

Syllabus for Ph.D in Agadtantra -Vidhi Vaidyaka

(Toxicology & Forensic Medicine)

1. Agada Tantra, its sequential development during Veda kala, Samhitha kala, Samgraha kala and Adhunka kala.
2. Definition of Visha, properties of visha and its comparison with madya and oja, visha samprapti, visha prabhava, visha-vega, vegantara and visha karmukata (toxicodynamic and toxicokinetic study).
3. Descriptive and comparative study of Upavisha in unison with Contemporary Toxicology.
4. Examination of poisons as per Contemporary and Ayurvedic Methods.
5. Descriptive study of sthavara visha, definition, classifications, classical signs and symptoms of poisoning including vanaspatic (phyto poison), khanija (mineral) and compound sthavara visha.
6. Study of Jangama visha and their sources (Animal poisoning and Zoonotic Diseases). Descriptive study of snakes according to ancient and contemporary knowledge. Causes of snake bite and its types. Composition of snake venom and its pharmacological actions. Signs and symptoms of envenomation and its prognostic signs. Clinical features of Vrischika (scorpion), Luta (spider), Grihagadhika (Lizard), Mushaka (rats), Alarka (dogs), Makshika and Mashaka (mosquitoes) and their pathologic manifestations including their role in the manifestation of communicable diseases.
7. Shanka visha and its management. Visha sankat and Visha Kanya.
8. Garavisha and Dushi visha, their varieties, signs, symptoms and management with contemporary relevance. Detailed study of Allergies including allergic manifestations in the eyes, nose, lungs and skin.

9. Detailed study of Madya visha and substances acting on the nervous system; substance abuse.(Diagnosis, Management and De-addiction)
- 10.Detailed study of the contemporary knowledge about vishajanya Janpadodhvansaniya roga (community health problems due to poisons - Environmental pollution, water pollution, soil pollution, air pollution, Industrial pollutions etc. their features and management according to ancient and recent concepts.
- 11.Concept of Virudha aahara, Aahara visha and Satmyasatmyata in contemporary and Ayurvedic views.
- 12.Conceptual study:- Drug interactions and incompatibility, Pharmacovigilance
- 13.Fundamental Principles for treatment of poisoning
- 14.General and specific treatment of different types of Sthavara visha.
- 15.General and specific treatment of different types of Jangama visha (animal poisons,insect poisons, snake bites and other zoonotic diseases).
- 16.Emergency medical management of poisoning including preparation, administration and complications of antivenoms/antisera.
- 17.Chaturvimsati upakrama (24 management procedures).
- 18.Management of Garavisha and Dushivisha. Treatment of Allergies including allergic manifestations in the eyes, nose, lungs and skin.
- 19.Diagnosis and Management of Drug Induced Toxicity
- 20.Management of the toxic manifestations caused by the contact poisons (paduka, 21.vasthra, abharana, mukhalepa- vishabadha etc).
- 22.Management of food poisoning.
- 23.Death due to poisoning, Duty of physician in poisoning, in cases of suspected poisoning. Post mortem findings in poisoning.
- 24.Extra -corporeal techniques (dialysis etc) for removal of poisons.

25. Definition of Vyavahara Ayurveda, its evolution in ancient and contemporary periods.
26. Personal identity and its medico-legal aspects
27. Death and its medico-legal aspects (Medical Thanatology)
28. Asphyxial deaths and its medico-legal importance.
29. Death due to starvation, heat and cold, lightning and electricity.
30. Suspended Animation.
31. Medico-legal autopsy.
32. Injuries due to explosions, chemical and nuclear warfare.
33. Medico-legal aspects of injuries and wounds.
34. Impotence and sterility-Its medico-legal aspects. Regulations of Artificial Insemination. Medico –legal aspects of surrogate motherhood.
35. Sexual offences and perversions.
36. Medico-legal aspects of virginity, pregnancy, delivery, abortion, infanticide and legitimacy with related acts.
37. Indian Penal Code, Criminal procedure code and study of related acts like Indian Evidence Act, Pre Natal Diagnostic Test Act, Nursing Home Act, Human Organ Transplantation Act, Drugs and Cosmetic Act 1940, Narcotic drugs and Psychotropic substances Act 1985, Pharmacy Act 1948, Drugs and Magical Remedies (Objectionable Advertisements) Act 1954, Medicinal and Toilet Preparations Act 1955 and Anatomy Act etc. Any related act enacted by the government from time to time.
38. Courts and Legal procedures.
39. Forensic Science Laboratory
40. Medico legal aspects of mental illness
41. Duties and privileges of physician.

42. Structure of Central Council of Indian Medicine, its jurisdiction and functions.
Code and Conducts as per the CCIM, Rules and Regulations there under.
43. Respective State Council of Indian Medicine, its structure, power, voluntary duties.
44. Doctor - patient relationship.
45. Rights and privileges of patients; Euthanasia.
46. Professional secrecy and privileged communication.
47. Professional negligence and malpractice
48. Indemnity Insurance scheme.
49. Consumer Protection Act related to medical practice
50. Ethics as in classics. Types of physicians and methods of identification, Pranabhisara and Rogabhisara Physicians, qualities of physician, responsibilities of Physicians, Chaturvidha vaidya vriti, duties of physicians towards patients, Vaidya sadvritam, Apujya Vaidya who is accepting fees, relationship with females.
51. Study of process for sodhana, marana and samskarana of poisonous drugs.
52. Pharmaco-dynamics of different formulations used in Agadatantra
53. Study of pharmacology and usage of antidotes as per the Ayurvedic and contemporary science.
54. Fundamentals of pharmaceuticals according to Ayurvedic and contemporary point of view.
55. Chemical, analytical, laboratory examination of poisons and suspicious substance.
56. Introduction of different instruments /equipments used in the examination of poisons.
57. Introduction to Clinical toxicology
58. Introduction to Experimental toxicology

59. Introduction to Toxicology - genomics

60. Survey and study of the traditional and folklore vishachikista sampradaya.

Reference Books:-

1. Useful Portion of Charak -Sushrut-Vagbhata
2. Dravyaguna Vigyan - Acharya Yadavji
3. Aushadhigunadharm Shastra - Pt Visvanath Dvivedi
4. Kriyatmat Aushada parichaya Vigyan - Pt Visvanath Dvivedi
5. Ayurvedic Vyadhi Vigyan - Acharya Yadavji
Trikamji
6. Madhavanidan with Madhukosha commentary
7. Sharangadhara Samhita
8. Yogaratnakara
9. Aushadigunadharm Shastra -Pt GangadharaShastri
Gune
10. Rasendracintamani
11. Rasaratna samuchhaya
12. Vishavigyan - Dr. Krishna Kumar
13. Related matter of Kautilya Artha Shastra
14. Harmekhlatantra
15. Anupana manjari
16. Ayurvedprakash
17. System of clinical Medicine - Savil
18. Forensic Pharmacy - B.M. Mhithai
19. Hand book of Forensic Medicine and toxicology - Dr. P.V. Chadha
20. Viva Forensic Medicine and toxicology - L.C. Gupta
21. Forensic Medicine and Ethics - J.P. Narena

22. Modi's Medical Jurisprudence and Toxicology
23. The essentials of forensic medicine and toxicology - Dr.K.S. Narayan
Reddy
24. Medical Laws and Ethics - Dr. H.S. Mehta
25. M.R.K. Krishnan's Handbook of Forensic Medicine
26. Text book of Medical Jurisprudence and Toxicology - Dr. C.K. Parikh
27. Atlas of Forensic Medicine - Dr. Tomio
Watenbe
28. Medico legal Post Mortems (Atlas) - Dr. Parikh and
Others
29. Textbook of Forensic Medicine and Toxicology - Dr.V.V. Pillay
30. Textbook of Forensic Medicine and Toxicology - Dr. Karmakar
31. Textbook of Forensic Medicine and Toxicology - Dr. Singhal
32. Textbook of Forensic Medicine and Toxicology - Dr. Krishnan Vij
33. Forensic Pathology - Dr. Bernard
Knight
34. Textbook of Forensic Medicine and Toxicology - Lyon's
35. Pocket picture guide to Forensic Medicine - Gower's Medical
Publication
36. Forensic Medicine - Simpson Knight
37. Taylor's Principles and Practical of Medical Jurisprudence - J and A
Churchis
38. Doctor and law - Singhal
39. Textbook of Toxicology - Singhal
40. Medicine Harrison's Principal of Internal Medicine
41. Agad Tantra - Dr. Shekhar
Namboodri

- 42.Modern Medical Toxicology - Dr. V.V.Pillay
- 43.Critical care toxicology - Bruent Wallace
- 44.Diagnosis and Management of common poisoning - Agarwal wali
- 45.Colour Atlas of Forensic Medicine - Govindaiah
- 46.Guidelines of poisons - W.H.O.
- 47.Doctors patients relationships - Dr.Lavekar
- 48.Bhavaprakasha.
- 49.Vishavaidya Jyotsnika -English translation By VPSV Ayurveda college,
Kottakkal.
- 50.Lakshnamritham.
- 51.Toxicology, Ayurvedic perspective - VPSV Ayurveda college, Kottakkal
- 52.Text book of Agadatantra - Edited By - Dr Huparikar, Dr.
Joglekar
- 53.Agadatantra ki Pathyapustaka - Edited By -Dr Huparikar, Dr.
Joglekar
- 54.Vyavahar Ayurveda Vigyanam - Dr.Indramohan
Jha(Sachchan)
- 55.Forensic Medicine - Dr. B. Umadathan
- 56.Visha Chikitsa - Dr. M. Balakrishnan Nair
- 57.Park Text book of Preventive and Social Medicine. - K. Park
- 58.Environmental Science and Biotechnology - Theory and Practice -
A.G.
- 59.Murukesan &C. Rajakumari
- 60.Veterinary Toxicology - Dr. Satish K. Gargi
- 61.Guide to Drinking Water Quality (3 Volumes) - WHO Publication
- 62.A short Text Book of Medical Entomology - H.S. Bhatti, R. Sehgal,
R.C. Mahajan.