

MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH (MEENAKSHI UNIVERSITY), CHENNAI
(Declared as Deemed to be University Under sec 3 of the UGC Act 1956)



REGULATIONS 2011
FOR
POSTGRADUATE SUPERSPECIALITY
DEGREE COURSES
DM – MEDICAL GASTROENTEROLOGY



Padmanabhan
Prof. Dr. PADMANABHAN. P. MBBS., MD., D.M.,
Reg.No:28611, Dept. of Medical Gastroenterology
Date: _____ Time: _____

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MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH

MASTER OF DISEASE (DM)– MEDICAL GASTROENTEROLOGY

REGULATIONS -2011

I.VISION AND MISSION OF MAHER

VISION

To be a world-class institution, transforming society through value-based diverse programs and healthcare advancements, leading to the all-around development of human resources, knowledge, innovation, entrepreneurship, and research.

MISSION

To become an institute of eminence by developing world-class professionals in the field of healthcare, science, liberal arts, technology and research with a focus on the societal good.

To create an enabling state-of-the-art infrastructure, intellectual capital and provide best-in class learning experience with a freedom to innovate and invent.

To foster values and ethics so as to develop students and learners into responsible citizens of the Nation and the world.

MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH

MASTER OF DISEASE (DM)– MEDICAL GASTROENTEROLOGY

REGULATIONS -2011

II.VISION AND MISSION OF MMCHRI

VISION

To provide global leadership in human development, excellence in education and quality health care.

MISSION

To train competent, compassionate and caring physicians through excellence in teaching, patient care and medical research


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REGULATIONS -2011

III. VISION AND MISSION – DEPARTMENT OF MEDICAL GASTROENTEROLOGY

To provide state of the art health care to this part of India, where many people are below poverty line. To educate public on common GI disorders

MISSION

To impart excellent education in the field of Gastroenterology

To promote research in the field of digestive health

MEENAKSHI ACADEMY OF HIGHER EDUCATION AND RESEARCH

MASTER OF DISEASE (DM)– MEDICAL GASTROENTEROLOGY

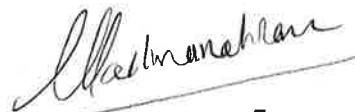
REGULATIONS -2011

IV. PROGRAM EDUCATIONAL OBJECTIVES (PEO's)

PEO 1 Acquisition of knowledge: The student will be able to explain clearly concepts and principles of Medical Gastroenterology. The student will also be able to explain the disease evolvment and management protocols at each stage. She/he will be able to observe and assist in clinical OPD procedures.

PEO 2 Teaching and training: The student will be able to effectively teach postgraduate students in medicine so that they become competent healthcare professionals and able to contribute to training of postgraduate trainees.

PEO 3 Research: The student will be able to carry out a research project (both basic and clinical) from planning to publication and be able to pursue academic interests and continue life-long learning to become more experienced in all the above areas and eventually be able to guide postgraduates in their thesis work.



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learning to become more experienced in all the above areas and eventually be able to guide postgraduates in their thesis work.

PEO 4 Critical thinking skill: The student will be able to evaluate and manage the difficult situational cases and become competent in early management of such cases. They will be able to co-ordinate with super-specialty consultants and follow protocols based on the cases

V. PROGRAM OUTCOMES (PO's)

PO 1: A Clinician, who understands and provides preventive, promotive, curative, palliative and holistic care with compassion

PO 2: A Leader and member of the health care team and system

PO 3: A Communicator with patients, families, colleagues and community

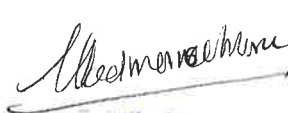
PO 4: A Lifelong learner committed to continuous improvement of skills and knowledge

PO 5: A Professional who is committed to excellence, is ethical, responsive and accountable to patients, community and the profession

VI. Program Specific Outcomes

PSO 1 Technical skill: The student will be able to assist and perform day-care, minor, major and emergency (Diagnostic & therapeutic) individually under the supervision of senior faculty.

PSO 2 Professional skill: Recognize conditions that may be outside the area of his specialty/competence and refer them to the proper specialist


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MEENAKSHI ACADEMY OF HIGHER EDUCATION & RESEARCH

(Deemed to be University), Chennai

REGULATIONS OF POSTGRADUATE SUPER SPECIALITY DEGREE COURSE

DM MEDICAL GASTROENTEROLOGY- 2011

DEPARTMENT OF MEDICAL GASTROENTEROLOGY

In the exercise of power conferred by Board of Management, (Meenakshi Academy of Higher Education and Research (Meenakshi University), Chennai form the regulations for the P.G. Super Specialty courses as follows.

1. Short Title & Commencement

THE REGULATIONS SHALL BE CALLED AS THE “REGULATIONS FOR D.M/M.CH” POST GRADUATE SUPER SPECIALITY DEGREE COURSES OF MEENAKSHI ACADEMY OF HIGHER EDUCATION & RESEARCH also known by abbreviation MAHER

The regulations will come into force from the academic year (2011-2012). The regulations and syllabi are formed under the above Regulations and are subject to modification by the Academic Council of the University from time to time

2. AIMS & OBJECTIVES

At the end of the course the student should have acquired

1. Broad understanding of Principles of Basic Medical Sciences related to his/her speciality.
2. Ability and skill to perform and interpret, investigative procedures related to their speciality.
3. Skills in clinical diagnosis, planning of investigations and manage common conditions in their specialities by relevant current therapeutic measures.
4. To be competent to make independent decisions in emergencies and to perform procedures to manage the emergencies.
5. Competence in the management of intensive care of their speciality including the working knowledge of all the gadgets; instruments and equipments handled in the critical care wing of their speciality.
6. Ability to critically review published literatures, interpret data and update latest developments.
7. Ability to make the best use of latest information technology in academic endeavors.
8. Competence to train undergraduate and postgraduate medical students as well the nursing and paramedical students with regard to their speciality.
9. Ability in decision making for medical interference & inter departmental references.
10. Ability to conduct research.
11. Ability to organize and start the speciality in the future.

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3. Branch of Study

D.M.

Branch-2 Medical Gastro Enterology

4. ELIGIBILITY FOR ADMISSION

D.M. (Branch 2):

M.C.I. recognized post graduate degree in Medicine; Paediatrics and Geriatrics from M.C.I. recognized Medical Colleges and D.N.B. (Medicine/Paediatrics)*

*With regard to the eligibility of D.N.B. candidates; the M.C.I. guidelines as and when issued only will be followed.

The candidates who seek admission to the Super Speciality Courses in MAHER; if they are graduated in P.G. from any colleges other than constituent college of MAHER (at present Meenakshi Medical College and Research Institute, Enathur) they should obtain ELIGIBILITY CERTIFICATE from MAHER before seeking admission. Every candidate admitted to the course should register with the University within six months of admission.

The upper age limit for admission is 50 years. Last day of September is taken as cutoff date for calculating the upper age limit since that happens to be last cutoff date for the wait listed candidates as per the MCI norms.

5. (a) DURATION OF THE COURSE

The admission shall commence on the 1st Day of August. Last date for admission for the wait listed candidates is 30th September.

The duration of the course is 3(Three) completed years including the examinations at the end of third year in the month of August.

The academic year shall commence on the 1st day of August. Each academic year is divided into two academic terms of six months each August 1st to January 31st one term, February 1st to July 31st the other term, the entire period of training is spread over six academic terms each term consisting of six months. Each candidate shall complete 3 academic years spread over six academic terms. No waiver shall be given for the duration of the courses for any sort of previous experience or any other Diploma or Degree or any Fellowship or any Honours.

5. (b) POSTINGS AND TRAINING MODALITIES

The candidates shall be trained in their speciality as per the syllabus prescribed under each speciality. The H.O.D. shall divide the programme suiting the norms and practical application. The students at the discretion of the H.O.D. of the Department; may be sent to the other centers of excellence connected with their speciality by drafting the academic schedule with the permission of the Dean. Training in Medical audit, Health Economics, Health Information System, Basics of Statistics, Exposure to Human Behavior Studies, Pharmaco Economics and introduction to Linear

Mathematics should be imparted to the students preferably in the first academic term with the Hospital Administration (experts). (vide M.C.I. regulation amended up to December 2010-Rule 13-7)

Every Speciality postgraduate student should be motivated to present short papers in national conferences; atleast one paper a year. They should also publish at least two articles in reputed journals during their 3 years period of training. These activities should be documented in their logbooks. H.O.D. should pay due weightage while assessing their logbooks for award of marks at the time of Internal assessment.

5. (c) Logbooks & Dissertation

Every candidate should maintain serial of certified logbooks in which he shall document date wise all the academic activities, procedure done, assisted, Interesting and rare case record, Journal Club details, Papers presented and published, Online Medical Search Activities and Literature Reviews. These logbooks should be periodically scrutinized by the Unit Head /H.O.D. and these books have to be submitted to the Examiners at the time of practical examinations.

(In respect of P.G. Degree courses in broad specialities, it was resolved to the effect that a postgraduate student in broad specialities would be required to present one poster presentation, to read one paper at a national/state conference and to present one research paper which should be published / accepted for publication / sent for publication during the period of his postgraduate studies so as to make him eligible to appear at the postgraduate degree examination. It was also resolved to implement the above decision from the academic year 2016-2017(Ref: MAHER/299/2017)).

6. (a) COMMENCEMENT OF EXAMINATION

The Examination shall be conducted at the end of third academic year. There will be four papers for every speciality out of which Paper-I will be on Basic Medical Sciences and Paper-4 will be on Recent Advances. (Both the papers related to their speciality. Reset of the two Papers will be with regard to their Subjects) (need clarity).

(b) GENERAL GUIDELINES FOR THE CONDUCT OF THE EXAMINATION

Theory Examination

Basic Examination pattern shall consist of four written papers in Theory as per the above guidelines. Maximum mark for each paper will be 100. It is suggested to have two sections Section A and B in each paper. Each section may contain the questions as follows.

Section A

Essay 1 x 20 =20

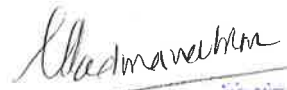
Short Notes 3 x 10 = 30

Section B

Essay 1 x 20 =20

Short Notes 3 x 10 = 30

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Total 100 x 4 Papers = 400marks
(Separate minimum of 200/400 should be secured in all papers put together for a pass).

Clinical Examination including ward rounds

Clinical/Practical Examination including ward rounds which shall be customized for each speciality for Maximum 300 marks and separate 50% minimum marks should be secured for pass.

Internal Assessment and Orals

5 Theory and Practical Examinations shall be conducted during the period of 3 year course at the end of 9; 15; 21; 27 & 33 months. Best of 3 examination marks each of 25 maximum totaling 75 marks are taken for consideration for the award of internal assessment marks. 25 marks are awarded for hand written logbook by the Unit Head in consultation with the Head of the Department and the mark is added to internal assessment. Oral Examination will be conducted along with the clinical Examination and it will be customized by each speciality. The candidate should secure separate 50% minimum out this total 200 marks, which includes 100 marks for internal assessment and 100 marks for orals.

The marks obtained in the clinical examination and internal assessment will be included with theory marks. The pass will depend upon securing 50% minimum.

Every speciality Board shall decide the customized pattern of Examination without deviating from the General Guidelines.

Written (Theory) 4 Papers	Maximum Marks	Minimum for a Pass
	400	200
Clinical Examination, Orals Including Ward Rounds	300	150
Internal assessment and Logbook	100	50
Total	800	400

6 (c) Attendance Requirements and other related subjects to the Examination.

- ❖ The candidate should produce 90% attendance in total for the entire period of training. No condonation of attendance shall be entertained.
- ❖ The candidate should have secured 50/100 in the internal assessment.
- ❖ (The candidate should produce the evidence for the fulfillment of the requirement as mentioned in the section of 5(c) thesis/dissertation).
- ❖ Total number of appearances are 5 (Five)

If the candidate does not pass the Examination in 3 (Three) attempts; he shall do refresher course for a period of six months in the same institution under the unit chief. The Dean of the Institution in consultation with the HOD shall give the posting in the beginning of academic term either in August or in February. At the end of the refresher course the candidate should obtain a certificate of satisfactory completion of the training from the

concerned HOD and submit the same through the Dean to the Controller of Examinations to become eligible for subsequent two attempts of the Examinations.

- ❖ Question Papers including Basic Medical Sciences shall be set by External Examiners belonging to the same Speciality.
- ❖ The answer papers shall be corrected by two sets of examiners and the average shall be calculated for each paper. The Controller of Examination with guidance of the Vice Chancellor shall decide the intricacies of setting of question papers and valuation of answer papers especially when the mark is more than 10 for the same paper between the two examiners correcting the same paper
- ❖ There won't be revaluation of papers after declaration of results but re-totaling may be permitted at the request of the aggrieved candidate.

7. Break of study

Any candidate who is absent for a continuous period of 30 days or less may be readmitted to the course by the Dean if he is satisfied that the period of absence is due to justifiable reasons.

If the period of absence is more than 30 days but less than 3 years the candidate shall apply to the Registrar, MAHER through the Dean with recommendation from the Unit Chief and HOD. His absence may be condoned after levying a fee for condonation provided the request is justifiable. Vice Chancellor's decision is final with regard to condonation.

If the period of absence is continuously more than three years, the candidate's registration for the course stands cancelled.

Branch – 2

D.M. MEDICAL GASTROENTEROLOGY

8. SYLLABUS

DEFINITION

- ❖ The term "gastrointestinal disease" includes diseases of the gastrointestinal lumen from the mouth to the anal canal (though the disease of the mouth are usually left to other specialists), diseases of the liver and biliary tree, disease of the pancreas and of the peritoneum. There are diseases from other systems which often manifest with gastrointestinal symptoms and these too come under the purview of the gastroenterologist.

THE SKILLS

- A. Clinical skill
- B. Manual skill
- C. Research skill

CLINICAL SKILL:

In depth knowledge of digestive health and disease in

- ❖ Diagnosis

- ❖ Prevention
- ❖ Development anomalies of digestive system
- ❖ Physiological functions and changes of organs in ill health
- ❖ Histopathology of normal structure and changes in diseases
- ❖ Acquired disease due to varying causes including functional disorders
- ❖ All current investigative procedures to assess both normally and also disease status
- ❖ Treatment by all the available modalities including surgery and therapeutic endoscopy etc...
- ❖ Preventive aspects must be studied in detail
- ❖ Knowledge of systemic diseases affecting digestive system.

MANUAL SKILL

ENDOSCOPIC PROCEDURES:

- ❖ Endoscopic procedures are a major part of investigative and therapeutic gastroenterology
- ❖ Hands on training in the basic upper and lower gastro intestinal endoscopic procedures
 - I. Diagnostic
 - II. Less specialized therapeutic procedures
 - i. Oesophageal dilatation
 - ii. Sclero therapy
 - iii. Variceal ligation
 - iv. Percutaneous endoscopic gastrostomy
 - v. Diagnostic pancreatic biliary endoscopy

NON-ENDOSCOPIC PROCEDURES:

- ❖ To be trained in non-endoscopic procedures
 - a. Percutaneous liver biopsy
 - b. Pneumatic dilatation
 - c. Ultrasound and CT guided FNAC
 - d. Motility studies
 - e. pH monitoring studies

RESEARCH SKILL

- ❖ This included the capacity to identify research problems, plan studies, and execute them. Analyze the data and write the report on the findings and their interpretation. (The candidate need to submit the evidence for the fulfillment of the requirement as mentioned in the section of 5(c) thesis/dissertation).
- ❖ Knowledge of the principle of the basic sciences
- ❖ Anatomy
- ❖ Physiology

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- ❖ Bio-chemistry
- ❖ Pathology
- ❖ Microbiology
- ❖ Virology
- ❖ Immunology
- ❖ Molecular biology

PERIPHERAL POSTINGS IN II YEAR

- A. Candidates to be sent to one of the institutes of Gastroenterology in government institution or institute in corporate hospital ... 1 month
- B. Pediatric gastroenterology department ... 15 days
- C. Radiology department ... 15 days

BRANCH – D.M. MEDICAL GASTROENTEROLOGY

PATTERN OF EXAMINATION

Theory – 4 paper, 100 marks each Duration: Three hours each

Paper I: Basic Science applied to the Speciality 100

Paper II: General Gastroenterology including Paediatric and Preventive Gastroenterology 100

Paper III: Hepatobiliary, Pancreatic Diseases 100

Paper IV: Recent Advances in the speciality 100

DISTRIBUTION OF MARKS: ***

Two Essay 20 Marks each (20 x 2) 40 Marks

Six Short 10 Marks each (10 x 6) 60 Marks

Total 100 Marks

PRACTICAL/CLINICAL AND ORAL EXAMINATION:

	<u>NO. OF CASES</u>	<u>DURATION</u>	<u>MARKS</u>
LONG CASE	ONE	One Hour	100
SHORT CASE	TWO	30 minutes each	100
WARD ROUNDS	FOUR (Minimum)	One Hour	100
Oral / Viva Examination			100
		Total	400

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* To follow similar examination pattern in all super speciality.

DISSERTATION:

Approved / not approved (No Marks)

MARKS QUALIFYING FOR A PASS:

	Maximum Marks	Marks Qualifying for a Pass (50%)
Theory	400	200
Practical/Clinical/Oral	400	200
Aggregate	800	400

The Viva and Clinical Examination may be conducted on the same day.

D.M. MEDICAL GASTROENTEROLOGY
POST GRADUATE TEACHING PROGRAMME

FIRST YEAR PG:

8 months

1. Clinical works in Hepatology and Gastro Enterology

- a. Workup of cases
- b. Daily ward Rounds
- c. Grand Rounds
- d. Attend OPD, Special Clinics

2. Basic Endoscopy Training


- a. Diagnostic Gastroscopy
- b. Rigid Sigmoidoscopy
- c. Flexible Sigmoidoscopy

3. Emergency on call Duties
4. Attend Academic Programmes
5. Research Methodology Course
6. Plan and Start research towards thesis

SECOND YEAR POST-GRADUATES:

- 8months

1. Clinical work in Hepatology and Gastroenterology
 - a. Daily ward rounds and case presentation


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- b. Grand rounds
 - c. Clinical Problem case discussion
 - d. Presentation GI Meets
 - e. Attend OPD, Special clinics
2. Endoscopic training – applied therapeutics
- i. Diagnostic Colonoscopy
 - ii. Therapeutic Procedures
 - ❖ Dilatation procedures: Achalasia Cardia,
Esophageal Stricture
 - ❖ Sclerotherapy
 - ❖ Variceal Ligation
 - ❖ Foreign Body Removal
 - ❖ Enteral Tube Placement
3. Emergency on call Duties
4. Inter departmental Consultation
5. Attend Academic Programmes
6. Continue Research towards thesis
7. Peripheral postings - 2 months

Candidates to be sent to Centre of Excellence - 1 month

- A. One of the tertiary hospital for
- ❖ SGPT – Lucknow
 - ❖ PGIMER – Chandigarh
 - ❖ C.M.C. – Vellore
 - ❖ G.E. Institute in Corporate hospitals
- B. Paediatric Gastroenterology department - 15 days
- C. Radiology Department - 15 days

THIRD YEAR POST-GRADUATES:

1. Clinical work in Hepatology and Gastroenterology
- a. Supervision / prioritization of Ward Work
 - b. Grand rounds
 - c. Emergency Consultation / Emergency Endoscopy
 - d. Attend G.I. Meet
 - e. Inter-departmental Consultation
 - f. Attend OPD, Special Clinics

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2. Advanced Endoscopy Training
 - a. Polypectomies
 - b. PEG Placements
 - c. Heater Probe / Argon plasma coagulation application
 - d. Diagnostic ERCPs
 - e. Basic Therapeutic ERCP under supervision

3. Basic Training Motility and pH Lab
 - a. Esophageal Manometry
 - b. Anorectal Manometry
 - c. Ph Testing and Interpretation

4. Attend all Academic Programmes

5. Research Training
 - a. Basic science lab work
 - b. Final project submission
 - c. Publication in at least two papers reviewed journals
 - d. Presentation at the ISG / INASL / GI endoscopy conference

LIST OF TEXT BOOKS
LATEST EDITIONS

1. HARRISON TEXT BOOK OF MEDICINE
2. ATLAS OF GASTRO INTESTINAL ENDOSCOPY – WILCOX
3. HARRISON GASTROENTEROLOGY AND HEPATOLOGY – LONGO
4. ATLAS OF GASTROENTEROLOGY INTESTINAL IMAGING
5. RADIOLOGIC-ENDOSCOPIC CORRELATION – PICKHARDT
6. GASTROENTEROLOGY – BOCUS, HENRY LEORY – VOL I-IV
7. LIVER DISEASE – SCHIFF – VOL I-II
8. GASTROINTESTINAL DISEASES, PATHOPHYSIOLOGY DIAGNOSIS
MANAGEMENT – MARIVIN HAND FORDTRON, JOHN – VOL I-II
9. NEURO GASTROENTEROLOGY – QUIGELY
10. HAND BOOK OF ELECTROGASTROENTEROLOGY – KOCH
11. CHALLENGES IN INFLAMMAMMATORY BOWEL DISEASE – MOTENSEN

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12. MEDICAL CARE OF THE LIVER TRANSPLANT PATIENT -- 2ED --
KILLENBEG
13. MEDICAL MANAGEMENT OF LIVER DISEASE -- KRAWITT
14. EVIDENCE BASED GASTROENTEROLOGY AND HEPATOLOGY --
MCDONALD
15. ATLAS OF GASTROINTESTINAL MOTILITY -- KOCH
16. METHODS IN DISEASE INVESTIGATING THE GASTROINTESTINAL TRACT --
PREDDY
17. DRUG THERAPY FOR GASTROINTESTINAL AND LIVER DISEASES --
FARSTING
18. PEDIATRIC GASTROENTEROLOGY AND NUTRITION IN CLINICAL
PRACTICE -- LIFSCHITZ
19. LIVER BIOPSY EVALUATION HISTOLOGIC DIAGNOSIS AND CLINICAL
CORRELATE -- KORULA
20. DISEASES OF THE LIVER AND BILIARY SYSTEM, IN CHILDREN -- KELLY
21. PRACTICAL GASTROINTESTINAL ENDOSCOPY -- COTTON
22. LIVER TRANSPLANTATION 2010 -- CHAKRAVARY
23. TOPIC IN GASTROENTEROLOGY (UP TO DATE SERIES)
24. YEARBOOK OF GASTROENTEROLOGY 2010-2011
25. CURRENT THERAPY IN GASTROENTEROLOGY AND LIVER DISEASE
26. MODERN TRENDS AND RECENT ADVANCE IN GASTROENTEROLOGY (ALL
SERIES UP TO DATE)

LIST OF JOURNALS

1. AMERICAN JOURNAL OF GASTROENTEROLOGY
2. CLINICAL GASTROENTEROLOGY
3. CURRENT GASTROENTEROLOGY
4. DIGESTIVE DISEASE
5. ENDOSCOPY
6. GASTROENTEROLOGY
7. GASTROINTESTINAL ENDOSCOPIC CLINIC OF NORTH AMERICA

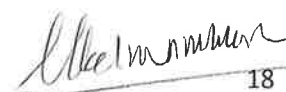
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8. JOURNAL OF GASTROENTEROLOGY AND HEPATOLOGY
9. JOURNAL OF HEPATOLOGY
10. JOURNAL OF PAEDIATRIC GASTROENTEROLOGY AND NUTRITION
11. TROPICAL GASTROENTEROLOGY
12. WORLD JOURNAL OF GASTROENTEROLOGY
13. GUT
14. EUROPEAN JOURNAL OF GASTROENTEROLOGY

COURSE OUTCOMES

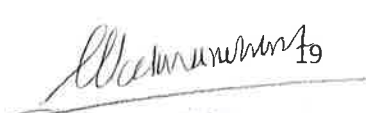
CO.1	Practice efficiently internal medicine specialty, backed by scientific knowledge including basic sciences and skills
CO.2	Diagnose and manage majority of conditions in his specialty (clinically and with the help of relevant investigations)
CO.3	Exercise empathy and a caring attitude and maintain professional integrity, honesty and high ethical standards
CO.4	Plan and deliver comprehensive treatment using the principles of rational drug therapy
CO.5	Plan and advise measures for the prevention and rehabilitation of patients belonging to his specialty;
CO.6	Manage emergencies efficiently by providing Basic Life Support (BLS) and Advanced Life Support (ALS) in emergency situations
CO.7	Recognize conditions that may be outside the area of the specialty/competence and refer them to an appropriate specialist
CO.8	Demonstrate skills in documentation of case details including epidemiological data



CO.9	Play the assigned role in the implementation of National Health Programs
CO.10	Demonstrate competence in basic concepts of research methodology and clinical epidemiology; and preventive aspects of various disease states
CO.11	Be a motivated 'teacher' - defined as one keen to share knowledge and skills with a colleague or a junior or any learner
CO.12	Continue to evince keen interest in continuing education irrespective of whether he/she is in a teaching institution or is practicing and use appropriate learning resources
CO.13	Be well versed with his medico-legal responsibilities
CO.14	Undertake audit, use information technology tools and carry out research - both basic and clinical, with the aim of publishing the work and presenting the work at scientific forums.

COURSE OUTCOME – PROGRAMME OUTCOME MAPPING

CO/PO	PO.1	PO.2	PO.3	PO.4	PO.5	PSO.1	PSO.2
CO.1	3	3	3	3	3	3	3
CO.2	3	2	2	2	2	2	3
CO.3	3	2	3	2	3	3	3
CO.4	3	2	3	2	2	3	3
CO.5	2	3	2	1	3	1	1
CO.6	3	2	2	3	2	3	2


 Prof. Dr. PADMANABHAN, P. MBBS., MD., D.M.,
 Reg.No:28611. Dept. of Medical Gastroenterology
 Date: _____ Time: _____

CO.7	3	3	2	2	1	2	1
CO.8	3	2	2	3	3	2	2
CO.9	3	2	2	3	3	3	2
CO.10	2	2	3	2	3	1	3
CO.11	3	3	2	3	2	1	3
CO.12	2	2	2	2	3	2	2
CO.13	3	3	3	3	3	2	3
CO.14	3	2	3	3	2	2	3
Average	2.8	2.4	2.4	2.4	2.5	2.14	2.4

Elkhanan