

# Diploma in Ayurvedic Pharmacy

D.Pharma (Ayu.)

## Course coordinator

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DEPARTMENT OF RAS SHASTRA & BHAISHAJYA KALPANA

MSM INSTITUTE OF AYURVEDA,

BHAGAT PHOOL SINGH MAHILA VISHWAVIDYALAYA,

KHANPUR KALAN, SONIPAT, HARYANA.



## SYLLABUS OF DIPLOMA IN AYURVEDIC PHARMACY

### Scheme of Examination

FIRST YEAR			Teaching Hours/Week		Credit	Marks		Total Marks
S.No.	Course code	Subject	Theory	Practical		Theory	Practical	
<b>Semester -I</b>								
1.	DAP-101	Ayurveda Siddhant Evam Itihas	3	-	3	50	-	50
2.	DAP-103	Sharir Rachna & Kriya Vigyan	4	2	5	60	40	100
3.	DAP-105	Dravya Guna Vigyana-1	4	2	5	60	40	100
4.	DAP-107	Ras Shastra & Bhaishajya Kalpana-1	4	2	5	60	40	100
<b>Semester -II</b>								
5.	DAP-102	Ras Shastra & Bhaishajya Kalpana-2	4	2	5	60	40	100
6.	DAP-104	Agad Tantra & Vyavhar Ayurveda	4	2	5	60	40	100
7.	DAP-106	Swasthavritta & Yoga	4	2	5	60	40	100
8.	DAP-108	Dravya Guna Vigyana-2	4	2	5	60	40	100
<b>SECOND YEAR</b>								
<b>Semester -III</b>								
9.	DAP-201	Ras Shastra & Bhaishajya Kalpana-3	4	2	5	60	40	100
10.	DAP-203	Vyadhi Nidana	4	2	5	60	40	100
11.	DAP-205	Vyadhi parichaya & Chikitsa	4	2	5	60	40	100
12.	DAP-207	Dispensing and Arrangement of Hospital	3	-	3	50 (evaluation by internal examiner only)		50
<b>Semester -IV</b>								
13.	DAP-202	Ras Shastra & Bhaishajya Kalpana-4	4	2	5	60	40	100
14.	DAP-204	Stri Prasuti & Bal Roga	4	2	5	60	40 (Internal examiner only)	100
15.	DAP-206	Shalya-Shalakyas	4	2	5	60	40 (Internal examiner only)	100
16.	DAP-208	Project work/credit course	3 hours per week		3	50 (evaluation by internal examiner only)		50

## Ayurveda Siddhant Evam Itihas

1. Definition of Ayurveda.
2. Ashtanga Ayurveda – The eight specialized branches of Ayurveda, concept and definition.
3. Ayurvediya Padarth Vigyan and its importance. Characteristics and classification of Padarth.
4. Dravya Vigyaniam. characteristics. number and classification of dravyas. The characteristics. guna and origin of Panchamahabhutas and their mutual micro-merging (Paraspara anupravesha).
5. Applied studies of dravyas from Ayurvedic perspective.
6. Guna Vigyaniam : characteristics and types of Gunas as gurvadi guna, adhyaumika guna, vaisheshika guna. saamanya guna.
7. Karma vigyaniam : characteristics and types of Karmas.
8. Saamanya, Vishesha, Samvaya Vigyaniam – characteristics and types.
9. Pramaan Vigyaniam: characteristics, importance and number of Pramaana. The Pramaanas accepted by Ayurveda–Pratyaksha. Anumaana. Aptopdesha and Yukti Pramaanas.
10. Karya, Karana Bhava : Description of Karya–Karana Bhava and various Vaadas. Features of cause (Kaarana) and types. Description of samavayi, asamavayi and nimitta karana in Ayurved. Satkaryavad. Asatkarya vada. Parmanu vada. Pilupaka. Pitharapaka etc.
11. Ayurvedavatarana : The Atreya (Charaka Samhita) and the Dhanvantari (Sushruta Samhita) traditions of Ayurveda.
12. Laghutrayi and Brihatrayi Parichaya.
13. Propagation of Ayurveda in foreign countries.

# Sharir Rachna & Kriya Vigyan

## Part A

1. Introduction to 'Sharira', 'Shadanga Sharira' Lakshana of Aatma and Mana. Properties of Mana and Vishaya. Gyanendriya and their adhisthana. and the knowledge of their vishya grahana. karmendriya and their work.
2. Asthi Vigyan: No. of Asthi (Classic and Modern view) their work and introduction. knowledge of formation of bone from Taruna ashthi (Cartilages)
3. Manspeshi Vigyana: Introduction of types of muscle. number of *Peshi*. Specially Trishirskha (Triceps). Anspindindiva (Deltoid). Nitamba Pindika (Glutial). Knowledge of Suchi Vedha. Knowledge of work of Peshi.
4. General Knowledge of Shira (Veins). Dhamniya (Arteries). Lasika Vahiniya (Lymphatics). Srotas. Karpristitika (Dorsa-Metacarpal). Madhyalahuka (Basalic). Dirghtana (Long Saphenous) Knowledge of sira suchivedha.
5. General knowledge of Twacha (skin) Kala (Membrane) Dhatu. Updhatu and Mala in classic and modern point of view.
6. Koshtang: Definition of Kostha. knowledge of structure and function of following Koshtanga – Hridya (Heart). Fuffusa (Lung). Yakrita (liver). Paliha (Spleen). Vrikka (Kidney). Vasti (Bladder). Amashaya (Stomach). Kshudrantra (Small intestine). Sthulantra (large intestine). Guda (Rectum). Agnashya (Pancrease). Knowledge of structure and function of male and female genital organs. No. of Aashya (Sapta and Astha Aashya).

## Part B

1. Nistrotta Granthiya (Endocrinal gland). General introduction of location of Nistrotta Granthiya. General Introduction of their secretion and their effects.
2. Nadi Tantra (Nervous System): Mastishka (Brain). Sushumna (Spinal cord). Knowledge of the cranial nerves.
3. Dosha Vijyanyam: Etymology of dosha. Number and their name. properties (Guna). normal function. Type and function of doshas on the basis of their location (Sthanabheda).
4. Dhatu Vigyanyam: Etymology. name. number. functions in the body. vridhhi- kshaya lakshana.

5. Mala Vigyaniam: Etymology, name, number, functions in the body, vriddhi- kshaya lakshana.
6. Oja: samanya rupa, types, brief introduction of immunity.
7. Anna Vighatana (Digestive System), Rakta Sancharan (Circulation of blood), Swashan Kriya (Respiration) knowledge of pravriti of mala even mutra (Excretory System).

### PRACTICAL

1. Identification of various body parts, organs and bones by study of models and charts.
2. Normal physiological process of body.
3. Instruments used in physiology lab with general knowledge of following:-
  - a. Study of microscope
  - b. Hb estimation by Sahli's method
  - c. Preparation & staining of blood smear
  - d. Packed cell volume
  - e. ESR
  - f. pH & specific gravity of Urine
  - g. To check sugar in Urine
  - h. To check albumin in Urine
  - i. To check bile salts in Urine

## Dravya Guna Vigyana-1

### Theory

1. Definition of Dravyaguna Vigyan and its importance.
2. Definition of Dravya and its importance.
3. Definition of Rasa. types and Panchbhautic composition of Rasa.
4. Definition. types and importance of Gunas. Vipaka. Veerya. Prabhav.
5. Introduction to Karmas (actions):- Deepan. Paachan. Graahi. stambhan. Bhedan. Rechan, Anuloman, Sramsana. Samshodhana. Rasayana, Vajikarana. Vyavai. Madakari. Vikasi.
6. Introduction to Mishrak Varga: Triphala. Madhururiphala. Sugandhatriphala. Swalpatriphala. Trijata. Chaturjata. Trikatu. Trimada. Panchkola, Shadushan. Panchawalkala. Chaturushana. Trikantaka. Panchapallav. Laghu Panchamool. Brihad Panchmoola. Vallipanchmoola. Trinpanchmoola. Ashtavarga.
7. Classification of Drugs according to Ayurvedic principles.
8. Collection, storage & preservation of drugs.

### Practical

1. Method of Identification of Drugs.
2. Visit to herbal garden
3. Identification of drugs mentioned in Mishrak varga

## Ras Shastra & Bhaishajya Kalpana-1

1. Development of Ayurvediya Rasashastra & Bhaishajya Kalpana
2. Definition of Rasa Shastra, importance in Ayurveda and brief history of Rasa Shastra, its relevance in vedic era, Ayurvedic literature and in Modern science.
3. Define (Paribhasha) Shodhana, Sanskar, Marana, Satvapatan, Nirvap, Avap, Dhanvantaribhag, Rudrabhag, kajjali, Patanapishiti, Dhanyabhrak, Bubhukshitparad, Hinguloth Parad.
4. Brief descriptions of Yantra, puta and Musha, Yantra – Dolayantra, Vidyadhar yantra, Taptakhalva yantra.
5. Musha – Samanya, Vajra, Vajradravani, Yog, Gar, Var, Varnya, Ropya, Bid, Gostani, Vrintaak, Gol, Malla, Pakva, Maha, Manduk, Musha.
6. Classification of drugs in Rasa Shastra.
7. Parada – Its synonyms, origin, its impurities, gatis, Samanya – Vishesh Shodhana, Shudh parad lakshana paradiya Kalpnana – Kajjali, Parpati, Pottali, Kupipakva rasayana and Kharliya Rasayana.
8. Maharasas – their synonyms, identification, types impurities shodhana, Marana, therapeutic doses and compound formulations, side effects and its antidote.
9. Aushadh Yogas: Their composition, properties and uses
  1. Panchamrit Parpati 2. Shweta Parpati 3. .Abragarbha pottali 4. Hemagarbha pottali
  5. Rasa Sindur 6. Mallasindur 7. Makardhwaj 8. Suvarnabang
  9. Saptamrita loha 10 .Kamadudha rasa

### Practical

1. Identification of instruments & equipments used in Pharmacy
2. Preparation of at least 20 yogas (formulations) from Rasa Shastra including purification processes.



## Semester -2

### Ras Shastra & Bhaishajya Kalpana-2

1. Definition of Bhaishaja – Bhaishjya kalapna and its brief history in vedas Ayurvedic samhitas and in samgrah period.
2. Paribhashas – Deepana. Paachana. Rasayana. Vajikarna. Stambhana. Sransana. Virechak. Vamana.
3. Definition of Mana. Mana Gyan Paryojana. Drugs on the basis of present measurement (Mana). Knowledge of quantity (Matra). Knowledge of storage and preservation of drugs.
4. Panchavidha kashaya kalpna. their method of preparation and their uses.
5. Manufacturing process of: Manda. Peya. Vilepi. Odan. Kritakrit yush. Shaka. Phala. Mansa. Rash. Kshirpaka. Kanji. Udak Nirmana Shadangpaniya. Yavodak. Mantha. Parmathya. Tandulodak. Tarpana. Karshara. Veshwar. Rason. Takrabhed. Panak. Karchika. Saktu.
6. Preparation methods of Avaleha Kalpana. Churna. Vati. Guggula Kalpana.
7. Aushadh Yoga: Their composition. properties and uses.

- 1 .Dashamool Kwath 2 .Phalatrikadi Kwath 3. Pathyadi Kwath 4. Rasnasaptak Kwath
5. Vasavaleha 6 .Chyavanaprashavaleha 7. .Sitopaladi Churna 8 .Talisaadi Churna
9. Dashanasamskar Churna 10 .Lavanbhaskar Churna 11. Triphala Guggulu
- 12 .Abha Guggulu 13.Yograj Guggulu 14 .Bala Chaturbhadra Churna

#### Practical

1. Preparation of at least 20 yogas (formulations) from Rasa Shastra and Bhaishjya Kalpana. including purification processes.
2. Visit to nearby pharmacies.

## Agad Tantra & Vyavhar Ayurveda

1. Definition of poison (Visha). Ten properties of poison and their effect on body (Sharira).
2. Describe Sthavar visha, Jangam Visha & Dushi Visha. Symptoms of poison and treatment of snake, scorpion and Honey bee etc.
3. Treatment and symptoms of overdose or poisoning by Parada, Sankhiya, Ahiphen, Dhatura, Gunja, Bhanga, Vatsnabha and Jaiphal.
4. Identification of poisonous water, air, soil, food and the method of prevention of their poisoning.
5. Vishadata Lakshana.
6. Causes of death, living and identification of dead body.
7. General description of Vidhivaidhak and vyaharayurveda.
8. Responsibility of court and jurisprudence.

### PRACTICAL

1. Minimum one visit of students in Madhuvana of Karnal.
2. Identification of poisons & weapons.

## Swasthavritta & Yoga

1. Swasth purush lakshan. objective of Sharira raksha.
2. Adhithana of Roga: Sharira & Mana. Swasthaya raksha hetu. Knowledge of natural utility of Sharira and Mana.
3. Knowledge of Kala & Ritusamdhi. Trayopastambha. Ahara. Sawapana and Brahmacharya explanation and their effect on sharira.  
Ahara: Main components of Shaka-ahara. Masha ahara. Phala ahara and Dugdha ahara. their effect on body. Ahara samrakshana vidhi. knowledge of special rules of Ahara sevana.
4. Complete description of Dharniya & Adharniya Vega.
5. Bhumi. Vayu & Jala: Their effect on health. Purification method of Jala and Vayu. Lakshana of Shudha Jala.
6. Health education to adolescents and general knowledge related to STD. family planning and knowledge of personal hygiene of females.
7. Communicable Disease: Koch's/Tuberculosis, Romanika. Mashurika. Kustha. Vishuchika. Rohini. Pashan Gadarbha. Kasha. Knowledge of vatashleshmik Javara. General preventive & treatment guidelines. knowledge of Vaccination.
8. Occupational hazards/disease borne from them and their method of prevention.
9. Knowledge of vector borne diseases.
10. Knowledge of various national health programme.
11. Yoga Parichaya. yoga asana practice. knowledge of common yoga protocol.

### PRACTICAL

1. Practical demonstration of yogasana. pranayama and shat karma
2. Ahardravya parichaya
3. Water treatment methods
4. Visit to nearby health centre

## DRAVYAGUNA VIGYAN-2

1. Study of following drugs including Classification, Latin name, Family, Vernacular name, Synonyms, Botanical description, Varieties, Habitat, Chemical composition, Properties, Doshakarma, Actions, Uses, Parts used: Dosage, Formulations, Substitute and Adulteration.

1. Aragvadha 2. Ardraka 3. Apaamarga 4. Arjuna 5. Ashwagandha
6. Arka 7. Aamalaki 8. Ashok 9. Balaa 10. Bilva
11. Bhringraj 12. Dhatura 13. Ela 14. Gokshu. 15. Guduchi
16. Guggulu 17. Chandan 18. Chitrak 19. Haritaki 20. Haridra
21. Jyotishmati 22. Jambu 23. Jataamansi 24. Kutaja 25. Khadira
26. Bhumyamalki 27. Nirgundi 28. Nimba 29. Marich 30. Madanphala
31. Pareesha 32. Punarnava 33. Pippali 34. Rohitak 35. Rasana
36. Shirisha 37. Shatavari 38. Karanja 39. Kumari 40. Shalmali
41. Sudarshan 42. Tulsi 43. Tvak 44. Udumbar 45. Vansh
46. Vacha 47. Vibhitaki 48. Lodhra 49. Vidang 50. Yashtimadhu
51. Katuka 52. Vasa 53. Sarpagandha 54. Sunthi

2. Property, effect & uses of drugs of animal origin: Kasturi, Gorochan, praval, mukta, shambuka, shankh, varatika, mrigsringa

### Practical

1. Preparation of 25 herbarium sheets.
2. Visit to herbal garden
3. Identification of drugs mentioned in theory

## Semester-3

### Ras Shastra & Bhaishajya Kalpana-3

1. Introduction, identification, types, impurities, shodhana, marana, therapeutic dose, adverse effects and antidotes of Uparasas, Sadharan Rasa, Dhatu, Ratna, sudha-kshar-sikta varga.
2. Introduction, shodhana, therapeutic dose, antidotes, toxicity of visha-upavisha varga.
3. Preparation of several Ayurvedic formulations like Bhasma, Sindooras, Netrabindu, Varti & Rasa preparations.
4. Aushadha Yoga: Manufacturing of Aushadhi, their characteristics and uses according to disease.

Jwara: Mritunjaya rasa, Tribhuvankirti rasa, Sanjivni vati.

Atisara: Gangadhar rasa, Karpura rasa

Grahini: Loknath rasa, Rasakarpura

Arasha (Piles): Arsha kuthar rasa, Kankayana vati

Pandu: Punarnava mandur

Rakta Vikara: Rakta pittantak rasa

Rajyayaksha: Vasantimala rasa

Kash: Chandramrut rasa

Hikka: Mayurpicha Bhasma

Shula: Shulgajkesari rasa

Haridya roga: Haridyarnav rasa, Naga arjunabhra, Chandrodaya

Sheet pitta: Lilavilas rasa

Amal pitta: Sutshekhar rasa

Aama vata: Aamvatari rasa

Gandmala: Gandmala Kandan rasa

Firang: Sudhanidi rasa

Prameh: Premhari rasa, Swaranvageshwar rasa

Udar roga: Narach rasa

Vaat vyadhi: Vaatachintamani

Apasmara: Smiritisagar rasa

Unmada: Unmandgaj Keshari

Pratishyay: Lakshmvilas, Mahalakshmi vilas rasa, Nardiya Lakshmvilas rasa

#### Practical:

1. Preparation of at least 20 yoga (Formulations) of different kalpanas.

## Vyadhi Nidana

1. General knowledge of Nidana Panchaka. Explanation of stages of kriyakal.
2. Knowledge of Vyadhi Gyanaupaya. Ashtavidha Pariksha. Sadhyasadhya Lakshana. Upradrava (complications). Arishta and their importance in treatment. General description and importance of Nidana - panchaka
3. Definition and importance of Roga Vignan and Vikruti Vignan
4. Collection and laboratory examination of patient Mala-Mutra. Rakta. Nishtivana. Jalodar dravya, Pleural fluid and Puya (Pus)
5. Temperature, pulse and blood pressure measurement, general examination of mouth, nose, throat, eyes and ears.
6. Definition. General discussion and types of Vyadhi (disease).
7. Trividha Rogi pariksha vidhi (Darshana etc. three types of Methodology of investigating a patient).
8. Signs, Symptoms and diseases of ojovyapata, ojokshaya and ojochyuti.
9. Vyadhikshamatva (Immunity).
10. Astha mahagada and astha nindita

## PRACTICAL

1. Sample collection methods & techniques.
2. Knowledge of instruments used in lab.
3. BP measurement
4. Hb estimation. TLC. DLC. ESR
5. Estimation of sugar, bile pigments, albumin in urine
6. Routine & microscopic urine examination.

## Vyadhi parichaya & Chikitsa

1. Clinical importance of Chikitsa Chatuspada, Tridosha, Dhatu, Mala, Siddhanta.
2. The importance of srotasa in the production of diseases.
3. The determination of the disorders of srotasa.
4. The causes and signs and symptoms of the vitiation of srotasa.
5. Definition. General discussion and types of Vyadhi (disease).
6. General description of Janapadodhvasaka vyadhi (Epidemics) and Aupsargika Roga and Sansargaja Roga (Infectious and communicable diseases).
7. Objectives of Chikitsa. Knowledge of Chikitsa Chatuspad & Panchkarma.
8. General Diagnostic knowledge of vividh javara. Astha javara. Vishama javara. Fufushdah javara. Vatasleshmil javara. Aantrik javara. Atisara. Pravahika. Grahini. Pandu. Kamla. Krimi roga. Raktpitta. Rajyakshma. Kasa. Hikka. Shula. Gulma. Hridya roga, Medo roga, Shitpitta, Amalpitta, Aamvata. Vatarakta. Gandmala. Puymeh, Firang. Prameh, Udar roga, Ashmari, Mutrakricha and their general line of treatment. knowledge of Pathya-Aapthya and drug treatment.
9. Knowledge/Introduction to Pathya-Apathya and anupan according to various diseases.
10. General knowledge of emergency and first aid.
11. Panchkarma: General knowledge of Snehana, Svedana, Vasti, Vaman, Virechan, Niruh, Anvashana, Nashya.

### PRACTICAL

Practical knowledge of panchkarma procedures.

First aid & emergency care.

## Dispensing and Arrangement of Hospital

1. Management of O.P.D. Dispensary room and its hygiene.
2. Maintain the hygiene of O.T. Medicine department and all the medicine with their name specially toxic medicine.
3. Assisting the doctor during patient examination. maintenance of code of conduct in O.P.D and O.P.D. management of patient.
4. Knowledge of Abbreviation used in O.P.D. AD. OD. TDS. BD and knowledge of Aushadh sevana kala.
5. Knowledge of maintenance of daily hospital record register.
6. Management of store and inventory registration of patient on the basis of their clinical complaints. Directions given to patient on the basis of prescription.
7. Care of I.P.D. patient and ward management including cleanliness of patient bed.
8. Concept of sterilization and its importance in hospital.



Semester-4  
Ras Shastra & Bhaishajya Kalpana-4

1. Preparatory methods of Sneha Kalpana and Sandhan Kalpana.
2. Definition and application of Bhojana, Bhavana, Samskara, Mardana.
3. Preparatory methods of ksheer pak, Satva, Ghana Kalpana, Kshar-lavan Nirmana: Malhar Kalpana.
4. Preparation of several Ayurvedic formulations : Asavas, Arishtha, Taila, Ghrita, etc.
5. Aushadha Yogas: Methods of preparation, properties, uses.
  1. Panchatikta Ghrita    2. Jatyadi Ghrita    3. Triphala Ghrita    4. Pind tail
  5. Jatyadi taila    6. Panchagun tail    7. Drakshasava    8. Kutajarishtha
  9. Bhringraj tail    10. Shadbindu tail    11. Vishgarbha tail    12. Shankha vati
  13. Khadiradi vati    14. Lavangadi vati
6. Knowledge of Drugs & Cosmetics Act, quality assurance & GMP, API, AFI
7. Appropriate knowledge of storage and preservation of all types of manufacture drugs.

## Stri Prasuti evam Bal Roga

1. General knowledge of shukra and shonit of Garbhadhan.
2. Rajo vigyana-ritu chakra, ritu kala- menstrual cycle.
3. Symptoms and basic management of diseases occurring during pregnancy.
4. Brief introductory Knowledge about the three stages of labour.
5. Post partum – general knowledge of placental retention (Makkashula Atirakatshaya), nabhinal Chedana, aprapatana and sisu paricharya (natal care), stana granthi & stana vidradhi
6. Diagnosis of Stanshoth, Garbhashya shoth, Raktapradar and Garbhashyabransh Stanvidradhi.
7. Tetanus, Mastiskavarana pradha (Meningitis), Atisara (Diarrhea), Kukur kas (Whooping cough), Kanthshalushoth (Tonsilitis), Rohini (Diphtheria), General knowledge, treatment, physiology & preventive measure of polio myelitis.
8. Navjat shishu paricharya, kamala (jaundice), mridbhaskshan janya pandu, Bone deformities, dantodbhav.
9. Atyayika balroga prabandhan.
10. Importance of breast feeding and vaccination.
11. Aushadh matra nirdharan (drug dose according to age, weight & drug preparation)
12. Kuposhan janya vyadhi- samanya parichaya, vitamins
13. Knowledge of National programmes related to RCH

### PRACTICAL

Knowledge of various equipments & instruments used in labour room, photo therapy unit, warmer, panchkarma procedures used in prasuti & bal rog.

Useful points of granth Sushruth Sharir Sthana Stri roga vigyana.

## Shalya-Shalakyā

1. Definition of Shalya, types and their niruhan-upaya. Yajurved and Shastra introduction. Sanrakshana, Visankramana and Knowledge of their use. type of vranbandhan.
2. Sadyavrana & dushtavrana: Definition of wound. aam-pachyman-paripakva wound knowledge. signs of dustvarna. bed sores (Shayyavarna). Types of wound and Basic knowledge of wound management.
3. Practical knowledge of Jalokacharna and Rakta mokshana.
4. Practical knowledge of ashtavidha Shastra karma.
5. General Diagnostic knowledge of arsh. bhagandhar. vidradhi. Shula. Gulma. Ashmari.
6. Symptoms & first aid of emergency haemorrhage (Rakatshrav). Fracture (Bhagan) and Shock (Stabdhatta). electric burn (Vidyut Pravah).
7. Symptoms and primary treatment of poisonous gas released from factories: Carbondioxide. Carbonmonoxide and sulphurdioxide.
8. Symptoms and treatment line of consuming vishdravya keetnashak Aushada (Pesticide). Napthelene balls. and chemical fertilizers.
9. Etiology and treatment of Anadrta (dehydration).
10. Brief knowledge of Dantutpatana.
11. Basic knowledge of ear disease & method of examination- otitis
12. General anatomy of eye & Basic Knowledge of general eye disorders and basic treatment & first aid care-blepharitis. conjunctivitis, pterygium. keratitis. contagious diseases. refractive errors.
13. Mukh Roga: anatomy of tongue. examination of tongue and treatment knowledge of Jihva (Tongue). Kanth. Upjihivika.
14. Examination of Nasa (Nose): Nasal disease (their shalya and treatment knowledge) and shalya nirharana knowledge of Nasa & karma.

## PRACTICAL

Instruments of shalya & shalakyā used in opd & OT.

Administration of first aid. wound management

Methods, positions & techniques employed for patient examination.

Refraction methods utilized in shalakyā.

