

Ordinance Governing

Fellowship Course in AYURVEDA ONCOLOGY

Syllabus/Curriculum

2025-27



Accredited 'A+' Grade by NAAC (3rd Cycle)
Placed in 'A' Category Grade by MoE (GoI)

KLE Academy of Higher Education & Research (Deemed-to-be-University)

[Declared as Deemed-to-be-University u/s 3 of the UGC Act, 1956 vide Government of India Notification
No. F.9 -19/2000-U.3 (A)]

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VISION

To be an outstanding University of excellence ever in pursuit of newer horizons to build self-reliant global citizens through assured quality educational programmes.

MISSION

- To promote sustainable development of Higher Education consistent with statutory and regulatory requirements.
- To plan and continuously provide necessary infrastructure & learning resources required for Quality education and innovations.
- To stimulate & to extend the frontiers of knowledge, through Faculty Development and Continuing Education Programmes.
- To make research a significant activity involving Staff, Students and Society.
- To promote Industry/Organization, Interaction/Collaborations with Regional / National / International bodies.
- To establish healthy systems for communication among all stakeholders for vision oriented growth.
- To fulfill the National Obligation through Rural Health Mission.

OBJECTIVES

The objectives are to realize the following at KAHER and its Constituent Institutions :

- To implement effectively programmes through creativity and innovation in teaching, learning and evaluation.
- To make existing programmes more career oriented through effective system of review and redesign of curriculum.
- To impart spirit of inquiry and scientific temperament among students through research oriented activities.
- To enhance reading and learning capabilities among faculty and students and inculcate sense of Life Long Learning.
- To promulgate process for effective continuous, objective oriented student performance evaluation.
- To ordinate periodic performance evaluation of the faculty.
- To incorporate themes to build values, civic responsibilities and sense of National Integrity.
- To ensure that the academic, career and personal counseling are in-built into the system of curriculum delivery.
- To strengthen, develop and implement staff students welfare programmes.
- To adopt and implement principles of participation, transparency and accountability in governance of academic and administrative activities.
- To constantly display sensitivity and respond to changing educational, social and community demands.
- To promote Public - Private Partnership.

INSIGNIA



The Emblem of the KAHER is a Philosophical statement in Symbolic.

The Emblem...

A close look at the emblem unveils a pillar, a symbol of the 'KAHER of Excellence' built on strong Values & Principles.

The Palm & the Seven Stars....

The Palm is the palm of the teacher - the hand that acts, promises and guides the students to reach for the Seven Stars...

The Seven Stars signify the 'Saptarishi Dnyanamandal', the Great Bear - a constellation made of seven stars in the sky, each signifying a particular Knowledge Domain. Our culture says: The true objective of human birth is to Master these Knowledge Domains.

The Seven Stars also represent the Saptarishis, the founders of KLE Society whose selfless service and intense desire for 'Dnyana Dasoha' laid the foundation for creating the knowledge kingdom called KLE Society.

Hence another significance of the raised Palm is our tribute to these great Souls for making this KAHER a possibility.

Empowering Professionals...

'Empowering Professionals', the inscription at the base of the Emblem conveys that our Organization with its strength, maturity & wisdom will forever strive to empower the student community to become globally competent professionals. It has been a guiding force for many student generations in the past, and will continue to inspire many forthcoming generations.



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Ref. No. KAHER/2025-26/D-26062523

24th June, 2025

NOTIFICATION

Sub: **Ordinance governing revision in the course curriculum of Fellowship in Ayur-Oncology under the Faculty of Ayurveda.**

Ref : Minutes of the 58th Academic Council meeting held on 25th March, 2025.

In exercise of the powers conferred under Rule 6 (9) of the Memorandum of Association of the KLE Academy of Higher Education and Research in its **58th Academic Council** meeting held on **24th June, 2025** has approved revision in the curriculum of **Fellowship in Ayur-Oncology** under the **Faculty of Ayurveda**, applicable to **2025** batch from the academic year **2025-26** onwards.

By Order


Dr. Mrs. Jyoti M. Nagamoti
Director, Academic Affairs


Prof. Dr. M.S. Ganachari
Registrar

To

The Dean,
Faculty of Ayurveda,
KAHER, BELAGAVI.

CC to :

1. The Special Officer to Hon, Vice-Chancellor, KAHER, Belagavi.
2. The Principal, KLE Shri B.M. Kankanwadi Ayurveda Mahavidyala, Belagavi.
3. The Controller of Examinations, KAHER, Belagavi.
4. The Director, Academic Affairs, KAHER, Belagavi.
4. The Director, IQAC, KAHER, Belagavi.

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Section I

Preamble:

Oncology is a branch of medicine that deals with the prevention, diagnosis and treatment of cancer. Oncology in Ayurveda is very much unexplored in spite of its great potential in preventing and treating cancer. Considering the widespread of cancer and limitations of conventional therapy there is a great need for an effective Complimentary and/or Alternative therapy. Also there is an increase in number of cancer survivors who requires effective therapies in prevention and rehabilitation.

Rasayu Cancer Clinic (RCC) is a unique venture located in Pune which offers comprehensive solutions to cancer patients. Rasayu Cancer Clinic is one of its kind cancer care centre which provides evidence based highly advanced therapies which are based on principles and fundamentals of Ayurveda. RCC has developed a comprehensive treatment protocol for treating cancer patients after series of in-vivo, in-vitro and clinical studies on fundamentals and pharmaceuticals of Ayurveda. This treatment protocol of Rasayu Cancer Clinic is found to be of immense help to cancer patients of all the stages. Thousands of cancer patients throughout the globe were treated successfully using this treatment protocol. Rasayu cancer clinic will be involved in providing lectures and also in hands on practical experience to students.

The present program aims in training Ayurveda practitioners in domain of Oncology and applications of Ayurveda in Oncology which translates as valuable human resources to society and serves the need of hour.

Section II

Goal of the Course:

To train Ayurveda doctors who will be capable to deliver best health services in specialized Ayurveda cancer therapy, treat patients efficiently with various malignancies and offer best guidance to cancer patients.

Section III

AIMS:

To develop skills amongst Ayurveda medical practitioners for exploring the potential of Ayurveda in treating cancer patients and also to develop skills for conducting scientific research in Ayurveda and integrative Oncology.

OBJECTIVES:

The course is designed with the following objectives which can be divided into sub headings as mentioned below. The student is expected to get trained in these domains by the time he completes the course.

- Knowledge (Cognitive domain)
- Skills (Psycho Motor Domain)
- Attitude and Communication abilities

KNOWLEDGE

- A thorough understanding of Ayurveda principles in Oncology.
- Describe the role of various Ayurveda formulations in treating malignancies
- To develop an ability in determining the role of Panchakarma in treating cancer patients.
- To develop knowledge regarding Yoga and application of yogic therapies in Oncology.
- To understand the principles of Diet and Nutrition in Oncology.

- To demonstrate the understanding of psychological counselling to cancer patients and survivors.
- Demonstrate understanding of the Basic Sciences relevant to Oncology.
- Describe etiology, patho-physiology, principles of diagnosis and management of malignancies
- Identify socio-economic, environmental and emotional determinants in a given case and take them into account for planning therapeutic measures.
- An ability to use knowledge to adapt professional practice to meet the changing demands of health care systems.
- Update oneself by self-study, by attending courses, conferences and seminars relevant to the specialty.
- To develop an ability to teach and guide his team, colleagues and students.
- Getting well versed with fundamentals of research and research methodology through research publications and presentations at various scientific domains.

SKILLS

- To develop skills in examining the patient, taking a proper clinical history, perform essential diagnostic procedures and prescribe relevant tests and interpret them so as to conduct diagnosis & staging of disease.
- Perform common ayurveda therapeutic procedures relevant to the Oncology.
- Undertake complete monitoring of the patient.
- Develop skills of complete documentation.
- To develop skills to apply his knowledge for prevention, treatment and rehabilitation of cancer patients.

ATTITUDE AND COMMUNICATION ABILITIES

- Develop communication skills with patient and his relatives, especially to provide unbiased opinion and to explain various options available in management of the disease.
- Develop communication skills so as to obtain a true Informed Consent from the patient & breaking of bad news.
- Develop leadership qualities so as to achieve best results from his team.
- An ability to understand and apply ethical guidelines while performing clinical as well as animal research.
- To develop presentation skills.

Section IV

Regulations of Governing fellowship course in Oncology

1. Eligibility:

A scholar having post graduate degree in Ayurveda of a recognized University is eligible for admission in fellowship course in Oncology.

2. Intake of the Student:

Four (4) students per year

3. Medium of instructions:

Medium of Instruction shall be English (with a working knowledge of Sanskrit to serve the study)

4. Duration of the Course Study:

The Course of study shall be for a period of 2 year.

5. Attendance and Progress:

A minimum of 75% of the attendance in theory and practical separately is required to be eligible for examination, subject to the condition that his/her progress and conduct are counted to be satisfactory by the principal.

Each student shall attend lectures, practical's, clinics, seminars, case presentations, journal review meetings etc. The students shall have to attend the hospital duties as may be assigned to them during the course of study. The

students must attend special lectures/demonstrations; seminars and such other activities as may be arranged by the department. Also, the students will have to attend clinics and lectures in Rasayu Cancer Clinic, Pune or any other branch of Rasayu Cancer Clinic.

Student shall Maintain a **Log Book** (e-log) on a day-to-day basis of his Clinical, Academic and Research work.

6. Course Content / Curriculum.

Ayurveda Syllabus points will be covered by departments of Samhita siddantha, RogaNidan, Kayachikthsa, Panchakarma, Rasashastra, Dravyaguna etc in accordance to Conventional understanding.

Conventional Aspect of Cancer will be covered by series of guest lectures and attending CME, Seminar etc. Postings or **visitations will be given** at respective department like laboratories, Radiology etc.

7. Schedule: A total 30 working hours a week which will be distributed as follows

Sl. no	Particular	Site	Hours	Total working hour / week
1.	Clinical Outpatient Department	KLE Ayurveda Hospital Abhaya Cancer Care/Rasayu Cancer Clinic	4 hours for 4 days a week	16
	Inpatient	KLE Ayurveda Hospital Abhaya Cancer Care	Regular Rounds 1 hour/ day	6
2.	Academic	Seminar /Journal Club	1 hour/ week	1
		Theory classes	5 hours / week	5
		Case discussion	1 hour / week	1
		Multidisciplinary lecture	1 hour / week	1
		Total		30 hours

for various subjects:

No.	Subject	Code	Lectures (hrs.)	Clinics, Practical and Demonstrations(hrs.)
1	Maulika Siddhaant and Vyadhi Parichaya.	FCCO-1	100	200
2	Chikitsa and Bhesha Siddhaant	FCCO-2	100	200

9. Scheme of University Examinations:

a) Subjects taught, number of theory papers and marks:

No.	Title of the paper	Code	Marks
1	Maulika Siddhaant and Vyadhi Parichaya. (1 paper part A and d B)	FCCO-1	100
2	Chikitsa and Bhesha Siddhaant (1 paper part A and B)	FCCO-2	100

b) University practical examination and marks division:

No.	Title of the paper	Code	Marks	Total
1	FCCO– 3	Practical	50	100
		Viva voce	50	

c) University Theory Question Paper Pattern Practical Pattern:

Will comprise of two papers of 100 marks each. The First paper will include **Maulika Siddhaant and Vyadhi Parichaya** (Conceptual and Etiopathogenesis) and second paper will include **Chikitsa and Bhesha Siddhaant** (Cancer Management and Pharmacology). Question papers in English language and of 3-hour duration only

	Subject	Long essay questions			Short essay Questions		
		No	Marks/ Q's	Total	No	Marks/ Q's	Total
01	Maulika	2	20	40	6	10	60

	Siddhaant and Vyadhi Parichaya							
02	Chikitsa and Bheshaja Siddhaant	2	20	40	6	10	60	100
	Total							200

Practical Examination: Case Presentation and Viva Voce.

Particulars	Distribution	Total marks
Case Presentation	LONG CASE (1*25) SHORT CASE (1*10) SPOTTING (5*3=15)	50
Viva Voce		50
	Total	100

d) Criteria for Pass:

- Minimum marks to be secured in each theory paper and practical paper are 50% separately.
- A candidate failed in or more than one subject in examination shall be eligible to appear in supplementary examination.
- In case of student fails to appear in regular examination for cognitive reasons he/she will appear in supplementary exam as a regular student.

e) Declaration of Class:

- A candidate obtaining 50% and more but less than 60% of the marks in the grand total aggregate in the first attempt shall be declared to have passed the examination in Second Class.
- A successful candidate obtaining 60% marks or more but less than 75% of marks in the aggregate of all the subjects in the first attempt will be declared to have passed the examination in First Class.

- c. Successful candidates obtaining 75% of marks or more in the aggregate of all the subjects in first attempt will be declared to have passed the examination in distinction.
- d. A candidate passing a university examination in more than one attempt shall be placed in Pass class irrespective of the percentage of marks secured by him / her in the examination

10. Syllabus

Name of the course: Fellowship in Ayurveda Oncology

Name of the paper: Maulika Siddhaant and Vyadhi Parichaya - FCCO-1

Duration: Theory: 100 hrs.

Maximum marks: Theory - 100

Part A Contents (Theory) Maulika Siddhaant (conceptual and basics)

Marks – 50

Duration: 50 hrs.

1. Brief Knowledge of Shareera and its basic principles like Dosha, Dhatu and mala.
2. Knowledge of Bija, Avayava uttapatti (organogenesis).
3. Knowledge of Dhatu Parinamana and Poshana nyaya.
4. Mamra vigyan.
5. Knowledge of Oja and Vyadhikshamtava.
6. Dushivisha, Garavisha and Virudda Ahar.
7. Tumour Immunology and epigenetics.
8. Knowledge of Srotas and Concept of Agni
9. Nidan Panchaka analysis in Cancer and Etiology's of cancer
10. Dashvid, Ashtavidh and Trividh Pariksha
- 11. Cancer Epidemiology**
12. Essentials of molecular biology of cancer: oncogenes, tumor suppressor genes etc
13. Stem cells and Cell cycle: Apoptosis etc
- 14. Cancer screening and early detection**

15. Diagnostic tools in Cancer & Principles of Imaging,**Part B: Vyadhi parichaya (Etiopathogenesis)****Marks – 50****Duration: 50 hrs.**

1. Cancer as swatantra and paratantra vyadhi
2. Knowledge of Gulma, Arbuda, Granthi, Yakshma, Udara roga's, raktapitta, Gandamala, Kshatksheena etc other relevant disorders.
3. Lakshana, Samprapti & Srotas Pariksha
4. Arista Lakshana and its application in clinical oncology.
5. Importance of Dhatu in cancer treatment
6. Neoplasma's of different systems and organs.
 - a. Gastrointestinal System
 - b. Genitourinary System
 - c. Haemopoietic
 - d. Thorax (lung & Mediastinum)
 - e. Head and neck
 - f. Endocrine ,Nervous and Skin system
 - g. Reproductive system (uterus & ovarian)
 - h. Sarcomas of soft tissue and Bone. etc

Name of the course: Fellowship in Ayurevda Oncology**Name of the paper: Chikitsa and Bheshaja Siddhaant- FCCO-2****Duration: Theory: 100 hrs.****Maximum marks: Theory – 100****Part A: Contents (Theory) Chikitsa Siddhaant (Clinical Management)****Marks – 50****Duration: 50 hrs.**

1. Chikitsaa Siddhaant / Sootra and Sadhyaasadhayata
2. Different Empirical treatments in practice (Rasayu Cancer Clinic, Kerala traditional practices etc)
3. Shodhana (Panchakarma) and Shamana. (Rasayana and Palliative care)
4. Treatment according to symptoms, stages, DFS...

5. Principles of Medical Oncology of different Neoplasmas.
6. Principles of Surgical Oncology
7. Applications of Radiation Oncology
8. Principles of Endocrine Therapy
9. Principles of Bio-therapeutics in Cancer
10. Principles of Bone Marrow Transplantation
11. Principles of Psycho-Oncology (conventional and satwaavayaja)
12. Principles of Rehabilitation in Oncology
13. Infections in Cancer Care
14. Principles of Palliative Care.
15. Ayurveda Management of Complications of Cancer therapies.
16. Importance of Integrative oncology.
17. Ayurveda management for Intensive Care Patients.

Part B: Bhesahja Siddhaant (Pharmacology)

Marks – 50

Duration: 50 hrs.

1. Dravya Guna Karma (Pharmacology of Rasayana dravya's)
2. Rasayana chikitsa
3. Rasashastra Chikitsa Siddhaant (Pharmacology of Bhasma)
4. Dravya and Bhasma useful in cancer.
5. Different compound formulations.
6. Aahaar Kalpa useful in cancer.
7. Vihaar
8. Yoga: Pranayam etc.
9. Satwavavayaja chikitsa (Counselling)
10. Pharmacology of Cancer Chemotherapy.
11. Chemotherapy drug resistance.
12. Cancer prevention tobacco related etc, diet and risk reduction chemo preventive agents and hormones.
13. Patient report outcome measures in clinical oncology.

Paper 1: Part A

Maulika Siddhaant (conceptual and basics)

1. Brief Knowledge of Shareera and its basic principles like Dosha, Dhatu and mala.
 - a. Karma of dosha dhatu mala
 - b. Assessment of dosha avastha in cancer patient
 - c. Role of Dhatu in vyadhi
2. Knowledge of Bija, Avayava uttapatti (organogenesis).
 - a. Bija (hereditary)
 - b. Matruja and pittruja bhava etc in Angapratyanga uttapati
3. Knowledge of Dhatu Parinamana and Poshana nyaya
 - a. Dhatu Karma wrt cancer patients
 - b. Prakopa Lakshana and nidan.
 - c. Different Nyaya like ksheradadhi, kalekapota and its application in treatment aspect etc.
4. Marma Vigyan.
5. Knowledge of Oja and Vyadhikshamtava
 - a. Oja lakshana, oja kshaya, vibhrmansa etc
 - b. Vyadhikshamatva, satmya asatmya etc.
 - c. Okastamya.
 - d. Understanding oja w.r.t individual dhatus.
6. Dushivisha and Garavisha
 - a. Concept of Dushivisha as a possible nidan
 - b. Concept of Garavisha as a possible nidan
 - c. Concept of Virudhha Ahara.

- d. Contemporary understanding and real time etiologies.
- 7. Tumor Immunology
 - a. Basic immune system
 - b. Pathological dysregulation of immunity in Cancer and cells involved.
- 8. Essentials of molecular biology of cancer: oncogenes, tumor suppressor genes etc
 - a. Regulation and expression of oncogenes
 - b. Basics of epigenetics.
 - c. Growth factors etc.
- 9. Knowledge of Srotas and Concept of Agni: All components of agni, levels of Agnimandya
 - a. Definition of srotas its mula, nidan for dusti, dusti prakara and lakshana.
 - b. Agni types, dusti nidan, lakshana of agnimandya and disorders of it.
- 10. Stem cells and Cell cycle: Apoptosis etc.
 - a. Stages of cell formation & Stem cell importance
 - b. Apoptosis, necrosis of cells in cancer
 - c. Angiogenesis.
 - d. Cell proliferation and Metastasis.
- 11. Nidan Panchaka analysis in Cancer and Etiology's of cancer
 - a. Contemporary and classical Ahara nidan's for cancer samprapti.
 - b. Possible lakshana's being produced in form of other disorders.
 - c. Building samprapti on bases of presentation of cancer.
 - d. Genetics.
 - e. Viral.
 - f. Chemicals and hormones.
 - g. Radiation.
 - h. Trauma and Inflammation.
- 12. Cancer Epidemiology.
 - a. Global and Indian incidence
 - b. Cancer specific presentation in age, sex and geographical

13. Dashvidh, Ashtavidh and Trividh Pariksha
14. Cancer screening and early detection
 - a. Tumor markers.
 - b. FNAC.
15. Diagnostic tools in Cancer & Principles of Imaging
 - a. CT scan (Computerised Tomography)
 - b. MRI (Magnetic Resonance Imaging)
 - c. PET scan (Positron Emission Tomography)
 - d. Ultrasound
 - e. X-rays
 - f. Mammogram
 - g. Bone scan
 - h. Colonoscopy
 - i. Endoscopy
 - j. Immuno-histochemistry tests.

Paper I: Part B

Vyadhi parichaya (Etiopathogenesis)

1. Cancer as swatantra and paratantra vyadhi.
2. Lakshana Pariksha, Samprapti Pariksha & Srotas Pariksha.
 - a. Differentiation between uttana and gambira lakshana
 - b. Type of samprapti followed by roga (in cancer patient per se)
3. Knowledge of Gulma, Arbuda, Granthi, Yakshma, Udara roga's, Raktapitta, visarpa, Kshataksheena etc and other relevant portion of respective roga's.
 - a. Nidan, purvarupa, lakshana samprapti of above-mentioned disease wst cancer
 - b. Other disorders that fit in to sign and symptomatology based on avastha.
4. Arista lakshana and its Application in Clinical oncology
5. Importance of Dhatu in cancer treatment.
 - a. Rasa dhatu
 - b. Rakta Dhatu

- c. Shukra dhatu
 - d. Mamas Dhatu.
6. Neoplasma's of different systems and organs.
- a. Alimentary Canal (oesophagus, stomach, liver, gallbladder, pancreas, Intestine & Colon, Rectum & Anal canal)
 - b. Genitourinary System (Renal, Bladder, Prostate, Penis, Testis)
 - c. Haemopoietic (AML, CML, ALL, CLL, NHL, Hodgkin's lymphoma etc.)
 - d. Thorax (lung & Mediastinum)
 - e. Head and neck
 - f. Endocrine system (Thyroid, Adrenal cortex etc), CNS and Skin
 - g. Reproductive system (Cervix, Vulva, Vagina, uterus, Fallopian tubes & ovarian)
 - h. Sarcomas of soft tissue and Bone. Etc.
 - i. Breast cancer.

Paper II: Part A

Chikitsa Siddhaant (Clinical Management)

1. Chikitsaa Siddhaant / Sootra and Sadhyaasadhayata
 - a. Samanya & Vishishta
 - b. Dosha viparita and Dhatu samya chikitsa
 - c. Dushivisha and Garavisha chikitsa.
 - d. Samanya visha chikithsa (mushika, keeta visha)
 - e. Virudha ahara chikithsa.
2. Rasayu Cancer Clinic treatment protocol.
 - a. Rasayan chikitsa
 - b. Vyadhikshamatva
 - c. Avastha anusaar chikithsa.
3. Shodhana (Panchakarma) and Shamana. (Rasayana and Palliative care)
 - a. Prophylactical & Post-operative Panchkrama

- b. External Procedures for Palliation of Pain or complications
 - c. Role of Rasayan dravya in Cancer
- 4. Treatment according to symptoms, stages, DFS...
 - a. International Protocols of cancer types and chemotherapy protocols etc,
- 5. Principles of Medical Oncology of different Neoplasmas.
- 6. Principles of Surgical Oncology (In Brief)
 - a. Principles of Surgical Oncology
 - b. Vascular Access in Cancer Patients
- 7. Applications of Radiation Oncology (In Brief)
 - a. Physical and Biologic Basis of Radiation Oncology
 - b. Principles of Hyperthermia
 - c. Photodynamic Therapy of Cancer
- 8. Principles of Endocrine Therapy (In Brief)
 - a. Steroid Hormone Binding and Hormone Receptors
 - b. Hypothalamic and Other Peptide Hormones
 - c. Corticosteroids
 - d. Estrogens and Antiestrogens
 - e. Clinical Use of Aromatase Inhibitors in Breast Carcinoma
 - f. Progestins
 - g. Androgen Deprivation Strategies in the Treatment of Advanced Prostate Cancer
- 9. Principles of Bio-therapeutics in Cancer (In Brief)
 - a. Immunostimulants
 - b. Active Specific Immunotherapy with Vaccines
 - c. Interferons & Cytokines: Biology and Applications in Cancer Medicine
 - d. Hematopoietic Growth Factors.
 - e. Monoclonal Serotherapy
 - f. Cancer Gene Therapy
- 10. Principles of Bone Marrow Transplantation (In Brief)
 - a. Autologous Bone Marrow and Stem Cell Transplantation

- b. Transplantation of Allogeneic Hematopoietic Cells for the Treatment of Malignancies
11. Principles of Psycho-Oncology (In Brief)
12. Principles of Rehabilitation in Oncology
13. Infections in Cancer Care
14. Principles of Palliative Care and treatment of CRT.
15. Ayurveda Management of Complications of Cancer therapies (In Brief conventional)
 - a. Jwara atisaar chardi & Vruna etc treatment adoption for complications.
 - b. Management of Cancer Pain, Anorexia and Cachexia
 - c. Antiemetic Therapy
 - d. Neurologic Complications & Dermatologic Complications of Cancer
 - e. Skeletal Complications
 - f. Hematologic Complications and Blood Bank Support
 - g. Urologic Complications
 - h. Cardiac Complications
 - i. Respiratory Complications
 - j. Liver Function and Hepatotoxicity in Cancer
 - k. Gastrointestinal Complications
 - l. Oral Complications
 - m. Gonadal Complications, Endocrine Complications
 - n. Secondary Cancers: Incidence, Risk Factors, and Management.
16. Importance of Integrative oncology.
17. Ayurveda management for Intensive Care Patients. (Pottali Kalpna, Nasya etc)

Paper II-Part B

Bhesahja Siddhaant (Pharmacology)

1. Dravya Guna Karma (Pharmacology of Rasayana dravya's)
 - a. Rasa, guna , virya, vipaka, Karma & Prabhava concepts in brief.

b. Mode of action of Rasayan Dravya

2. Rasayana chikitsa

a. Classification of Rasayana

b. Understanding rasayan in perspective of:

i. Nutraceutical action

ii. Immunomodulation

iii. Oxygen free radicals &Antioxidant activity

iv. Adaptogenesis

v. Regenerative action

vi. Cell proliferative

vii. Cell regenerative

viii. Genoprotective

ix. Micronutrients

x. Anabolic activity

c. Dhatu specific rasayana

d. Srotas wise rasayana

3. Rasashastra Chikitsa Siddhaant (Pharmacology of Bhasma)

a. In brief Bhasma Preparation

b. Role of Samskar like Bhavana to it.

4. Dravya and Bhasma useful in cancer.

a. Pharmacology of: Aswagandha, Shatavari, Kapikacchu, Gokshura, SvetaMusali, Kokilaksha, Ksheeravidari, Yastimadhu, Amalaki, Akarakarabha, Bhrihati, Jatiphala, Bhallataka, Bhanga, Haritaki, Guduchi, Ikshu, Masha, etc.

b. Pharmacology of: Hiraka, Svarna, tamra, Rajata, Vanga, Naga, Yashada, Haratala, Manashila, somala, Shilajit, Abhraka, Svarnamakshika etc.

5. Different compound formulations.

a. **Ghritha:** Shatavari Grita, AswagandhaGritha, VidaryadiGritha, Amrita PrashaGritha,

b. **Rasayanas:** NarasimhaRasayana, Brahmarasayan,
Narasimharasayan, Pippalirasayan, Chyavanaprasa,
HaritakyadiRasayan, NagabalaRasayan, VidangaRasayan,

Agasthyarasayana, Shilajathurasayan, Bhallathaka rasayan, Pippalirasayan, Lasunarasayan, Vardhamana Pippali Rasayana,

- c. **Rashoushadi's**: Arogyavardhini, Makaradhwaja, Chandrakala rasa, Sootashekar rasa, Laghusootashekar rasa, Suvarna Sootshekar, Laxmi Vilas rasa, Mahalaxmivilas rasa, Tribhuvankirti rasa, Swasakasachintamani rasa, Laghumalini rasa, Kanakasundar rasa, Bolbadda rasa, Kamadugha rasa (plain and mukta yukta), Tapyadi loha, Suvarnamalini vasant, Bruhatvata Chintamani rasa, Vasant Kusumakar rasa, Trilokyachintamani rasa, Chaturmuka rasa, Yogendra rasa, Rasaraj rasa, Suvarna bhupati rasa, Chandraprabhavati, Pravala panchamruta, etc.
- d. **Agada prayoga**: Bilwadi agada, Dushivishari agada, Murvadi agada, Lodhrasevyadhi churna, Dashanga agada and some kalpa's of agada practiced in kerala.
- e. **Visha prayoga** : Dhattura, Arka, Snuhi, langali etc.
- f. **Vati/Guggulu**: Kanchnar guggulu, Mahayograj guggulu, Gokshuradi Guggulu, Trayodashanga guggullu, Shankavati, Lashunadi vati, etc.

6. Aahaar Kalpa useful in cancer.

- a. Pathya Kalpana: Mantha, Phanta, Hima, Lajja peya, Yusha, Ksheerpaka etc.

7. Vihaar

- a. Home environment, psychology play of patient attenders etc.

8. Yoga: Pranayam etc.

9. Satwaavayavaja and Daivavyapashraya. (Counselling)

10. Pharmacology of Cancer Chemotherapy.

11. Chemotherapy drug resistance.

12. Cancer prevention tobacco related etc, diet and risk reduction chemo preventive agents and hormones.

13. Patient report outcome measures in clinical oncology. (different scales used for assessment like FACT, EORTC etc.)