

6. AGADA TANTRA EVUM VIDHIVAIIDYAKA

PAPER-I Agada Tantra (Ayurvedic and Contemporary Toxicology)

100 marks

1. Agada Tantra, its sequential development during Veda kala, Samhitha kala, Samgraha kala and Adhunika 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), Grihagodhika (Lizard), Mushaka (rats), Alarka (dogs), Makshika and Mashaka (mosquitoes) and their pathologic manifestations including their role in the manifestation of communicable diseases. Shanka visha and its management. Visha sankat and Visha Kanya.
7. 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.
8. Detailed study of Madya visha and substances acting on the nervous system; substance abuse.(Diagnosis, Management and De-addiction)
9. Detailed study of the contemporary knowledge about vishajanya Janpadodhvarsaniya 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.
10. Concept of Virudha aahara, Aahara visha and Satmyasatmyata in contemporary and Ayurvedic views.
11. Conceptual study:- Drug interactions and incompatibility, Pharmacovigilance

PAPER- II Visha Chikitsa Vigyan (Management Of Poisoning)

100 marks

1. Fundamental Principles for treatment of poisoning
2. General and specific treatment of different types of Sthavara visha.
3. General and specific treatment of different types of Jangama visha (animal poisons, insect poisons, snake bites and other zoonotic diseases).
4. Emergency medical management of poisoning including preparation, administration and complications of antivenoms/antiserum.
5. Chaturvimsati upakrama (24 management procedures).
6. Management of Garavisha and Dushivisha. Treatment of Allergies including allergic manifestations in the eyes, nose, lungs and skin.
7. Diagnosis and Management of Drug Induced Toxicity
8. Management of the toxic manifestations caused by the contact poisons (paduka, vasthra, abharana, mukhalepa- vishabadha etc).
9. Management of food poisoning.
10. Death due to poisoning, Duty of physician in poisoning, in cases of suspected poisoning. Post mortem findings in poisoning.
11. Extra -corporeal techniques (dialysis etc) for removal of poisons.

PAPER –III Vyavahara Ayurveda Evam Vidhi Vaidyaka**100 marks**

1. Definition of Vyavahara Ayurveda, its evolution in ancient and contemporary periods.
2. Personal identity and its medico-legal aspects
3. Death and its medico-legal aspects (Medical Thanatology)
4. Asphyxial deaths and its medico-legal importance.
5. Death due to starvation, heat and cold, lightning and electricity. Suspended Animation.
6. Medico-legal autopsy.
7. Injuries due to explosions, chemical and nuclear warfare.
8. Medico-legal aspects of injuries and wounds.
9. Impotence and sterility-Its medico-legal aspects. Regulations of Artificial Insemination. Medico –legal aspects of surrogate motherhood.
10. Sexual offences and perversions.
11. Medico-legal aspects of virginity, pregnancy, delivery, abortion, infanticide and legitimacy with related acts.
12. 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.
13. Courts and Legal procedures.
14. Forensic Science Laboratory
15. Medico legal aspects of mental illness
16. Duties and privileges of physician.
17. Structure of Central Council of Indian Medicine, its jurisdiction and functions. Code and Conducts as per the CCIM, Rules and Regulations there under.
18. Respective State Council of Indian Medicine, its structure, power, voluntary duties.
19. Doctor - patient relationship.
20. Rights and privileges of patients; Euthanasia.
21. Professional secrecy and privileged communication.
22. Professional negligence and malpractice
23. Indemnity Insurance scheme.
24. Consumer Protection Act related to medical practice.
25. 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.

PAPER – IV Aushadha Yoga Vigyan**100 marks**

1. Study of process for sodhana, marana and samskarana of poisonous drugs.
2. Pharmaco-dynamics of different formulations used in Agadatantra
3. Study of pharmacology and usage of antidotes as per the Ayurvedic and contemporary science.
4. Fundamentals of pharmaceuticals according to Ayurvedic and contemporary point of view.
5. Chemical, analytical, laboratory examination of poisons and suspicious substance.
6. Introduction of different instruments /equipments used in the examination of poisons.
7. Introduction to Clinical toxicology
8. Introduction to Experimental toxicology

9. Introduction to Toxicology - genomics
10. Survey and study of the traditional and folklore vishachikista sampradaya.

Content of Practical/Demonstration

1. Identification of specimens models and equipments of toxicological and jurisprudence importance.
2. Practical training in postmortem examination (10 cases)
3. Regular clinical postings in the Agadatantra OPD / IPD
4. Medico-legal cases (20 cases)
5. Chemical Identification of various acids, alkalis, alcohols – Hydrochloric acid, Nitric acid, Sulphuric acid, Ascorbic acid, Sodium Hydroxide and Potassium Hydroxide
6. Detection of minerals Copper, Mercury, Lead, Arsenic and their compounds.
7. Physical and Chemical analysis of Datura, Karaveera, Vatsanabha, Jayapala, Arka and Bhallataka with Microscopy, powder microscopy, TLC, solvent extraction, detection of Phenol, tannins etc. (10 studies)
8. Detection of human blood, hair, semen and other biological secretions of Forensic importance.
9. Herbarium of 15 sthavara vishas and 10 agadas.
10. Preparation of two Agada yogas

Clinical Postings

1. Modern medical hospitals – 2 weeks
(For emergency management of poisoning)
2. Postmortem postings - 2 weeks
3. Court postings - 1 week

Visit to

1. Forensic Laboratory
2. Anti snake venom serum manufacturing Unit.

Pattern of practical examination

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|---|------------------|
| 1. Post mortem / Medico-legal case record and clinical record | - 10 Marks |
| 2. Identification of specimens models and equipments of jurisprudence importance. | - 20 Marks |
| 3. Spotting related to Visha, Upavisha and others poisonous drugs | - 20 Marks |
| 4. Thesis presentation | - 25 Marks |
| 5. Viva-voce | - 25 Marks |
| Total | 100 Marks |

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 -PtGangadharaShastri 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
 18. Forensic Pharmacy
 19. Hand book of Forensic Medicine and toxicology
 20. Viva Forensic Medicine and toxicology
 21. Forensic Medicine and Ethics
 22. Modi's Medical Jurispudence and Toxicology
 23. The essentials of forensic medicine and toxicology
 24. Medical Laws and Ethics
 25. M.R.K. Krishnan's Handbook of Forensic Medicine
 26. Text book of Medical Jurispudence and Toxicology
 27. Atlas of Forensic Medicine
 28. Medico legal Post Mortems (Atlas)
 29. Textbook of Forensic Medicine and Toxicology
 30. Textbook of Forensic Medicine and Toxicology
 31. Textbook of Forensic Medicine and Toxicology
 32. Textbook of Forensic Medicine and Toxicology
 33. Forensic Pathology
 34. Textbook of Forensic Medicine and Toxicology
 35. Pocket picture guide to Forensic Medicine
36. Forensic Medicine
 37. Taylor's Principles and Practical of Medical Jurispudence - J and A Churchis
 38. Doctor and law
 39. Textbook of Toxicology
 40. Medicine Harrison's Principal of Internal Medicine
 41. Agad Tantra
 42. Modern Medical Toxicology
 43. Critical care toxicology
 44. Diagnosis and Management of common poisoning
 45. Colour Atlas of Forensic Medicine
 46. Guidelines of poisons
 47. Doctors patients relationships
 48. Bhavaprakasha.
 49. Vishavaidya Jyotsnika -- English translation By VPSV Ayurveda college, Kottakkal.
 50. Lakshnamritham.
 51. Toxicology, Ayurvedic perspective
52. Text book of Agadatantra
 53. Agadatantra ki Pathyapustaka
 54. Vyavahar Ayurveda Vigyanam
 55. Forensic Medicine
 56. Visha Chikitsa
 57. Park Text book of Preventive and Social Medicine.
 58. Environmental Science and Biotechnology
 59. Veterinary Toxicology
 60. Guide to Drinking Water Quality (3 Volumes)
 61. A short Text Book of Medical Entomology
- Savil
 - B.M. Mhithai
 - Dr. P.V. Chadha
 - L.C. Gupta
 - J.P. Narena
 - Dr.K.S. Narayan Reddy
 - Dr. H.S. Mehta
 - Dr. C.K. Parikh
 - Dr. Tomio Watenbe
 - Dr. Parikh and Others
 - Dr.V.V. Pillay
 - Dr. Karmakar
 - Dr. Singhal
 - Dr. Krishnan Vij
 - Dr. Bernard Knight
 - Lyon's
 - Gower's Medical Publication
 - Simpson Knight
 - Singhal
 -Singhal
 - Dr. Shekhar Namboodri
 - Dr. V.V.Pillay
 - Bruent Wallace
 - Agarwal wali
 - Govindaiah
 - W.H.O.
 - Dr.Lavekar
 - VPSV Ayurveda college, Kottakkal
 - Edited By Dr Huparikar, Dr. Joglekar
 - Edited By Dr Huparikar, Dr. Joglekar
 - Dr.Indramohan Jha (Sachchan)
 - Dr. B. Umadathan
 - Dr. M. Balakrishnan Nair
 - K. Park
 - Theory and Practice - A.G. Murukesan &C. Rajakumari
 - Dr. Satish K. Gargi
 - WHO Publication
 - H.S. Bhatti, R. Sehgal, R.C. Mahajan.
