarjana, Pathya, Apathya, Chikitsa siddhanta, Shamana, Shodhana, Panchakarma, Rasayana and Atyayika Chikitsa (Anupana, Drug/Non-drug) as per Ayurvedic and conventional therapeutics of following Srotogata vyadhi including Kshaya, Vriddhi srotodushti janya vyadis such as:

1. Pranavahasrotas: Shwasa, Hikka, Kasa, Rajayakshma, Hridroga, Parshwashoola, Urakshata, Svarabheda.
Cardio-respiratory system: Bronchitis, Bronchiectasis, Bronchial asthma, COPD, Cor-pulmonale, Pneumonias, Occupational lung diseases, Pulmonary tuberculosis, Congenital Heart disorders, IHD, RHD- Valvular diseases, Cardiac failures, Cardiomyopathy, Pericarditis, Endocarditis, Hypertension.
2. Annavahasrotas: Agnimandya, Ajirna, Aruchi, Amadosha, Amilapitta, Chhardi, Shoola, Grahani. Gastrointestinal disorders: GERD, APD, Malabsorption Syndrome.
3. Udakavahasrotas: Trishna, Shotha, Udararoga, water and electrolyte imbalance
4. Rasavaha srotas: Jwara, Amavata, Pandu, Madatyaya, Anaemias, Rheumatoid arthritis.
5. Raktavaha Srotas: Raktapitta, Kamala, Vatarakta, Kushtha, Kshudraroga, Sheetpitta, Udarda, Kotha, Visarpa, Shvitra. Haemopoietic disorders, Bleeding and Coagulation disorders, Leukaemias, Thrombocytopenia, Disorders of Bone Marrow, Hepatobiliary disorders, Hepatitis, Cirrhosis, Cholecystitis, Liver abscess, Jaundice, Dermatological disorders, Parasitic, Infective, Allergic, Autoimmune skin disorders such as Psoriasis, Eczemas.
6. Mamsa-Medovahasrotas: Medoroga, Sthaulya, Prameha, Galaganda, Gandamala, Urustambha, Diabetes mellitus, Obesity.
7. Asthi-Majja vahasrotas: Asthikshaya, Sandhigatavata, Osteoarthritis, Osteopenia, Osteoporosis.
8. Shukravahasrotas: Such as Klalvya, Dwajabhanga, Impotence.
9. Mutravahasrotas: Mutrakricchra, Mutraghata, Ashmari, Urinary disorders: UTI, Lithiasis, ARF, CRF, Uraemia, BPH.
10. Purishvaha srotas: Atsara, Pravahika, Anaha, Adhamana, Krimi, Udavarta, Diarrhoeas, Dysentery, Ulcerative colitis, IBS, Intestinal Worm infestation.


17/50



VISHISHTA ROGA CHIKITSA

Comprehensive knowledge of Nidan Panchak- etiology, demography, pathogenesis, symptomatology, complications, investigations, diagnosis and drug/non-drug management of following diseases as per Ayurveda/ Conventional therapeutics:

1. Vata-Vyadhi:- Pakshavadha, Ekangvata Ardhang Vata, Sarvanga Vata, Ananta Vata, Gata Vata, Gridhrasi, Ardita, Akshepaka, Apatantraka, , Vishvachi, Avabahuka, Avarana, Urustambha.
Musculoskeletal disorders: Myopathies, Muscular dystrophies, Lumbago
Neurological disorders: Neurodegenerative disorders like Alzheimer's, Parkinsonism, CVA, Neuropathies, Facial palsy, G B Syndrome, Motor Neuron Diseases, Epilepsy, Sciatica.
2. Sankramakroga: Sheetala, Masoorika, Updansa, Phiranga, Gonorrhoea, Chancroids, Syphilis.
3. Manasa vyadhi:- Unmada, Apasmara, Atavabhinivesha, Mada, Moorcha, Sanyasa.
Common psychiatric disorders: Classification of psychiatric ailments. Disorders of thought like Schizophrenia. Disorders of Mood like Mania, Depression. Neurosis, personality disorders, psychosexual disorders.
4. Metabolic disorders: Gout, Dyslipidaemia, Atherosclerosis, Metabolic Syndrome.
5. Endocrinal disorders: Disorders of Pituitary, Thyroid, Adrenal Medulla, Reproductive hormones.
6. Parasitic/Infective/Communicable disorders: Shlipada, Filariasis, Vishama Jvara, Malaria, Manthara Jwara, Enteric Fever, Dengue, Chickenpox, Measles, Influenza, Kalaazar, Mumps, Rabies, Poliomyelitis, Plague, Meningitis, Encephalitis, Chikungunya, HIV/AIDS, Common worm infestations.
7. Neoplastic disorders and their management strategies. Role of Ayurvedic medicines in cancer care including palliative care.
8. Autoimmune diseases: Myopathies, Rheumatic fever, SLE.
9. Common poisonings and their management like Insecticide/Pesticide poisoning, Snake poisoning, Vegetable and chemical poisoning, Substance abuse.
10. Janapadodhvamsa Vikara:- Environmental diseases Causes, Impact on human health and their management.
11. Ashtanindhataya Prusha and their clinical relevance.

ADVANCES IN KAYACHIKITSA

Critical care medicine, Management of medical emergencies, ICU services, Field medical services

1. Hospital management strategies, Infrastructure, use of IT technology, essential manpower, equipment, Patient care, management and coordination with contemporary health institutions and field institutions.
2. National Health Campaigns of AYUSH and components under NRHM.
3. Clinical Research in Kayachikitsa and its application in clinical medicine as per new evidence base in different systemic disorders.
4. New emerging health challenges and ayurvedic medicines: Chikungunya, HIV/AIDS, Swineflu, Chickenflu, Dengue, Restless leg syndrome, Sick building syndrome, Fibromyalgia.
5. Role of Ayurveda in immune-protection, immuno-modulation and in management of other allergies and immunological disorders.
6. Indications and importance of Organ transplantation, Ethical and legal issues involved.
7. Knowledge of Geriatric care and terminal care medicine.
8. Basic knowledge of Gene therapy, Stem cell therapy, Genetic modeling and chromosomal disorders in different disease conditions.

9. Radio-isotopes, disease and tumor markers in diagnosis and assessment of therapy.
10. Scope and methods of independent and collaborative research in Kayachikitsa.
11. Disaster management strategies.
12. Application of advances in Rasayana and Vajikarana therapies
13. Application of emerging trends in Panchakarma in medical management.
14. Physical medication and rehabilitation.

PRACTICALS -

100 Marks

Practicals shall be held to evaluate the patient care, diagnostic and treatment expertise of the student. It should also be taken as a chance to evaluate the clinical skills.

Publication of One Scientific paper based on Thesis Research preferably in indexed journal is essential. Should have taken minimum 20 Theory and Practical classes of BAMS in concerned subject.

Clinical Ability Evaluation-60 Marks based on

- | | |
|--|-----------|
| 1. Case records of 40 IPD Patients in Detail | 10 Marks |
| 2. Long case History-1: | 20 Marks |
| 3. Short Case history-1 : | 10 Marks |
| 4. Medical procedures demonstration | 20 Marks. |
| 5. Academic Competence evaluation- 40 Marks based on: | |
| a. Viva | 30 Marks. |
| b. Teaching and communication skills/Thesis presentation in PPT /: | 10 Marks. |

Reference Books:

- | | |
|---|----------------------------------|
| 1. Relevant portions of Brihatrayi and Laghutrayi with commentaries | |
| 2. Cikitsadarsha | - Pandit Rajeshvar Dutta Shastri |
| 3. Kayachikitsa | - Ramaraksha Pathak |
| 4. Rog Pariksha Vidhi | - Priyavrat Sharma |
| 5. Panchakarma Vigyan | - Haridas Sridhar Kasture |
| 6. Ayurvediya Nidana- Chikitsa Siddhanta | - Prof. R.H.Singh. |
| 7. Kayachikitsa Vol. 1 and 2 | - Prof. R.H.Singh. |
| 8. The Holistic Principles of Ayurvedic Medicine | - Prof. R.H.Singh. |
| 9. Essentials of Kayachikitsa -II, Vol. 1 | - Dr. Aruna |
| 10. Kayachikitsa Vol. I-IV. | - Prof. Ajay Kumar |
| 11. Panchakarma Therapy | - Prof.R.H.Singh |
| 12. Panchakarma Illustrated | - Prof.G.Shrinivasa Acharya |
| 13. Practice of Ayurvedic Medicine(Kayachikitsa) | - Prof.A.K.Tripathi |
| 14. Nidanachikitsa Hastamalaka | - Prof. R.R.Desai |
| 15. Clinical Methods In Ayurveda | - Prof. K.R. Srikantamurthy |
| 16. Aushadhi Gunadharna Shastra | - Gangadhar shastri Gune |
| 17. Introduction to Kayachikitsa | - Prof. C. Dwarkanath |
| 18. Samprapti lakshnanayoh Sambandhah | - Prof.Sadashiv Sharma |
| 19. Nidana Panchak | - Prof.S.C.Dhyani |
| 20. Kayachikitsa | - Prof.S.C.Dhyani |
| 21. Davidson's Principles and Practice of Medicine. | |
| 22. API Text Book of Medicine. | |
| 23. Harrison's Text Book of Medicine. | |
| 24. Cecil Text Book of Medicine. | |
| 25. Relevant texts of concerned subjects. | |

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4. DRAVYAGUNA VIGYAN

PAPER-I Namarupa Vigyana

100 marks

1. Importance of Namagyana of Dravya, origin of Namarupagyana of Aushadhi in Veda, etymological derivation of various names and synonyms of Aushadhi.
2. Rupagyana in relation to Aushadhi. Sthula and Sukshma description (Macroscopic and Microscopic study) of different parts of the plant.
3. Synonyms of dravyas(aushadha and Ahara) mentioned in Vedic compendia, Brihatrayee, Bhavaprakasha and Rajanighantu.
4. Basonyms, synonyms and distinguish morphological characteristic features of medicinal plants listed in Ayurvedic Pharmacopoeia of India(API).
5. Knowledge of Anukta dravya (Extrapharmacopial drugs)with regards to namarupa.
6. Sandigdha dravya(Controversial drugs) vinischaya.
7. Knowledge of biodiversity, endangered medicinal species.
8. Knowledge of TKDL, Introduction to relevant portions of Drugs and cosmetic act, Magic remedies Act, Intellectual Property Right (IPR) and Regulations pertaining to Import and Export of Ayurvedic drugs.
09. Knowledge of tissue culture techniques
10. Knowledge of Genetically Modified Plants

PAPER -II Guna Karma Vigyan

100 marks

1. Fundamental principles of drug action in Ayurveda and conventional medicine.
2. Detailed study of rasa-guna- virya- vipaka-prabhava and Karma with their applied aspects and commentators (Chakrapanidatta, Dalhana, Arunadatta, Hemadri and Indu) views on them.
3. Comprehensive study of karma as defined in Brihatrayee & Laghutrayee
4. Detailed study of Guna and Karma of dravyas listed in API and Bhavaprakasha Nighantu along with current research review.
5. Detailed study of ahara-dravya/ ahara varga ascribed in Brihatrayee and various nighantus along with Kritanna varga.
6. Pharmacological principles and knowledge on drugs acting on various systems.
7. Basic knowledge on experimental pharmacology for the evaluation of - analgesic, anti pyretic, anti inflammatory, anti diabetic, anti hypertensive, hypo lipidemic, anti ulcer, cardio protective, hepatoprotective, diuretics, adaptogens, CNS activities.
8. Knowledge on Heavy metal analysis, pesticidal residue and aflatoxins
9. Knowledge on evaluation of anti microbial and antimycotic activities.

PAPER - III Prayogavigyana

Marks 100

1. Bhaishjya Prayog Siddhant [Principles of drug administration] - Bhaishajya Marga (routes of drug administration), Vividha Kalpana (Dosage forms), Principles of Yoga Vijnan(compounding), Matra (Dosage), Anupana (Vehicle), Aushadha grahankal (Time of drug administration), Sevankal avadhi (duration of drug administration), Pathyapathya (Dos' /Donts' /Contraindications), complete Prescription writing (Samagra Vyavastha patraaka).
2. Samyoga- Viruddh Sidhanta and its importance
3. Amayika prayoga (therapeutic uses) of important plants ascribed in as well as Brihatrayee, Chakradutta, Yoga ratnakara and Bhavaprakasha.
4. Knowledge of Pharmaco-vigilance in Ayurveda and conventional system of medicine.

PG Final Year Syllabus-12

5. Knowledge of clinical pharmacology and clinical drug research as per GCP guide lines.
6. Knowledge of Pharmacogenomics

PAPER- IV

100 marks

1. Etymology of nighantu, their relevance, utility and salient features.
2. Chronological history of the following Nighantus with their authors name, period and content- Paryaya ratnamala, Dhanvantari nighantu, Hridayadipika nighantu, Ashtanga nighantu, Rajanighantu, Siddhamantra nighantu, Bhavaprakasha nighantu, Madanpala nighantu, Rajavallabha nighantu, Madhava Dravyaguna, Kaiyadeva nighantu, Shodhala nighantu, Saligram nighantu, Nighantu ratnakara, Nighantu adharsha and Priya nighantu
3. Detailed study Aushadha kalpana mentioned in Sharangadhara samhita and Ayurvedic Formulary of India (AFI).
4. General awareness on poshaka ahara(Nutraceuticals),Varnya(cosmoceuticals), food additives, Excipients etc.
5. Knowledge of plant extracts, colors, flavors and preservatives.
6. Review of important modern works on classical medicinal plants published by Govt of India, department of AYUSH and ICMR.

Syllabus of the Practical training of part two M.D. (Ayu) - Dravyaguna

Practical:-

Study tours:

Field identification of medicinal plants through at least three local Dravyaguna study tours within the state and one study tour out of state. Preparation of minimum 50 herbarium sheets, along with raw drug either from field, of plants be collected during study tours.

1. **Evaluation of Crude drugs:**
Macro and microscopic methods of examining five drugs of each of different useful parts of plants, including their powders.
2. **Phytochemical evaluation of raw material:**
Quantitative standards like foreign matter, extractive (water and alcohol), ash value, acid insoluble ash and TLC separation of various parts of minimum two plants of Ayurvedic Pharmacopoeia of India.
3. **Yoga vijnana :**
Preparation of two yoga of each kalpana of Ayurvedic Formulary of India:
4. **Pharmacology:**
 - ✓ Rasa nirddharana by Taste Threshold method of minimum one drug for each of rasas.
 - ✓ Observation of animal experimentation models (both in vitro and in vivo)- 05 models for possible rasadi gunas.
5. **Clinical**
 - ✓ Regular clinical training in the hospital for submission of Single Aushadhi Prayoga (Single drug trial/ Clinico-pharmacological studies.)
 - ✓ Survey for Amayika prayoga of aushadhi(Pharmaco epidemiology) for studying their role in clinical practice in contemporary period -observational study-minimum.
6. **Dissertation**
A Dissertation, as per the approval of Departmental Research Committee/Competent Committee for the purpose, be prepared under the guidance of approved supervisor

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in Dravyaguna and submitted 6 months before the final examination. The approval of Dissertation shall be essential before appearing the final examinations.

7. Method of practical training - Posting for minimum one month in each of the following units -

- ✓ Quality control laboratory of nearest pharmacy/institution for crude drug identification, adulterants and substitutes & understanding standardization techniques.
 - ✓ Experimental pharmacology laboratory for developing skills in animal experimentation
 - ✓ Regular clinical training in the Teaching hospital for studying Ekala Aushadhi Prayoga & Adverse drug reactions(ADR).
8. Post Graduate Scholar is expected to present minimum two scientific papers in National / international seminars during the course of study
9. Post Graduate Scholar is expected to publish / get accepted at least one paper in indexed/ peer reviewed journal under the supervision of guide.

Pattern of Practical Examination-

Total =200 marks

- | | |
|--|------------|
| 1. Herbarium | - 10 Marks |
| 2. Pharmacognosy practical record | - 10 Marks |
| 3. Pharmacology practical record | - 10Marks |
| 4. Clinical records record | - 10 Marks |
| 5. Practical examination(Identification of green and raw drugs, microscopic examination, Ekala aushadha pariksha | - 60 Marks |
| 6. Thesis Presentation | - 20Marks |
| 7. Viva voce | - 80 Marks |

Reference books -

