

2.2. AGADTANTRA, VYAVAHAR-AYURVED EVUM VIDHIVAIIDYAK

(TOXICOLOGY, FORENSIC MEDICINE AND MEDICAL JURISPRUDENCE)

Theory One Paper – 100 Marks

Practical/Viva voce -50 Marks

Theory -200 hrs

Practical - 100 hrs

Part- A

50 Marks

- 1** Derivation, definition of Visha and Agadatantra. Scope of Agadatantra. Visha Utpatti, Visha Prabhava, Visha Pranaharana Kriya, Visha Guna, Visha Gati, Visha Vega Visha Sankata, Shanka Visha.
- 2** Definition of toxicology, Definition of poison, suicidal and homicidal poisons, classification of poisons, their action and route of administration, absorption, excretion, metabolism, diagnosis and general principles of treatment, duties of a medical practitioner in case of suspected poisoning.
- 3** Origin and Classification of Visha:-Its sources, Difference between Visha, Madya and Oja guna, Visha Upadrava and Visha Mukta Lakshana.
- 4** Tests for detection of Visha, and Modern Toxicological Techniques of detection of poisons
Visha Data Lakshana, Visha Peeta Lakshana, Signs and symptoms of Visha afflicted organs and personal effects. (Poisoning with Anjana, Lepa paduka, Abharana etc.
- 5** Introduction to Environmental Toxicology- Samuhika Vishaprayoga- effect of chemical and nuclear warfare.
- 6** Vishopakrama described by Charak, General principles of Management of poisoning.
- 7** Manifestation of poisoning due to poisons of plant origin their fatal Dose, fatal period, management of poisoning, post mortem appearance and its medico legal importance.
Visha and Upavisha- Arka, Snuhi, Langali, Karaveera, Gunja, Ahiphena, Dhatura, Bhallataka, Vatsanabha, Kupeelu, Jayapala, Bhanga & Tobacco, Parthenium hysteriphorus, Chitraka, Eranda, Digitalis and Cerebra Odallam.
- 8** Garavisha, Dooshivisha, Viruddhahara. Food adulteration and poisoning–classification, diagnosis, management and contemporary significance.
- 9** Jangama Visha – Detailed study of Sarpa, Keeta, Loota, Vrischika, Mooshika, Alarka – Visha; Lakshana, Bheda, Chikitsa and their Sadhyasadyata (contemporary and classical views).
- 10** Introduction to poisoning due to Acids, Alkalis, metals, Non-metals, Asphyxiants and others, their Fatal Dose, Fatal period, Manifestation, management, medico legal importance and postmortem appearance of poisoning due to:
 - a) Acid and Alkalis– Sulphuric acid, Hydrochloric acid, Nitric acid, Hydrocyanic acid, Oxalic acid, Carbolic acid, Formic acid, alkalis in general.
 - b) Asphyxiants – Carbon monoxide, Carbon dioxide, Hydrogen sulphide
 - c) Nonmetallic poisons – Phosphorous, Iodine
Metallic poisoning – Arsenic, Mercury, Lead, Copper, Zinc, Tin.

d) Others - Petroleum – Kerosene Organo phosphorus compounds -Aluminum phosphate, Organo Chlorinated Compounds, Household poisons.

11 Madya and Madatyaya. Alcohol poisoning (Ethanol and Methanol).

12 *Introduction to Narcotic drugs and Psychotropic substances Act 1985.*

Part –B

50 Marks

- 1.** Definition of Vyavahara Ayurveda (Forensic medicine) and Vidhivaidyaka (Medical jurisprudence), concise history of Vyavahara Ayurveda (Forensic medicine) and Vidhivaidyaka (Medical jurisprudence). Introduction to Indian Penal Code, Indian Evidence Act and Criminal Procedure Code.
- 2.** Legal Procedures:- Inquest, Evidence, Witness, Courts and their powers.
- 3.** Personal identity and its Medico legal aspects, forensic odontology, Introduction to Forensic Serology and DNA profiling.
- 4.** Death and its Medico Legal Aspects, Medico Legal autopsy and *exhumation*.
- 5.** Injuries and thermal injuries, their medico Legal aspects, general introduction of weapons.
- 6.** Dowry deaths (Domestic Violence), their Medico Legal importance and laws in relation to it.
- 7.** Asphyxial deaths and its Medico Legal importance.
- 8.** Medico Legal importance of Pregnancy, Delivery; Impotence & Sterility, Abortion, Infanticide, battered baby. Virginity, Artificial Insemination, Legitimacy.
- 9.** Sexual offences, and their Medico Legal aspects. Sexual perversions.
- 10.** Introduction to Forensic psychiatry.
- 11.** Introduction to forensic laboratory.
- 12.** Ethics as in classical Texts. Types of Vaidya, Pranabhisara and Rogabhisara Vaidya, Qualities of Vaidya, Responsibilities of Vaidya, Chaturvidha Vaidyavrutti, Duties of Vaidya to his patient, Vaidya Advrittam, Apujya Vaidya, Code of conduct.
- 13.** Laws in relation to Medical practitioners: Indian Medicine Central Council Act.
- 14.** Maintenance of medical record.
- 15.** Physician's responsibility in criminal matters, Professional negligence, Civil negligence, Criminal negligence, Medico Legal aspects of Acquired Immune Deficiency Syndrome, Rights of an unborn child, Medical Termination of Pregnancy Act Transplantation of

human organs Bill 1994, Pre Natal Diagnostic Testing Act, Malingering of feigned diseases, International Code of Medical Ethics for Doctors. Clinical establishment Act. Consumer Protection Act 1986.

PRACTICAL

Practical Training

1. Post Mortem examination
2. Evidence in the court
3. Demonstrations in the Forensic & Toxicology museum
(Toxic & Anti toxic substances, medico legal specimens & Charts)
4. Clinical postings
5. Library Hours for compilation

Distribution of Practical Marks

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| 1. Post Mortem examination and Court posting – Case Record | 10 Marks |
| 2. Practical/Clinical Record Book | 10 Marks |
| 3. Identification (spotting) | 10 Marks |
| 4. Viva – voce | 20 Marks |

Total

50 Marks

Reference Books

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| 1. Topics related to Agada Tantra from Charak Samhita, Sushrut Samhita, Ashtanga Hridaya, Ashtanga Samgraha, Kasyapa Samhitha, Yogaratnakara, Bhavaprakasha and Madhava Nidana. | |
| 2. Vidhivaidyaka (Vyavahar Ayurveda Vijnan) | Dr.Charuchandra Pathak |
| 3. Medical Jurisprudence and Toxicology | Modi |
| 4. Basavarajeeyam | Edited by Vd.Govardhan |
| 5. Agada Tantra | Sh. Ramanath Dwivedi |
| 6. Text book of Agada Tantra | Edited by Dr Huparikar, Dr.Joglekar |
| 7. Agadatantra ki Pathyapustaka | Edited By Dr Huparikar,
Dr.Joglekar |
| 8. Agad Tantra | Dr. Shekher Namboodri |
| 9. Vishachikitsa
(Ayurveda Toxicology English Translation) | Vaidya Balakrishnan Nair, Kerala |
| 10. Medical Ethics and Medical Laws in India | Dr. H.S. Mehta |
| 11. Toxicology Ayurvedic Perspective | VPSV Ayurveda college Kottakkal |
| 12. Kautilya Arthashastra (English) | Prof. Kangle |
| 13. Kautilya Arthashastra (Hindi) | Dr. Raghunath Singh |
| 14. Vyavahar Ayurveda | Dr.Ayodhya Prasad Achal |
| 15. Vyavahar Ayurveda Vigyanam | Dr.Indramohan Jha (Sachchan) |
| 16. Textbook of Forensic Medicine and Toxicology | Dr. V.V.Pillay |
| 17. Forensic Medicine | Dr. B. Umadathan |
| 18. Relevant Acts | Govt. of India |
| 19. Relevant topics from Manu Smriti | |

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