

## Roga Nidanam

### 1. Terms & periodical exams

It is proposed to divide the 1-½ years of professional course into three terms as envisaged by DAME. The three terms, study leave & periodical exams can be as follows:

Term 1	: Classes for 6 months, including examination & result
Term 2	: Classes for 6 months, including examination & result
Term 3	: Classes for 4 months including model examination & result.
	Study leave + University Exam for 2 months
	University Examination process 2 months
Total	: 18 months

- Terminal exams should include viva.
- Examinations should be completed within the period of 18 months as stipulated by CCIM
- Third terminal exam may be conducted as model exam.

### 2. Rearrangement of Theory for three terms

The subject roga vijnana consist of Roga vijnana paper 1, paper 2 & Charakasamhitha Poorvardham.

Topics-paper 1	Topics-paper 2	Charakasamhitha
Term 1	Syllabus No 1 to 8	Syllabus No - 1,7,9 Soothram (chapters)1 to 10
	13 to 17	Jwaram, Amavatham (Relevant to II Prof.)
	66 to 69	Sandhigathavatham
	78 to 80	Vathakandakam
		Avarana vatham, Akshepakam
		Sthambhakam, Arditham, Gridhrasy
		Pakwasayagatha vatham
		Amasayagatha vatham

		Indriyagatha vatham
		Dhathugatha vatham
		Sarvangasraya vatham
		Jihwasthambham
		Pakshaghatam, Apabahukam
		Viswachi, Khanjam, Pangu
		Kalayakhanjam, Khalwi
		Urushtambham, Padaharsham
		Padadaham, Manyasthambham
		Sira graham, Mookam, Minminam
		Gadgadam, Vepadhu.
Term 2	Syllabus No	Syllabus No - 2,3,4,5,12
		Soothram (chapters) 11 to 20
	25 to 31	Rektha pitham, Pandu Vimana sthanam
	56 to 65	Kamala, Kumbhakamala (all chapters)
		Haleemakam, Vatharektham
		Kroshtukaseersham
		Seethapitham, Udardam
		Koddam, Seethala, Masoorika
		Romanthika, Yakruth vikaram
		Pleeha vikaram, Snayukam,
		Sleepadam, Phirangam
		Upadamsam, Sodham,
		Kasam,Swasam,Rajayekshma
		Hikka, Hrit roga
		Hrit soola, Parswa soola
		Urasthoyam (Pleuresy)
		Hridayabhighatam (Heart attack)
		Swarasadam,
		Athisaram, Pravahika, Vishoochika
		Vilambika, Grahani, Trishna
		Chardi, Agnimandyam, Ajeernam
		Anaham, Adhmanam, Adopam
		Amlapitham, Soola, Udara roga
		Arochakam, Gulmam

Term 3	Syllabus No	Kushtam, Swithram, Visarpam Syllabus No - 6,8,10,11,13 Soothram (chapters) Prameham, Medo rogam 21 to 30 Moorcha, Sanyasam, Apasmaram Indriya sthanam Unmadam, Athathwabhinivesam (all chapters) Moothrakrichram, Mootraghatham Asmari Vitamin deficiency diseases Vyadhikshamathwam
	9 to 12	
	18 to 24	
	32 to 55	
	70 to 77	

8 chapters of Charakasamhitha Nidana sthanam should be taught along with diseases in paper 2 and need not be delt separately.

### 3. Arrangement of Lab investigations & Clinical training for three terms

#### a. Lab investigations

1. Blood – Collection of blood, T.C, D.C, Hb%, ESR, Cholesterol, RBS, RA factor, ASO titre, S. Bilirubin, S. Creatinine, HbsAg, Elisa, Blood Urea, Uric acid, Platelet count, LFT, Peripheral smear, PCV, BUN, CRP, Bleeding time, Clotting time, T3, T4, TSH, Blood gas studies. Bio chemical examinations like serum electrolytes, Sodium, Potassium, HCO<sub>3</sub>, Ca, Mg, Alkaline Phosphatase, Acid phosphates. Examination of blood films for parasites as malarial parasites. I term (8 hours)
2. Urine – Physical examination, Chemical examinations like Sugar, Acetone, Albumin, Bile salts, Bile pigments, Occult blood & Microscopical examinations.
3. Faeces – Routine examinations, Parasites, Occult blood.
4. Respiratory – Pulmonary function test, Tidal volume, vital capacity, residual volume, forced vital capacity, peak expiratory flow rate, blood gas studies, sputum – AFB  
2 to 4 II term (6 hours)
5. Semen analysis
6. CSF examination (theory)

7. Nerve conduction studies (theory)
8. ECG, EMG, EEG, CT Scan, MRI Scan (theory)
9. X-ray –Bone & soft tissues (theory & practical)
10. Biopsy – Skin & FNAC

5 to 10 - III term (6 hours)

(Hormonal and immunological assays may be considered as preferable)

b. Clinical training

The following topics may be covered in clinical training in three terms. Students must be trained to examine a patient from the Ayurvedic point of view and modern point of view. A guideline for roga – rogi pareeksha and system examination is provided later on.

Term 1 : General case taking, CNS, GIT, Geneto-Urinary system

Term 2 : Respiratory, Cardiovascular, Locomotor, Integumentary

Term 3 : Psychiatry, Bedside & case presentations

**4. Distribution of teaching hours (theory & practical)**

a. Theory

Total hours for teaching Roga Nidana is 280hrs as per CCIM (180hrs for paper 1 & 2, 100hrs for Charaka samhitha)

Subjects in each paper should be covered in 30hrs in each term.

Hence 6hrs per week should be allotted (2hrs for each paper)

b. Practical

Total hours for clinical / lab training is 90hrs as per CCIM.

This is quite inadequate. In a week atleast 3 days should be ear marked for practical training. Posting must be from 9am to 11am (2hrs). So it is expected that atleast 96hrs will be utilized for clinical training in each term. To ensure this a uniform timetable should be implemented.

Practicals should be completed within 1<sup>st</sup> two terms.

Clinical record work should contain a minimum of 20 different cases in which atleast 2 cases of psychiatry should be included.

Record should be written in English.

Clinical posting is not uniform in all the colleges in Kerala. In some colleges 2hrs (9am to 11am) per 3 days per week is allotted. Where as in some other colleges students are divided into various groups and posted under different departments for months together. This disparity should be avoided.

1. In one week 3 days in continuous (2hrs each – 9am to 11 am) will be utilized for clinical training.
2. All the students in one profession should be posted under Roga Vijnana at a time.
3. These students must be divided into various groups and posted to out patient department, male ward, female ward, lab etc. and will be rotated.

#### **5. Distribution of marks (theory & practical)**

Mark distribution for theory and practical is mentioned in syllabus prescribed by CCIM. Anyway for better clarity the following pattern must be followed.

a.	Theory	Roga Vijnana paper 1	-	100 marks
		Roga Vijnana paper 2	-	100 marks
		Charaka samhitha Poorvardham	-	100 marks
b.	Practicals	Daily work	-	10 marks
		Record of Lab & Clinical work	-	10 marks
		Lab practicals		
		1. Writing & procedure	-	10 marks
		2. Oral in lab	-	10 marks
		Instruments (Spotting)	-	10 marks
		Bed side		
		1. Case sheet	-	10 marks
		2. Bed side oral	-	15 marks
		Oral (Viva)	-	25 marks

Total – 100 marks

Marks should be recorded by the internal & external examiners separately as per the model mark sheet given in the next page.

## 6. Restructuring of question paper

The present system of questions with equal marks (20 questions with 5 marks each) in case of theory examinations should be changed. This system is an out dated one and is not helpful in assessing a student exactly. So the following pattern is recommended in theory examinations.

Objective type questions (1 mark each)	- 10	10
Short answer questions (2 marks each)	- 10	20
Short answer questions (5 marks each)	- 10	50
Essay questions (10 marks each)	- 02	20
Total		100

### Guidelines

1. Determine the learning outcome to be measured and prepare questions appropriately.
2. If a student is expected to answer a question from a particular text, it should be specified in the question paper itself.
3. Ayurvedic & modern questions should be asked separately
4. 30% of questions should be asked from modern in paper 1 & 2.
5. Write out questions carefully using precise language. The questions should have the same meaning to all the students.
6. Start questions with such phrases as "explain and why", "present arguments for and against", "give reasons for", etc. Avoid questions starting with "give an account", "describe", "discuss in detail" and the like.
7. Break the questions into components.
8. Allot marks to each component.

9. Question paper should be in English.
10. Technical words should be written in Devanagari lipi itself in brackets wherever necessary.

**Examples for various objective types of questions**

1. According to Acharya Charaka Gridrasi is divided into —— types.  
a.2                      b.3                      c.6                      d.7
2. Butterfly rashes are observed in \_\_\_\_\_
3. Poorvaroopam manifest during the sthanasamsraya stage.  
(State True/ False)
4. Match the following:  
Pakshaghata                                      Ekangarogam  
Arditam    Ekangavatam  
Vatashonitam                                      Adyavatam  
Urusthambham                                      Adyarogam  
Ekayamam

**7. Model question paper**

Reg.No.....

Name.....

**SECOND PROFESSIONAL AYURVEDACHARYA (B.A.M.S) DEGREE  
EXAMINATION, SEPTEMBER/OCTOBER 2004**

**ROGAVIJNAN AND VIKRUTI VIJNAN – II**

Time : Three Hours

Maximum : 100 Marks

Parts A and B should be written in separate answer books

**PART – A**

Marks

1.	Explain the sadya sadyata of pakshagata	2
2.	List the types of Kamala according to charaka samhita	2
3.	List shadrupa of Rajyakshma	2
4.	Define Apasmara	2
5.	List the Nidana of Pandu according to Madhava Nidana	2
6.	Explain the samprapthi of Jwara according to Ashtanga Sangraha	5
7.	List the cause and symptoms of Abhigataja sobjam	5
8.	List the poorva rupa of kushta	5
9.	Explain medoroga according to Madhavanidana	5
10.	List the cause and symptoms of Madhumeha	5
11.	Describe vyadhikshamatva	
	a) Define vyadhi kshamatva	1
	b) List the symptoms of Ojovypat, Ojovisramsas and Ojakshaya according to Charaka Samhita	3
	c) List Balavidhi kara bhava	3
	d) What is an antigen and antibody	2
	e) List two diseases with immune deficiency	1
<b>PART-B</b>		
1.	List the symptoms of Kaphavruta vata	2
2.	List the cause of Brain attack	2
3.	List pramehapitaka according to charakasamhita	2
4.	Explain khallwi	2
5.	Define vishamajwara	2
6.	Explain the samprapthi of vatarakta	5
7.	Explain krimija hridroga	5
8.	Explain the samprapthi of Atisara	5
9.	Explain the symptoms of obstructive jaundice and list the	







7. Inflammatory joint diseases – Rheumatoid arthritis, Psoriatic arthritis, Juvenile arthritis, Infective arthritis, SLE, Gouty arthritis, Reiter's disease.
8. Allergy – Inflammation, cellular response, cellular players, Urticaria.
9. Filariasis – Lymphatic filariasis: Pathology, clinical features and investigations
10. Sexually transmitted diseases – Approach to the patient with suspected STD, Syphilis – classification, Neuro syphilis, and investigations. Gonorrhoea – clinical features and investigations, prognosis. Non-gonococcal infection, Herpes simplex, Hepatitis.
11. Electrolytes & acid base disorders – Physiology of electrolytes, water & acid base, normal distribution of water & electrolytes, regulation of electrolytes, regulation of water excretion, maintenance of normal acid base balance, major electrolytes & acid base disorders.
12. Oedema – Classification (elaborate each one), differential diagnosis
13. Diseases of lower air ways – Acute & chronic Bronchitis, Bronchiectasis, Emphysema, Pulmonary collapse, Pulmonary fibrosis
14. Asthma – Bronchial asthma – Atopic & non-atopic, clinical features, and their investigations.
15. Hiccup – Causes, local causes, metabolic causes, diaphragmatic flutter.
16. Cardiac disorders – Heart failure, congenital heart disease, chronic valvular disease, Ischaemic heart disease, Infective endocarditis, and Systemic hypertension.
17. Pulmonary disorders – Pneumonia, Pleurisy, Lung abscess.
18. Pulmonary Tuberculosis – Aetiology, clinical features, diagnosis, primary Pulmonary TB, extra Pulmonary TB, Miliary TB.
19. Laryngeal disorders – Chronic laryngitis, Laryngeal paralysis, Hysterical hoarseness & Aponia.
20. Diarrhoea – Acute & chronic diarrhoea, Malabsorption diarrhoea

21. Irritable bowel syndrome (IBS), Inflammatory bowel disease
22. Dysentery, Food poisoning
23. Vomiting – Causes, and their investigations.
24. Gastro esophageal reflux disease (GORD) – Gastritis, Peptic ulcer
25. Ascitis – Pathogenesis, clinical features, and their investigations.
26. Motility disorders – Colon & Rectum, Diverticulitis
27. Diabetes Mellitus – Aetiology, Patho physiology, clinical features & and their investigations. Diabetes Incipidus
28. Metabolic disorders – Lipo protein disorders, hyper lipidemias, Hypo lipo protienamias.
29. Degenerative joint disorders - Osteo Arthritis – Etiology, pathogenesis. Nodal OA; Errosive OA and their investigations.
30. Coma – Causes, classifications, assessment of conscious level; Syncope – Common causes, Differential diagnosis. Neurogenic syncope; Cardiac Syncope.
31. Epilepsy – Types, classification, Causes, and their investigations. Seizures and its pathophysiology.
32. Mania – Causes, symptoms, Hamilton’s diagnostic criteria.
33. Depression - Causes, symptoms, Hamilton’s diagnostic criteria.
34. Psychosomatic disorders – Mechanism, Causes, symptoms and general signs.
35. Parkinson’s disease – Aetiology Pathology Clinical features and investigations.
36. Disorders of spine and spinal cord – Compression of spinal cord with clinical features, causes of spinal cord compression, signs and symptoms, investigations; Cervical spondylosis and radiculopathy, mylopathy; Lumbar disc herniation, lumbar canal stenosis, Syringomyelia.
37. Cerebrovascular accidents (CVA) – Embolism, Thrombosis,

Hemorrhage – Aetiology, Pathology, Clinical features, and Investigations. Transient Ischaemic attacks (TIA)

38. AIDS
39. Concepts of Infections – Patterns of infections, Microorganism – Host Interaction, Major manifestations of Infections, Bacteremia and Septicemia.
40. Viral Infections – Classification; Measles, Herpes – Zoster and Simplex.
41. Bacterial Infections – Staphylococcus, Salmonella.
42. Helminths Infections – Classifications; *Tenia saginatum*, *Tenia solium*, *Entrobios vermicularis*, *Ascaris lumbricoids*, *Trichuris trichuria*, *Ancylostomiasis*.
43. Oncology – Incidence, Age, Diagnosis, Aetiology, Tumor markers, Clinical features, assessment of tumors by staging.
44. Hypothalamus pituitary gland Disorders – Clinical syndromes associated with hypo and hyper activity, Investigations.
45. Thyroid gland - Clinical syndromes associated with hypo and hyper activity, Investigations; Grave's disease.
46. Parathyroid - Clinical syndromes associated with hypo and hyper activity; Hyper and hypo calcaemias; Investigations.
47. Adrenal gland - Clinical syndromes associated with hypo and hyper activity, Investigations.
48. Reproduction – Hypogonadism, Erectile impotence, Male infertility, Cryptorchidism, Hirsutism.
49. Peripheral vascular disorders – TAO
50. Demyelinating diseases - Guillanbarry Syndrome.

## **9. TOPICS for paper PRESENTATION (Ayurveda)**

### **Charakam**

1. Pancha panchakas
2. Pada chatushtayas

3. Thridaya roga margas
4. Throyopasthambhas
5. Threeni ayathanas
6. Vathakalakaleeyam
7. Doshagathi
8. Sankhya samprapthi of rogas as per asthodariya
9. Sthoulya and karsya
10. Shadvidha vpakramas
11. Sanndtharpana/apatarpanaja vikaras
12. Nanathmaja and samanya vyadhis
13. Mada, moorcha and saniyas
14. Dhathu pradoshaja vyadhis
15. Sakha – koshtagathi of doshas
16. Janapadodwaska vyadhis
17. Thrivida pareeksha
18. Srotho dushti nidanas
19. Arishta lakshnas
20. Dasavidha pareekshya and pareeksha

**R.v.I**

21. Nidana panchakas
22. Vyadhi avasthas
23. Upadrava, vyadhisankara and nidanarthakara rogas
24. Vyadhikshamathwa
25. Ashtasthana pareeksha
26. Genetics in ayurveda

**R.v.II**

27. Importance of ama in jwaraulpatti

28. Vishamajwaras
29. Classification of jwaras
30. Doshagati in the disease raktapitta
31. Importance of pitta in the samprapti of panduroga
32. Ashyapakarsha gati in kamala
33. Symptom formation in doshik varieties of vathasonitham
34. Srotodushti in swasam
35. Kriyakala in premeha
36. Critical analysis of urine in different premehas
37. Upadravas in premeham
38. Soola
39. Ajeernam
40. Amlapittam
41. Differential diagnosis of udara
42. Dermatological manifestations in kushta
43. Concept of avarana (defention, mechanism, signs and symptoms, upadravam, sequels of avarana)
44. Sthanika manifestation of vathadosha
45. Diseases charecterised by abnormal movements
46. Differential diagnosis of sophia
47. Dhatuparinama in rajayakshma
48. Differential diagnosis of visarpa.

## 10 List of equipments

- |   |                     |
|---|---------------------|
| 1. Laryngeal mirror                     | 11. Ophthalmoscope  |
| 2. St. clains Thomson post nasal mirror | 12. Stethoscope     |
| 3. Tuning fork                          | 13. Magnifying lens |
| 4. Spiro meter                          | 14. Head mirror     |

- |                              |                          |
|------------------------------|--------------------------|
| 5. Dressing forceps          | 15. Knee hammer          |
| 6. Peak flow meter           | 16. Thermometer          |
| 7. Thudicum's nasal speculum | 17. Tongue depressor     |
| 8. Siegle's speculum         | 18. Relevent X ray films |
| 9. Gonio meter               | 19. E.C.G Machine        |
| 10. B.P Apparatus            | 20. Autoscope            |

**A short note about the above instruments and its utility will be provided.**

### **Model Case Sheet**

Case No.

Name :

O.P.D. No. :

Age :

I.P.D. No. :

Sex :

Ward :

Religion :

Bed No. :

Education :

DOA :

Occupation :

DOD :

Economic Status:

Marital Status :

Address :

Nearest Relative/Informant :

Presenting Complaints:

Duration :

History of presenting complaints:



History of past illness:

Personal History:

Food	Micturition
Habit	Sleep
Bowel	Addiction
Allergy	Exercise
Appetite:	Menstrual

Family History

Familial  
Hereditary

General Examination

Stature	Respiration
Nutrition	Built
Pulse Rate	Blood Pressure
Temperature	

Sara Pareeksha

Ashtasthana Pareeksha

Nadi	Sabdam
Moothram	Sparsam
Malam	Drik
Jihwa	Akrithi

Physical Examination

Head  
Neck

Upper limbs

Thorax

Abdomen

Lower Limbs

Systemic Examination :

Interpretation:

Sroto Pareeksha :

Srotas Involved	Symptoms	Type of Srotodushti
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Dasavidha pareeksha

1. Dushyam

Dosham

Vatam  
Kapham

Pittam

Dhatu/Upadhathu

Swedam

Mootram

Purisham

2. Desha

Bhoomi

Deham

3. Balam :

Roga

Rogi

4. Kalam

Ritu

Vyadhyavastha

5. Analam :

6. Prakrithi

7. Vayah

8. Satvam

9. Satmyam

10. Aharam

Abhyavaharana Shakti

Jarana Shakti

Provisional Diagnosis

Investigations

Required

Reports:

Rogavijnanopayas:

Nidanam

Samprapti

Poorva roopa

Roopa

Upashaya

Anupashaya

Vyavachedaka Nidanam (Differential Diagnosis)

Roga Nirnayam (Final Diagnosis)

Dosha predominance

Type

Upadravam (Complications)

Sadhyasadhyatha (Prognosis)

Signature of Student

Tutor/Lecturer

## 12. Methods of evaluation

The present method for evaluation is inadequate. Various techniques have been adopted in other professional courses. An attempt has been made in following lines to adopt such techniques. OSCE & OSPE are the two methods that can be adapted to Ayurvedic academy.

Model 1 Clinics

Objective Structured Clinical Examination (OSCE)

Example. Station questions

1. Take history for the possible cause for joint pain
2. Palpate the Abdomen.
3. Examine the knee joint.
4. Measure BP
5. Exam the facial nerve.
6. Elicit Biceps jerk
7. Find out the dosha dominance.
8. Find out Agni. Give reason in one sentence.
9. List the essential investigations required for this patient.
10. What is the prognosis of this patient? Give reason in two sentences.

Biceps jerk – structured evaluation.

1. Made a rapport with the patient
2. The procedure was explained to the patient.
3. Uncovered the Biceps muscle with the consent of the patient.

4. Elbow semi flexed
5. Forearm semi pronated
6. Arm rest on the abdomen of the patient/Left hand of the student
7. Biceps tendon firmly pressed with thump.
8. Taped sharply over the thump.
9. Looked on the Biceps.
10. Procedure repeated on the other limb.
11. Showed friendly attitude after the procedure.

### **Model 2 - Practical**

#### Objective Structured Practical Examination (OSPE)

##### Performing station

1. Urine examination for sugar
2. Collection of blood
3. Preparation of a slide

##### Question station

1. X- Ray chest  
Exposure?  
Rotation?  
Cardiac diameter?
  2. Gonio meter  
Identify and mention its use?
  3. Histology  
Identify and list three features.
13. Instruction for writing clinical record