

### **Course curriculum for Second Professional BAMS**

### (PRESCRIBED BY NCISM)



# Agad Tantra evam Vidhi Vaidyaka (SUBJECT CODE : AyUG-AT)

(Applicable from 2021-22 batch, from the academic year 2023-24 onwards for 5 years or until further notification by NCISM, whichever is earlier)





BOARD OF AYURVEDA NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE NEW DELHI-110058



#### NCISM

# II Professional Ayurvedacharya (BAMS)

## Subject Code : AyUG-AT

### Summary

| Total number of Teaching hours: 300 |            |     |          |  |  |  |
|-------------------------------------|------------|-----|----------|--|--|--|
| Lecture hours(LH)-Theor             | у          |     |          |  |  |  |
| Paper I                             | 100        | 100 | 100(LH)  |  |  |  |
| Non Lecture hours(NLH)              | -Theory    |     |          |  |  |  |
| Paper I                             | 60         | 200 | 200(NLH) |  |  |  |
| Non Lecture hours(NLH)              | -Practical |     |          |  |  |  |
| Paper I                             | 140        |     |          |  |  |  |

|             | Examination (Pa        | pers & Mark I             | Distribution) |                |    |  |  |
|-------------|------------------------|---------------------------|---------------|----------------|----|--|--|
| Item        | Theory Component Marks | Practical Component Marks |               |                |    |  |  |
|             |                        | Practical                 | Viva          | Elective       | IA |  |  |
| Paper I     | 100                    | 100                       | 60            | (Set SA)<br>10 | 30 |  |  |
| Sub-Total   | 100                    | 200                       |               |                |    |  |  |
| Total marks |                        | 300                       |               |                |    |  |  |

**Important Note:-**The User Manual II BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual II before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic.

In case of difficulty and questions regarding curriculum write to cur.imp@ncismindia.org



## **PREFACE**

Agada Tantra, is one of the eight clinical branches (Ashtanga) of Ayurveda. This branch of clinical toxicity was considered as the stalwart of Ayurveda which popularized this science across several civilizations around the world. Many great explorers glorified the snake bite management existed in India and this paved way for the popularization of Ayurveda in several countries with Ayurvedic scriptures being translated to several languages and many scholars came to India to study this science. The subject encompasses the detailed study for several toxicological conditions ranging from animate, inanimate and other disease entities with an inherent toxic pathology that enables to apply the principles of Agada Tantra in several diseases of contemporary significance.

Poisons disrupts the homeostasis created by the three doshas. Agada Tantra details measures to re-establish the proper functioning of the dosha, dhatu, mala, srotas and to reinstate the vital force (Oja). To attain this, a judicious use of Agada formulations is necessary coupled with specific treatment procedures enshrined in the 24-fold treatments (Chaturvimsati Upakrama). A proper assessment of the patient with respect to the level of spread of poison in the body ascertained through the concept of Vega is utmost important as far as any successful management of poisoning is concerned. A thorough knowledge of all these is essential to adopt treatment of any poison or to extend it to any contemporary toxicological conditions like contact dermatitis, food poisoning etc. Current curriculum has been designed to unearth the scope of this subject as a clinicl branch which aims at empowering an undergraduate student to understand the current clinical toxicological manifestations under the theoretical and practical/clinical framework of Agada Tantra.

The present curriculum of Agada Tantra equips an undergraduate student to grasp the clinical utility of these concepts through an effective teaching-learning process involving cognitive, psychomotor and affective domains. Students will be guided through effective teaching-learning methods to understand the concepts through state-of-the-art techniques like activity based learning, problem based learning and group activities. Effective evaluation techniques are also been incorporated to make the student community learn this subject in its entirity and utilizes the spectrum of its theoretical, practical and clinical aspects.



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|--|-----|
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| Paper 1  | 12  |
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#### **Course Code and Name of Course**



| <u> </u>    |                                 |
|-------------|---------------------------------|
| Course code | Name of Course                  |
| AyUG-AT     | Agad Tantra evam Vidhi Vaidyaka |

#### Table 1- Course learning outcomes and matched PO

| SR1<br>CO<br>No | A1<br>Course learning Outcomes (CO) AyUG-AT<br>At the end of the course AyUG-AT, the students should be able to-                                 | B1<br>Course learning<br>Outcomes matched<br>with program<br>learning outcomes. |
|-----------------|--|---|
| CO1             | Demonstrate application of fundamental concepts of Agada Tantra,<br>Vyavahara Ayurveda and Vidhi vaidyaka in real life situations.               | PO1,PO2   |
| CO2             | Diagnose and manage acute and chronic poisoning due to Sthavara, Jangama and Kritrima visha along with their contemporary relevance.             | PO1,PO2,PO3,PO4,<br>PO5   |
| CO3             | Demonstrate application of concepts of Dushivisha, Garavisha and Viruddha ahara in prevention, diagnosis and management of diseases.             | PO1,PO2,PO3,PO4,<br>PO5   |
| CO4             | Demonstrate application of principles of Agada Tantra and therapeutic administration of common Agada yoga and Visha dravya in Clinical practice. | PO2,PO3,PO4,PO5,<br>PO9   |
| CO5             | Appreciate research updates in relevance to Agada Tantra and apply for healthcare promotion and social awareness.                                | PO6,PO7,PO8,PO9   |
| CO6             | Demonstrate application of professional skills of Forensic Medicine in handling medico legal issues.   | PO2,PO3,PO6   |
| CO7             | Demonstrate professional and ethical behavior in discharging the medico-<br>legal duties and responsibilities in abidance to the law.            | PO5,PO6,PO8,PO9   |



| Papo<br>Sr.<br>No | A2<br>List of Topics   | B2<br>Term | C2<br>Marks | D2<br>Lecture<br>hours | E2<br>Non-<br>Lecture<br>hours |
|-------------------|--|------------|-------------|------------------------|--------------------------------|
| 1                 | <ul> <li>Concepts of Agada Tantra (Clinical Toxicology)</li> <li>1.1 Agada Tantra and Clinical Toxicology.</li> <li>1.2 Scope of Agada Tantra.</li> <li>1.3 Definition of visha and poison, synonyms, visha guna, difference between visha, madya and oja guna, visha gati, classification of visha and poison, sthavara and jangama visha adhishtana.</li> <li>1.4 Difference between poison, venom and toxin.</li> <li>1.5 Routes of administration of poison.</li> <li>1.6 Mode of action of visha (visha gunanusara karma) and poison (Introduction to toxicokinetics)</li> <li>1.7 Factors modifying the action of poison.</li> <li>1.8 Visha vardhaka bhava and visha sankata</li> <li>1.9 Vishavega, vegantara and sthavara visha veganusara lakshana and chikitsa.</li> <li>1.10 Visha peeta and vishamukta lakshana.</li> </ul> | 1          | 13          | 8                      | 1                              |
| 2                 | <ul> <li>Visha Chikitsa (Management of Poisoning)</li> <li>2.1. Diagnosis of poisoning in living &amp; dead</li> <li>2.2. Chaturvimshati upakrama.</li> <li>2.3. General principles of management of poisoning.</li> <li>2.4. Duties of medical officer in case of suspected poisoning.</li> </ul>   | 1          |             | 5                      | 4                              |
| 3                 | <ul> <li>Vishakta aahara pariksha and Viruddha ahara</li> <li>3.1. Sources of exposure of visha with contemporary relevance.</li> <li>3.2. Vishakta aahara pariksha.</li> <li>3.3. Adulteration and tests for its detection.</li> <li>3.4. Techniques used in the detection of poisons.</li> <li>3.5. Viruddha-ahara with contemporary relevance.</li> <li>3.6. Food poisoning and amavisha.</li> </ul>  | 1          |             | 3                      | 2                              |
| 4                 | <ul> <li>Garavisha and Dooshivisha</li> <li>4.1. Garavisha</li> <li>4.2. Dooshivisha</li> <li>4.3. Contemporary aspects of garavisha and dooshivisha.</li> <li>4.4. Role of garavisha and dooshivisha in the manifestation of diseases</li> <li>4.5. Research updates in garavisha and dooshivisha</li> </ul>  | 1          | 12          | 7                      | 2                              |
| 5                 | Visha Upadrava and diseases caused due to exposure to Visha/poisons  | 1          | 1           | 4                      | 2                              |



|   | <ul> <li>5.1 Visha upadrava</li> <li>5.2 Drug-induced toxicity</li> <li>5.3 Occupational hazards.</li> <li>5.4 Allergic manifestations</li> <li>5.5 Endocrine disrupters</li> </ul>   |   |    |   |   |
|---|---|---|----|---|---|
| 6 | <ul> <li>Environmental Toxicology</li> <li>6.1 Vishakta vayu, jala and bhumi (air, water and land pollution)</li> <li>6.2 Effect of biological, chemical and nuclear warfare.</li> <li>6.3 Ecotoxicology &amp; biomagnification.</li> <li>6.4 Toxicovigilance.</li> </ul>   | 2 | 11 | 2 | 5 |
| 7 | <ul> <li>Dermatological manifestations of visha/poisons.</li> <li>7.1. Contact dermatitis and its management.</li> <li>7.2. Signs and symptoms and management of abhyanga visha, lepa visha, vastra visha, paduka visha, abharana visha etc. with contemporary relevance.</li> <li>7.3. Signs and symptoms and management of dermatological manifestations due to cosmetics, chemicals, occupational and other allergens.</li> <li>7.4. Dermatological manifestation due to dooshivisha and garavisha.</li> <li>7.5. Dermatological manifestation due to bites and stings.</li> </ul> | 2 |    | 6 | 2 |
| 8 | <ul> <li>Therapeutic utility of Agada yoga</li> <li>8.1 Dooshivishari agada</li> <li>8.2 Bilwadi agada</li> <li>8.3 Dashanga agada</li> <li>8.4 Murvadi agada</li> <li>8.5 Panchashirisha agada</li> <li>8.6 Vishaghna mahakashaya (Charaka Samhita)</li> <li>8.7 Ekasara gana (Sushruta Samhita)</li> </ul>  | 2 |    | 1 | 0 |
| 9 | <b>Sthavara visha – Poisons of Plant origin</b><br>9.1. Cardiac Poisons - Vatsanabha, Karaveera, Digitalis,<br>Tobacco and Cerbera odollam.   | 2 | 17 | 4 | 2 |



|    | <ul> <li>9.2. Neurotoxic Poisons- Kupeelu, Ahiphena, Dhattura, Bhanga.</li> <li>9.3. Irritant Poisons - Jayapala, Gunja, Bhallataka, Arka, Snuhi, Langali.</li> </ul>   |   |    |    |   |
|----|---|---|----|----|---|
| 10 | Sthavara Visha – Poisons of Metallic origin<br>10.1. Arsenic.<br>10.2. Mercury.<br>10.3. Lead.<br>10.4. Copper  | 2 |    | 4  | 2 |
| 11 | <ul> <li>Jangama Visha</li> <li>11.1. Sarpa visha<br/>11.2. Loota visha<br/>11.3. Vrischika visha<br/>11.4. Mushika visha and its contemporary<br/>relevance.</li> <li>11.5. Alarka visha and its contemporary relevance.<br/>11.6. Keeta visha<br/>11.7. Vector borne diseases.</li> </ul>   | 2 |    | 10 | 6 |
| 12 | <ul> <li>Kritrima visha</li> <li>12.1. Inorganic Acids – Sulphuric acid,<br/>Hydrochloric acid, Nitric acid.</li> <li>12.2. Organic Acids - Oxalic acid, Carbolic acid,<br/>Formic acid.</li> <li>12.3. Alkalies - Potassium hydroxide and Sodium<br/>hydroxide.</li> <li>12.4. Asphyxiants – Carbon monoxide, Carbon<br/>dioxide.</li> <li>12.5. Non-metallic poisons – Phosphorous, cyanide</li> <li>12.6. Hydrocarbons – Kerosene.</li> <li>12.7. Agrochemical Poisoning – Organo-phosphorus<br/>compounds, Carbamates, Organo-chlorine<br/>compounds, Aluminium phosphide.</li> <li>12.8. Household poisons.</li> </ul> | 3 | 12 | 2  | 0 |
| 13 | Substances of abuse<br>13.1. Madya and madatyaya, Alcoholism.<br>13.2. Addiction - Alcohol, Bhang, Opioids, Tobacco and<br>Digital addiction.<br>13.3. Drugs of abuse- Lysergic acid diethylamide (LSD) and<br>3,4-Methylenedioxy methamphetamine (MDMA).   | 3 |    | 4  | 3 |



|    | 13.4. Narcotic Drugs and Psychotropic Substances (NDPS)<br>Act.   |   |    |   |   |
|----|---|---|----|---|---|
| 14 | Agada Tantra perspectives on cancer14.1. Toxic carcinogens.14.2. Toxicities due to chemo and radiotherapy and itsAyurvedic approach.14.3. Agada and visha dravya prayoga in the prevention andmanagement of cancer along with its research updates.   | 3 |    | 2 | 4 |
| 15 | <ul> <li>Forensic medicine (Vyavahara Ayurveda) and Medical jurisprudence (Vidhi vaidyaka):</li> <li>15.1 Forensic Medicine and Medical Jurisprudence. 15.2 Introduction to Indian Penal Code, Indian Evidence Act and Criminal Procedure Code.</li> </ul>  | 1 | 10 | 1 | 0 |
| 16 | <ul> <li>Vaidya sadvritta : Duties and Responsibilities of medical practitioner</li> <li>16.1 Vaidya sadvritta, medical ethics and code of conduct, Charaka oath and Hippocratic oath.</li> <li>16.2 NCISM - constitution, objectives and functions.</li> <li>16.3 Duties, rights and privileges of a registered medical practitioner.</li> <li>16.4 Consent, professional secrecy and privileged communication.</li> <li>16.5 Professional negligence, professional misconduct and unethical practices.</li> <li>16.6 Defenses in medical negligence suits.</li> <li>16.7 Medical records.</li> <li>16.8 Consumer Protection Act.</li> </ul> | 1 |    | 6 | 4 |
| 17 | Legal Procedures<br>17.1. Courts and their powers<br>17.2. Inquest, evidence and witnesses<br>17.3. Court procedures: summons, oath, recording of<br>evidence and conduct money.<br>17.4. Conduct of a medical professional in the court of law.  | 1 |    | 4 | 4 |
| 18 | Personal identity   | 1 |    | 2 | 2 |



|    | $\sim$   |   |    |   |   |
|----|--|---|----|---|---|
|    | <ul> <li>18.1. Identification data</li> <li>18.2. Age</li> <li>18.3. Race, religion, sex.</li> <li>18.4. Moles, tattoos, scars, occupational marks &amp; hairs.</li> <li>18.5. Hand writing, dactylography, DNA typing and superimposition</li> </ul>  |   |    |   |   |
| 19 | <b>Thanatology</b><br>19.1. Death<br>19.2. Signs of death.<br>19.3. Medicolegal autopsy and exhumation.<br>19.4. The Transplantation of Human Organs and Tissues<br>Act (THOTA).   | 2 | 12 | 6 | 2 |
| 20 | Asphyxial deaths<br>20.1. Hanging.<br>20.2. Strangulation and suffocation<br>20.3. Drowning.   | 2 |    | 4 | 2 |
| 21 | <b>Injury</b><br>21.1. Basics of injury<br>21.2. Mechanical injury<br>21.3. Firearm injury<br>21.4. Thermal injury<br>21.5. Dowry death  | 2 |    | 5 | 3 |
| 22 | <ul> <li>Pregnancy, delivery and abortion</li> <li>22.1 Medico-legal aspects of pregnancy, delivery, infanticide and battered baby syndrome.</li> <li>22.2 Abortion, Medical Termination of Pregnancy (MTP) Act and Pre-Conception and Pre-Natal Diagnostic Techniques (PCPNDT) Act.</li> <li>22.3 Medico-legal aspects of artificial insemination and surrogacy.</li> </ul> | 3 | 6  | 2 | 3 |
| 23 | Sexual offences<br>23.1. Rape<br>23.2. Medico-legal aspects of sexual offences<br>23.3. Protection of Children from Sexual Offences<br>(POCSO) Act   | 3 |    | 2 | 1 |
| 24 | <b>Forensic psychiatry.</b><br>24.1. Common symptoms associated with psychiatric<br>disorders<br>24.2. Lucid interval  | 3 | 7  | 2 | 2 |



| Tot | al Marks  |   | 100 | 100 hr | 60 hr |
|-----|---|---|-----|--------|-------|
| 26  | <ul> <li>Laws, Acts, Rules and Regulations</li> <li>26.1 Clinical Establishments Act</li> <li>26.2 State AYUSH registration board rules and regulations.</li> <li>26.3 Medicare Service Persons and Medicare Service</li> <li>Institutions (Prevention of violence and damage or loss to property) Act, 2008.</li> <li>26.4 Drugs and Cosmetics Act and Rules – Schedules related to poison.</li> <li>26.5 The Occupational Safety, Health and Working</li> <li>Conditions Code, 2020</li> <li>26.6 Employees State Insurance Act, 1948.</li> <li>26.7 Rights of Person with Disability Act, 2016.</li> </ul> | 3 |     | 3      | 2     |
| 25  | <ul> <li>Forensic science laboratory</li> <li>25.1. Hierarchy and major divisions of forensic lab</li> <li>services.</li> <li>25.2. Newer techniques and recent advances - polygraphy, narcoanalysis, DNA profiling.</li> </ul>   | 3 |     | 1      | 0     |
|     | <ul><li>24.3. Civil and criminal responsibilities of a mentally ill person</li><li>24.4. Mental Health Act (MHA)</li></ul>  |   |     |        |       |



| Paper 1                 |  |                      |  |  |                         |  |                                       |            |                       |
|-------------------------|--|----------------------|--|--|-------------------------|--|---------------------------------------|------------|-----------------------|
| A3<br>Course<br>outcome | B3<br>Learning Objective (At the end of the session, the students<br>should be able to)    | C3<br>Doma<br>in/sub | D3<br>Must to know<br>/ desirable to<br>know / Nice<br>to know | E3<br>Level<br>Does/<br>Show<br>s<br>how/<br>Know<br>s<br>how/<br>Know | F3<br>T-L<br>meth<br>od | G3<br>Assessment<br>(Refer<br>abbreviations) | H3<br>Form<br>ative/<br>summ<br>ative | I3<br>Term | J3<br>Integr<br>ation |
| Topic 1 Con             | cepts of Agada Tantra (Clinical Toxicology) (Lecture :8 hour                               | rs, Non I            | ecture: 1 hours)   | )  |                         |  |                                       |            |                       |
| CO1                     | Define Agada Tantra and Toxicology. Describe the scope of Agada Tantra in the present era. | СК                   | МК   | K  | L&PP<br>T               | T-EMI,T- EW                                  | F&S                                   | I          |                       |
| CO1                     | Define visha and poison. Enlist its synonyms.  | СК                   | MK   | K  | L&PP<br>T               | T-EMI  | F&S                                   | I          |                       |
| CO1                     | Differentiate between poison, venom and toxin.   | СК                   | МК   | K  | L,L&<br>PPT             | P-VIVA                                       | F&S                                   | Ι          |                       |
| CO1                     | Describe classification of visha & poison  | СК                   | МК   | K  | L&PP<br>T               | T-EMI,P-<br>VIVA                             | F&S                                   | I          |                       |
| CO1                     | Describe sthavara and jangama visha adhisthana.  | СК                   | МК   | К  | L&PP<br>T               | T- EW  | F&S                                   | Ι          |                       |
| CO1                     | Describe the routes of administration of poison.   | CC                   | МК   | К  | L&PP<br>T               | T- EW,P-<br>VIVA                             | F&S                                   | Ι          |                       |
| CO1                     | Enlist visha guna and differentiate between visha, madya and oja                           | СК                   | МК   | K  | L&PP                    | T-EMI  | F&S                                   | Ι          |                       |

Г



|           | guna.   |           |              |    | Т                    |                       |     |   |      |
|-----------|---|-----------|--------------|----|----------------------|-----------------------|-----|---|------|
| CO1       | Describe the mode of action of visha (visha gunanusar karma) & poison (Introduction to toxicokinetics). | CC        | МК           | КН | L,L&<br>PPT,L<br>&GD | T-EMI,T- EW           | F&S | I |      |
| CO1       | Describe the factors modifying the action of poison.  | CC        | МК           | КН | L&PP<br>T            | T- EW                 | F&S | Ι |      |
| CO1       | Describe vishavardhaka bhava and visha sankata.   | CC        | МК           | КН | L&PP<br>T            | T-EMI,T-<br>EW,P-VIVA | F&S | I |      |
| CO1       | Describe visha vega & vegantara   | СК        | DK           | K  | L&PP<br>T            | T-EMI,P-<br>VIVA      | F&S | I |      |
| CO1       | Describe sthavara visha veganusara lakshana and chikitsa  | СК        | МК           | К  | L,L&<br>PPT          | T-EMI                 | F&S | I |      |
| CO1       | Describe vishapeeta and vishamukta lakshana.  | СК        | МК           | К  | L&G<br>D             | T-EMI,P-<br>VIVA      | F&S | Ι |      |
| Topic 2 V | Visha Chikitsa (Management of Poisoning) (Lecture :5 hours, No  | on lectur | re: 4 hours) |    |                      |                       |     |   |      |
| CO2       | Describe the diagnosis of poisoning in living and dead.   | CAP       | МК           | КН | L&PP<br>T            | T-EMI,T-<br>EW,P-VIVA | F&S | Ι |      |
| CO2       | Enumerate and discuss chaturvimshati upakrama   | CC        | МК           | КН | L&PP<br>T            | T- EW,P-<br>VIVA      | F&S | I |      |
| CO2       | Describe the general principles of managment of poisoning.  | CAP       | МК           | КН | L&PP<br>T            | T-EMI,P-<br>VIVA      | F&S | Ι | V-KC |
| CO2       | Describe the duties of medical officer in case of suspected poisoning.                                  | СК        | МК           | K  | L&PP<br>T            | T-EMI,P-<br>VIVA      | F&S | I |      |



| CO1,CO2,CO<br>3 | Explain the various sources of exposure of visha like anna, paana, vastra, abhyanga, lepa, paduka, abharana, etc.                        | СК  | DK | K  | L&PP<br>T,L&<br>GD           | T- EW,CL-<br>PR,M-CHT                   | F&S | Ι |  |
|-----------------|--|-----|----|----|------------------------------|---|-----|---|--|
| CO1,CO2,CO<br>3 | Describe the Ayurvedic methods of detection of food and<br>beverages contaminated with visha.  | CC  | МК | KH | L&PP<br>T,L_<br>VC,S<br>DL,D | T- EW,P-VIV<br>A,P-EXAM                 | F&S | I |  |
| CO1,CO2,CO<br>3 | Define adulteration, describe the methods of detection of adulterants and its relevance in Agada Tantra.                                 | САР | DK | KH | L_VC<br>,SDL,<br>PT          | T- EW,P-VIV<br>A,P-<br>EXAM,OSPE<br>,RK | F&S | I |  |
| CO1,CO2,CO<br>3 | Describe the modern analytical techniques for the detection of poison (in contaminated articles) like chromatography, spectroscopy, etc. | CC  | NK | KH | L&PP<br>T,L&<br>GD,L<br>_VC  | T- EW,P-<br>VIVA,CL-PR                  | F&S | I |  |
| CO1,CO2,CO<br>3 | Define viruddha ahara and explain its types.   | CC  | МК | KH | L&PP<br>T,L&<br>GD,B<br>S    | T- EW,P-<br>VIVA,INT                    | F&S | I |  |
| CO1,CO2,CO<br>3 | Discuss and illustrate the contemporary importance of viruddha ahara with examples   | CAN | МК | КН | L&G<br>D,BS,<br>SDL          | T- EW,QZ<br>,CL-PR                      | F&S | Ι |  |
| CO1,CO2,CO<br>3 | Discuss the application of concepts of viruddha ahara in the prevention and management of diseases.                                      | CAP | МК | КН | L&G<br>D,BS,<br>SDL          | T- EW,P-VIV<br>A,CR-RED                 | F&S | Ι |  |
| CO1,CO2,CO<br>3 | Describe food poisoning, its types and management.   | CC  | МК | КН | L&PP<br>T,L&                 | T- EW,P-VIV<br>A,CR-RED                 | F&S | Ι |  |



|                 |  |     |    |    | GD,L<br>_VC,<br>CD          |                        |     |   |  |
|-----------------|--|-----|----|----|-----------------------------|------------------------|-----|---|--|
| CO1,CO2,CO<br>3 | Discuss the clinical application of principles of Agada Tantra in<br>the management of food poisoning. | САР | МК | КН | L&G<br>D,BS,<br>CBL,<br>SDL | T- EW,P-<br>VIVA,CL-PR | F&S | I |  |
| CO1,CO2,CO<br>3 | Describe the concept of amavisha.  | CC  | МК | КН | L&PP<br>T,L&<br>GD,L<br>_VC | T- EW,P-<br>VIVA       | F&S | I |  |
| Topic 4 Gara    | avisha and Dooshivisha (Lecture :7 hours, Non lecture: 2 hours)  | rs) |    |    |                             |                        |     | • |  |
| CO1,CO3         | Describe the various definitions of garavisha.   | СК  | МК | К  | L&PP<br>T                   | T- EW                  | F&S | Ι |  |
| CO1,CO3         | Describe the clinical presentations of garavisha.  | CC  | МК | КН | L&PP<br>T                   | T- EW                  | F&S | Ι |  |
| CO1,CO3         | Understand and explain the management principles of garavisha.   | CC  | МК | КН | L&PP<br>T                   | T- EW                  | F&S | Ι |  |
| CO1,CO3         | Describe the various definitions of dooshivisha.   | CC  | МК | КН | L&PP<br>T                   | T- EW                  | F&S | Ι |  |
| CO3             | Describe the clinical presentations of dooshivisha.  | CC  | МК | КН | L&PP<br>T                   | T- EW                  | F&S | Ι |  |
| CO3,CO4         | Describe the principles of management of dooshivisha.  | CC  | МК | КН | L&PP<br>T,DIS               | T- EW,P-REC            | F&S | Ι |  |
| CO3,CO4         | Discuss the application of the concept of dooshivisha and  | CAP | МК | КН | L&G                         | P-VIVA                 | F&S | Ι |  |



|                 | garavisha and its management in day to day clinical practice.   |        |                |          | D                         |                                  |     |   |      |
|-----------------|---|--------|----------------|----------|---------------------------|----------------------------------|-----|---|------|
| CO3,CO5         | Discuss the recent research updates in the concept of garavisha and dooshivisha.  | CAN    | МК             | KH       | L&G<br>D,PE<br>R          | P-VIVA,CL-<br>PR                 | F&S | Ι |      |
| CO1,CO3,CO<br>4 | Describe garavisha and dooshivisha as an etiology for the diseases of present era.  | CAP    | МК             | КН       | DIS,B<br>S,FC             | P-VIVA,CL-<br>PR                 | F&S | Ι |      |
| Topic 5 Visha   | a Upadrava and diseases caused due to exposure to Visha/p   | oisons | (Lecture :4 ho | urs, Non | lecture:                  | 2 hours)                         |     | • |      |
| CO1,CO3         | Describe visha upadrava.  | СК     | МК             | K        | L&PP<br>T                 | T- EW,P-<br>VIVA                 | F&S | Ι |      |
| CO2,CO3,CO<br>4 | Define drug induced toxicity and discuss its Agada Tantra perspective.  | CC     | МК             | КН       | L&G<br>D,L_<br>VC,B<br>S  | T- EW,T-<br>OBT,P-VIVA           | F&S | Ι |      |
| CO2,CO3,CO<br>4 | Discuss the application of principles of Agada Tantra in drug induced hepatotoxicity, nephrotoxicity and neurotoxicity.                                     | CAP    | МК             | KH       | L&PP<br>T,CB<br>L         | T- EW,P-<br>VIVA,CL-PR           | F&S | Ι |      |
| CO2,CO3,CO<br>4 | Discuss various occupational poisons and their health hazards.  | CC     | МК             | КН       | L&PP<br>T,PB<br>L,SD<br>L | T-OBT,P-VIV<br>A,M-CHT,M-<br>POS | F&S | Ι | H-SW |
| CO2,CO3,CO<br>4 | Discuss the application of principles of Agada Tantra in occupational diseases caused due to pollution, paints, pesticides, fertilizer and other chemicals. | CC     | DK             | KH       | L&PP<br>T,ML              | QZ ,CL-PR,M-<br>CHT,M-POS        | F&S | Ι |      |
| CO2,CO3,CO<br>4 | Define and discuss allergy, types of allergens and its<br>understanding as per Ayurveda.  | CC     | МК             | KH       | L&PP<br>T,DIS<br>,BS,C    | INT,CR-RED                       | F&S | Ι |      |



|                 |  |     |    |    | BL                           |                            |     |    |   |
|-----------------|--|-----|----|----|------------------------------|----------------------------|-----|----|---|
| CO2,CO3,CO<br>4 | Discuss the application of the treatment principles of Agada<br>Tantra in various allergic manifestations.                                       | CAP | МК | КН | L&G<br>D,BS,<br>CBL          | T-EMI,P-VIV<br>A,PRN,CL-PR | F&S | Ι  |   |
| CO2,CO3,CO<br>4 | Define and enlist endocrine disruptors and discuss its Agada<br>Tantra perspectives.   | CAP | DK | КН | L&PP<br>T,DIS<br>,BS,C<br>BL | CL-PR,M-<br>CHT,COM        | F&S | Ι  |   |
| Topic 6 Envi    | ronmental Toxicology (Lecture :2 hours, Non lecture: 5 hours   | )   |    | •  | •                            |                            |     |    | • |
| CO4,CO5         | Define environmental toxicology.   | СК  | DK | K  | L&PP<br>T,DIS                | PRN,M-POS                  | F&S | Π  |   |
| CO3,CO4,CO<br>5 | Describe the lakshanas and chikitsa of vishakta bhoomi, vishakta jala, and vishakta vayu.  | СК  | DK | K  | L&PP<br>T                    | P-VIVA,P-<br>MOD           | F&S | II |   |
| CO4,CO5         | Define pollution. Describe various pollutants and explain water<br>pollution, soil pollution, air pollution, along with their health<br>hazards. | СК  | DK | КН | L&PP<br>T,BS                 | T- EW,T-CS,P<br>RN,P-MOD   | F&S | II |   |
| CO4,CO5         | Describe the health effects of biological, chemical and nuclear warfare.   | СК  | NK | K  | L&G<br>D,SD<br>L             | PRN,QZ                     | F&S | II |   |
| CO4,CO5         | Define ecotoxicology & biomagnification.   | СК  | NK | КН | L&G<br>D,SD<br>L             | PRN,CL-PR                  | F&S | II |   |
| CO4,CO5         | Explain the concept of toxicovigilance   | CC  | DK | K  | FC,S<br>DL                   | P-POS,CL-<br>PR,CR-RED     | F   | II |   |



| CO3,CO4      | Describe the clinical presentations and diagnosis of paduka visha, abharana visha, vastra visha, lepa visha, abhyanga visha, etc.              | CAP     | МК | КН | L&PP<br>T,DIS<br>,CBL,<br>CD  | T- EW,P-<br>CASE,CL-PR            | F&S | II |  |
|--------------|--|---------|----|----|-------------------------------|-----------------------------------|-----|----|--|
| CO3,CO4      | Discuss the management of paduka visha, abharana visha, vastra visha, lepa visha, abhyanga visha, etc.   | CAN     | МК | КН | L&PP<br>T,DIS<br>,CBL,<br>PER | T- EW,P-EXA<br>M,P-<br>CASE,CL-PR | F&S | II |  |
| CO3,CO4      | Describe contact dermatitis and its types.   | СК      | МК | K  | L&PP<br>T                     | T- EW,P-<br>VIVA                  | F&S | II |  |
| CO3,CO4      | Discuss the application of treatment principles of Agada Tantra<br>in the contact dermatitis.  | CAP     | МК | КН | L&PP<br>T,CB<br>L             | P-VIVA,P-<br>CASE,CL-PR           | F&S | п  |  |
| CO3,CO4      | Discuss the dermatological conditions caused due to garavisha and dooshivisha.   | CAP     | МК | КН | L&PP<br>T,DIS<br>,CBL,<br>CD  | T- EW,P-VIV<br>A,P-CASE           | F&S | II |  |
| CO3,CO4      | Discuss the application of principles of treatment of garavisha<br>and dooshivisha in the management of dermatological<br>manifestations.      | CAP     | МК | КН | L&PP<br>T,DIS<br>,CBL         | P-VIVA,P-<br>CASE,CL-PR           | F&S | П  |  |
| CO3,CO4      | Discuss the daignosis and application of the treatment principles<br>of Keeta visha in dermatological manifestations due to bites &<br>stings. | CAP     | МК | КН | L&PP<br>T,DIS<br>,CBL,<br>SDL | T- EW,P-VIV<br>A,P-CASE,CL-<br>PR | F&S | II |  |
| Topic 8 Ther | rapeutic utility of Agada yoga (Lecture :1 hours, Non lecture:   | 0 hours | ;) |    |                               |                                   |     |    |  |
| C01,C02,C0   | Enlist ingredients and discuss the therapeutic utility of  | CAP     | МК | KH | L&PP                          | T- EW,P-                          | F&S | II |  |



| 3,CO4               | Doohivishari Agada, Bilwadi Agada, Dashanga Agada, Murvadi agada and Panchashririsha Agada.   |           |          |    | T,DIS<br>,CBL               | CASE                                |     |    |  |
|---------------------|---|-----------|----------|----|-----------------------------|-------------------------------------|-----|----|--|
| CO1,CO2,CO<br>3,CO4 | Enlist and discuss the ingredients of vishaghna mahakashaya<br>(Charaka Samhita) and ekasara gana (Sushruta Samhita).   | САР       | МК       | КН | L&PP<br>T,BS,<br>CBL,<br>FC | T- EW,P-<br>VIVA                    | F&S | Π  |  |
| Topic 9 Stha        | vara visha – Poisons of Plant origin (Lecture :4 hours, Non le  | ecture: 2 | 2 hours) |    |                             |                                     |     |    |  |
| CO2,CO4,CO<br>6     | Describe the active principles, mode of action, fatal dose, fatal<br>period, signs and symptoms, management, post-mortem<br>appearance and medicolegal aspects of vatsanabha. | CAP       | МК       | КН | L&PP<br>T                   | T- EW,P-<br>VIVA,P-ID               | F&S | Π  |  |
| CO2,CO4             | Mention therapeutic dose and enlist two important formulations of vatsanabha.   | СК        | NK       | K  | L                           | T-EMI,P-VIV<br>A,P-EXAM             | F&S | II |  |
| CO2,CO4,CO<br>6     | Describe the active principles, mode of action, fatal dose, fatal<br>period, signs and symptoms, management, post-mortem<br>appearance and medicolegal aspects of karaveera.  | CAP       | МК       | K  | L&PP<br>T                   | T- EW,P-<br>VIVA,P-ID               | F&S | Π  |  |
| CO2,CO4             | Mention therapeutic dose and enlist two important formulations of karaveera.  | СК        | NK       | K  | L                           | T- EW,T- ME<br>Qs,P-VIVA,P-<br>EXAM | F&S | Π  |  |
| CO2,CO6             | Describe mode of action, fatal dose, fatal period, signs and<br>symptoms, management, post-mortem appearance and<br>medicolegal aspects of digitalis.                         | CAP       | NK       | K  | L&PP<br>T                   | T- EW,P-<br>VIVA                    | F&S | II |  |
| CO2,CO6             | Describe mode of action, fatal dose, fatal period, signs and<br>symptoms, management, post-mortem appearance and<br>medicolegal aspects of tobacco.                           | СК        | МК       | К  | L&PP<br>T                   | T- EW,P-ID                          | F&S | Π  |  |
| CO2,CO6             | Describe mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and   | СК        | DK       | К  | L&PP<br>T                   | T- EW                               | F&S | II |  |



|                 | medicolegal aspects of Cerbera odollam.   |    |    |    |           |                                  |     |    |
|-----------------|---|----|----|----|-----------|----------------------------------|-----|----|
| CO2,CO4,CO<br>6 | Describe the active principles, mode of action, fatal dose, fatal<br>period, signs and symptoms, management, post-mortem<br>appearance and medicolegal aspects of Kupeelu.  | СК | МК | КН | L&PP<br>T | T- EW,P-<br>VIVA,P-ID            | F&S | II |
| CO2,CO6         | Mention therapeutic dose and enlist two important formulations of kupeelu.  | СК | NK | К  | L         | T-EMI                            | F&S | II |
| CO2,CO4,CO<br>6 | Describe the active principles, mode of action, fatal dose, fatal<br>period, signs and symptoms, management, post-mortem<br>appearance and medicolegal aspects of ahiphena. | СК | МК | КН | L&PP<br>T | T- EW,P-<br>VIVA,P-ID            | F&S | П  |
| CO2,CO6         | Mention therapeutic dose and enlist two important formulations of ahiphena.   | СК | NK | К  | L         | T-EMI                            | F&S | II |
| CO2,CO4,CO<br>6 | Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of dhatura.        | СК | МК | КН | L&PP<br>T | T- EW,P-<br>VIVA,P-ID            | F&S | п  |
| CO2,CO6         | Mention therapeutic dose and enlist two important formulations of dhatura.  | СК | NK | К  | L         | T-EMI                            | F&S | II |
| CO2,CO4,CO<br>6 | Describe the active principles, mode of action, fatal dose, fatal<br>period, signs and symptoms, management, post-mortem<br>appearance and medicolegal aspects of Bhanga.   | СК | МК | К  | L&PP<br>T | T- EW,P-VIV<br>A,P-EXAM,P-<br>ID | F&S | II |
| CO2,CO6         | Mention therapeutic dose and enlist two important formulations of bhanga.   | СК | NK | К  | L         | T-EMI                            | F&S | II |
| CO2,CO4,CO<br>6 | Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of jayapala.       | СК | МК | К  | L&PP<br>T | T- EW,P-<br>VIVA,P-ID            | F&S | п  |
| CO4             | Mention therapeutic dose and enlist two important formulations  | СК | NK | K  | L         | T-EMI,P-                         | F&S | П  |



|                 | of jayapala.   |          |               |    |                   | EXAM                        |     |    |  |
|-----------------|--|----------|---------------|----|-------------------|-----------------------------|-----|----|--|
| CO2,CO4,CO<br>6 | Describe the active principles, mode of action, fatal dose, fatal<br>period, signs and symptoms, management, post-mortem<br>appearance and medicolegal aspects of gunja.   | CAP      | DK            | КН | L&PP<br>T         | T- EW,P-<br>VIVA,P-ID       | F&S | II |  |
| CO4             | Mention therapeutic dose and enlist two important formulations of gunja.   | СК       | NK            | КН | L                 | T- EW,P-VIV<br>A,P-EXAM     | F&S | II |  |
| CO2,CO4,CO<br>6 | Describe the active principles, mode of action, fatal dose, fatal<br>period, signs and symptoms, management, post-mortem<br>appearance and medicolegal aspects of bhallataka.                                      | CAP      | МК            | КН | L&PP<br>T         | T- EW,P-<br>VIVA,P-ID       | F&S | II |  |
| CO4             | Mention therapeutic dose and enlist two important formulations of bhallataka.  | СК       | NK            | К  | L                 | T-EMI,P-VIV<br>A,P-EXAM     | F&S | II |  |
| CO2             | Describe the active principles, mode of action, fatal dose, fatal<br>period, signs and symptoms, management, post-mortem<br>appearance and medicolegal aspects of arka and snuhi.                                  | СК       | DK            | K  | L&PP<br>T         | T- EW,P-<br>VIVA            | F&S | II |  |
| CO2,CO4,CO<br>6 | Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of langali.   | СК       | NK            | K  | L&PP<br>T         | T- EW,P-<br>VIVA,P-ID       | F&S | II |  |
| Topic 10 Stha   | avara Visha – Poisons of Metallic origin (Lecture :4 hours, N  | Non lect | ure: 2 hours) |    | 1                 |                             |     | 1  |  |
| CO2             | Describe the mode of action, fatal dose, fatal period, signs and<br>symptoms, management, post-mortem appearance, medicolegal<br>aspects of acute poisoning of<br>1. Arsenic<br>2. Mercury<br>3. Lead<br>4. Copper | СК       | МК            | K  | L&PP<br>T,PB<br>L | T-EMI,T-<br>MEQs,P-<br>VIVA | F&S | П  |  |



|                 | Write its therapeutic dose and enlist any four important formulations.  |     |    |    |                              |                                  |     |    |  |
|-----------------|---|-----|----|----|------------------------------|----------------------------------|-----|----|--|
| CO1,CO2         | Discuss the Ayurvedic concepts for the diagnosis and management of chronic heavy metal toxicity.  | CC  | DK | K  | L&PP<br>T,L&<br>GD           | T-EMI,T-<br>MEQs,P-<br>VIVA      | F&S | II |  |
| CO2,CO3,CO<br>4 | Discuss the toxicological implications of improperly prepared<br>medicines with special reference to those containing metals,<br>minerals and poisonous substances. | САР | NK | КН | L&PP<br>T,CB<br>L,FC         | P-VIVA                           | F&S | II |  |
| Topic 11 Jan    | gama Visha (Lecture :10 hours, Non lecture: 6 hours)  | •   |    | •  |                              |                                  |     |    |  |
| CO2,CO5         | Describe sarpa bheda and ennumerate the indentification features of darvikara, mandali and rajimantha sarpa.  | CAP | МК | КН | L&PP<br>T,BS,<br>CBL         | T- EW,P-VIV<br>A,P-EXAM          | F&S | II |  |
| CO2,CO5         | Classify snakes and describe the features of venomous and non venomous snakes and identify their bites.   | CAN | МК | K  | L&PP<br>T                    | T- EW,P-VIV<br>A,P-EXAM          | F&S | Π  |  |
| CO2,CO5         | Describe the fatal dose, fatal period, signs and symptoms of<br>common cobra, king cobra, russel's viper, saw scaled viper, pit<br>vipers and common krait.         | CAN | МК | КН | L&PP<br>T,DIS<br>,BS,C<br>BL | T- EW,T-CS,P<br>-VIVA,P-<br>EXAM | F&S | II |  |
|                 | Describe the samanya lakshana and samanya chikitsa of darvikara, mandali and rajimanth sarpa damsha.  | СК  | МК | K  | L                            | T-EMI                            | F&S | Π  |  |
| CO2,CO5         | Describe the management of snake bites according to recent<br>WHO snake bite management guidelines.   | CAN | МК | КН | L&PP<br>T,CB<br>L,PE<br>R,CD | T- EW,P-VIV<br>A,P-EXAM          | F&S | п  |  |
| CO2,CO5         | Describe the classification, diagnosis, samanya lakshana and chikitsa of lootavisha with its contemporary aspects.  | CAN | МК | КН | L&PP<br>T,CB                 | T- EW,P-<br>VIVA                 | F&S | П  |  |



|            |   |     |    |    | L                    |                         |     |     |  |
|------------|---|-----|----|----|----------------------|-------------------------|-----|-----|--|
| CO2,CO5    | Describe the classification, diagnosis, samanya lakshana and<br>chikitsa of vrischika damsha (Scorpion Sting) along with its<br>contemporary aspects.   | СК  | МК | K  | L&PP<br>T,CB<br>L,CD | T- EW,P-VIV<br>A,P-EXAM | F&S | П   |  |
| CO2,CO4    | Describe leptospirosis and rat bite fever with special reference to mushika visha.  | СК  | NK | K  | L,CB<br>L            | T- EW                   | F&S | II  |  |
| CO2,CO5    | Describe rabies and its management with special reference<br>to alarka visha.   | СК  | DK | КН | L&G<br>D,CB<br>L     | T- EW,P-<br>VIVA        | F&S | Π   |  |
| CO2,CO5    | Describe the classification of keeta, samanya sakshana and<br>chikitsa of keeta damsha with special importance to regional<br>prevalence.   | CAN | DK | КН | L&PP<br>T,CB<br>L    | T- EW                   | F&S | П   |  |
| CO2,CO5    | Discuss the application of visha chikitsa in vector borne diseases like chikungunya, dengue and malaria.  | CAP | DK | КН | L&PP<br>T,DIS        | P-VIVA                  | F&S | II  |  |
| Topic 12 K | ritrima visha (Lecture : 2 hours, Non lecture: 0 hours)   |     |    | ·  |                      | •                       |     |     |  |
| CO2        | Describe the action of poison, fatal dose, fatal period, signs and symptoms,<br>management, post mortem appearance and medico legal aspects of<br>Inorganic acids - Sulphuric acid, Hydrochloric acid and Nitric Acid | СК  | МК | КН | L&PP<br>T,PE<br>R    | T- EW,P-VIV<br>A,P-EXAM | F&S | III |  |
|            | Organic acids - Oxalic acids, Carbolic acids and Formic acid  |     |    |    |                      |                         |     |     |  |
|            | Alkalies  |     |    |    |                      |                         |     |     |  |
| CO2        | Describe the action of poison, fatal dose, fatal period, signs and  | СК  | DK | KH | L&PP<br>T,PE         | T- EW,P-<br>VIVA        | F&S | III |  |



|                 | symptoms, management, post mortem appearance and medico legal aspects of  |     |    |    | R                 |                                 |     |     |  |
|-----------------|---|-----|----|----|-------------------|---------------------------------|-----|-----|--|
|                 | Asphyxiants - CO and CO2  |     |    |    |                   |                                 |     |     |  |
|                 | Non Metal - Phosphorous   |     |    |    |                   |                                 |     |     |  |
|                 | Hydrocarbon - Kerosene  |     |    |    |                   |                                 |     |     |  |
| CO2             | Describe the action of poison, fatal dose, fatal period, signs and<br>symptoms, management, post mortem appearance and medico legal<br>aspects of agrochemical poisons- organophosphorous compounds,<br>carbamates, organochlorine compounds and aluminium phosphide<br>and enlist the household poisons. | САР | МК | SH | L&PP<br>T,PB<br>L | T- EW,P-VIV<br>A,P-EXAM         | F&S | III |  |
| Topic 13 Sub    | stances of abuse (Lecture :4 hours, Non lecture: 3 hours)   |     |    | ·  |                   |                                 |     |     |  |
| CO1,CO2         | Define Mada and describe its stages.  | СК  | МК | K  | L&PP<br>T         | T-EMI,T-<br>MEQs,P-<br>VIVA     | F&S | Ш   |  |
| CO1,CO2         | Describe the types of madatyaya along with its management.  | СК  | МК | К  | L&PP<br>T         | T-EMI,T-<br>MEQs,P-<br>VIVA     | F&S | III |  |
| CO1,CO2,CO<br>6 | Describe mode of action, fatal dose, fatal period, signs and<br>symptoms, management, post mortem appearance and<br>medicolegal importance of acute ethanol poisoning.  | CC  | МК | КН | L&PP<br>T         | T-EMI,T-CS,<br>T-OBT,P-<br>VIVA | F&S | Ш   |  |
| CO1,CO2,CO<br>6 | Describe mode of action, fatal dose, fatal period, signs and<br>symptoms, management, post mortem appearance and<br>medicolegal importance of acute methanol poisoning.   | CC  | МК | К  | L&PP<br>T         | T-EMI,T-<br>MEQs,P-<br>VIVA     | F&S | Ш   |  |
| CO2,CO4         | Discuss the application of principles of Ayurveda in the  | CC  | МК | КН | L&G               | T- EW,P-                        | F&S | III |  |



|             | management of chronic alcoholism.  |          |        |    | D,BS                     | VIVA                                   |     |     |  |
|-------------|--|----------|--------|----|--------------------------|--|-----|-----|--|
| CO2,CO4     | Discuss the signs & symptoms of alcohol withdrawal with its Ayurvedic approach.  | CC       | МК     | КН | L&G<br>D,BS,<br>IBL      | T- EW,P-<br>VIVA                       | F&S | Ш   |  |
| CO2,CO4     | Discuss the signs & symptoms of withdrawal of bhang<br>(cannabis), ahiphena/opium and its derivatives, tobacco, LSD<br>and MDMA with its Ayurvedic approach. | CC       | МК     | КН | L&G<br>D,BS,<br>TUT      | T- EW,P-<br>VIVA                       | F&S | Ш   |  |
| CO2,CO4     | Discuss the reseach updates in Ayurveda in the management of conditions due to substances of abuse.  | CC       | МК     | КН | L&G<br>D                 | T-EMI,T- ME<br>Qs,T-CRQs,P-<br>VIVA    | F&S | III |  |
| C07         | Describe the NDPS Act.   | СК       | DK     | K  | L&PP<br>T                | T- EW                                  | F&S | III |  |
| Topic 14 Ag | ada Tantra perspectives on cancer (Lecture :2 hours, Non le  | cture: 4 | hours) | •  |                          |  | •   | • • |  |
| CO2,CO4     | Discuss the concepts of Agada Tantra in oncology.  | CC       | МК     | КН | L&G<br>D,BS,<br>PBL      | T-EMI,T-<br>MEQs,P-<br>VIVA            | F&S | Ш   |  |
| CO1,CO2     | Enlist the cancer causing toxic chemicals / substances (toxic carcinogens) and describe the process of mutation in genes and carcinogenesis.                 | CC       | МК     | К  | L&G<br>D                 | T-EMI,T- ME<br>Qs,T-CRQs,P-<br>VIVA,SA | F&S | III |  |
| CO2,CO4     | Describe the chemotherapy induced common toxicities and<br>Ayurvedic approach for its management.  | CC       | МК     | КН | L&PP<br>T,PB<br>L        | T-EMI,T- ME<br>Qs,T-CRQs,P-<br>VIVA,SA | F&S | Ш   |  |
| CO2,CO4     | Describe the radiotherapy induced common toxicity and<br>Ayurvedic approach for its management.  | CC       | МК     | КН | L&G<br>D,PB<br>L,SD<br>L | T-EMI,T- ME<br>Qs,T-CRQs,P-<br>VIVA    | F&S | III |  |



| CO2,CO4         | Discuss the role of visha and vishaghna dravya in the management of cancer along with its research updates.  | CC     | DK               | кн       | L&G<br>D,BS                   | T-EMI,T- ME<br>Qs,T-CRQs,P-<br>VIVA | F&S       | III   |
|-----------------|--|--------|------------------|----------|-------------------------------|-------------------------------------|-----------|-------|
| Topic 15 For    | ensic medicine (Vyavahara Ayurveda) and Medical jurispru   | idence | (Vidhi vaidyak   | a): (Lee | cture :1                      | hours, Non lectu                    | ure: 0 ho | ours) |
| CO1,CO6,CO<br>7 | Define Forensic Medicine & Medical Jurisprudence. Give an introduction to Indian Penal Code (IPC), Criminal Procedure Code (CrPC) and Indian Evidence Act (IEA). | CC     | МК               | КН       | L&G<br>D                      | T- EW,P-<br>VIVA,QZ                 | F&S       | I     |
| Topic 16 Vaio   | dya sadvritta : Duties and Responsibilities of medical practi  | tioner | (Lecture :6 hour | rs, Non  | lecture:                      | 4 hours)                            | •         |       |
| CO1,CO6,CO<br>7 | Describe vaidya sadvritta, medical ethics, code of conduct,<br>Charaka oath and Hippocratic oath.  | СК     | МК               | K        | L&PP<br>T,L&<br>GD,B<br>S,PER | T- EW,P-<br>VIVA                    | F&S       | I     |
| CO1,CO6,CO<br>7 | Desribe the constitution, objectives and functions of NCISM.   | СК     | МК               | К        | L&PP<br>T,DIS                 | T- EW,P-<br>VIVA                    | F&S       | I     |
| CO6,CO7         | Describe the duties and rights and privileges of a registered medical practitioner.  | СК     | МК               | К        | L&PP<br>T,DIS                 | T- EW,P-<br>VIVA                    | F&S       | Ι     |
| CO1,CO6,CO<br>7 | Describe consent, professional secrecy and privileged communication.   | CC     | МК               | К        | L&PP<br>T,BS                  | T- EW                               | F&S       | Ι     |
| CO1,CO6,CO<br>7 | Describe professional negligence, professional misconduct and unethical practices.   | CC     | МК               | K        | L&G<br>D,CB<br>L,PE<br>R      | T- EW,P-<br>VIVA                    | F&S       | I     |
| CO6,CO7         | Explain the defenses in medical negligence suits with appropriate case laws.   | САР    | МК               | K        | L&PP<br>T,L&<br>GD,B          | T- EW,P-<br>VIVA                    | F&S       | I     |



|                 |  |    |    |    | S,CB<br>L                  |                        |     |   |   |
|-----------------|--|----|----|----|----------------------------|------------------------|-----|---|---|
| CO6,CO7         | Describe the maintainance of medical records and explain its significance.   | CC | MK | K  | L,FV                       | T- EW,P-<br>VIVA       | F&S | Ι |   |
| CO7             | Describe the Consumer Protection Act.  | СК | MK | K  | L&PP<br>T                  | T- EW,P-<br>VIVA       | F&S | Ι |   |
| Topic 17 Leg    | gal Procedures (Lecture :4 hours, Non lecture: 4 hours)  |    | ·  | •  | •                          |                        |     | • |   |
| CO1,CO6,CO<br>7 | Describe the types of courts along with their powers. Describe -<br>Inquest, Evidence, Witness, Summons, Conduct money and<br>procedure of recording of evidence in a court of law. Describe<br>the conduct of a medical professional in the court of law. | CC | МК | КН | L&PP<br>T,DIS<br>,SDL      | T- EW,P-<br>VIVA,CL-PR | F&S | I |   |
| Topic 18 Per    | rsonal identity (Lecture :2 hours, Non lecture: 2 hours)   |    | •  |    | •                          |                        |     | • | • |
| CO1,CO6         | Define identification and enlist the identification data. Describe<br>the method of estimation of age based on Teeth, ossification of<br>bones, secondary sexual characteristics and general<br>development.   | CC | DK | КН | L&PP<br>T,L_<br>VC,D<br>IS | T- EW,P-<br>VIVA       | F&S | I |   |
| CO1,CO6         | Describe the medico-legal importance of age, tattoo marks and occupational marks.  | СК | DK | K  | L&PP<br>T                  | T- EW                  | F&S | Ι |   |
| CO1,CO6         | Describe the medico-legal importance of race, religion, sex, moles and hair.   | CC | DK | КН | L_VC<br>,DIS,<br>EDU       | P-VIVA                 | F   | Ι |   |
| CO1,CO6         | Describe the medico-legal importance of handwriting,<br>dactylography, DNA typing and superimposition as an<br>identification data.  | СК | NK | K  | L,ED<br>U                  | T- EW                  | F   | Ι |   |



| CO6      | Define death and describe the stages and modes of death. Explain the immediate changes following death.   | CC | MK | KH | L&PP<br>T,L&<br>GD,L<br>_VC        | T- EW,P-<br>VIVA          | F&S | II |  |
|----------|---|----|----|----|------------------------------------|---------------------------|-----|----|--|
| CO6      | Enlist and explain the early changes following death. Describe<br>Algor mortis, rigor mortis and livor mortis with regards to their<br>definition, mechanism, modifying factors and medico legal<br>importance. | CC | МК | КН | L&PP<br>T,L_<br>VC,D<br>IS,SI<br>M | T- EW,P-<br>VIVA          | F&S | П  |  |
| CO6      | Enlist the late changes following death and describe the definition, modifying factors and medico legal importance of putrefaction, mummification and adipocere formation.                                      | CC | МК | КН | L&PP<br>T,L_<br>VC,D<br>IS         | T- EW,P-<br>VIVA          | F&S | П  |  |
| CO6      | Define Autopsy and describe its types, its objectives, rules and procedure along with exhumation.   | CC | МК | KH | L&PP<br>T,L_<br>VC                 | T- EW,P-<br>VIVA          | F&S | II |  |
| CO6      | Describe the Transplantation of Human Organs and Tissues Act.   | CC | NK | КН | BS,S<br>DL,P<br>ER                 | T- EW,P-<br>VIVA          | F   | II |  |
| Topic 20 | Asphyxial deaths (Lecture :4 hours, Non lecture: 2 hours)   | ·  |    | ·  |                                    |                           | -   |    |  |
| CO6      | Define hanging. Describe its classification, causes of death, post-<br>mortem appearances and medico-legal aspects.   | СК | MK | KH | L&PP<br>T,DIS                      | T- EW,T- ME<br>Qs,T-CS,P- | F&S | II |  |



|             |  |         |     |   |                      | VIVA,P-MOD                       |     |     |  |
|-------------|--|---------|-----|---|----------------------|----------------------------------|-----|-----|--|
| CO6         | Define strangulation and suffocation. Enlist their classification, post-mortem appearances and medico-legal aspects.                                     | СК      | МК  | K | L&PP<br>T,D-<br>M    | T- EW,T- ME<br>Qs,PRN,M-<br>MOD  | F&S | II  |  |
| CO6         | Define Drowning, explain its classification, post-mortem appearances and medico-legal aspects.   | СК      | МК  | K | L&PP<br>T,L_<br>VC   | T- EW,P-VIV<br>A,PRN,P-<br>CASE  | F&S | II  |  |
| Topic 21 Ir | njury (Lecture :5 hours, Non lecture: 3 hours)   |         | •   |   | •                    |                                  |     |     |  |
| CO6         | Define and classify Injuries. Describe the medico-legal aspects of injuries.   | СК      | MK  | К | L&G<br>D             | T- EW                            | F&S | II  |  |
| CO6         | Describe the characteristics, age and medico-legal aspects of mechanical injuries.   | СК      | MK  | К | L&PP<br>T            | T- EW                            | F&S | II  |  |
| CO6         | Describe firearm injuries, its characteristics and medico-legal aspects. Differentiate between entry and exit wound                                      | СК      | DK  | К | L&PP<br>T            | T- EW                            | F&S | II  |  |
| CO6         | Define and classify thermal injury. Describe charecterstics<br>and degrees of burns, rule of nine, post-mortem appearances, and<br>medico-legal aspects. | СК      | DK  | K | L&G<br>D             | T- EW                            | F&S | Π   |  |
| CO6         | Explain medico-legal aspects of dowry death.   | СК      | NK  | К | L&G<br>D             | T- EW                            | F&S | II  |  |
| Topic 22 P  | regnancy, delivery and abortion (Lecture :2 hours, Non lecture   | : 3 hou | rs) |   |                      | •                                | •   |     |  |
| CO6,CO7     | Define pregnancy, delivery, infanticide and battered baby<br>syndrome along with their medico legal aspects.   | СК      | МК  | К | L,L&<br>PPT,L<br>&GD | T- EW,T-CS,P<br>-VIVA,P-<br>EXAM | F&S | III |  |
| CO6,CO7     | Define and classify abortion, MTP Act and PCPNDT Act.  | СК      | МК  | К | L&PP<br>T,D-         | T- EW,T- ME<br>Qs,T-CS,P-        | F&S | III |  |



|             |  |      |    |    | M,D               | VIVA,PRN                        |     |     |
|-------------|--|------|----|----|-------------------|---------------------------------|-----|-----|
| CO6,CO7     | Describe Surrogacy (Regulation) Act 2021 and the Assisted<br>Reproductive Technology (Regulation) Act 2021.                        | СК   | NK | KH | L,L&<br>PPT       | P-VIVA,O-QZ                     | F&S | III |
| Topic 23 Se | exual offences (Lecture :2 hours, Non lecture: 1 hours)  |      |    |    |                   |                                 |     |     |
| CO6         | Describe classification of sexual offences.  | СК   | NK | KH | L&PP<br>T         | P-VIVA,PRN,<br>QZ               | F&S | III |
| CO6         | Define rape. Describe the examination of rape victim and accused and its medico legal aspects.                                     | СК   | МК | КН | L&PP<br>T,CB<br>L | T- EW,P-VIV<br>A,P-<br>EXAM,PRN | F&S | III |
| CO6         | Define the un-natural sexual offences and sexual perversion with<br>their medico-legal aspects and give introduction to POCSO Act. | СК   | NK | К  | L&PP<br>T,CB<br>L | P-VIVA,QZ                       | F&S | III |
| Topic 24 Fo | orensic psychiatry. (Lecture :2 hours, Non lecture: 2 hours)   |      |    |    | •                 |                                 | •   |     |
| CO6         | Describe the symptoms commonly associated with psychiatric disorders & the significance of lucid interval.                         | СК   | DK | K  | L&PP<br>T,TU<br>T | T-EMI,T-<br>EW,P-VIVA           | F&S | III |
| CO6,CO7     | Describe the civil and criminal responsibilities of a mentally ill person.   | СК   | DK | K  | L&PP<br>T         | T- EW,P-<br>VIVA                | F&S | III |
| CO6         | Describe Mental Health Act   | СК   | NK | K  | SDL,<br>PER       | T- EW,P-<br>VIVA                | F&S | III |
| Topic 25 Fo | orensic science laboratory (Lecture :1 hours, Non lecture: 0 hours)  | urs) | ·  | ·  |                   |                                 |     |     |
| CO6         | 25.1. Hierarchy and major divisions of forensic lab services.  | СК   | DK | К  | L&PP<br>T,ML      | T-OBT,P-<br>VIVA                | F&S | III |
|             | 25.2. Newer techniques and recent advances - polygraphy,   |      |    |    |                   |                                 |     |     |

|            |   | ACCESS OF THE SECOND |      |   |                       |                        |     |     |  |
|------------|---|----------------------|------|---|-----------------------|------------------------|-----|-----|--|
|            | narcoanalysis, DNA profiling.   |                      |      |   |                       |                        |     |     |  |
| Topic 26 L | aws, Acts, Rules and Regulations (Lecture :3 hours, Non lecture   | re: 2 hou            | ırs) |   |                       |                        | •   | •   |  |
| CO6,CO7    | <ul> <li>Describe the</li> <li>1. NCISM Rules and Regulations in force.</li> <li>2. Clinical Establishments Act.</li> <li>3. Medicare Service Persons and Medicare Service<br/>Institutions (Prevention of violence and damage or loss<br/>to property) Act, 2008.</li> <li>4. The Drug and Cosmetic Act - schedules related to<br/>poison.</li> <li>5. Rules and Regulations related to AYUSH State<br/>Registration Boards of concern state.</li> </ul> | СК                   | DK   | K | L&PP<br>T,DIS<br>,SDL | T- EW,P-<br>VIVA,CL-PR | F&S | III |  |

### List of Practicals (Term and Hours)



|      | PRACTICALS (Marks-100)  |      |       |  |  |  |  |  |  |  |
|------|---|------|-------|--|--|--|--|--|--|--|
| S.No | List of Topics  | Term | Hours |  |  |  |  |  |  |  |
| 1    | Visha Chikitsa  | 1    | 6     |  |  |  |  |  |  |  |
| 2    | Vishakta Ahara Pariksha   | 1    | 6     |  |  |  |  |  |  |  |
| 3    | Dooshivisha, Garavisha, Visha Upadrava  | 1    | 20    |  |  |  |  |  |  |  |
| 4    | Dermatological manifestation of visha   | 2    | 20    |  |  |  |  |  |  |  |
| 5    | Environmental toxicology  | 2    | 2     |  |  |  |  |  |  |  |
| 6    | Jangama Visha   | 2    | 10    |  |  |  |  |  |  |  |
| 7    | Sthavara visha  | 2    | 6     |  |  |  |  |  |  |  |
| 8    | Substance abuse   | 3    | 8     |  |  |  |  |  |  |  |
| 9    | Legal Procedures  | 1    | 2     |  |  |  |  |  |  |  |
| 10   | Vaidya Sadvritta  | 1    | 2     |  |  |  |  |  |  |  |
| 11   | Personal Identity   | 1    | 4     |  |  |  |  |  |  |  |
| 12   | Thanatology   | 2    | 6     |  |  |  |  |  |  |  |
| 13   | Injury  | 2    | 6     |  |  |  |  |  |  |  |
| 14   | Sexual offences   | 3    | 2     |  |  |  |  |  |  |  |
| 15   | Field Visits (Field visits should be integrated along with the educational tour conducted by Dravyagunavijnan, Rasasatra and Swasthavrutha Departments) | 2    | 30    |  |  |  |  |  |  |  |
| 16   | Topics related to regional preference   | 3    | 10    |  |  |  |  |  |  |  |

#### Table 4: Learning objectives (Practical)



| A4                | B4   | C4             | D4   | E4   | F4                | G4                                     | H4                              | I4   | K4              |
|-------------------|--|----------------|--|--|-------------------|--|---------------------------------|------|-----------------|
| Course<br>outcome | Learning Objective (At the end of the session, the students<br>should be able to)  | Doma<br>in/sub | Must to know<br>/ desirable to<br>know / Nice<br>to know | Level<br>Does/<br>Show<br>s<br>how/<br>Know<br>s<br>how/<br>Know | T-L<br>meth<br>od | Assessment<br>(Refer<br>abbreviations) | Form<br>ative/<br>summ<br>ative | Term | Integr<br>ation |
| Topic 1 Visha     | ı Chikitsa   |                |  |  |                   |  |                                 |      | <u> </u>        |
| CO2               | Demonstrate the procedure of gastric lavage on mannequin.  | CAP            | МК   | SH   | D-<br>M,D         | P-EXAM,P-<br>PRF,OSPE                  | F&S                             | Ι    |                 |
| CO2               | Demonstrate the procedure of CPR on mannequin.   | PSY-<br>MEC    | МК   | D  | D-<br>M,D         | P-EXAM,P-<br>PRF,OSPE                  | F&S                             | Ι    |                 |
| CO2               | Observe the differrent procedures for removal of absorbed poison.  | CC             | МК   | КН   | L_VC<br>,D        | P-VIVA                                 | F&S                             | I    |                 |
| Topic 2 Visha     | akta Ahara Pariksha  | ·              |  |  |                   | •                                      |                                 |      |                 |
| CO2               | Demonstrate adulteration detection test for urea in milk, boric<br>acid in milk, artificial colour in turmeric, pulses and<br>vegetables as per recent Food Safety and Standards Authority of<br>India (FSSAI) guidelines. | PSY-<br>SET    | МК   | D  | D_L               | P-PRF,RK                               | F&S                             | I    |                 |
| CO2               | Demonstrate adulteration detection test for argemone oil in<br>mustard oil and adulterants in Honey as per recent FSSAI<br>guidelines.   | PSY-<br>SET    | МК   | D  | D_L               | P-PRF,RK                               | F&S                             | Ι    |                 |
| Topic 3 Doos      | hivisha, Garavisha, Visha Upadrava   | 1              | 1  | 1  | 1                 | 1                                      | 1                               |      |                 |



| CO3,CO4     | Diagnosis and management of diseases due to garavisha,<br>dooshivisha and visha upadrava - drug induced toxicities.                    | CAP | МК | SH | L_VC<br>,CBL,<br>SIM,<br>CD         | SP,OSCE ,RK | F&S | Ι  |  |
|-------------|--|-----|----|----|-------------------------------------|-------------|-----|----|--|
| CO3,CO4     | Diagnosis and management of diseases due to garavisha,<br>dooshivisha and visha upadrava - occupational hazards.                       | САР | МК | КН | L_VC<br>,PBL,<br>CBL,<br>SIM,<br>CD | OSCE ,RK    | F&S | II |  |
| CO3,CO4     | Diagnosis and management of diseases due to garavisha,<br>dooshivisha and visha upadrava - allergic manifestations.                    | САР | МК | КН | L_VC<br>,PBL,<br>CBL,<br>SIM,<br>CD | OSCE ,RK    | F&S | I  |  |
| CO3,CO4     | Diagnosis and management of diseases due to garavisha,<br>dooshivisha and visha upadrava - autoimmune diseases                         | CAP | МК | КН | L_VC<br>,CBL,<br>CD                 | OSCE ,RK    | F&S | Ι  |  |
| CO3,CO4     | Diagnosis and management of diseases due to garavisha,<br>dooshivisha and visha upadrava - endocrine disruptors induced<br>diseases.   | CAP | МК | КН | L_VC<br>,CBL,<br>CD                 | OSCE ,RK    | F&S | Ι  |  |
| Topic 4 Der | rmatological manifestation of visha  | •   |    | •  | •                                   |             |     |    |  |
| CO3,CO4     | Diagnosis and Management of Dermatological manifestations<br>due to visha ex: contact poisoning (paduka visha, abharana visha<br>etc.) | CAN | МК | SH | L_VC<br>,CBL,<br>CD                 | OSCE ,RK    | F&S | II |  |
| CO3,CO4     | Diagnosis and management of dermatological manifestations due<br>to visha - bites and stings.  | CAP | МК | КН | L_VC<br>,CBL,<br>CD                 | OSCE ,RK    | F&S | II |  |



| CO3,CO4     | Diagnosis and Management of contact dermatitis based on the principles of Agada Tantra.  | CAP         | МК | KH | L_VC<br>,CBL,<br>CD              | OSCE ,RK                      | F&S | П        |
|-------------|--|-------------|----|----|----------------------------------|-------------------------------|-----|----------|
| Topic 5 En  | vironmental toxicology   |             |    |    |                                  |                               | -   |          |
| CO5         | Social Awareness program related to environmental toxicology –<br>Rally, street play, skit etc   | AFT-<br>VAL | DK | SH | RP                               | P-VIVA,M-<br>CHT              | F   | II       |
| Topic 6 Jar | igama Visha  | •           |    |    |                                  |                               | •   | <b>·</b> |
| CO2,CO4     | Demonstrate identification of poisonous and non poisonous snakes.  | CAN         | МК | KH | L&G<br>D,L_<br>VC,D-<br>M,FV     | P-VIVA,P-<br>EXAM,OSCE        | F&S | II       |
| CO2,CO4     | Demonstration of the diagnosis of poisonous snake bite cases<br>based on local and systemic clinical presentations.                                    | САР         | МК | КН | L&G<br>D,L_<br>VC,C<br>BL,C<br>D | P-VIVA,P-<br>EXAM,RK          | F&S | Π        |
| CO2,CO4     | Demonstration of identification of vrishchika, loota and keeta<br>based on regional prevalence and their diagnosis based on<br>clinical presentations. | САР         | МК | КН | L&G<br>D,L_<br>VC,C<br>BL,C<br>D | P-VIVA,P-<br>EXAM,RK          | F&S | П        |
| Topic 7 Sth | avara visha  | ·           |    |    |                                  | •                             | -   |          |
| CO2         | Demonstration of Identification of vatsanabha, karaveera and tobacco with their respective toxic parts.  | CAN         | МК | KH | D-<br>M,D                        | P-VIVA,P-<br>EXAM,OSPE<br>,RK | F&S | П        |
| CO2         | Demonstration of Identification of kupeelu, dhattura and bhanga  | CAN         | MK | КН | D                                | P-VIVA,P-                     | F&S | II       |



|             | and their respective toxic part.  |             |    |    |              | EXAM,OSPE<br>,RK              |     |     |   |
|-------------|---|-------------|----|----|--------------|-------------------------------|-----|-----|---|
| CO2         | Demonstration of Identification of jayapala, gunja, bhallataka, langali with their respective toxic parts.  | CAN         | МК | КН | D            | P-VIVA,P-<br>EXAM,OSPE<br>,RK | F&S | П   |   |
| CO2         | Demonstration of identification of arsenic, copper, mercury and lead.   | CAN         | МК | К  | D-M          | P-VIVA,P-<br>EXAM             | F&S | III |   |
| CO2         | Demonstration of Identification of non metal and mineral compounds, acids, alkalis, agrochemicals, hydrocarbons and household poisons.                              | СК          | МК | K  | D            | P-VIVA,P-<br>EXAM,RK          | F&S | Ш   |   |
| Topic 8 Sul | bstance abuse   | •           |    | •  |              |                               | •   | •   | • |
| CO2,CO4     | Create public awareness on substance abuse and its ill effects.   | AFT-<br>VAL | МК | SH | RP,D         | P-POS,QZ ,M-<br>CHT           | F   | III |   |
| Topic 9 Leg | gal Procedures  | -           | 1  |    | -1           |                               |     |     |   |
| CO6,CO7     | Demonstartion on issuing of fitness certificate, sickness<br>certificate, birth and death certificate, and other relevant medical<br>and medico legal certificates. | CAN         | МК | D  | PBL,<br>W,PT | P-<br>EXAM,OSPE<br>,RK        | F&S | Ι   |   |
| CO6,CO7     | Demonstartion of reporting of Leave against medical advice<br>(LAMA), discharge against medical advice (DAMA) and<br>doscharge on patient request (DOPR)            | CAP         | МК | D  | SDL          | P-VIVA,RK                     | F   | I   |   |
| Topic 10 V  | aidya Sadvritta   |             |    |    |              |                               |     |     |   |
| CO6,CO7     | Exposure to medical records department for understanding storage, maintanance and disposal of Medical records.  | СК          | DK | К  | D,FV         | P-VIVA                        | F&S | Ι   |   |
| Topic 11 Po | ersonal Identity  | ·           | •  |    | •            |                               | •   | •   | • |



| CO6             | Demonstrate the method of sex determination based on pelvis.   | CAP         | МК            | SH               | EDU,<br>SIM,<br>D                  | P-PRF,OSPE        | F&S     | Ι   |  |
|-----------------|--|-------------|---------------|------------------|------------------------------------|-------------------|---------|-----|--|
| Topic 12 Tha    | natology   |             |               |                  |                                    |                   |         |     |  |
| CO6             | Observe the procedure of medico-legal autopsy and preparation autopsy report.  | CAP         | МК            | SH               | L_VC<br>,D,FV                      | RK                | S       | II  |  |
| Topic 13 Inju   | iry  |             |               |                  |                                    |                   |         |     |  |
| CO6,CO7         | Demonstrate the difference between homicidal, suicidal and accidental injuries.  | САР         | МК            | SH               | L&PP<br>T,L_<br>VC,SI<br>M,D-<br>M | P-VIVA,P-<br>EXAM | F&S     | II  |  |
| CO6,CO7         | Demonstration of drafting of an injury report.   | CAP         | МК            | D                | D-<br>M,D                          | P-EXAM,P-<br>PRF  | F&S     | II  |  |
| Topic 14 Sex    | ual offences   | •           |               |                  | •                                  |                   | •       | • • |  |
| CO5,CO6,CO<br>7 | Discuss the essentials of Protection of Women from<br>Domestic Violence Act (PWDV Act) 2005 and The Sexual<br>Harassment of Women at Workplace (Prevention,<br>Prohibition & Redressal) Act and Rules (PoSH Act) 2013. | AFT-<br>VAL | DK            | D                | L&G<br>D,BS,<br>RP                 | C-INT,INT         | F&S     | III |  |
| -               | d Visits (Field visits should be integrated along with the ed<br>a Departments)  | ucation     | al tour condu | cted by <b>E</b> | Dravyagi                           | unavijnan, Ras    | sasatra | and |  |
| CO6,CO7         | (Visit to Forensic Science Laboratory) - (Mandatory) Appraise<br>the functioning of a forensic science laboratory  | CC          | МК            | КН               | FV                                 | P-VIVA,RK         | F       | III |  |
| CO4,CO5         | (Visit to Food testing laboratory) Observe the instrumentation<br>and procedire of food testing  | CC          | DK            | КН               | FV                                 | RK,COM            | F       | Ι   |  |



| CO4,CO5     | (Visit to Pollution Control Board) - (Mandatory) Perceive the<br>functioning of Pollution Control Board                                      | CC          | DK | КН | FV       | P-VIVA,RK        | F   | II  |   |
|-------------|--|-------------|----|----|----------|------------------|-----|-----|---|
| CO4,CO5     | (Visit to De-addiction centre)Observe the management of de-<br>addiction cases   | PSY-<br>GUD | DK | КН | FV       | RK               | F   | III |   |
| CO7         | (Visit to the Court) - (Mandatory) Observe the procedure of court<br>procedure and conduct of a medical practitioner as an expert<br>witness | PSY-<br>GUD | МК | KH | FV       | RK               | F   | Ι   |   |
| CO6         | (Visit to mortuary for observation of autopsy)Observe the procedure of medico-legal autopsy  | PSY-<br>GUD | МК | КН | FV       | P-VIVA,RK        | F   | П   |   |
| CO2         | (Visit to snake park) - (Mandatory)Observe live specimens of snake   | CC          | DK | КН | FV       | P-VIVA,RK        | F   | II  |   |
| CO2,CO7     | (Visit to casuality) -( Mandatory) Watch the procedure of resuscitation and emergency management   | СК          | МК | КН | FV       | RK               | F   | Ι   |   |
| CO4,CO5     | (Visit to occupational hazards centre)Observe the types and<br>management of cases of occupational hazard                                    | СК          | DK | КН | FV       | RK               | F   | II  |   |
| CO2         | (Visit to ASV manufacturing centre)Observe the steps and<br>procedures involved in ASV manufacturing   | СК          | DK | К  | FV       | RK               | F   | II  |   |
| CO4,CO5     | Visit Cancer treatment centre.   | СК          | NK | K  | FV       | RK               | F   | III |   |
| CO2,CO4     | Visit to department of entomology.   | CC          | NK | K  | FV       | RK               | F   | II  |   |
| CO2,CO5     | Visit to folklore vaidya using Agada tantra concepts in visha chikitsa.  | САР         | DK | SH | FV       | RK               | F&S | П   |   |
| Topic 16 To | opics related to regional preference   |             |    | •  | •        |                  | •   | -   | • |
| CO2,CO3     | Discuss the topics related to regional preference like bites and<br>stings, substance abuse, texts of regional importance, regional          | CAP         | NK | K  | L&G<br>D | P-VIVA,M-<br>POS | F   | III |   |



### Table 4a: List of Practical



| S.No | Name of practical                         | Term | Activity   | Practical hrs |
|------|---|------|--|---------------|
| 1    | Visha Chikitsa                            | 1    | <ul><li>1.1 Gastric lavage</li><li>1.2 Cardiopulnomary resuscitation (CPR)</li><li>1.3 Video demonstration or visit to the emergency care unit for procedures used for removal of absorbed poison.</li></ul>   | 6             |
| 2    | Vishakta Ahara Pariksha                   | 1    | <ul> <li>2.1 Adulteration detection Tests</li> <li>2.1.1 Urea in milk</li> <li>2.1.2 Boric acid in milk</li> <li>2.1.3 Artificial color in turmeric.</li> <li>2.1.4 Artificial color in pulses and</li> <li>Vegetables.</li> <li>2.1.5 Argemone Oil in Mustard oil</li> <li>2.1.6 Adulteration in Honey</li> </ul>   | 6             |
| 3    | Dooshivisha, Garavisha,<br>Visha Upadrava | 1    | <ul> <li>3.1 Case based teaching on diseases due to dooshivisha and garavisha - drug induced toxicity, occupational hazards, allergic manifestations, autoimmune diseases and endocrine disruptors.</li> <li>3.2 Recording 10 cases based on case based teaching or OPD and IPD exposure.</li> </ul>   | 20            |
| 4    | Dermatological<br>manifestation of visha  | 2    | <ul> <li>4.1 Dermatological manifestations due to visha ex: contact poisoning (paduka visha, abharana visha etc.) and bites and stings.</li> <li>4.2 Contact Dermatitis</li> <li>4.3 Recording 10 cases based on case based teaching or OPD and IPD Exposure.</li> </ul>   | 20            |
| 5    | Environmental toxicology                  | 2    | 5.1 Social Awareness program – Rally,<br>street play, skit etc.  | 2             |
| 6    | JangamaVisha                              | 2    | <ul> <li>6.1 Identification of Poisonous and non poisonous snakes</li> <li>6.2 Diagnosis based on bite marks of snakes</li> <li>6.3 Diagnosis and Management of snake bite cases through audio/video case presentations or OPD/IPD exposure</li> <li>6.4 Diagnosis and management of vrishchika, loota and keeta damsha cases through audio/video case presentations or</li> </ul> | 10            |



|    |                   |   | OPD/IPD exposure.  |   |
|----|-------------------|---|--|---|
| 7  | Sthavara visha    | 2 | 7.1 Identification of various plant poisons,<br>metal and mineral compounds, acids,<br>alkalis, agrochemicals, hydrocarbons and<br>household poisons.  | 6 |
| 8  | Substance abuse   | 3 | <ul> <li>8.1 Community Awareness programmes by students like rallies, street play etc.</li> <li>8.1.1. Observation of international day against drug abuse and illicit trafficking.</li> <li>8.1.2. World No tobacco day.</li> </ul>   | 8 |
| 9  | Legal Procedures  | 1 | <ul> <li>9.1 Hands on training on Preparation of<br/>Medical &amp; Medico legal reports.</li> <li>9.1.1 Fitness &amp; Sickness certificate.</li> <li>9.1.2 Birth &amp; Death Certificate and other<br/>relevant medical and medico legal<br/>certificates.</li> <li>9.1.3 Leaving against medical advice<br/>(LAMA), Discharge against medical<br/>advice (DAMA), Discharge on patient<br/>request (DOPR)</li> </ul> | 2 |
| 10 | Vaidya Sadvritta  | 1 | 10.1 Exposure to the medical records<br>department for understanding the storage,<br>maintenance and disposal of medical<br>records.   | 2 |
| 11 | Personal Identity | 1 | 11.1. Sex determination based on pelvis.   | 4 |
| 12 | Thanatology       | 2 | 12.1 Procedure of autopsy: visit to<br>mortuary or audio-visual demonstrations.  | 6 |
| 13 | Injury            | 2 | <ul><li>13.1. Hands on training on assessment of accidental, suicidal, and homicidal injuries.</li><li>13.2. Preparation of injury report.</li></ul>   | 6 |
| 14 | Sexual offences   | 3 | 14.1 Introduction to Protection of Women<br>from Domestic Violence Act (PWDV Act)<br>2005 and The Sexual Harassment of   | 2 |



| should<br>with the<br>conduc<br>Dravya<br>Rasasat<br>Swasth<br>Departi |  |   | Total Hr   | 140 |
|--|--|---|--|-----|
| should<br>with the<br>conduc<br>Dravya<br>Rasasat<br>Swasth            | es related to regional rence   | 3 | Exposure to topics related to regional<br>preference like bites and stings, substance<br>abuse, texts of regional importance,<br>regional visha chikitsa practices, regional<br>medico-legal issues etc. | 10  |
|  | Visits (Field visits<br>d be integrated along<br>the educational tour<br>acted by<br>yagunavijnan,<br>satra and<br>thavrutha<br>rtments) | 2 | (It is mandatory to have 5 field visits)   | 30  |
|  |  |   | Women at Workplace (Prevention,<br>Prohibition & Redressal) Act and Rules<br>(PoSH Act) 2013.  |     |

### Activity

| СО      | Topic name  | Activity Details  | Hours# |
|---------|---|---|--------|
| CO3,CO4 | Survey of personal care<br>products.  | Students shall be divided into small groups and<br>are asked to collect the information about<br>common personal care products like soaps,<br>shampoos, deodorants, cosmetics etc. Then they<br>sholud be asked to enlist the chemicals used in<br>them and discuss about the health hazards<br>associated with their use. Then students can be<br>asked to present their findings in the form of<br>class seminar or Charts or Posters or small<br>videos.         | 4      |
| CO5     | Community teaching by<br>students - awareness<br>among adoloscent about<br>Protection of Women from<br>Domestic Violence Act<br>(PWDV Act) 2005 and The<br>Sexual Harassment of<br>Women at Workplace<br>(Prevention, Prohibition &<br>Redressal) Act and Rules | After undergoing orientation/sensitization regarding<br>Protection of Women from Domestic Violence Act<br>(PWDV Act) 2005 and The Sexual Harassment of<br>Women at Workplace (Prevention, Prohibition &<br>Redressal) Act and Rules (PoSH Act) 2013, the<br>students will have to visit nearby schools/colleges in<br>small teams/groups and create awareness amongst<br>them. This can be done as part of NSS activity or<br>exclusive visits to schools/colleges. | 2      |



|         | (PoSH Act) 2013.   |   |   |
|---------|--|---|---|
| CO2,CO4 | Observation of<br>international day against<br>drug abuse and illicit<br>trafficking           | Community awareness programmes by students like rallies, street play etc.   | 3 |
| CO2,CO4 | No Tobacco Day   | Community Awareness programmes by students like rallies, street play, skit, flash mob etc.  | 3 |
| CO5     | Environmental<br>toxicology  | Poster presentation competition related to<br>environment, rallies, skit, flash mob on World<br>Environment Day.  | 2 |
| CO6,CO7 | Vaidya sadvritta   | Exposure to Medical records department for<br>maintainance, storage and disposal of medical<br>record, finding out errors in medical case<br>reccords.  | 2 |
| CO6     | Forensic psychiatry  | Seminar/ guest lecture on how to deal with adolescent psychiatric issue   | 2 |
| CO2,CO4 | Chronic toxicity of heavy metals.  | Group discusion and case based learning by taking example of published case reports.  | 1 |
| CO2,CO4 | World Cancer Day to<br>raise awareness of cancer<br>risk and cancer prevention                 | Poster Competition / Quiz Competition / Gruop<br>Discusion  | 4 |
| CO6,CO7 | Legal procedure-<br>Recording of evidence<br>and duties of a physician<br>in the court of Law. | Mock court / role play  | 4 |
| CO2     | Sarpa Visha  |   | 2 |
|         |  | 1. Identification of poisonous and non poisononus snakes -  |   |
|         |  | Group Discussion/ Brainstorming - Specimens<br>(Photos) of poisonous and non poisonous snakes<br>with their features shall be given to small group<br>of students and asked to identify the sankes. |   |
|         |  |   |   |

|         | A STATE   |  |   |
|---------|---|--|---|
|         |   | Group Discussion - Specimens (Photos)<br>showcasing local and systemic signs and<br>symptoms of poisonous (Hemotoxic and<br>Nuerotoxic) snake bite shall be given to small<br>group of students and asked to diagnose the case.  |   |
|         |   | CBL - Presentation of recorded cases or the Case reports or studies published in reputed journals.   |   |
|         |   | Brainstorming/Quiz - The same pictures may be<br>shown with MCQ's and Quiz session can be<br>conducted among the groups of students  |   |
| CO2     | Vrischika visha, luta visha<br>and keeta visha. | Group Discussion - Specimens (Photos)<br>showcasing local and systemic signs and<br>symptoms of Vrischika Visha (Scorpion Sting),<br>Loota Visha (Spider Bite) and Keetavisha (Insect<br>bite) and differentiating with snake bites shall be<br>given to small group of students and asked to<br>diagnose the case.  | 2 |
|         |   | CBL - Presentation of recorded cases or the Case reports or studies published in reputed journals.   |   |
|         |   | Brainstorming/Quiz - The same pictures may be<br>shown with MCQ's and Quiz session can be<br>conducted among the groups of students.   |   |
| CO3,CO4 | Dooshivisha, garavisha<br>and visha upadrava    | Group Discussion - Photographs/case reports/<br>simulated cases showcasing various drug<br>induced toxicities, occupational hazards, allergic<br>manifestations, autoimmune diseases and<br>diseases due to endocrine disruptors shall be<br>given to small group of students and asked to<br>assess the dosha, diagnose and discuss the plan<br>of treatment. | 4 |

|         | Affin and a second s |  |   |
|---------|---|--|---|
|         |   | CBL - Presentation of recorded cases or the Case reports or studies published in reputed journals.   |   |
|         |   | Brainstorming/Quiz - The same pictures may be<br>shown with MCQ's and Quiz session can be<br>conducted among the groups of students.   |   |
| CO3,CO4 | Dermatological<br>manifestation of visha.   | Group Discussion - Photographs/case reports/<br>simulated cases showcasing various<br>dermatological presentations of poison, bites and<br>stings and contact dermititis shall be given to<br>small group of students and asked to assess the<br>dosha, diagnose and discuss the plan of<br>treatment. | 4 |
|         |   | CBL - Presentation of recorded cases or the Case reports or studies published in reputed journals.   |   |
|         |   | Brainstorming/Quiz - The same pictures may be<br>shown with MCQ's and Quiz session can be<br>conducted among the groups of students.   |   |

# Hours indicated are included in calculations of Table 3 and 4

| Table 5- Teaching l | earning method |
|---------------------|----------------|
|---------------------|----------------|

| Sr No | Teaching learning methods in the course | No of Activities |
|-------|---|------------------|
| 1     | Lecture                                 | 18               |
| 2     | Lecture with Power point presentation   | 106              |
| 3     | Lecture & Group Discussion              | 32               |
| 4     | Lecture with Video clips                | 13               |
| 5     | Discussions                             | 22               |
| 6     | Brainstorming                           | 22               |
| 7     | Inquiry-Based Learning                  | 1                |



| 8  | PBL                    | 6  |
|----|------------------------|----|
| 9  | CBL                    | 26 |
| 10 | Flipped classroom      | 4  |
| 11 | Edutainment            | 2  |
| 12 | Mobile learning        | 2  |
| 13 | Simulation             | 1  |
| 14 | Self-directed learning | 15 |
| 15 | Demo on Model          | 2  |
| 16 | Tutorial               | 2  |
| 17 | Presentations          | 9  |
| 18 | Practical              | 1  |
| 19 | Case diagnosis         | 5  |
| 20 | Demonstration          | 2  |
| 21 | Field visit            | 1  |

These are overall teaching learning methods listed in Table 3 and 4. Teachers can select the best possible method amongst the given methods as per objective, available time etc.

#### Table 6: Assessment Summary: Assessment is subdivided in A to H points

#### 6 A-Number of Papers and Marks Distribution

| Subject | Papers | Theory |           | Practical/Clinical Assessment |                      |    |              |                |
|---------|--------|--------|-----------|-------------------------------|----------------------|----|--------------|----------------|
| Code    |        |        | Practical | Viva                          | Elective<br>(Set SA) | IA | Sub<br>Total | Grand<br>Total |
| AyUG-AT | 1      | 100    | 100       | 60                            | 10                   | 30 | 200          | 300            |

#### **6 B - Scheme of Assessment (formative and Summative)**

| PROFESSIONAL | <b>DURATION OF PROFESSIONAL COURSE</b> |                              |                              |  |  |
|--------------|--|------------------------------|------------------------------|--|--|
| COURSE       | First Term (1-6<br>Months)             | Second Term (7-12<br>Months) | Third Term (13-18<br>Months) |  |  |
| Second       | 3 PA & First TT                        | 3 PA & Second TT             | 3 PA & UE**                  |  |  |

PA: Periodical Assessment; TT: Term Test; UE: University Examinations.

\*\* University Examination shall be on entire syllabus

## 6 C - Calculation Method for Internal asses

|          | PERIODICAL ASSESSMENT*  |                 |                 |                          | TERM<br>TEST**                           | TE<br>ASSESS                               | RM<br>SMENT                |                              |
|----------|---|-----------------|-----------------|--------------------------|--|--|----------------------------|------------------------------|
|          | A 4   | В               | С               | D                        | Е  | F  | G                          | Н                            |
| TERM     | 1 (15<br>Marks)   | 2 (15<br>Marks) | 3 (15<br>Marks) | Average<br>(A+B+C/<br>3) | Converted<br>to 30<br>Marks<br>(D/15*30) | Term Test<br>(Marks<br>converted<br>to 30) | Sub Total<br>_/60<br>Marks | Term Ass<br>essment<br>(/30) |
| FIRST    |   |                 |                 |                          |  |  | E+F                        | (E+F)/2                      |
| SECOND   |   |                 |                 |                          |  |  | E+F                        | (E+F)/2                      |
| THIRD    |   |                 |                 |                          |  | NIL  |                            | Е                            |
| Final IA | Average of  | Three Term      | Assessment      | Marks as Sh              | own in 'H' C                             | column.                                    |                            |                              |
|          | Maximum Marks in Parentheses<br>*Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D<br>for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct<br>Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then<br>convert to 30 marks. |                 |                 |                          |  |  |                            |                              |

#### 6 D - Evaluation Methods for Periodical Assessment

| S. No | Evaluation Methods  |
|-------|---|
| 1     | Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3 |

Evaluation Methods in MSE

- 1. Practical / Clinical Performance
- 2. Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
- 3. Open Book Test (Problem Based)
- 4. Summary Writing (Research Papers/ Samhitas)
- 5. Class Presentations; Work Book Maintenance
- 6. Problem Based Assignment
- 7. Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination

(OPSÉ), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)

8. Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).

9. Small Project etc.



## II PROFESSIONAL BAMS EXAMINATIONS AyUG-AT PAPER-1

Time: 3 Hours Maximum Marks: 100 INSTRUCTIONS: All questions compulsory

|     |                                 | Number of<br>Questions | Marks per<br>question | Total Marks |
|-----|---------------------------------|------------------------|-----------------------|-------------|
| Q 1 | MULTIPLE CHOICE QUESTIONS (MCQ) | 20                     | 1                     | 20          |
| Q 2 | SHORT ANSWER QUESTIONS (SAQ)    | 8                      | 5                     | 40          |
| Q 3 | LONG ANSWER QUESTIONS (LAQ)     | 4                      | 10                    | 40          |
|     |                                 |                        |                       | 100         |

## 6 F Distribution of theory examination



| Pap       | er 1  |           |            |                 |                  |                      |
|-----------|---|-----------|------------|-----------------|------------------|----------------------|
| Sr.<br>No | A<br>List of Topics   | B<br>Term | C<br>Marks | MCQ (1<br>Mark) | SAQ (5<br>Marks) | LAQ<br>(10<br>Marks) |
| 1         | Concepts of Agada Tantra (Clinical<br>Toxicology)                                     | 1         | 13         | Yes             | Yes              | Yes                  |
| 2         | Visha Chikitsa (Management of Poisoning)  | 1         |            | Yes             | Yes              | Yes                  |
| 3         | Vishakta aahara pariksha and Viruddha<br>ahara  | 1         |            | Yes             | Yes              | No                   |
| 4         | Garavisha and Dooshivisha   | 1         | 12         | Yes             | Yes              | Yes                  |
| 5         | Visha Upadrava and diseases caused due to exposure to Visha/poisons                   | 1         |            | Yes             | Yes              | No                   |
| 6         | Environmental Toxicology  | 2         | 11         | Yes             | Yes              | No                   |
| 7         | Dermatological manifestations of visha/poisons.                                       | 2         |            | Yes             | Yes              | No                   |
| 8         | Therapeutic utility of Agada yoga   | 2         | -          | Yes             | Yes              | No                   |
| 9         | Sthavara visha – Poisons of Plant origin  | 2         | 17         | Yes             | Yes              | Yes                  |
| 10        | Sthavara Visha – Poisons of Metallic origin   | 2         |            | Yes             | Yes              | Yes                  |
| 11        | Jangama Visha   | 2         |            | Yes             | Yes              | Yes                  |
| 12        | Kritrima visha  | 3         | 12         | Yes             | Yes              | Yes                  |
| 13        | Substances of abuse   | 3         | -          | Yes             | Yes              | Yes                  |
| 14        | Agada Tantra perspectives on cancer   | 3         | -          | Yes             | Yes              | No                   |
| 15        | Forensic medicine (Vyavahara Ayurveda) and<br>Medical jurisprudence (Vidhi vaidyaka): | 1         | 10         | Yes             | No               | No                   |



|     |  |   | 1   | I   | 1   | 1   |
|-----|--|---|-----|-----|-----|-----|
| 16  | Vaidya sadvritta : Duties and Responsibilities of medical practitioner | 1 | -   | Yes | Yes | No  |
| 17  | Legal Procedures   | 1 | -   | Yes | Yes | No  |
| 18  | Personal identity  | 1 | -   | Yes | Yes | Yes |
| 19  | Thanatology  | 2 | 12  | Yes | Yes | Yes |
| 20  | Asphyxial deaths   | 2 | -   | Yes | Yes | Yes |
| 21  | Injury   | 2 | -   | Yes | Yes | Yes |
| 22  | Pregnancy, delivery and abortion                                       | 3 | 6   | Yes | Yes | No  |
| 23  | Sexual offences  | 3 | -   | Yes | Yes | No  |
| 24  | Forensic psychiatry.   | 3 | 7   | Yes | Yes | No  |
| 25  | Forensic science laboratory  | 3 | -   | Yes | Yes | No  |
| 26  | Laws, Acts, Rules and Regulations                                      | 3 | -   | Yes | Yes | No  |
| Tot | al Marks   |   | 100 |     | 1   |     |



| Paper No:1  |  |  |
|-------------|--|--|
| Question No | Type of Question   | Question Paper Format  |
| Q1          | Multiple choice Questions<br>20 Questions<br>1 mark each<br>All compulsory<br>Must know part - 15 MCQ<br>Desirable to know - 3 MCQ<br>Nice to know part - 2 MCQ  | <ol> <li>Concepts of Agada Tantra (Clinical<br/>Toxicology)</li> <li>Visha Chikitsa (Management of Poisoning)</li> <li>Visha Lgaravisha and Dooshivisha</li> <li>Visha Upadrava and diseases caused due to<br/>exposure to Visha/poisons</li> <li>Asphyxial deaths</li> <li>Dermatological manifestations of<br/>visha/poisons.</li> <li>Therapeutic utility of Agada yoga</li> <li>Kritrima visha / Sthavara Visha – Poisons of<br/>Metallic origin</li> <li>Jangama Visha</li> <li>Substances of abuse</li> <li>Agada Tantra perspectives on cancer</li> <li>Vaidya sadvritta : Duties and Responsibilities<br/>of medical practitioner / Forensic medicine<br/>(Vyavahara Ayurveda) and Medical<br/>jurisprudence (Vidhi vaidyaka):</li> <li>Legal Procedures / Injury</li> <li>Pregnancy, delivery and abortion /<br/>Thanatology</li> <li>Environmental Toxicology / Personal identity</li> <li>Forensic psychiatry. / Forensic science<br/>laboratory</li> <li>Laws, Acts, Rules and Regulations</li> <li>Sthavara visha – Poisons of Plant origin</li> <li>Sexual offences</li> </ol> |
| Q2          | Short answer Questions<br>Eight Questions<br>5 Marks Each<br>All compulsory<br>Must know - 7 SAQ<br>Desirable to know - 1 SAQ<br>No questions on Nice to<br>know | <ol> <li>Vishakta aahara pariksha and Viruddha ahara<br/>/ Visha Upadrava and diseases caused due to<br/>exposure to Visha/poisons / Garavisha and<br/>Dooshivisha</li> <li>Visha Chikitsa (Management of Poisoning) /<br/>Therapeutic utility of Agada yoga /<br/>Dermatological manifestations of<br/>visha/poisons.</li> <li>Kritrima visha / Sthavara visha – Poisons of<br/>Plant origin / Environmental Toxicology /<br/>Sthavara Visha – Poisons of Metallic origin</li> <li>Jangama Visha / Concepts of Agada Tantra<br/>(Clinical Toxicology) / Vaidya sadvritta :<br/>Duties and Responsibilities of medical</li> </ol>  |

|    | All the second |  |
|----|---|--|
|    |   | <ul> <li>practitioner</li> <li>5. Environmental Toxicology / Agada Tantra perspectives on cancer / Substances of abuse</li> <li>6. Asphyxial deaths / Personal identity / Injury</li> <li>7. Pregnancy, delivery and abortion / Sexual offences / Personal identity</li> <li>8. Forensic psychiatry. / Forensic science laboratory / Laws, Acts, Rules and Regulations</li> </ul>                |
| Q3 | Long answer Questions<br>Four Questions<br>10 marks each<br>All compulsory<br>All questions on must<br>know. No Questions on<br>Nice to know and Desirable<br>to know   | <ol> <li>Visha Chikitsa (Management of Poisoning) /<br/>Concepts of Agada Tantra (Clinical<br/>Toxicology)</li> <li>Jangama Visha / Garavisha and Dooshivisha</li> <li>Kritrima visha / Sthavara visha – Poisons of<br/>Plant origin / Sthavara Visha – Poisons of<br/>Metallic origin / Substances of abuse</li> <li>Thanatology / Asphyxial deaths / Personal<br/>identity / Injury</li> </ol> |

## 6 H Distribution of Practical Exam



| S.No | Heads  | Marks |
|------|--|-------|
| 1    | Spotting (15 specimens of 4 marks each) 1.1. Snake – 2 specimens   | 60    |
|      | 1.1.1 Identification - 1 mark  |       |
|      | 1.1.2 Differentiating features of poisonous/ non-poisonous snake – 1 mark  |       |
|      | 1.1.3 Important clinical signs - 1 mark  |       |
|      | 1.1.4 Ayurvedic management - 1 mark1.2. Mineral poisons/ Kritrima visha (1 specimen each)-2 specimens                    |       |
|      | 1.2.1. Identification - 1 mark   |       |
|      | 1.2.2 Identification of symptom clusters mimicking other diseases and their  |       |
|      | differential diagnosis - 2 marks   |       |
|      | 1.2.3 Method of detoxification and Antidotes-1 mark1.3. Toxicplants- 2 specimens   |       |
|      | 1.3.1 Identification with scientific, family and sanskrit names 1 mark   |       |
|      | 1.3.2 Mode of use in Visha cases – 1 mark  |       |
|      | 1.3.3 detoxification method, Class of poison and Active principles present in  |       |
|      | the plant - 1 mark   |       |
|      | 1.3.4 Antidotes used against the specimen - 1 mark1.4. Antitoxic plants - 3 specimens                                    |       |
|      | 1.4.1 Identification with scientific, family and sankrit names       - 1 mark  |       |
|      | 1.4.2 Mode of use in visha - 1 mark  |       |
|      | 1.4.3 Active principles   - 1 mark   |       |
|      | 1.4.4 Important formulations - 1 mark1.5. Injuries – 2 specimens   |       |
|      | 1.5.1. Identify the injury - 1 mark  |       |
|      | 1.5.2. Identify the weapon/criminal act causing such injury - 2 mark   |       |
|      | 1.5.3. Medico-legal importance- 1 marks1.6. News item – papercuttings or other medico-legal case scenarios – 2 specimens |       |
|      | 1.6.1. Identify the crime – 1 mark   |       |

|   | 1.6.2. Relevant IPC/CrPC sections associated with the crime – 1 mark  |    |
|---|---|----|
|   | 1.6.3. Relevant Act related to the crime – with sub-questions related to its sub-   |    |
|   | sections, punishment etc 2 marks7. Jangama visha – other poisonous creatures – 2 specimens  |    |
|   | 1.7.1. Identification – 1 mark  |    |
|   | 1.7.2. Adhishtana/samanya lakshana/ chikitsa – 2 marks  |    |
|   | 1.7.3. specific formulations/doses – 1 mark(Sub-questions mentioned against each item is for a purpose of example only. Different questions may be framed on the various aspects of the guidelines provided)  |    |
| 2 | Practical Records   | 10 |
| 3 | Medical and Medico-legal Certificate WritingStudents will be provided with<br>a case-scenario based on which they are asked to write a medical certificate<br>for a specific purpose. Evaluation guidelines should be based on the essential<br>criteria in the format of a valid medical certificate.  | 10 |
| 4 | Short CaseCase scenarios with pictures to diagnose a specific case of poisoning and specific questions asked regarding its clinical examination, investigations, treatment, prognosis etc.  | 10 |
| 5 | Clinical Applications of Agada  | 10 |
|   | <ul> <li>Identification of Agada for a case scenario detailed – 2 marks</li> <li>Select the ingredients of the formulation from a group of drugs and identify using scientific names and answer sub-questions based on its preparation, anupana, dose etc. – 8 marks</li> </ul>   |    |
| 6 | Viva Questions will be asked on the following topics  | 60 |
|   | <ul> <li>Agada Tantra (2 questions 5 marks each) - 10 marks</li> <li>Forensic Science (Vyavaharayurveda) (2 questions 5 marks) - 10 marks</li> <li>Jurisprudence (Vidhivaidyaka) (2 questions 5 marks) - 10 marks</li> <li>Toxicology (2 questions 5 marks each) - 10 marks</li> <li>Concepts of Agada Tantra in cancer and substance abuse (one question from each) (2 questions 5 marks each) - 10 marks</li> <li>Viva on Compilation and Communication skills (2 questions 5 marks each) - 10 marks</li> </ul> |    |



| 7           | Electives (Set SA) | 10  |
|-------------|--------------------|-----|
| 8           | ΙΑ                 | 30  |
| Total Marks |                    | 200 |



| S.No | Book  | Author(s)/Resources   |
|------|---|---|
| 1    | Concise Forensic Medicine &<br>Toxicology   | KS Narayana Reddy, Jaypee Medical Publisher   |
| 2    | Essentials ofForensic Medicine &<br>Toxicology  | K S Narayana Reddy, Jaypee Medical Publisher  |
| 3    | Principles of Forensic Medicine &<br>Toxicology   | Rajesh Bardale, Jaypee Medical Publisher  |
| 4    | Modern Medical Toxicology   | VV Pillay, Jaypee Medical Publisher   |
| 5    | Recent Advances in Forensic<br>Medicine and Toxicology (Volume 1<br>& 2)  | Gautam Biswas, Jaypee Medical Publisher   |
| 6    | Textbook on Medicolegal Issues:<br>Related to Various Medical<br>Specialties by Satish TiwariMahesh<br>BaldwaMukul TiwariAlka Kuthe | Jaypee Medical Publisher  |
| 7    | Manual on Doctor and Law  | RN Goel Narendra, Malhotra Shashi Goel, Jaypee Medical<br>Publisher                           |
| 8    | Jaypee's Video Atlas of Medicolegal<br>Autopsy  | Sujith Sreenivas C Prasannan K Thomas Mathew, Jaypee<br>Medical Publisher                     |
| 9    | Jaypee Gold Standard Mini Atlas<br>Series Forensic Medicine by Ashesh<br>Gunwantrao Wankhede  | Jaypee Medical Publisher  |
| 10   | MODI's Textbook of Medical<br>Jurisprudence and Toxicology  | K Kannan, Jaypee Medical Publisher  |
| 11   | A Text book of Agada Tantra   | Dr Shobha Bhat, Chaukamba Orientalia  |
| 12   | Agada Tantra  | Dr Ramesh Chandra Tiwari, Chaukamba Orientalia  |
| 13   | Text Book of Agad Tantra Evam<br>Vyavaharayurveda   | Dr Sandeep Charak Dr.Piyush Gupta Dr Divya<br>Tiwari, Ayurveda Sanskrit Hindi Pustak Bhandar. |
| 14   | Ayodhyaprasad Achal'sAgada Tantra   | Dr Jina Patnaik, Chaukamba Surbharati Prakashan   |
| 15   | Illustrated Agada Tantra  | Dr PVNR Prasad, Chaukamba Sanskrit Series Varanasi  |
| 16   | Textbook on Agada Tantra  | DR V P JOGLEKAR, RASHTRIYA SHIKSHAN<br>MANDAL, PUNE   |
| 17   | Review of Forensic Medicine and<br>Toxicology by Dr Gautam Biswas   | Jaypee Medical Publisher  |
| 18   | Toxicology - An Ayurvedic<br>Perspective  | Department of Agadtantra, Vaidyaratnam PS Varier<br>Ayurveda College, Kottakkal               |

## Abbreviations



### Assessment

| 2 7      | T-EMI   | Theory extended matching item |
|----------|---------|-------------------------------|
| <u> </u> | T- EW   | Theory Essay writing          |
| 3 7      | T- MEQs | Theory MEQs                   |
| 4 7      | T-CRQs  | Theory CRQs                   |
| 5 7      | T-CS    | Theory case study             |
| 6 7      | T-OBT   | Theory open book test         |
| 7 1      | P-VIVA  | Practical Viva                |
| 8 1      | P-REC   | Practical Recitation          |
| 9 1      | P-EXAM  | Practical exam                |
| 10 1     | PRN     | Presentation                  |
| 11 I     | P-PRF   | Practical Performance         |
| 12 1     | P-SUR   | Practical Survey              |
| 13 1     | P-EN    | Practical enact               |
| 14 I     | P-RP    | Practical Role play           |
| 15 I     | P-MOD   | Practical Model               |
| 16 I     | P-POS   | Practical Poster              |
| 17 1     | P-CASE  | Practical Case taking         |
| 18 I     | P-ID    | Practical identification      |
| 19 I     | P-PS    | Practical Problem solving     |
| 20       | QZ      | Quiz                          |
| 21 1     | PUZ     | Puzzles                       |
| 22 0     | CL-PR   | Class Presentation,           |
| 23 1     | DEB     | Debate                        |
| 24       | WP      | Word puzzle                   |
| 25 (     | 0-QZ    | Online quiz                   |



| 26 | O-GAME       | Online game-based assessment |
|----|--------------|------------------------------|
| 27 | M-MOD        | Making of Model              |
| 28 | M-CHT        | Making of Charts             |
| 29 | M-POS        | Making of Posters            |
| 30 | C-INT        | Conducting interview         |
| 31 | INT          | Interactions                 |
| 32 | CR-RED       | Critical reading papers      |
| 33 | CR-W         | Creativity Writing           |
| 34 | C-VC         | Clinical video cases,        |
| 35 | SP           | Simulated patients           |
| 36 | РМ           | Patient management problems  |
| 37 | СНК          | Checklists                   |
| 38 | OSCE         | OSCE                         |
| 39 | OSPE         | OSPE,                        |
| 40 | Mini-CEX     | Mini-CEX                     |
| 41 | DOPS         | DOPS                         |
| 42 | CWS          | CWS                          |
| 43 | RS           | Rating scales                |
| 44 | RK           | Record keeping               |
| 45 | СОМ          | Compilations                 |
| 46 | Portfolios   | Portfolios                   |
| 47 | Log book     | Log book                     |
| 48 | TR           | Trainers report              |
| 49 | SA           | Self-assessment              |
| 50 | РА           | Peer assessment              |
| 51 | 360D         | 360-degree evaluation        |
| 52 | TT-Theory    | Theory                       |
| 53 | PP-Practical | Practical                    |
| 54 | VV-Viva      | Viva                         |



## Domain

| S.No | Short form | Discription                 |
|------|------------|-----------------------------|
| 1    | СК         | Cognitive/Knowledge         |
| 2    | CC         | Cognitive/Comprehension     |
| 3    | САР        | Cognitive/Application       |
| 4    | CAN        | Cognitive/Analysis          |
| 5    | CS         | Cognitive/Synthesis         |
| 6    | СЕ         | Cognitive/Evaluation        |
| 7    | PSY-SET    | Psychomotor/Set             |
| 8    | PSY-GUD    | Psychomotor/Guided response |
| 9    | PSY-MEC    | Psychomotor/Mechanism       |
| 10   | PSY-ADT    | Psychomotor Adaptation      |
| 11   | PSY-ORG    | Psychomotor/Origination     |
| 12   | AFT-REC    | Affective/ Receiving        |
| 13   | AFT-RES    | Affective/Responding        |
| 14   | AFT-VAL    | Affective/Valuing           |
| 15   | AFT-SET    | Affective/Organization      |
| 16   | AFT-CHR    | Affective/ characterization |



# T L method

| S.No | Short form | Discription                           |
|------|------------|---------------------------------------|
| 1    | L          | Lecture                               |
| 2    | L&PPT      | Lecture with Power point presentation |
| 3    | L&GD       | Lecture & Group Discussion            |
| 4    | L_VC       | Lecture with Video clips              |
| 5    | DIS        | Discussions                           |
| 6    | BS         | Brainstorming                         |
| 7    | IBL        | Inquiry-Based Learning                |
| 8    | PBL        | PBL                                   |
| 9    | CBL        | CBL                                   |
| 10   | PrBL       | Project-Based Learning                |
| 11   | TBL        | TBL                                   |
| 12   | TPW        | Team project work                     |
| 13   | FC         | Flipped classroom                     |
| 14   | BL         | Blended Learning                      |
| 15   | EDU        | Edutainment                           |
| 16   | ML         | Mobile learning                       |
| 17   | ECE        | ECE                                   |
| 18   | SIM        | Simulation                            |
| 19   | RP         | Role plays                            |
| 20   | SDL        | Self-directed learning                |
| 21   | PSM        | Problem solving method                |
| 22   | KL         | Kinesthetic Learning                  |
| 23   | W          | Workshops                             |
| 24   | GBL        | Game-Based Learning                   |
| 25   | D-M        | Demo on Model                         |



| 26 | LS    | Library Session           |
|----|-------|---------------------------|
| 27 | PL    | Peer learning             |
| 28 | RLE   | Real life experience      |
| 29 | REC   | Recitation                |
| 30 | SY    | Symposium                 |
| 31 | TUT   | Tutorial                  |
| 32 | PER   | Presentations             |
| 33 | РТ    | Practical                 |
| 34 | XRay  | X ray identification      |
| 35 | CD    | Case diagnosis            |
| 36 | LRI   | Lab report interpretation |
| 37 | DA    | Drug analysis             |
| 38 | D     | Demonstration             |
| 39 | D_BED | Demonstration bedside     |
| 40 | D_L   | Demonstration Lab         |
| 41 | DG    | Demonstration Garden      |
| 42 | FV    | Field visit               |
| 43 | PRA   | Practical                 |
|    |       |                           |
|    |       |                           |