

NATIONAL INSTITUTE OF AYURVEDA

Deemed-to-be-University(de-novo)
(Ministry of AYUSH, Govt. of India)



Syllabus



Master of Science in Ayur-Yoga Preventive Cardiology

Course Code: NIA/M.Sc./PC

Department of Ayur-Yoga Preventive Cardiology

National Institute of Ayurveda

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P R E F A C E

M.Sc. in Ayur-Yoga Preventive Cardiology is a two-year degree program to be offered by department of Ayur-Yoga Preventive Cardiology, National Institute of Ayurveda, Jaipur. This course is designed to enhance the knowledge, skills and core competencies of primary care physicians in the field of preventive cardiology through Ayurveda and Yoga. This course will also enable the learners to work in the field of Cardiac rehabilitation. The course is designed for graduates of various AYUSH disciplines along with MBBS graduates.

Cardiovascular diseases (CVDs) have now become the leading cause of mortality in India. Ischemic heart disease and stroke are responsible for > 80% of CVD related deaths. Some aspects of the CVD epidemic in India are particular causes of concern, including its accelerated buildup, the early age of disease onset in the population, and the high case fatality rate. In present times, field of cardiology has advanced a lot and developed newer medications, new generations of coronary stents, and robust mechanical circulatory support system. Despite of these advancements, a strong need exists for equally aggressive primary and secondary prevention strategies. As personalized strategies for prevention arise, there is a clear demand for a specialized training in Preventive Cardiology.

The art and science of Preventive Cardiology is advancing at a rapid pace, but its domain is still very limited in India and almost negligible in the field of Ayurveda and Yoga. Field of Cardiac rehabilitation is also almost nonexistent in India. The scientific evidence regarding principles of Ayurveda and Yoga in cardiovascular disease prevention and rehabilitation is compelling but translating this evidence into clinical practice is a challenge. This innovative program of Ayur-Yoga Preventive Cardiology will enrich students with the knowledge and practical skills required to bridge this implementation gap.

Hence, it is a forward step taken by National institute of Ayurveda, Jaipur to design a degree program on preventive cardiology through Ayurveda and Yoga. This course aims to produce skilled workforce in the field of Preventive cardiology through Ayurveda and Yoga. This course will provide comprehensive information on etiology, clinical practice patterns, clinical outcome, primary and secondary prevention and rehabilitation practices in the field of preventive cardiology.

Ayurveda and Yoga propose a different understanding and approach to prevention and treatment of cardiovascular disorders. Importance given by Ayurveda and Yoga for prevention is immense when compared to any other medical sciences. Latest researches in Ayurveda and Yoga have given a new hope in preventive and therapeutic aspects of CVDs. Ayurvedic way of living and low-cost method and traditional approaches like Yoga have the potential to address this issue. With the emergence of increasing number of cardiac problems from the young age itself, it is the need of hour to employ and explore the principles of Ayurveda and Yoga in preserving the health of our society.

I take this opportunity to acknowledge the excellent groundwork done by Kayachikitsa department and moral support provided by Prof Sanjeev Sharma, Director, NIA in bringing out this form of course. I am very much grateful for sincere efforts put by group of experts in to designing of this course. I also appreciate all the valuable mentoring of Prof. M.S. Baghel for designing the outline and theme of this innovative course. I wholeheartedly thank Ministry of AYUSH, Govt. of India for all the resources and continuous support and motivation provided for shaping this course.

Date:
Place: Jaipur

Prof. Ram Kishor Joshi
Chairman, Syllabus Drafting Committee
Department of Ayur - Yoga Preventive Cardiology
National Institute of Ayurveda, Jaipur

Members of the Course Development Committee

Course Name: M.Sc. in Ayur-Yoga Preventive Cardiology

Title: Ayur-Yoga Preventive Cardiology

Course Code: NIA/M.Sc./PC

Members of the Committee

Description	Name of member	Designation
Course Development Committee	Prof Ram Kishor Joshi, Professor & Head, PG Department of Kayachikitsa, NIA Jaipur	Chairman
	Dr Abhishek Upadhyay, Lecturer, PG Department of Kayachikitsa, NIA Jaipur	Member
	Dr Rashmi Mutha, Lecturer, PG Department of Kayachikitsa, NIA Jaipur	Member
	Dr Bharat Padhar, Lecturer, PG Department of Kayachikitsa, NIA Jaipur	Member
Departmental Review committee	Dr HML Meena, Associate Professor, PG Department of Kayachikitsa, NIA Jaipur	Chairman
	Dr Udai Raj Saroj, Associate Professor, PG Department of Kayachikitsa, NIA Jaipur	Member
	Dr Ajay Kumar Sahu, Assistant Professor, PG Department of Kayachikitsa, NIA Jaipur	Member
	Dr Harish Bhakuni, Assistant Professor, PG Department of Kayachikitsa, NIA Jaipur	Member
Interdepartmental Internal Reviewers	Dr BK Sevetkar, Associate Professor, PG Department of Roga Nidan, NIA Jaipur	Internal Expert
	Dr Sarvesh Aggarwal, Assistant Professor, PG Department of Swasthavritta, NIA Jaipur	Internal Expert
	Dr Sumit Nathani, Assistant Professor, PG Department of Dravya Guna, NIA Jaipur	Internal Expert
	Dr Sarvesh Singh, Assistant Professor, PG Department of Panchkarma, NIA Jaipur	Internal Expert
	Dr Arun Garg, MD Medicine, Visiting Physician, NIA Jaipur	Internal Expert
	Mrs. Shalini Sharma, Yoga Instructor, NIA Jaipur	Internal Expert
External Reviewers	Prof Ajay Kumar Sharma, Former Director, NIA Jaipur	External Expert
	Prof Vijay Chaudhary, Prof & Head PG Department of Kayachikitsa RGGPGAC Paprola	External Expert
	Prof OP Singh, Prof & Head, PG Department of Kayachikitsa, BHU Varanasi	External Expert
	Prof Mahesh Vyas, Professor & Head, PG Department of Basic Principle, AIIA New Delhi	External Expert
	Dr GL Sharma (Cardiologist), Amar Jain Hospital, Jaipur	External Expert
	Dr Ankesh Singh, Principal, Institute of Swasthya Kalyan Naturopathy and Yoga Sciences, Jaipur	External Expert

Aims and Objectives:

- To produce skilled workforce in the field of Preventive Cardiology through Ayurveda and Yoga
- To upgrade knowledge and skills of healthcare providers necessary to identify, evaluate patients having risk of heart disease and providing them appropriate preventive care through Ayurveda and Yoga
- To provide medical care and conduct research on various aspects of Preventive Cardiology in Ayurveda
- To explore and utilize the potential of Ayurveda and Yoga in the field of Cardiology
- To meet shortage of skilled healthcare providers in order to prevent and treat growing cardiac disorders

Vision & Mission:

- To produce skilled healthcare providers who will work in the field of Preventive Cardiology using wisdom of Indian heritage of Ayurveda and Yoga
- To be a pioneer in the field of Preventive Cardiology through Ayurveda and Yoga
- To provide best quality education to the aspirants of learning the fundamentals of Ayurveda and Yoga in the field of Preventive Cardiology
- To enrich the knowledge of health care professionals related to Ayurveda and Yoga in respect of preventive cardiology so that they can help the government and society to enhance their physical, mental and social lives.

Outcome of the Course:

- Postgraduate degree in M.Sc. in Ayur-Yoga Preventive Cardiology will be awarded to the students.
- Students acquiring this post graduate degree will be experts in the field of preventive cardiology through Ayurveda and Yoga.
- Department of AYUSH will have pool of skilled health care providers in the field of Preventive Cardiology.
- MBBS graduates pursuing this course would learn the fundamentals of Ayurveda and Yoga for prevention of cardiac disorders and promotion of health.
- Further scope of exploring and expanding the specialized domain of Preventive cardiology will be created at government and private sector.

Career Opportunities:

- Preventive cardiology is an emerging field in various parts of globe including India. Individuals pursuing this unique course will be part of skilled work force required to meet the demand of healthcare providers in the field of Preventive cardiology.
- Opportunity to work in various Public health projects of central or state governments related to non-communicable diseases specially in the field of preventive cardiology.
- Opportunity to work as faculty in institutes where these types of courses are being conducted after acquiring eligibility.
- To work as a skilled healthcare provider in the field of preventive cardiology in government or private sector facilities.

- To work as an expert independently in the field of Preventive AyurYoga cardiology to help prevent cardiovascular disorders in the society.
- To work as an expert in the field of preventive cardiology internationally through Ayurveda and Yoga.
- Opportunity to work in different cardiac centers where integrated approach is adopted to manage or prevent cardiac disorders.
- Opportunity to work in the field of R&D to develop pharmaceutical products related to preventive cardiology.

SCHEME OF ACADEMIC PROGRAMME

Department:

Department of Ayur-Yoga Preventive Cardiology

Course Name:

M.Sc. in Ayur-Yoga Preventive Cardiology

Course Code:

NIA/M.Sc./PC

Eligibility:

BAMS/BHMS/BUMS/BNYS/Other AYUSH graduates/MBBS graduates from a recognized college from their respective council who has completed compulsory internship. Aspirants must be registered in the state or central register.

Admission Procedure:

Admission will be made on the basis of merit secured in the screening test to be conducted by NIA.

Course Duration:

Duration of the course will be of 2 years.

Each year there will be four papers. Syllabus for first paper in the year 1 will be uniform across all the MSc courses carried out in the institute for which combined classes will commence. The department of AyurYoga preventive cardiology will cover course of the other three papers of the year one. The department will take full course of the second year. External or internal subject experts will cover the topics requiring their expertise. This will help the students understand the subject matter in a better way.

Working days:

As per UGC guidelines, the effective teaching days in an institution should not be less than 180 days. The syllabus for the present course of M.Sc. in preventive cardiology through Ayurveda and Yoga has been framed following the assumption that there will be six working days in a week total duration of the course will be as follows.

Sl.No.	Subject	Theory	Practical	Total Hrs.
1.	M.Sc. 1 st Year	18 Hrs/Week	18 Hrs/Week	36 Hrs/ Week
		540 Hrs/Year	540 Hrs/Year	1080 Hrs/ Year
2.	M.Sc. 2 nd Year	18 Hrs/Week	18 Hrs/Week	36 Hrs/ Week
		540 Hrs/Year	540 Hrs/Year	1080 Hrs/ Year

Course Structure

1st Year

Sl.No.	Paper	Course No.	Course	Hours
1.	Paper 1	PC - 101	Fundamentals of Ayurveda, Research and Bio Statistics	135
2.	Paper 2	PC - 102	Comprehensive Fundamentals of Cardiac Anatomy and Physiology	135
3.	Paper 3	PC - 103	Comprehensive Cardiovascular Pathology	135
4.	Paper 4	PC - 104	Scope of AyurYoga preventive cardiology	135

Practical: 1st Year

1	Paper 1-4	Practical Examination	540 Hrs
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2nd Year

Sl.No.	Paper	Course No.	Course	Hours
1.	Paper 1	PC - 105	Comprehensive Practical Cardiology (Hrid Roga-Rogi Pariksha)	135
2.	Paper 2	PC - 106	AyurYoga Cardiology - Treatment Principles and Therapeutic approach	135
3.	Paper 3	PC - 107	Fundamentals of Ayurveda in Preventive Cardiology	135
4.	Paper 4	PC - 108	Principles of Yoga in Preventive Cardiology	135

Practical: 2nd Year

1	Paper 1-4	Practical Examination	540 Hrs
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Syllabus: 1st Year

Paper 1: Fundamentals of Ayurveda, Research and Bio Statistics

Teaching Hours: 135 Hrs (Theory)

Max. Marks: 100

Paper 1 PC : 101	Fundamentals of Ayurveda, Research and Bio Statistics	135 Hrs
1.	Definition and components of Ayu, definition and aim of Ayurveda, Brief introduction of Ayurveda Samhitas.	04 Hrs
2.	Definition of Swastha purush, introduction of parameters of Swasthya and Tray-upastambha.	06 Hrs
3.	Introduction of concept of Panchmahabhuta theory, Tridosha theory and Loka samya purush.	06 Hrs
4.	Introduction of concept of Saptadhatu, Mala and Ojus	04 Hrs
5.	Introduction of concept of Srotas	03 hrs
6.	Introduction of concept of Prakriti, Mana and Atma, Chaturvinshati and Shaddhatuj Purush	05 Hrs
7.	Introduction of concept of Raspanchaka	07 Hrs
8.	Introduction of Panchvidha kshaya kalpana	02 Hrs
9.	The concept of Roga, Main etiological factors, Chikitsa and its types	04 Hrs
10.	Introduction of various sections/departments of Ayurveda and their specific activities	14 Hrs

11.	Understanding the fundamental concepts of Vriddhi and Kshaya of Dosha, Dushya, Mala with Amshaamsha Kalpana. Srotodushti, Khavaigunya, Agni, Ama (Saama and Nirama Dosha, Dhatu & Mala), Aavarana, Rogamarga, Ashayapakarsha, Dosha Gati, Kriyakala. Aushadha Sevana Kala, Anupana, Pathya-Apathya and their scientific relevance during health and disease.	08 Hrs
12.	Knowledge of Rogi Roga Pariksha including detailed history taking, systemic examination and detail description of Cardio vascular systemic examination.	10 Hrs
13.	Basics and need of preventive Cardiology through Ayurveda.	04 Hrs
14.	Arista lakshana (Rationale of targeting high risk, life expectancy) in hridaya rogi.	02 Hrs
15.	Role of Graha vigyana (psycho-somatic risk factors) in preventive cardiology	03 Hrs
16.	Role of Sahaj roga vigyana (Genetics) in preventive cardiology.	03 Hrs
17.	Basic knowledge of Ashthang Yoga	04 Hrs
18.	Understanding physiology of Rasapanchaka -Rasa, Guna, Veerya, Vipaka, Prabhava in relation to hridya karma	06 Hrs
19.	Definition of word research and classification of research - (pure/applied; qualitative/quantitative; observational and interventional)	05 Hrs
20.	Historical background of research in Ayurveda	02 Hrs
21.	Introduction to Classical methods of research- Aptopadesh, Pratyaksha Anuman and Yukti	06 Hrs
22.	Research process- Brief introduction of Selection of topic, Review of literature, Formulation of hypothesis, Aims and objectives, Materials and methods, Observation and Results.	04 Hrs
23.	Concept of ethics in research	02 Hrs
24.	Publication of research, Structuring of article (IMRAD)	04 Hrs
25.	Brief introduction of Medical Statistics	02 Hrs
26.	Collection and presentation of data	04 Hrs
27.	Definition of Average, Percentile, Arithmetic Mean, Median, Mode, Range, Standard Deviation and Standard Error	05 Hrs
28.	Parametric and Non-parametric tests	06 Hrs

Paper 2: Comprehensive Fundamentals of Cardiac Anatomy and Physiology

Teaching Hours: 135 Hrs (Theory)

Max. Marks: 100

Paper 2	Comprehensive Fundamentals of Cardiac Anatomy and Physiology	135 Hrs
1.	Understanding of Surface and Gross Anatomy of Thorax (Heart, Lungs, Mediastinum),	15 Hrs
2.	Understanding and knowledge of Great vessels (Sira-Dhamani Vigyan)	12 Hrs
3.	Understanding of Lymphatic System and Nervous Regulation of Cardiovascular Physiology.	12 Hrs
4.	Knowledge and Understanding of Essentials of Cardiovascular Physiology – Action potential, Cardiac Cycle, Blood Pressure, Pulse, Heart Sounds.	16 Hrs
5.	Shat Chakra - Location and significance in Yoga. Description of Ida, Pingala, Sushumnanadi.	8 Hrs
6.	General description and understanding of Koshtanga Shareera and Aashya in relation to Cardiovascular system	5 Hrs
7.	Understanding of Marma shareera in relation to Cardiovascular system. Knowledge of importance of Hridaya, Basti and Shir (Trimarma) and	10 Hrs

	their inter-relation	
8.	Comprehensive understanding of Detailed description of circulatory system (Rasa samvahana, hridyastha oja, Mana, Buddhi, Chetana and Tridosha varnan Arthedashmahamoola, Dasha Pranayatana).	12 Hrs
9.	Clinical Importance of Tridosha in maintaining structural and physiological Cardiovascular functions.	06 Hrs
10.	Panchabhautikatwa of Cardiovascular system and its clinical and applied importance in Prevention	05 Hrs
11.	Concept of srotas, their types specially Pranavaha, rasavaha, raktavaha, manovahi and their relation and importance to cardiac disorders .	08 Hrs
12.	Applied and clinical knowledge of Practices mentioned in Ayurveda text as a cause of congenital heart defects and its prevention. (Garbhavakranti Shaarira, features of Shukra and Shonita, description of Beeja, Beejbhaga, Beejbhagavyava and Garbhotpadaka bhava)	08 Hrs
13.	Concept of Vyadhi uttpati and its understanding in relation to Hrid roga.	10 Hrs
14.	Knowledge of different Nidanarthkara Roga for Hridaya Roga such as Udavarta, Pandu, etc.	08 Hrs

Paper 3: Comprehensive Cardiovascular Pathology

Teaching Hours: 135 Hrs (Theory)

Max. Marks: 100

Paper 3	Comprehensive Cardiovascular Pathology	135 Hrs.
1.	Knowledge and comprehensive understanding of pathogenesis (Nidana Panchak) and diagnosis of Coronary artery Disease	10 Hrs
2.	Epidemiology of Cardiac disorders	06 Hrs
3.	Detailed description of Hridroga according to their types (Vataj, Pittaj, Kaphaja, Sannipataja and Krimija) and its Chikitsa available in various Ayurvedic classics.	05 Hrs
4.	Knowledge and comprehensive understanding of pathogenesis (Nidana Panchak) and diagnosis of Heart Failure	10 Hrs
5.	Knowledge and comprehensive understanding of pathogenesis (Nidana Panchak) and diagnosis of Systemic Hypertension	10 Hrs
6.	Knowledge and comprehensive understanding of pathogenesis (Nidana Panchak) and diagnosis of Pulmonary thromboembolism and pulmonary hypertension	10 Hrs
7.	Knowledge and comprehensive understanding of pathogenesis (Nidana Panchak) and diagnosis of Peripheral vascular disorders	12 Hrs
8.	Knowledge and comprehensive understanding of pathogenesis (Nidana Panchak) and diagnosis of Cardiac arrhythmias.	12 Hrs
9.	Knowledge and comprehensive understanding of pathogenesis (Nidana Panchak) and diagnosis of Geriatric Cardiac disorders.	10 Hrs
10.	Valvular Heart Diseases and diseases of Myocardium and Pericardium.	10 Hrs
11.	Knowledge and comprehensive understanding of pathogenesis (Nidana Panchak) and diagnosis of Systemic diseases involving heart.	10 Hrs
12.	Understanding and knowledge of Peripheral Vascular Diseases.	10 Hrs
13.	Understanding and knowledge of Pregnancy and heart diseases	08 Hrs
14.	Knowledge and understanding of Congenital heart disease.	12 Hrs

Paper 4: Scope of Ayur-Yoga preventive Cardiology

Teaching Hours: 135 Hrs (Theory)

Max. Marks: 100

Paper 4	Scope of Ayur-Yoga preventive cardiology	135 Hrs
1.	Concept of Swasthaya rakshan of Ayurveda and ways to maintain and preserve health like Dincharya, Ratricharya, Sadvritta, non suppression of natural urges, suppression of urges, Vyayama etc.	20 Hrs
2.	Approach to prevention & management of Hridaya Roga including Shodhana, Shamana and Naimittika Rasayana etc.	10 Hrs
3.	Role of Rasayana and Vajikarana in Preventive Cardiology.	15 Hrs
4.	Stress / Psychological management in Preventive Cardiology.	10 Hrs
5.	Interdisciplinary approach in palliative care of various Hridroga.	10 Hrs
6.	Scope and Role of Yoga in Preventive Cardiology	10 Hrs
7.	National Health Campaigns of AYUSH and components under NRHM.	10 Hrs
8.	Hospital management strategies, Infrastructure, use of IT technology, essential manpower, equipment, Patient care, management and coordination with contemporary health institutions and field Institutions.	10 Hrs
9.	Emergency in Cardiology: Myocardial infarction, Cardiac arrest, Cardiogenic Shock, Syncope, sudden onset Arrhythmia, hypertensive crisis and encephalopathy.	20 Hrs
10.	Basic knowledge of Panchkarma and its role in preventive Cardiology	20 Hrs

Practical of M.Sc. First Year

Teaching Hours: 540 Hrs

Max. Marks: 100

Sl. No.	Practical Examination	540 Hrs
1.	Assessment of Prakruti.	15 Hrs
2.	Practice Sessions of Yoga.	100 Hrs
3.	Clinical Demonstration of Assessment of Dosha.	30 Hrs
4.	Clinical Demonstration of Assessment of Dhatu Dushti Lakshana.	40 Hrs
5.	Clinical Demonstration of Assessment of Mala Dushti Lakshana.	15 Hrs
6.	Clinical Demonstration of Pranavaha Srotas Dushti Lakshana and Cardiovascular System Examination.	50 Hrs
7.	Clinical Demonstration of Identification of Risk Factors Associated with Cardiac Disorders.	20 Hrs
8.	Clinical Demonstration of Nadi Pariksha (Pulse examination).	20 Hrs
9.	Clinical Demonstration of Other Components of Ashtavidha Pariksha.	25 Hrs
10.	Clinical Demonstration of Trividha, Shadvidha and Dashvidha Pariksha.	50 Hrs
11.	Clinical Demonstration of Roga Pariksha (Nidan Panchak).	30 Hrs
12.	Clinical Demonstration of Case Recording.	20 Hrs
13.	Clinical Demonstration of Aushadha Vyavastha and Sevana Kala.	10 Hrs
14.	Clinical Demonstration of Other Systems Examination (Respiratory, GIT, Renal and Urogenital).	50 Hrs
15.	Clinical Demonstration of Medicinal plants related to Cardiac Disorders.	15 Hrs
16.	Clinical Demonstration of Panchvidha Kashaya Kalpana.	20 Hrs
17.	Clinical demonstartion of various Panchkarma procedures like Shirodhara, Varti, Vaman, Virechana, Udvartana, Abhyanga, Hrid vasti, Swedana, Vasti etc	30 Hrs

2nd Year**Paper 1: Comprehensive Practical Cardiology (Hrid Roga –Rogi Pariksha)**

Teaching Hours: 135 (Theory)

Max. Marks: 100

Paper 1	Comprehensive Practical Cardiology (Hrid Roga–Rogi Pariksha)	135 Hrs
1.	Detailed knowledge of Roga-Rogi Pariksha including detailed history taking, systemic examination and detail description of Cardio vascular systemic examination.	20 Hrs
2.	Clinical implementation of Dwividha Pariksha, Trividha Pariksha, Chaturvidha Pariksha, Panchavidha Pariksha, Shadvidha Pariksha, Ashtavidha Pariksha, Dashvidha Pariksha Bhavas and Prakrityadi Dashvidha Pariksha including detail of Nadi Pariksha.	20 Hrs
3.	Basic knowledge regarding interpretation of ECG, TMT, Echocardiography, vascular doppler studies, X-Ray chest, CT scan, MRI, PET, Angiography, Holter's monitoring.	25 Hrs
4.	Basic knowledge of Blood investigations related to cardiology like CBC, Blood sugar, Lipid profile, RFT, TFT, Cardiac enzymes etc and their interpretations.	15 Hrs
5.	Knowledge and identification of different risk factors related to cardiology.	10 Hrs
6.	Rogi Pariksha: Trividha pariksha, Ashtavidha pariksha with detailed Nadi pariksha, Dashvidhpariksha in the light of recent advances in cardiology.	15 Hrs
7.	Roga Pariksha - Detailed description of various Hridroga through Nidana-panchaka (Hetu, poorvarupa, rupa, Upashaya & Samprapti) and Vikriti pariksha.	15 Hrs
8.	Clinical methods-Detailed history taking, patient's general examination and cardio vascular system examination.	15 Hrs

Paper 2: Ayur-Yoga Cardiology – Treatment Principles and Therapeutic Approach

Teaching Hours: 135 (Theory)

Max. Marks: 100

Paper 2	Ayur Yoga Cardiology – Treatment Principles and Therapeutic Approach	135 Hrs
1.	Ayurvedic Treatment Principles in perview of Cardiac Disorders.	10 Hrs
2.	Detailed description of Charakokta Hridya Mahakashaya, Jeevaniya Mahakashaya, Lekhaniya Mahakashaya, Phala Varga, Shaka Varga, Dugdha Vaga, Mootra Varga, Jala Varga and Susrutokta Utpaladi Gana, Parushakadi Gana and Shalsaradi Gana.	10 Hrs
3.	Knowledge of common Ayurvedic formulations and preparations indicated in Hridroga by various Acharyas including followings: Ekal Dravyas - Arjun, Rasona, Guduchhi, Pippali, Asana, Pushkarmool, Sarpagandha, Guggulu, Shilajit, Gokshura, Punarnava, Amlavetas, Dadima, Vacha, Brahmni, Jatamansi, Matulunga, Amrataka, Vrikshamla Churna - Dwiruttar Hingvadi churna, Nagbala churna, Haritkyadi churna, pippalyadi churna, Arjun tvak churna, Pushkarmool churna. Kashaya - Pushkarmuladi Kasaya, Kathaphaladi kasaya. Dashamula, Asanadi, Punarnavashtaka, , Drakshadi Kashaya. Asavas-Arista - Arjunarist Amritarishta, Ashwagandharishta ,	20 Hrs

	Dasamula rista. Vati - Prabhakar Vati, Shankar vati, Amarsundari vati. Rasaushadhi - Hridyarnavarasa, Trinetra rasa. Makardhvaja rasa, Kasturi bhairav rasa, Jaharamohara pisti, Akik pisti, Muktapisti, Abhraka bhasma, sringa bhasma, Ghrita -Triushnadi ghrita, Arjun ghrita, Vallabha ghrita, Swadamstra ghrita, Brahmi Ghrita, , Dadimadya Ghrita, Lehya - Chyavanaprasha Avaleha, Brahma Rasayana, Amalaki Rasayana. Ashwagandha Avaleha, Amrita-Bhallataka Rasayana.	
4.	Evidence based Knowledge of pharmacological action of various Ayurvedic drugs and formulations used in prevention and management of Hrid Roga.	15 Hrs
5.	Basic Knowledge of Common Allopathic Drugs used in Cardio-vascular Diseases.	20 Hrs
6.	Knowledge of Critical care medicine, Management of cardiac emergencies, CCU services, Field medical service.	20 Hrs
7.	Drug-drug interactions and adverse drug reactions, Iatrogenic disorders in relation to cardiac vascular system.	20 Hrs
8.	Indications and importance of pacemaker implantation, stent implantation, Valvular transplantation and cardiac transplantation, Ethical and legal issues involved.	15 Hrs
9.	Detailed knowledge of Cardiopulmonary resuscitation	5 Hrs

Paper 3 : Fundamentals of Ayurveda in Preventive Cardiology

Teaching Hours: 135 (Theory)

Max. Marks: 100

Paper 3	Fundamentals of Ayurveda in Preventive Cardiology	135 Hrs
1.	Ayurveda Dietetics: Importance of Pathya, Apathya and Anupana in prevention and management of Hridroga.	10 Hrs
2.	Basic knowledge of Drugs, Dietetics and Lifestyle modification in prevention of cardiac diseases.	10 Hrs
3.	Psychosocial and Behavioural Aspects of Cardiovascular disease.	5 Hrs
4.	Nutritional recommendations for patients with cardiovascular disease.	10 Hrs
5.	Concept and understanding of Pathya-Apathya described in Ayurveda.	5 Hrs
6.	Aharaja - Viharaja- Mansika-pathya & apathya in relation to hridya roga.	5 Hrs
7.	Importance of Anupana in Hridaya roga. Various anupana used in cardiac disorders.	5 Hrs
8.	Concept of Viruddha ahara and its role in cause and prevention of various Hrid roga.	5 Hrs
9.	Concept and Importance of Asta ahara vidhi viseshayatana, Dwadasha ashana and Shat Padartha Vigyan in prevention of different Hrid roga.	10 Hrs
10.	Different Ahara varga described in Ayurveda like shukavarga, shamivarga, Mamsavarga, shaka-varga, Harita varga, phala varga, madya varga, jala varga, Go ras varga, kruttanna varga, aharyogi varga and their role and application in prevention and treatment of Hridya roga.	10 Hrs
11.	Importance of Selection of diet according to Desha, Prakriti, dosha-dushya along with Elementary Nutritional Value calculation / Calorie consumption.	10 Hrs
12.	Concept and Importance of Vihara (Lifestyle modifications) - Dinacharya, Ritucharya, Sadvritta, Dharniya-Adharniya vega, Achara	10 Hrs

	Rasayana specific to Hrid roga.	
13.	Manasika Pathya-apathya and their role in various disorders specifically in relation to Hrid roga like ashvasana, harshan, mani, mangal, mantra, upavaas, adhyayan Homa, Jaap etc.	5 Hrs
14.	Understanding of various Psychosomatic risk factors and Behavioral Aspects in cardiovascular disorders.	5 Hrs
15.	Knowledge regarding Importance of DASH diet, The Mediterranean Dietary Pattern, AHA Heart Healthy Eating Pattern Recommendations, The Vegetarian Dietary Pattern in CVD risk groups.	10 Hrs
16.	Selection of Aushadha Sevan kal in Hridaya Roga .	5 Hrs
17.	Preventive measures during Janapadodhwamsa lakshana for Hridaya rogi.	10 Hrs
18.	Effective key components of smoking cessation (modules)	5 Hrs

Paper 4 : Principles of Yoga in Preventive Cardiology

Teaching Hours: 135 (Theory)

Max. Marks: 100

Paper 4	Principles of Yoga in Preventive Cardiology	135 Hrs
1.	Basic Knowledge of Ashtanga Yoga.	5 Hrs
2.	Importance and Understanding of Ashtang Yoga (Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana, Samadhi in Preventive and Curative Cardiology.	10 Hrs
3.	Concept of Asanas and its importance in preventive cardiology.	5 Hrs
4.	Specific asana to be practiced & to be avoided in relation to cardiac disorders like Dhanurasana, Vakrsasana, Janushirshasana, Matsyasana, Shavasana, utthita trikonasana, paschimottasana, ardha-matsyendra asana, Gomukhasana, Setubandhasana, Salabha-sarvangasana, tadasana on maintaining health of heart.	10 Hrs
5.	Concept and Role of Pranayam in Preventive Cardiology.	5 Hrs
6.	Yoga and its body -mind relationship.	5 Hrs
7.	Yoga and its importance on QOL of post-operative cardiac patients.	5 Hrs
8.	Mindfulness based stress reduction (MBSR) & Types of meditation in preventive cardiology specially in relation to substance abuse.	10 Hrs
9.	Transcendental Meditation & Behavioral modifications.	5 Hrs
10.	Effect of Yoga on Cardiac Circulatory system / Hemodynamics, Cardiac Musculature & Electrical conduction.	10 Hrs
11.	Yoga practices for preventive cardiology during gestational & postpartum period with special importance to Congenital Cardiac anomalies.	10 Hrs
12.	Specific Yoga practices for childhood, Adults, Old age in high risk groups of CVD.	5 Hrs
13.	Yoga according to Age, Gender, Occupation in relation to preventive and curative cardiology.	5 Hrs
14.	Types of Cardiac Strength exercise and importance of time duration of exercise according to Roga & Rogi bala.	10 Hrs
15.	Precaution during Yoga Practices in cardiac disorders and Latest research trends in yoga and preventive cardiology.	10 Hrs

16.	Comprehensive rehabilitation of patients with cardiovascular diseases.	5 Hrs
17.	Emerging trend of practicing Yoga in Preventive Cardiology.	5 Hrs
18.	Understanding exercise testing protocols and determination of functional capacity.	5 Hrs
19.	Understand physiology of exercise training in patients with cardiovascular disease.	10 Hrs

Practical of M.Sc. 2nd Year

Teaching Hours: 540 Hrs

Max. Marks: 100

S.No	Practical Examination	540 Hrs
1	Clinical Examination of Cardiovascular system	50 Hrs
2	Practical demonstration of various procedures like paracentesis, suction, nasogastric tube insertion, Per urethral catheterisation, Thoracocentesis, nebulization etc	60 Hrs
3	Practical demonstration and reading of recording of ECG	30 Hrs
4	Yoga demonstrartion	100 Hrs
5	Case recording	150 Hrs
6	Clinical examination of other systems	60 Hrs
7	Practical demonstration of different Panchkarma procedures like shirodhara, Vasti making and administration, Abhyanga etc	60 Hrs
8	Role and application of cardiac defibrillation	10 Hrs
9	Practical demonstration and understanding of Spirometry	20 Hrs

Faculty required for M.Sc. in Ayur-Yoga Preventive Cardiology

Teaching Faculty				
Sl.No.	Name of Post	Number of Post	Qualification	Eligibility Criteria
1	Professor	One	MD in Kayachikitsa OR M.Sc. in Ayur-Yoga Preventive Cardiology with PhD degree. Age Limit 55 Years	16 years of teaching experience in Kayachikitsa OR in M. Sc. Preventive Cardiology Minimum 5 publications in national or international peer reviewed journals preferably in the related field.
2	Associate Professor	One	MD in Kayachikitsa OR M.Sc. in Ayur-Yoga Preventive Cardiology with PhD degree. Age Limit 50 Years	10 years of teaching experience in Kayachikitsa OR in M. Sc. Preventive Cardiology Minimum 3 publications in national or international peer reviewed journals preferably in the related field.
3	Assistant	One	MD Ayu in	Concerned degree from the

	Professor		Kayachikitsa OR M.Sc. in Ayur-Yoga Preventive Cardiology with Ph.D. Degree / MD in Swasthavritta and Yoga Age Limit 45 Years	recognized college or University recognized by CCIM/UGC Minimum 2 publications in national or international peer reviewed journals preferably in the related field.
4	Lecturer	Two	MD Ayu in Kayachikitsa OR M.Sc. in Ayur-Yoga Preventive Cardiology with Ph.D. Degree / MD in Swasthavritta and Yoga	Concerned degree from the recognized college or University recognized by CCIM/UGC Publications in national or international peer reviewed journals preferably in the related field.
1	MTS	1		Working knowledge of Computers
2	Computer Operator	1		
3	Yoga Instructor	2 (1 - M, 1 - F)		

Visiting / Adjunct / Contractual Faculty

- MD in Kayachikitsa
 - MD in Roga evam Vikriti Vigyan
 - MD in Swasthavritta and Yoga
 - MD in Panchkarma
 - MD in Samhita Sidhanta
 - MD in Rasa Shastra and Bhaishajya Kalpana
 - PG Degree in Yoga or Yoga and Naturopathy
 - MSc. In Cardio-vascular science or Cardiology
 - MBBS, MD (Medicine)/Cardiologist
 - Dietitian
 - Any other specialist as and when required
- Every teacher shall participate in teaching, which may include all of the following: lectures, tutorials, practical sessions, seminars, fieldwork, projects and other such activities.
 - Every teacher shall also give general assistance to students in removing their academic difficulties; and participate in the invigilation and evaluation work connected with tests/examinations; and take part in extra-curricular, co-curricular and institutional support activities as required.
 - The workload of a teacher shall take into account activities such as teaching, research and extension, preparation of lessons, evaluation of assignments and term papers, supervision of fieldwork as also guidance of project work done by the students. The time spent on

extension work, if it forms an integral part of the prescribed course, shall count towards the teaching load. The total workload and the distribution of hours of workload for the various components shall be in accordance with the guidelines issued by the UGC and the other statutory bodies concerned in this regard from time to time.

Syllabus:

1. Annual exams will be conducted at university level. 1st year annual exams will be scheduled at the end of the 1 year in the same way the 2nd year exams will be conducted. Half yearly midterm examination will be conducted at institutional level.
2. Depending upon its nature and level, a course may be assigned a certain number of credits. The credits assigned to the various courses shall also be indicated in the respective syllabuses. The system of credits shall be in accordance with the guidelines of the UGC and other statutory bodies concerned.
3. The syllabus for each course shall also indicate the scheme of evaluation/ examination.
4. The students shall be given assignments, so as to make use of the library, laboratory, internet and such other faculty.
5. The total workload on a student shall also be adequate so as to provide him/her sufficient academic involvement.
6. The minimum number of lectures, tutorials, seminars and practical's which a student shall be required to attend for eligibility to appear at the examination shall be not be less than 75% of the total number of lectures, tutorials, seminars, practical's, and any other prescribed requirements.

Thesis / Dissertation:

Every Candidates pursuing M.Sc. Degree in **Ayu-Yoga Preventive Cardiology** is required to carry out the work on selected dissertation under the guidance of recognized post graduate teacher in their respective subject in final Year. The result of such work should be submitted in the form of a dissertation (not less than 100 Pages).

By carrying out a research project and presenting the work in the form of thesis, the student shall be able to:

- Identify a relevant research question
- Conduct a critical review of literature
- Formulate a hypothesis
- Determine the most suitable study design
- State the objectives of the study
- Prepare a study protocol
- Undertake a study according to the protocol
- Analyze and interpret research data, and draw conclusions
- Write a research paper

Guidelines

While selecting the topic, following should be kept in mind:

- The scope of study is limited to enable its conduct within the resources & time available
- The study must be ethically appropriate
- The emphasis should be on the process of research rather than the results

- The protocol, interim progress and final presentation is made formally to the department
- There should be periodic department review of the thesis work

Assessment (Examination and Evaluation):

1. The university shall adopt the guidelines issued by the UGC and other statutory bodies concerned from time to time in respect of conduct of examinations.
2. The units of evaluation, namely, tests, seminars, presentations, class performance, field work, thesis and the like and the weightage assigned to each of such units in respect of each course shall be determined by the appropriate academic body of the university, and shall be made known to the students at the beginning of the academic session of the year, the semester or the trimester, as the case may be.
3. The nature of final examination, whether written or oral or both, in respect of each course shall also be made known to the students at the beginning of the academic session.
4. The question papers for the examinations shall be set in such a manner as to ensure that they cover the entire syllabus of the concerned course.
5. The tests and examinations shall aim at evaluating not only the student's ability to recall information, which he/she had memorized, but also his/her understanding of the subject and ability to synthesize scattered bits of information into a meaningful whole. Some of the questions shall be analytical and invite original thinking or application of theory.
6. While the actual process of evaluation shall be confidential, the system of evaluation shall be sufficiently transparent, and a student may be given a photocopy of his/her answer paper, if requested as per procedure laid down in this regard.

Scheme of Examination:

There will be eight papers in the whole duration of the course four in each year. Each Theory paper will be of 100 marks covering the questions from entire syllabus of the corresponding paper. Each paper shall be set from the external experts and will cover very short questions, short essay and long essay questions. Practical examination will be conducted covering patient examination and viva voce on the project and the subject matter.

Distribution of Marks:

Theory – 100 Marks, 3 Hours Each Paper

Model of Questions	Marks Distribution
MCQ/One Word questions/ Fill up the blanks	10 Marks
Very Short answer question	20 Marks
Short essay	30 Marks
Long essay	40 Marks

Practical examination– 100 Marks, Covers All Paper

1st Year: Covers All Paper

100 Marks

Kind of Work	Marks Distribution
History sheet	20 Marks
Spotting	10 Marks
Yoga demonstration	10 Marks
Viva-voce	60 Marks

2nd Year: Covers All Paper

Kind of Work	Marks Distribution
Thesis Presentation	20 Marks
Spotting	10 Marks
Yoga demonstration	10 Marks
Viva-Voce	60 Marks

Eligibility for Admission to the Examination

Students with a minimum of 75% attendance are eligible to write the examination.

Question Paper Design

The examination shall be three hours duration to each paper at the end of each year. The candidate failing in any subject(s) will be permitted to appear for each failed subject(s) in the subsequent examination.

Question papers will be designed in two sections (Part A, Part B and Part C) with number of questions and allotment of marks as detailed below:

PART-A (10x 1 = 10 Marks)

MCQ/One Word questions/ Fill up the blanks

PART-A (10 x 2 = 20 Marks)

(Answer all questions)

PART-B (6x 5 = 30Marks)

(Answer all questions)

PART-C (4 x 10 = 40 Marks)

5 (Answer any four out of five questions)

Passing Mark Minimum:

The candidate shall be declared to have passed the examination if the candidate secures not less than 50% marks in each theory and practical paper.

Award of Degrees:

1. No student shall be eligible for the award of the **M.Sc. Degree** unless he/she has successfully completed a minimum of two years
2. The degree to be awarded may should be called the **M.Sc. Degree** in the **Ayur-Yoga Preventive Cardiology**
3. Degree will be conferred to the passing students in the convocation held by the affiliating university.

Recommended Books:

1. Charak Samhita with commentary of Ayurved Dipika by Chakrapanidatta and Jalpakalpa taru by Gangadhara
2. Sushruta Samhita with the Nibhandha Samgraha commentary of Dalhana and Nyayachandrika panjika of Gayadasa on nidansthana
3. Ashtang Hridaya with Sarvanga sundara and Ayurved rasayana commentaries Ashtanga Sangraha with Shashilekha commentery
4. Bhela Samhita
5. Kashyapa Samhita
6. Bhavaprakasha of Bhavamishra
7. Sharangadhara Samhita
8. Pratyaksha Shariram - GananathSen
9. Abhinava Shariram - Damodar Sharma Gaur
10. Parishadyam Sabdartha Shariram - Damodara Sharma Gaur
11. Brihat Shariram - P S Varier
12. Shiva Samhita
13. Gray's Anatomy - Latest Edition
14. Human Anatomy - B D Chaurasia
15. Cunnigham's Companion to Manual of Practical Anatomy.Vol I, II & III
16. Developing Human - Keith L Moore & Persaud
17. Surface and Radiological Anatomy - Halim
18. Grant's Methods of Anatomy - Grant
19. Grant's dissector - Grant
20. Human Embryology - I. B. Singh
21. Ayurvediya Human Anatomy - G. M. Kanthi
22. Hridaya roga utpatti.
23. Charak Samhita - Cakrapanidutta commentry
24. Sushrut Samhita - with all available commentaries.
25. Ashtang Samgraha – Indu commentary
26. Ashtang Hridaya – Arundutta and Hemadri commentry
27. Cikitsadarsha - Pandit Rajesvardutta Shastri
28. Kayachikitsa - Ramaraksha Pathak Ayurved Nidan Chikitsa Siddhanta - Prof. R.H.Singh.
29. Kayachikitsa Vol. I-IV. - Prof. Ajay Kumar
30. Davidson's Principles and Practice of Medicine - API Text Book of Medicine.
31. Harrison's Text Bok of Medicine
32. Cecil Text Book of Medicine.
33. The ESC Textbook of Cardiovascular Medicine, 3rd edition, overseen by Professors A. John Camm, Thomas F. Lüscher, Patrick W. Serruys, and Gerald Maurer
34. Braunwald's Heart Disease: a Textbook of Cardiovascular Medicine, 2-Volume Set by Douglas
35. P. Zipes. Color Atlas and Synopsis of Adult Congenital Heart Disease -Curt Daniels, Ali N Zaidi
36. APPROACH AND UPDATE TO CARDIOLOGY IN AYURVEDA Paperback by Dr. Shubash Wagh
37. Heart disorders and their care in Ayurveda – By Prof Ajay Kumar Sharma
38. Scope of preventive cardiology The ESC Textbook of Preventive Cardiology Edited by Stephan Gielen, Guy De Backer, Massimo Piepoli, and David Wood
39. Rasayana vajeekarana - Darpan by Om prakash Upadhyaya, Soi Balachandra yantralaya, Manavashram, Jaipur
40. Basic principles of Ayurvediya Padartha Vigyan - Dr Yogesh Chandra Mishra Synopsis of Psychiatry - Harold kaplon and Saddocks General psychology and Abnormal psychology - S.K. Mangal
41. A text book of Post Graduate Psychiatry - Neeraj Ahuja
42. Kaplan and Saddocks Synopsis of Psychiatry, Lippincott Williams and Wilkins
43. Cardiology in Ayurveda Hardcover – Import, 31 December 1999 by V.B. Athavale (Author)
44. Madhav Nidan (Madhukosha Commentary)
45. Vyadhivigyan I and II - Yadav Thrikamji

46. Ayurvediya Roga Vargikaran - Vd. Ramanat Vd. Gurdip Singh
47. Parameswarappa's Ayurvediya Vikriti Vigyan & Roga Vikriti Vigyan - Dr. P.S. Byadgi.
48. Symptoms & Signs in Clinical Medicine- Chamberlains
49. Hutchison's Clinical Methods
50. Oxford American Handbook of Cardiology Jeffrey Bender, Kerry Russell,
51. Clinical Cardiology Current Practice Guidelines: Updated Edition – by Demosthenes Katritsis, The Complete Guide to ECGs James H. O'Keefe Jr., Stephen C. Hammill
52. Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine, Single Volume 11th Edition by Douglas P. Zipes MD (Author), Peter Libby MD PhD (Author), Robert O. Bonow MD MS (Author), Douglas L. Mann MD (Author), Gordon F. Tomaselli MD (Author)
53. Clinical Diagnosis and Management by Laboratory methods - Todd, Sanford and Davidson Nadi Pariksha – - GP Upadhyay
54. Rogi Pariksha vidhi - Acharya Priyavrata Sharma
55. Nidan Panchak - Shivcharan Dhyani Madhav Nidan (Madhukosha Commentary) Marriott's Practical Electrocardiography by David G. Strauss; Galen S. Wagner Park's Pediatric Cardiology for Practitioners, 6e -Myung K. Park
56. Integrative Cardiology -Stephen Devries, James Dalen
57. Hridaya roga chikitsa siddhanta
58. Ayurvedic Management for Heart Diseases - Dr. J.L.N Shastry and K Nishteshwar Panchakarma Treatment of Ayurveda including Keraliya Panchakarma
59. Preventive Cardiology Companion to Braunwald's Heart Disease: Expert Consult – Online and Print, 1Ed Roger Blumenthal MD FACC FAHA,
60. The ESC Handbook on Cardiovascular Pharmacotherapy -Juan Carlos Kaski, Keld Per Kjeldsen Manual of Cardiovascular Medicine-Brian P. Griffin MD FACC
61. The ESC Textbook of Preventive Cardiology -Edited by Stephan Gielen, Guy De Backer, Massimo Piepoli
62. Preventive Cardiology: Companion to Braunwald's Heart Disease: Expert Consult – 1st Edition by Roger Blumenthal MD FACC FAHA (Author)
63. Preventive Cardiology: A Practical Approach, Second Edition (Masters in Cardiology Series) 2nd Edition -by Nathan Wong (Author), Henry Black (Author), Julius Gardin (Author)
64. Dravyaguna Vigyana (Vol. 1-5)- Acharya Priyavrata Sharma
65. Materia Medica-Acharya Ghosh Nighantu Adarsh (Vol. 1-2)-Vd. Bapa Lal
66. Pharmacopia of India – all the volumes Database on medicinal plants all the volumes of CCRAS Aurveda formulary of India – all the volumes
67. Rasahridaya Tantra Rasarnava
68. Rasaratna Samuccahaya Ayurved Prakasha Rasendrachudamani Rasendra Chintamani Rasatarangini Rasapraksha Sudhakar Rasamrita
69. Rasa Chandanshu : CCRAS Publication Sharangadhara Samhita
70. Sharangadhara Darpan (BP Pandey) Bhavaprakasha
71. Yoga Ratnakara Bhaishajya Ratnavali
72. Siddha Bhaishajya Manimala Bharat Bhaishajya Ratnakara Rasayoga Sagara
73. Siddha Bhaishajya Manimala Sahasrayoga
74. Pathya-apathya in prevention of Heart diseases
75. Food for Reversing Heart Diseases -by Dr Bimal Chajer
76. A Clinician's Guide to Healthy Eating for Cardiovascular Disease Prevention - Paul Scheel, MD; Vincent Pallazola, MD
77. The Prevention of Cardiovascular Disease through the Mediterranean Diet 1st Edition Authors: Almudena Sánchez Villegas Ana Sanchez-Taínta
78. Diabetes and Heart Healthy Cookbook by American Diabetes Association, American Heart Association
79. The New American Heart Association Cookbook by American Heart Association
80. Role of Yoga in prevention in Heart diseases
81. Yoga and Cardiovascular Management by Satyananda Saraswati (Author)
82. Light on Yoga - Shri. B.K.S. Iyengar
83. Light on Pranayama - Shri. B.K.S. Iyengar
84. Light on Patanjala Yogasutra - Shri. B.K.S. Iyengar

85. Yoga and Yogikchikitsa - Ramharsha Singh
86. The Foundation of Contemporary Yoga - R.H.Singh
87. Yogasidhanta evum Sadhna - H.S.Datar
88. Patanjali Yoga Sutra - Maharshi Patanjali
89. Dr. Yoga: A Complete Guide to the Medical Benefits of Yoga (Yoga for Health) by Nirmala Heriza (Author) Integral Yoga Cardiac specialist at Cedars-Sinai Medical Center's Preventive and Rehabilitative Cardiac Center and president of the United Yoga Council

Recommendations:

- In the proposed curriculum sufficient exposure has been provided on the theoretical and practical aspect of the subject. It is recommended to involve students in seminars, presentations, preparing projects so that interest and curiosity can be generated along with critical thinking. It is recommended to conduct periodic presentations by the students in the department so that overall skills can be enhanced in the students.
- It is highly recommended for the students to clearly understand the risk factors associated with various cardiac disorders particularly in relation to preventable risk factors. Students must also focus on learning to apply the fundamentals of Ayurveda and Yoga in population at risk with proper care.
- It is also recommended to equip the proposed department with required infrastructure for research in the field of preventive cardiology. This would be a much required unique course in the field of prevention of cardiac disorders through Ayurveda and Yoga and hence there would be a great scope for research.
- Training of faculty of the department is highly recommended. Training of faculty in the area of diagnostics, procedures, research in the field of cardiology must be prioritized so that they can utilize the potential of ancient science and also transfer this knowledge to the aspirants of this course.
- It is also recommended to select the students on the basis of entrance test so that best amongst the applicants can be selected or otherwise should be selected on the basis of percentage of the graduation and marks/percentage of the subject concerned with medicine (e.g. Kayachikitsa for BAMS) in the eligible courses.

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