

## Agadathantra

### SCHEME OF EXAMINATION:

#### Terms & Periodical exams

It is proposed to divide the 1-½ years of professional course into three terms as envisaged by DAME. The three terms, study leave & periodical exams can be as follows:

Term 1 : Classes for 6 months, including examination & result

Term 2 : Classes for 6 months, including examination & result

Term 3 : Classes for 4 months including model examination & result.

Study leave + University Exam for 2 months

University Examination process 2 months

Total : 18 months

- Terminal exams should include viva.
- Examinations should be completed within the period of 18 months as stipulated by CCIM

Third terminal exam may be conducted as model exam.

## AGADATANTRA AND VYAVAHARAYURVEDA

### SYLLABUS REARRANGEMENT

The subject has two parts (1) AGADATANTRA  
(2) VYAVAHARAYURVEDA and VIDHIVAIDYAKA

The whole syllabus is divided into 8 modules and distributed in 3 terms – as shown. The approximate hour distribution is also shown.

#### THEORY-MODULES

#### PRACTICAL

##### First Term - 48 hours

###### MODULE-1

Definition of Agadatantra & Visha, Description of visha, mythological concepts, classification, Vishadhishtana, Pranacharya, properties and actions of visha, Its experimental study, examination based on panchabhoota, Concept, origin, properties Upavishas no., ten properties and actions of Visha, Visha and Ojus, Vishavega, Vegantara, Madya, three stages of intoxication and treatment, Aharavisha, Viruddha, introduction to toxicology and poison, introduction to modern analytical techniques

Visit to botanical garden, identification, study and collection of poisonous plants and antidotes,

###### MODULE-2

Definition and description of Vyavaharayurveda, origin and development of Forensic medicine, courts, evidence, witness, legal procedures- inquest subpoena, examination of witness etc., identification, Death and its medico legal importance, post mortem changes, Asphyxial deaths

MODULE-3

Types , qualities and defects of a physician,  
Visikhanupravesam, Vaidya sadvruttam,  
Aim of Ayurveda & Dharma,Artha,Kama, Moksha;  
Prajnaparadha, Dasavidhapapa.

**Second Term - 48 hours**

MODULE-4

Doosheevisha ,Gara, Vishadata, Vishapeeta, Visit to Toxicology  
museum, Postmortem  
Vishayukta anna,pana, dantakashta,anjana etc.,  
postings, Court postings  
Sankavisha, Vishasankata, Vishakanya, poisoning  
Preparation of Herbarium  
of water, land, air etc. and methods of purification,  
sheets  
Wargases, study of individual poisons as per the  
classification.

MODULE-5

Death from starvation, cold and heat, thermal  
injuries, mechanical injuries, Wounds, Impotence,  
sterility, virginity, pregnancy, delivery, sexual  
offences and Sexual perversions

**Second Term - 48 hours**

MODULE-6

Jangamavisha, Savishadamsalakshana, Visit to serpentarium,  
Identification and study  
Sarpavishavijnana & pratishedha with emphasis  
of snakes,spiders etc.  
on Chaturvimsati Upakrama,  
Herbarium preparation  
Keetalootadi vishavijnana & prathishedha,  
Mooshikavishavijnana & pratishedha.

MODULE-7

Legitimacy and legal aspects of marriage,  
annulment, duration of pregnancy, viability of  
child , legal aspects of maternity and paternity

Infanticide, Abortion, Sterilization,

Forensic psychiatry

MODULE-8

Law in relation to medical men, Medical acts,

Medical ethics, Duties of patient etc.

Torture, its medico legal aspects.

### Clinics

There should be clinical training at the O.P&I P units of Agadatantra department a minimum of 9 hours per week is essential .At the end of the clinical posting, the student should submit a rough record of the cases recorded.

### Practical

As practicals students shall be given practical classes for identification and study of poisonous and anti-toxic plants, taught preparation of herbarium sheets practical classes for identification and study of snakes, spiders etc, sent for visit to toxicology museum. Herbarium sheets should be prepared from the list of the substances given in Annexure 4 in the prescribed format.

The students shall be also posted in Medical Colleges or other hospitals for observing postmortem cases. 10 post mortem cases should be recorded according to the format which is given in Annexure 3. During the second term the students shall also be sent for court postings so as witness and learn the court procedures.

The detailed rearranged Syllabus with portions for reference will be provided in the Annexure.

### 3. DISTRIBUTION OF TEACHING HOURS

At present 3 hours per week is allotted for Agadatantra (theory and practical). A maximum of 144 hours (including theory and practical) will be available which is insufficient to complete the portion as per the syllabus suggested. A minimum

of 4 hours of theory classes per week is essential. Therefore timetable may be revised accordingly.

The 144 hours provided are divided equally for the three terms i.e. 48 hours each.

Assignments and Paper presentation: Each student shall be given assignments (refer No. 7) to be made in duplicate of which one copy must be submitted before the Head of the department. The topics for presentation may be selected from these topics; and one hour of each month may be utilized for paper presentation.

4. DISTRIBUTION OF MARKS

THEORY EXAMINATION	:	100
PRACTICAL EXAMINATION	:	50
ORAL EXAMINATION	:	50
TOTAL	:	200

Theory: Theory examination consists of only one paper which is divided into two parts

Part A Agadatantra inclusive of modern Toxicology

Part B Vyavaharayurveda and Vidhi Vaidyaka inclusive of Medical Jurisprudence and Medical Ethics

For theory, 100 marks are recommended by CCIM for University examination.

For term examination, 50 marks per term may be considered as maximum. However to get a deeper probe into the subject during term examination, maximum marks can be fixed as 100.

**Distribution of practical marks**

Record	10— (Clinical case sheets, Herbarium, Post mortem record)
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Class schedule card	15
Practical examination	25

### **Record**

1. Clinical Case Sheet: The students should be given clinical postings in O.P&I.P. units. They should record minimum 10 cases of Visha or Doosheevisha. The format for clinical record is given in Annexure 2.
2. Post mortem Case Record: The students will be posted in medical colleges or other hospitals for viewing autopsies. 10 post mortem cases should be recorded according to the format which is given in Annexure 3.
3. Herbarium: Herbarium sheets should be prepared for mineral poisons (6 specimens), vegetable poisons (16 specimen), mechanical irritants (2 specimen) antitoxic plants (7 specimen) and other materials(4 specimen). Total -35 specimens.

The list of the substances to be collected along with the format is given in Annexure 4.

### **Practical examination**

Practical examination on court procedure and post mortem examination cannot be conducted as a part of examination due to obvious reasons. Hence spotting alone is given for practical examination, where 10 specimen will be kept, each carrying 2 ½ marks –(1mark for identification and 1½ marks for side questions). Conduct of practical examination may be difficult for the first term, as the students may not get sufficient time for training. Therefore practical examination may be included only from the second term.

### **5. Restructuring of Question Paper and Method of Evaluation**

The maximum marks for theory is 100. Part A and B carries 50 marks each. The distribution of marks for each part is as follows

Marks	No. of questions	Total
7	1	7
5	4	20
3	2	6
2	7	14
1	3	3
TOTAL		50

The same text books (both Ayurvedic and modern) should be followed in all the colleges. Specific answer keys should be supplied to the examiners.

### **6. Model Question Paper**

A model question paper following the above pattern is given in Annexure 5.

### **7. Topics For Assignment**

Only a broad outline is given here

Mineral poisons - Vegetable poisons: identification (physical & chemical), fatal dose and fatal time, poisoning symptoms-acute & chronic; antidote, treatment-acute & chronic, detoxification method, Asodhitha vikaras(diseases caused as a result of impurity),therapeutic use as Ayurvedic medicine- single drug formulation, therapeutic dose-(Modern &Ayurveda).

Snake poison: Identification of nonpoisonous& poisonous snakes; by sight, by bite; poisoning symptoms, concept of Vegas, treatment: first aid such as Manthra, Arista, Uthkarthana, Rakthamokshana, Vamana, Virechana, Upadhana, Prathisaarana, Prativisha, Fatal signs, Fatal dose, (Modern & Ayurveda).

Insect poisoning: Identification :by sight ,by bite; Poisoning symptoms, treatment: general & specific; Fatal signs, therapeutic use of poisonous insects, (Modern and Ayurveda).

Zoonoses: Communicable diseases: from animal to man-communicating

circumstances, general signs and symptoms, toxicological aspect, investigations, treatment, Fatal signs (Modern & Ayurveda).

Communicable diseases: Vector carriers, communicating circumstances, general signs & symptoms, toxicological aspect, investigations, treatment, Fatal signs (Modern & Ayurveda).

Doosheevisha: Theory, scope and extent, possible diseases with special pathology, special symptoms, line of treatment, prognosis, discussion on the background of diseases of unspecified etio-pathology.

### **8. List Of Equipments And Instruments Essential For The Department**

Computer, digital camera, microtome, Histokinet, cold centrifuge, minidialyzer, autotransfusion set, ECG, microbalance, Zoom microscope with photo facility, Ordinary microscope, Models & charts on jurisprudence and toxicology, refrigerator, multi purpose thermometer, poisonous gas sensor, glass equipments for chemistry lab, incubator, oven, etc

Facility for animal house :( This should start from construction level. Equipments for the functioning are to be listed and purchased)

### **9 Laboratory Investigations Done Or Proposed For The Subject**

Routine blood –urine examination, specific biochemical tests for renal, liver and cardiac function.

### **10. Common Pattern Of Timetable For Clinical Posting**

The students shall be divided into different batches and posted in the concerned O.P. & I.P. sections on rotation basis.

### **11. Common clinical records**

A common prescribed format is to be followed which is provided in Annexure 2.

### **12. Model question Bank with answer key**



Refer annexure.

### 13. Methods of Evaluation

For formative evaluation periodical examinations should be conducted as theory, practical and oral examinations and results should be published. A model examination at the end of the three terms would be beneficial.

### 14. GENERAL RECOMMENDATIONS IF ANY

ANNEXURE

#### ANNEXURE 1

#### AGADATANTRA, VYAVAHARAYURVEDA AND VIDHIVAIDYAKA

#### FIRST TERM

#### AGADATANTRA

Definition of Agadatantra, description of Visha, Mythological concepts on the origin of Visha based on Hridaya, Susruta and Charaka, origin and actions of visha, types of visha and classification, substrates of Sthavara (inanimate) and Jangama (animate) visha and duties of Pranacharya (based on Susruta Kalpa Ch.1)

Examination of Visha based on a) Panchabhoota concept, b) Origin, Ch. Chi 23/6-7 c), Properties (Su Kal2/19-21), experimental study of the properties of Visha in animals, study of diseases that originate due to the actions of Visha.

Upavishas-no.:Rastharangini Ch. 24. Vishatindukabeejam, Ahiphenam, Jepalam, Dhattoorabeejam, Vijaya, Gunja, Bhalathakam, Arkaksheeram, Snuheeksheeram, Langalee and Karaveerakam (Upavisha gana 11number); Rasrnavam Ch 5- Panchapatalam. Snuhee, Arka, Unmathakam, Karaveeram and Langalee. (Mukhya Upavishas 5 numbers). Bhaishajyaratnavali, Ch. 2 Sodhanamaarana Prakaranam. (similar to Bhavaprakaasa). Rasajalanidhi, III Volume, Ch. 8. (Rasatarangini plus Ativisha and Nirvisha).

Visha: Its ten properties (gunas), their actions in the body (Su Kal. 2/18-21). Contrast in the properties of Visha and Ojus. Concept, definition, description and treatment of Vega, difference of opinion on the number and symptoms of Vegas based on Astanga Samgraha Uttara, and Vegantara, (based on Su Kal. 4/44) significance of Vegantara in relation to treatment.

Alcohol (Madya) as a poison: the merits and defects of Alcohol; the three stages of Alcohol intoxication; symptoms and treatment of alcohol intoxication.

Aharavisha (Food poisoning): symptoms. viruddhaahara (Incompatible food) Ref: Charaka Su 26, 28; Su Sutra 20,34; elaboration of incompatibility based on guna (properties), Time (time), Matra (dose) and Swabhava (Inherent quality); treatment of Food Poisoning.

General introduction to commonly used poisons in India. Routes of administration and elimination of poisons; actions of poison: local, remote, systemic and general, factors that modify the actions of poison; diagnosis of poisoning in the living and dead, introduction to modern analytical techniques: chromatography, mass spectrometry, spectrophotometry, immunoassay; duties of a physician in cases of doubtful poisoning (Vishapaana Sannigdha); line of treatment in cases of poisoning: Removal of unabsorbed poisons, use of antidotes, elimination of poison absorbed into the system, symptomatic treatment; measures for the prevention from poisoning.

#### VYAVAHARAYURVEDA

Definition and description of Vyavaharayurveda (Medical Jurisprudence), origin and development of forensic medicine in India, legal procedures in an inquest, coroner's inquest, police inquest, Magistrate's inquest, difficulties in detection of crime, Criminal courts and their powers, court sentences, subpoena, summons, examination of witness in court, examination in chief, cross examination, re examination and questions by Judge, evidence, documentary evidence, medico legal report, dying declaration, oral evidence, rules for giving evidence.

Personal identity, race, cephalic index, sex determination, secondary sexual characters, hermaphrodites, determination of age based on teeth, ossification of bones, physical examination, medico legal aspects of age, complexion and features, hair, Anthropometry and Dactylography, footprints, deformities, scars, tattoo marks, occupation marks, handwriting, clothes and personal articles, speech and voice, gait, ticks manner and habit, mental power, memory and education and DNA fingerprinting. Death in its medico legal aspects, modes of death, coma, syncope, asphyxia, Gordon's classification of death, sudden death, signs of death, tests to detect stoppage of circulation, Magnus test, diaphanous test, Icard's test, application and withdrawal of pressure, application of heat, cutting a small artery, ECG tracing. Changes in the eye, skin, cooling of the body, Cadaveric lividity, hypostasis, suggilation or post mortem staining, Cadeveric changes in muscles, Rigor Mortis, putrefaction or decomposition and autolysis, circumstances modifying putrefaction, Adipocere (saponification), Mummification, determination of time passed since death, post mortem examination, detailed study of deaths from Asphyxia- Hanging, Strangulation, Suffocation, Drowning - definition, symptoms, cause of death, fatal period, treatment, postmortem appearance, medico legal questions, differences between hanging and strangulation.

#### VIDHIVAIDYAKAM

Types of physicians and methods of identification (Ch Su 11), Praanabhisara Physician (Ch Su 29), Rogaabhisara Physician (Ch Su 29), Qualities of a physician (Ast Sang Su 6-15), Visikhanupravesam Su Su 10 (adhigatatantrena to visikhanupravestavya), Bhishakkartavyam Ch Su 25 (Bhishaja to vyaapacchasamyoganimitaa), Chaturvidha Vaidyavrutti (Ch Su 9) (Maitree to vaidyavrittischaturvidha), Duties of physician to his patient Su Su 22 (Mataram to Bhishak), Vaidya sadvrittam A Sa Ut 50 (Sarvatra to Sadvrittamalamkaroti), Accepting fees Ch Su 2 (Varamaseevishavisham to Rogapeeditthat), Relationship with females (Su Su 10) (Streebhi to Bhishagvararai), Defects of Physician Ch Su 16( Kuchela to api), Ch Su 16 (Dharmasyaarthasya to danaaddehasukhayusham), A San Ut 50(Saamishenapi to mitha), Cha Su 29 (Ye to nama),A hru ut 40 (Bhishajaam to bhadraabhilashinam).

The ultimate aim of Ayurveda is maintenance of health for fulfillment of righteousness (Dharma), material pleasures (Artha), satiation of desires (Kama) and attainment of salvation (Moksha).

Absence of righteousness is the root cause of all diseases and hence, righteousness is essential for the maintenance of health.

The Ten Evils: (Dasavidha Papas), brief outline and differentiation of somatic (Kayika), psychic (Manasa) and verbal (Vachika) evils.

## II TERM AGADATANTRA

Treatment of Doosheevisha (Latent poison) and Gara (Concocted poison).

Identification, description, toxicity Methods to identify the person who poisoned food (Vishadata). Identification of person who has consumed poison (Vishapeetha) (Su Kal 3/33-36). Identification and treatment of poisoned food, drinks, liquids, tooth brush, oil for application on the body, comb, soap, astringent liquids used for removal of oil from the body, water used for bathing, pastes applied externally, garlands, clothing, bed, dress, armor, ornaments, footwear, foot rest, anklet, seating on elephant, and saddle. Identification and treatment of poisoned materials and drugs used for applications on the eye, nose, and ear. (Su Kalp Ch 1) Identification and poisoned materials used for fumigation. Sankavisha, visha sankata and Vishakanya (poison dame). Martial poisoning of water, land, grass, smoke and air and measures for purification. War gases: Vesicants (Blistering gases) Mustard gas, Asphyxiant (Lung irritant Gases) Chlorine, Phosgene, and Methyl Isocyanate. Lachrymators (Tear gas): I Chloracetophenol. Sternutators: Nasal irritants (Diphenyl chlorarsine). Paralyzants: Hydro cyanic acid, Nerve gases: Serine. Peripheral Neural Poisons, Clonium maculatum, Strychnos toxifera.

Definition, description, symptoms and manifestations, fatal dose, fatal period, post mortem appearance and medico legal significance of poisoning caused

by (corrosives) Sulphuric acid, Nitric acid, Hydrochloric acid, Carbolic acid, Oxalic acid, Salicylic acid, Acetic acid, Calcium hydroxide, Sodium hydroxide (caustic soda), Sodium carbonate (washing soda) Ammonia, (inorganic irritant poisons: Non metallic) Phosphorus, (Metallic) Compounds of Lead, Tin, Mercury, Arsenic, Copper, Zinc, Antimony, Aluminium, Gold, Silver, Cadmium, Platinum, (Organic irritant poison vegetable) Erandam (*Ricinus Communis*), Jeypala (*Croton tiglium*), Gunja (*Abrus precatorius*), Indravaarunee (*Colocynthis pulpa*), Ergot (Annamayam) (source fungus: *Claviceps purpurea*), Red chillis (*Capsicum annum*), Bhallathakam (*Semicarpus Anacardium*), Arkam (*Calotropis gigantia*), Chitrakam (*Plumbago zeylanica/ rosea*), Snuhee (*Euphorbia species*), Kalihaaree/Langalee (*Gloriosa superba*), Swarnaksheeree (*Argemone mexicana*), Vibheetaka (*Terminalia bellerica*), (Mechanical Irritant Poison) Powdered Glass, Diamond Powder, Needles, Chopped animal hair, Vegetable hair, (Somniferous Cerebral Poison) Ahiphenam (*Papaver somniferum*), (Inebriant Cerebral Poison) Alcohol, Formaldehyde, Chloroform, DDT, Endrin, Chloral hydrate, Barbiturates, Traquilisers(*Rauwolfia serpentina*, Diazepam), Antihistamines, Sulfonamides, Coal tar, Naphthalene, Petroleum, Oil of turpentine, Eucaliptus oil and Nutmeg (Deliriant Cerebral Poisons) Dhattoora (*Dhatura fastuosa*), Soochi ( *Atropa belladonna*), Kurasani-Paraseeka yavaanee (*Hyoscyamus niger*), Bhanga (*Cannabis sativa*), Cocaine (*Erythroxylon coca*), Karpoora (*Cinnamomum camphora*), Poisonous Mushrooms (*Amanita species*) and Kesari dal (*Lathyrus sativa*), (Spinal Poisons) Kupeelu-Karaskaram- Vishamustee (*Strychnos nuxvomica*), (Cardiac Poisons) Thamalapatram (*Nicotiana tabaccum*, *Lobelia inflata*), Hritpatree (*Digitalis purpuria*), Poogam –Areca nut (*Areca catechu*), Kanaveeram (*Nerium odorum*, *Cerebra thevetia*), Vatsanaabhi (*Aconitum ferox –napellum*), Hydrocyanic acid (*Manihot utilissima*, *Potassium cyanide*), (Asphyxiant) Carbon dioxide, Carbon Monoxide, Hydrogen sulphide and Sulphur dioxide.

#### VYAVAHAR AYURVEDA

Death from Starvation, Cold and Heat, Injuries from Burns, Scalds, Lightning and Electricity, Injuries by Mechanical Violence – bruises or Contusions, age, differences between Accidental, Homicidal and Self Inflicted bruise, differences

between Ante mortem and Postmortem Bruises, Abrasion, differences between Ante mortem and Postmortem abrasions, Classification of wounds, Incised or Slash wound, Punctured or Stab Wounds, Lacerated Wound, Firearm Wounds, Closed distance phenomena observed in Firearm Injuries or shot holes on clothing. Medico legal aspects of wounds, Injury certificate; distinction between ante mortem and postmortem Wounds, differences between suicidal, homicidal and accidental wounds.

Impotence, Sterility and Artificial Insemination, surrogate birth, Virginity, Pregnancy and Delivery, Symptoms and signs of Pregnancy, signs of Pregnancy in the dead, signs of Delivery, signs of recent delivery in the living, signs of recent delivery in the living, signs of recent delivery in the dead, Causes of maternal death. Sexual Offences, Rape, definition, punishment for rape, Marital Rape, custodial rape, Examination of the victim, accidents following rape, Examination of the accused, Medico legal questions. Unnatural Sexual Offences, Sodomy, Tribadism or Lesbianism (Female Homosexuality), Bestality, Sexual Deviations: Sadism, masochism, Fetishism, Transvestism or Eonism, Exhibitionism.

### III TERM

#### AGADATANTRA

Jangama Visha (Animal poisons) Savisha damsalakshana, Snakes, classification: Divya (celestial), Bhouma (terrestrial) Darveekara, mandali, raajila, vyantara, (Vaikaranja), Vaikaranjotbhava, Nirvisha: Brahmana, kshatriya, vaisya, soodra; purusha, stree, napumsaka; description, classification, types of bites: Sarpita radita nirvisha - Su, Thundahata, Vyaleedha, Vyaalupta, dastaka, dastanipeeditha – A Hrudaya Ut 36/11-14, causes that reduce the potency of snake poison, factors that increase the potency of Visha, inauspicious periods and places of snake bite, symptoms of poisonous snake bite, causes of snake bite, fangs (Damstra) of snakes: Karaalee makaree, Kaalaratree, yamadootika, (Jyotsnika) or Vamottara Vamadhara, Daksinottara, Dakshinaadhara Ch Chi 23/137 to 139.

Charaka Chikitsa- 23: The Twenty- four specific treatments of poison (Visha).

- a) Mantra
- b) Aristabandhana - ligation
- c) Utkarthana- excision
- d) Nishpeedana- application of pressure
- e) Chooshana-suction
- f) Agni -burning
- g) Parisheka -irrigation
- h) Avagaaha- Imersion bath
- i) Rakthamokshana- blood letting Susruta Kalpa 5/34
- j) Vamana- Vomiting Ref Susruta Kalpa 5/37
- k) Vireka Sus Kalpa 5/38
- l) Upadhaana-Application of medicine on head after incision. Su kal 5/42-45
- m) Hrudayaavarana- Administration of ghee to protect heart. Ch Chi23/ 46-50
- n) Anjana- Collyrium Su kal 5/39
- o) Nasya –nasal medication Su kal 5/40
- p) Dhoopa –medicated fumigation
- q) Leha – consumption of medicated jam
- r) Oushadha-consumption of antidote
- s) Prasamana-removal of residual poison
- t) Pratisaarana- dustingof medicated powder
- u) Prativisha-(Antivenom/antitoxin) Astangasangraha utara: vishopayogeeyam
- v) Samjnasamsthapana- Measures to bring back senses

w) Lepa -application of medicated paste

Mritasanjeevana- revival of the apparently dead.

Symptoms of poisoning and treatment of Scorpion, identification of Manda, Madhya and Maha visha scorpions, symptoms of fatal scorpion bite, Spider venom, the eight substrates of spider venom, symptoms of poisoning, symptoms of fatal spider bite, general symptoms of spider bite, daily changes in spider bite upto seven days, karnikaapathana, Dasavidhopakrama in Spider venom Su. Kal8/131 Rat, worms, insects (Keetavisha) Vayavya, Agneya, Kaphadhika, Saannipathika, wasp, centipede (Uchchitinga), frog (mandooka), lizard, Chameleon, leech - identification of poisonous Leech.

Identification of Rabid dog (Alarka), etiopathogenesis, symptoms and treatment of Alarkavisha (rabid dog bite). Preparation of bread (Apoopa) in the treatment of rabies, (Su. Kal 7/51-56), Jalatraasa or Hydrophobia, Rabies, diagnosis and treatment and preventive measures of rabies.

#### VYAVAHARAYURVEDAM

Legitimacy and Legal aspects of Marriage Annulment, average duration of pregnancy, maximum period of pregnancy, minimum period of pregnancy and viability of a child, super fecundation, superfoetation, and paternity. Legal aspects of marriage annulment: Adultery, Impotence, Cruelty, Non-consummation and fraud, Desertion.

Infanticide: Definition, was the child still-born or Dead born, was the child born alive, Hydrostatic test, if born alive, how long did the child survive the birth, what was the cause of death, natural causes and accidental causes during birth, after birth, criminal causes - Acts of Commission, Acts of Omission or neglect, abandoning of infants, concealment of birth, Sudden Infant Death syndrome (SIDS).

Abortion and Medico legal Aspects of pregnancy-Definition, Natural (spontaneous) Abortion, Induced (therapeutic) Abortion, Induced (criminal) Abortion,



Evidence of Abortion, examination of woman during life and after death, examination of Aborted material. Features that enable distinction between Natural and Criminal abortion. Medico legal aspects of sterilization, Vasectomy, tubectomy. Causes of death and causes of failure in Laparoscopic Sterilization.

Mental Ill health and its Medico legal Aspects: Introduction, Causes of mental ill health, indication of mental ill health, classification of mental diseases, mental retardation, Mental Health Act 1987, Diagnosis of mental ill health, feigned mental ill health, Violent behavior, psychotic murderer, sexual killer, psychopathic killer, jealous killer, alcoholic killer, Assessment of dangerousness, restraint of the mentally ill person, civil responsibility, criminal responsibility.

#### VIDHIVAIDYAKAM

Law in relation to medical men: Medical Act, Indian Medical Council Act, Code of Medical Ethics, General Principles, duties of a physician towards his patient, towards the profession at large, professional services of physicians to each other, duties of a physician in consultation, duties of a physician in cases of interference, duties of a physician to the public, Physician's responsibility in criminal matters, duties of a patient, professional negligence, civil negligence, criminal negligence, medico legal aspects of AIDS, rights of an unborn child, transplantation of human organs Bill 1994, donation of cornea, malingering of feigned diseases, international code of medical

ethics, doctors and the media, human experimentation.

Torture, definition, types; Physical torture, mental torture, Sequel of torture, management of torture victims, medico legal and ethical aspects of torture.

## ANNEXURE 2

..... College  
Department Of Agadatantra  
Clinical Record

Name of Candidate :

Class Number :

Register Number :

Certified that this is the bonafide record of practical work done during the year

..... by the candidate with Register No.....

Tutor

Lecturer

Reader

Professor

Place:

Date:

Record verified:

Internal Examiner:

External Examiner:

Outpatient number

Inpatient number

Name of the patient

Date of admission

Age

Sex

Address

Occupation

Name of nearest relative

Marital status

Presenting Complaints with duration:

History of present illness

Previous history of illness:

Personal History

Aakruti

Prakruti

Saatmyam - Aahaaratah

- Vihaaratah

Family History

Previous Treatment history

Menstrual History

Obstetric History

### **General Examination**

Temperature

Pulse rate

Heart rate

Respiratory rate

Blood pressure

Body weight

Koshta

### **Systemic Examination**

GIT

CVS

Respiratory system

Nervous system

Loco motor system

Genito Urinary

Skin and appendages

Dasavidha Pareeksha

Dooshyam

Desam

Balam

Kalam

Anala

Prakruthi

Satwam

Saatmyam

Aahaaram

Avastha

Astasthaana Preeksha:

Naadi

Mootram

Malam

Jihwa

Sabda

Sparsa

Drik

Aakruthi

Laboratory Investigations:

**Vishabheda**

(Sthaavara/Jangama/Krtrima/Doosheevisha)

**Sthaavara vishabheda:**

Signs & Symptoms

Saamaanya lakshana

Vega lakshana

Anubandha upadrava

**Jangama vishabheda:**

Place of bite (damsa sthaana)

Time of bite (damsa samaya)

Time elapsed between bite and admission

Part of body affected

Nature of bite(damsasya bhaava)

Damsa lakshanaani

Vega lakshanaani

Asadhya lakshanaani

Anubandha upadravaani

Arishta lakshanaani

**Krtrima visha**

Saamaanya lakshanaani

Krtrimavisha pratiniyata lakshanaani

**Doosheevisha:**

Lakshanaani

Doosheevishajanya roga

Anubandha upadrava

Indriya pareeksha

Dosha & vikruta lakshanaani

Dooshya & vikruta lakshanaani

Srotas & dushti lakshanaani

### **Specific investigation**

Blood

Stool

Urine

Sputum

Vyaadhyadhishtaanam

Vyadhi margam

Vyaadhi vinischayam

Differential diagnosis

### **Treatment**

Chathur vimsati upakrama

Samaanya chikitsa			
Sodhana chikitsa			
Samana chikitsa			
Date	Daily Report	Medicine, Dose & Time	Pathya

Chikitsaphalam

Date of discharge

Advice

Signature of the student

Signature of the Lecturer



### ANNEXURE 3

#### FORMAT FOR POST MORTEM CASE RECORD

#### SCHEDULE OF OBSERVATION

##### A. General

Sex

Age

Height

Weight:

Nutrition:

Identifying features:

External Appearance:

Post mortem changes:

Injuries:

##### B. Head & Neck

Skull (Scalp):

Brain, Meninges and Cerebral vessels

Mouth and Pharynx:

Neck and its structures:

### **C. Chest**

Ribs and chest wall:

Pleural cavities:

Diaphragm:

Mediastinum and thymus

Oesophagus:

Trachea and Bronchi:

Lungs:

Right:

Left:

Pericardial sac:

Heart:

Blood vessels:

#### **D. Abdomen**

Abdominal wall:

Peritoneal Cavity:

Liver, Gall bladder ,biliary passages:

Spleen:

Kidneys:

Right:

Left:

Pancreas:

Adrenal glands:

Right:

Stomach and its contents:

Intestine and Mesentery:

Urinary bladder:

Genital Organs:

Spinal column and cord:

**E. Additional Observations:**

**F. Viscera-Material Objects for chemical analysis**

1. Stomach, Small intestine and contents
2. Part of Liver and Kidney
3. Blood
4. Urine

Preservative for 1&2- Rectified spirit/Saturated saline:

Preservative for 3&4- Sodium fluoride:

**G. Tissues for pathological Examination:**

Post mortem concluded at ..... on .

Opinion as to cause of death:

Signature of the student

Signature of the Lecturer/Tutor

## ANNEXURE - 4

### HERBARIUM PRACTICAL SHEETS

#### MINERAL POISONS

1. Arsenic disulphide/trisulphide
2. Mercuric chloride/sulphate
3. Copper sulphate/Copper
4. Lead
5. Zinc
6. Sulphur
7. Antimony sulphide

Any six samples in 3 sheets

#### VEGETABLE POISONS

##### A.IRRITANT

1. Ricinus communis
2. Gloriosa superba

3. Croton tiglium
4. Abrus precatorius
5. Semicarpus anacardium
6. Calotropis gigantia/procera
7. Plumbago zeylanica/rosea
8. Argemon mexicana
9. Euphorbia species\*
10. Balsamodendron mukul
11. Hydrocarpus laurifolia
12. Amorphophalus compenulatus
13. Ferula foitida

Any ten specimen in 10 sheets

B.DELIRIANT

1. Datura fastuosa/alba 1 sheet

C.INEBRIANT

1. Terminalia bellerica 1 sheet

D.SOMNIFEROUS

1. Papaver somniferum 1 sheet

E.SPINAL

1. Strychnos nuxvomica 1 sheet

F.CARDIAC

1. Nerium indicum
2. Aconitum ferox
3. Nicotiana tabacum

4. Cerebra odollam
5. Mannihot utilissima
6. Areca catechu

Any three in 3 sheets

#### MECHANICAL IRRITANTS

1. Pin
2. Hairs
3. Glass pieces/Glass powder
4. Nails

Any two in 1 sheet

#### ANTITOXIC PLANTS

1. Albizzia lebeck
2. Curcuma longa
3. Oscimum sanctum
4. Tricosanthus cucumeriana
5. Aristolochia indica
6. Eupatoriu ayapana
7. Indigofera ticnctoria
8. Terminalia bellerica
9. Asperagus racemosus
10. Coccinia indica
11. Biophytum sensitivum
12. Clitoria ternate
13. Eclipta alba
14. Aerva lanata

15. Moringa pterygosperma
16. Zingiber officinale
17. Santalum album
18. Aegle marmelos
19. Sesamum indicum
20. Alangium salvifolium
21. Pongamia glabra
22. Erythrina indicum

Any seven in 7 sheets

#### OTHER MATERIALS

1. Cloth
2. Coal
3. Potassium permanganate
4. Sodium bicarbonate

#### FORMATS

##### 1. VEGETABLE AND MINERAL POISONOUS SUBSTANCES

1. Binomial nomenclature/Chemical formula
2. Family/Symbolic representation
3. Sanskrit name
4. Regional/Malayalam name
5. Classification according to Toxicological effects
6. Morphological/Physical characteristics
7. Toxic parts
8. Other natural forms
9. Important chemical ingredients/other combinations



10. Fatal dose
11. Fatal time/period
12. Poisonous symptoms: Acute/chronic
13. Treatment for Acute/Chronic poisoning
14. Post mortem Signs
15. Detoxification method
16. Medical/therapeutic dose if any
17. Important formulations with one indication

## 2. MECHANICAL IRRITANTS

1. Common English Name
2. Sanskrit Name
3. Regional Name
4. Classification of poison
5. Description of physical appearance
6. Fatal dose
7. Fatal time/period
8. Poisonous symptoms
9. Post mortem signs
10. Antidote
11. Treatment

## 3. ANTITOXIC SUBSTANCES

### PLANTS

1. Binomial Nomenclature
2. Family
3. Part used
4. Sanskrit Name
5. Regional Name

6. Morphological characters
  7. Important Chemical ingredients
  8. Use in Toxicology
  9. Medical Dose
  10. Important formulations
  11. Indications
4. OTHER MATERIALS
1. Common English Name

2. Sanskrit Name
3. Regional Name
4. Description of Physical appearance
5. Use in Toxicology
6. Mode of application

## ANNEXURE 5

### MODEL QUESTION PAPER

Time: 3 Hours

Maximum marks :100

#### PART A

- I. 1. Define Doosheevisha. Describe the clinical manifestations and treatment principles of Doosheevisha. (7x1=7 marks)
- II. 1. What are the general conditions that enhance the potency of Visha?  
2. What are the gunas (properties) of Visha? Based on Susrutha Samhita, explain how each of the gunas act on the body.  
3. What are the clinical features of Asadhya Lootadamsa (incurable spider bite)?  
4. Detail the preparation and indications of Vilwaadi gulika. (5x4=20 marks)
- III. 1. What is the method of purification of poisoned water as described in Susruta Samhita?  
2. What are the clinical manifestations seen when Visha enters Amasaya and Pakwasaya? (3x2=6 marks)
- IV. 1. Enumerate the Adhishtanas (substrates) of Jangama Visha?

2. Mention the Asadhya lakshanas of Mooshika Visha?
3. What are the indications for Anjana in Visha as mentioned in Susruta Samhita?
4. Define Visha Vega.
5. Describe Dasanga Agada.
6. What do you understand by Gara?
7. Explain Jalasantrasa.

(2x7=14 marks)

- V.
1. Mention the indication of Kosatakyadi Peya.
  2. Define Viruddha.
  3. Name the Sarpadamsas (bite marks) as told by Vagbhata and Susruta.

(1x3=3 marks)

#### PART B

- I.
1. Classify Hanging. Describe the postmortem findings and the medicolegal aspects of hanging.
- (7x1=7 marks)
- II.
1. What is Rigormortis? Briefly describe the conditions simulating Rigormortis .
  2. Differentiate between suicidal and homicidal wounds.
  3. Define infanticide. What are the signs of live birth?
  4. What is meant by Evidence? Describe the types of Documentary medical

evidence.

(5x4=20 marks)

- III. 1. Elucidate the Rule of Nine with illustration and mention its clinical importance.
2. What are the causes of death in Drowning?

(3x2=6 marks)

- IV. 1. Enumerate the injuries that would amount to Greivous hurt.
2. Define starvation. What is the cause of death in acute starvation?
3. What is meant by Mummification? What is its medico legal importance?
4. What are the common therapeutic methods of Abortion?
5. Define Torture as according to World Medical Association and mention the sequelae.
6. Illustrate with a diagram how you can establish the sex of a person from mandible.
7. What do you mean by Dactylography? What is its medico legal importance?

(2x7=14 marks)

- V. 1. Enumerate Dasavidhapapa
2. Define Viability.
3. Define Consent in medical practice and name the types of consent.

(1x3=3 marks)