

# MGM INSTITUTE OF HEALTH SCIENCES

(Deemed to be University u/s 3 of UGC Act, 1956)

### Grade 'A' Accredited by NAAC

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# **Curriculum for** M.Sc. Medical Anatomy Amended upto BOM- 57/2019, dated 26/04/2019

# **Amended History**

- 1. Approved as per Resolution No. 3.2.1.6.i, of BOM -23/2012, dated 30/03/2012.
- 2. Amended as per Resolution No. 3.6 f, Resolution No. 3.6 h of BOM 45/2016, dated 28/04/2016.
- 3. Amended as per Resolution No. 4.13, Resolution No. 4.4.1.3 of BOM- 55/2018, dated 27/11/2018.
- 4. Amended as per Resolution No. 3.1.4.2 of BOM- 57/2019, dated 26/04/2019.

# PROPOSED M.SC MEDICAL ANATOMY SYLLABUS AND EXAMINATION PATTERN

### FIRST SEMESTER: SYLLABUS: Basic

# Annexure XI-A IX:

### General anatomy:

- 1. Terminology
- 2. Bone
- 3. Joints
- 4. Muscles
- 5. Cardiovascular system
- 6. Nervous system
- 7. Integumentary system

### General Histology:

- 1. Epithelium and glandular tissue
- 2. Connective tissue
- 3. Muscles
- 4. Cartilage and bone
- 5. Vessel and nerve
- 6. Lymphoid system-spleen, thymus, lymphnodes, tonsil.

### General embryology:

- 1. Cell cycle and cell division
- 2. Spermatogenesis, Oogenesis
- 3. Menstrual cycle, Ovulation, fertilization
- 4. Cleavage, formation of germ layers
- 5. Placenta

### Muscular system:

- 1. Muscles of upper limb
- 2. Muscles of lower limb
- 3. Muscles of abdomen
- 4. Muscles of head and neck
- 5. Muscles of thoracic cage

### Skeletal system:

- 1. Skull
- 2. Vertebral column
- 3. Thoracic bones
- 4. Upper limb bones

Lower limb bones

1.

2

# SECOND SEMESTER: SYLLABUS: Basic

### Gastrointestinal system:

- 1. Tongue
  - 2. Palate
  - 3. Pharynx
  - 4. Oesophagus and stomach
  - 5. Small intestine
  - 6. Caecum and appendix
  - 7. Large intestine
  - 8. Rectum and anal canal
  - 9. Peritoneal coverings
  - 10. Liver
  - 11. Pancreas
  - 12. Spleen

### Cardiovascular system:

### Heart

- 1. Aorta
- 2. Superior and inferior venacavae

### Respiratory system:

- 1. Nose and Larynx
- 2. Lungs and Pleura
- 3. Bronchopulmonary segments
- 4. Mediastinum and Diaphragm

### Genitourinary system:

- 1. Kidney, ureter, bladder
- 2. Male and female urethra
- 3. Male reproductive system
- 4. Female reproductive system

### Nervous system:

- 1. Meninges and cavernous sinus
- 2. Spinal cord
- 3. Cerebellum
- 4. Cerebrum
- 5. Cranial nerves
- 6. Blood supply of brain

### Endocrines

### Pitutary gland

- 1. Thyroid
- 2. Suprarenal gland

C.

### THIRD SEMESTER: SYLLABUS: Detailed

### General anatomy:

- 8. Terminology
- 9. Bone
- 10. Joints
- 11. Muscles
- 12. Cardiovascular system
- 13. Nervous system
- 14. Integumentary system

### General Histology:

- 7. Epithelium and glandular tissue
- 8. Connective tissue
- 9. Muscles
- 10. Cartilage and bone
- 11. Vessel and nerve
- 12. Lymphoid system- spleen, thymus, lymphnodes, tonsil.

### General embryology:

- 6. Cell cycle and cell division
- 7. Spermatogenesis, Oogenesis
- 8. Menstrual cycle, Ovulation, fertilization
- 9. Cleavage, formation of germ layers
- 10. Placenta

# All syllabus from here is associated with related histology, radiology, embryology and associated Clinical Anatomy

### Upper limb:

- 1. Pectoral region and clavicle
- 2. Axilla
- 3. Scapula and Scapular region
- 4. Brachial plexus
- 5. Arm and Humerus
- 6. Forearm-Radius and Ulna
- 7. Vessels of upper limb
- 8. Nerves of upper limb
- 9. Hand
- 10. Joints of upper limb

### Lower limb:

- 1. Hip bone and gluteal region
- 2. Femur, front of the thigh

- 3. Tibia, fibula and leg
- 4. Joints of lower limb
- 5. Vessels and nerves of lower limb
- 6. Foot

Genetics: Chromosomes, Genes, Chromosomal techniques, Chromosomal Abnormalities



2

### THIRD SEMESTER

### RESEARCH METHODOLOGY AND BIO STATISTICS

# Syllabus

### Research Methodology

- 1. Introduction
- 2. Research Design:-Correlational design, Experimental design, Internal & External validity, Threats to validity, components of research design, features of corrlational & experimental design
  - Observational studies:- Exploratory studies, Descriptive studies, Explanatory studies, cohort studies, case-control studies, Evaluative studies, Monitoring studies, Historical studies, Panel studies.

### 3. Methods of data collection:

Sample survey- Stages of sample survey

- Methods of survey

Sampling & Non sampling errors.

Interviewing for Data Collection

- -Types of interviews
- -Art of asking questions.

### Questionnaire construction

- -Considerations of questionnaire construction
- -Features of questionnaire

Pre-test Interviews & Pilot studies



2

### **Bio-Statistics**

- 1. Introduction to statistics & Biostatistics & its application.
- 2. Data condensation & graphical methods.
  - Raw data, Attributes & variables, Discrete & continuous variables,
  - Principles of classification
  - Construction of frequency distribution, discrete &continuous frequency distribution, relative frequency distribution, cumulative frequency distribution.
  - Graphical presentation of data using: Histogram, frequency polygon, frequency curve, ogive curves.
  - Diagrammatic presentation of data using :simple bar diagram, multiple bar diagram, subdivided bar diagram, pie- diagram
  - Stem-leaf display
- 3. Measures of Central Tendency:
  - Need & features of good measure of central tendency.
  - Arithmatic mean, mode, median
  - Merits & demerits of mean, mode & median.
  - Graphical methods for mode & median.
  - Relation between mean, mode & median (Empirical Relation)
- 4. Measures of dispersion:
  - Need & characteristics of good measure of dispersion
  - Range, mean deviation, standard deviation, variance, C.V.
  - Merits & demerits of range, Mean deviation, Standard deviation, variance C.V.
  - Sampling variability & Significance, Hypothesis testing
  - Normal distribution & its properties, Hypothesis, Types of hypothesis, Type I error, Type II error, level of significance, P-value, one-tailed test, two tailed test.
  - Significance of difference in Mean & proportion for large samples & small samples.
  - SEM (Standard Error of Mean) uses & its applications
  - SEDM (Standard Error of Differences in Means)
  - t-test –(paired t-test, unpaired t-test)
  - ANOVA
  - Chi-square test
    Standard Error of Proportion (SEP) & Standard Error of Difference in Proportion (SEDP) & its uses and applications.
- 5. Vital Statistics:

### FOURTH SEMESTER: SYLLABUS: Detailed

### Thorax:

- 1. Bib cage, intercostals muscles, mechanics of respiration
- 2. Sternum, thoracic vertebrae
- 3. Lung and pleura- Bronchopulmonary segments
- 4. Pericardium and Heart
- 5. Mediastinum
- 6. Diaphragm

### Abdomen:

- 1. Abdominal area and anterior abdominal wall
- 2. Perineum, Stomach
- 3. Liver, spleen
- 4. Small intestine and pancreas
- 5. Large intestine
- 6. Kidney, ureter, bladder and urethra
- 7. Lumbar vertebrae, Sacrum, pelvis
- 8. Male reproductive system
- 9. Female reproductive system
- 10. Aorta, Inferior vena cava, suprarenal gland
- 11. Posterior abdominal wall

### FIFTH SEMESTER: SYLLABUS: Detailed

### Head and Neck

- 1. Skull
- 2. Scalp and face
- 3. Cervical vertebrae
- 4. Triangles of neck
- 5. Parotid and other salivary glands
- 6. Infratemporal fossa and temporo mandibular joint
- 7. Tongue and pharynx
- 8. Nasal cavity, paranasal air sinuses
- 9. Larynx
- 10. Endocrine-thyroid, Parathyroid, pituitary
- 11. Eye and ear
- 12. Histotechniques, Cross sectional anatomy and recent advances

### SIXTH SEMESTER: SYLLABUS: Detailed

# Central nervous system:

- 1. Introduction and meninges, Cavernous sinus
- 2. Spinal cord
- 3. Brainstem
- 4. Cerebellum
- 5. · Cerebrum- Sulci, gyri, functional areas
- 6. Cerebrum-Ventricles, Corpus striatum
- 7. Diencephalon, Limbic system
- 8. Cranial nerves
- 9. Blood supply of brain

### M.Sc. Medical Courses

### Exam Pattern

The new suggested exam pattern which is common for all subjects is as follows.

- There will one final university exam at the end of every semester.
- Internal exam will be conducted at the college level for 1<sup>st</sup> and 2<sup>nd</sup> semesters with a common time table and for 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> semesters at the departmental level. The marks scored will be used for calculating the internal assessment as described on page 4, 5...

Marks scheme for the University exam:

Final theory marks will be 80 marks (60marks University Theory exam + 20 Marks Internal assessment).

The existing University Theory exam pattern should be modified as follows:

### **Existing Scheme:**

Question	Mark	Total marks
	distribution	(60)
Sec:A:MCQ	20X0.5M	10
Sec:B: SAQ	10/11 x 4M	40
Sec C: LAQ	1/2 x 10 M	10
		Total= 60 M

### Modified scheme: (This gives equal weightage to sec B and Sec C)

Question		Mark distribution	Marks allotted per section	Marks
Sec:A	MCQ	10X 1 M =10	10	10
Sec:B	SAQ	3/4 x 5 M =15	15	25
	LAQ	1/2 x 10 M =10	10	
Sec : C	SAQ	3/4 x 5 M =15	15	25
	LAQ	1/2 x 10 M =10	10	
			8	Total= 60 M

Final practical marks will be 70M.(50 marks University practical exam ± 20 Marks Internal assessment)

# Practical exam pattern: Total 50 marks with following break up.

Exercise	Description -	Marks	
Q No 1.	Practical exercise	15 M	9
Q No 2	Station exercise	5x 5M = 25 M	· ·
Q No 3	VIVA	10 M	
		Total= 50 M	

Calculation of Internal assessment: there will be 20 marks each towards internal assessment in theory and practicals. This should be submitted by respective departments atleast 15 days before university exam to the university (exam section)

### Break up of Theory IA calculation for 20marks

Internal exam(at	10 marks
department)	
Attendance	5 marks
Seminar	5marks
	Total= 20 M

### Break up of Practicals IA calculation:

Internal exam(at	10 marks	
department)		
Attendance	5 marks	
Journal	5marks	
	Total= 20 M	

# Exam pattern for Internal exam Theory: (30 marks) to be converted to 10 marks.

Question	Mark	Total marks
	distribution	(30)
Sec:A:MCQ	10 x1M	10
Sec:B: SAQ	2/3 x 5M	10
Sec C: LAQ	1/2 x 10 M	10
		Total= 30 M

# Exam pattern for Internal exam Practicals (30 marks) to be converted to 10 marks.

Exercise	Description	Marks	
Q No 1.	Practical exercise	10 M	
Q No 2	Station exercise	10 M	
Q No 3	VIVA	10 M	
		Total= 30 M	

5 marks allocated for Attendance in theory and 5 marks for attendance in practicals.

It was decided that weightage be given to attendance as per following scheme:

Attendance percentage	Marks
<75	Zero
75	2.5
76-80	3.0
81-85	3.5
86-90	4.0
91-95	4.5
96-100	5.0

5marks for Seminar presentations (to be added to theory internal assessment) and 5marks for Journal (to be added to Practical Internal assessment).

# Regarding exam marks distribution in VI Semester (3 year courses)

It was proposed that for the final semester ie  $6^{th}$  Sem in 3 year courses, the same mark distribution should be kept for practical exams.

Out of 50 marks practicals, break up will be as follows:

Exercise	Description	Marks
Q No 1.	Practical exercise	15 M
Q No 2	Dissertation presentation	25
Q No 3	VIVA	10 M
		Total= 50 M

### Dissertation:-

M.Sc. (Medical Courses) student should submit a suitable dissertation topic forwarded by the guide to the School of Biomedical Sciences by 16<sup>th</sup> September in III Semester of the course. Following approval of ethics & scientific committee, work should be carried out.

Completed dissertation should be submitted by 31st march in VI Semester.



Practical:

	OBGY.	General Surgery
VI <sup>th</sup> / VIII <sup>th</sup> Sem. & Prelim Exam.	15	20
Day to day assessment as per MCI norms	05	10
Total marks	20	30

**Resolution No. 3.4(e):** Resolved to accept Academic Calendar for UG (III MBBS Part 2) and PG course 2016-17. [Annexure – V of BOM-45/2016]

Resolution No. 3.5: It was resolved to start Fellowship course in Clinical Nephrology at MGM Medical College, Aurangabad from June 2016 as per the syllabus. [Annexure – X of BOM-45/2016]

Resolution No. 3.6(f): It was resolved to accept Human Anatomy journal for 1<sup>st</sup> year B.Sc. students of Paramedical courses to be implemented from 2016-17 Batch onwards. [Annexure – XI of BOM-45/2016]

Resolution No. 3.6(g): It was resolved to accept Microbiology Journal [Annexure - XII (A) & (B)] of BOM-45/2016] & Microbiology Log book [Annexure - XIII (A) & (B)] of BOM-45/2016] for B.Sc. MLT 2<sup>nd</sup> & 3<sup>rd</sup> year courses to be implemented from 2016-17 Batch onwards and old batches as well.

Resolution No. 3.6(h): It was resolved to accept journal [Annexure - XIV of BOM-45/2016] & log book [Annexure - XV of BOM-45/2016] for 1<sup>st</sup>, 2<sup>nd</sup> & 3<sup>rd</sup> year of M.Sc. Medical Anatomy courses to be implemented from 2016-17 new Batch onwards and as well as for Students who have taken admission in 2015-16 and will be entering into their 2<sup>nd</sup> year in 2016-17.

Resolution No. 3.6(i): It was resolved to accept journal [Annexure - XVI of BOM-45/2016] & log book [Annexure - XVII of BOM-45/2016] for 1<sup>st</sup>, 2<sup>nd</sup> & 3<sup>rd</sup> year of M.Sc. Medical Physiology to be implemented from 2016-17 new Batch onwards and as well as for Students who have taken admission in 2015-16 and will be entering into their 2<sup>nd</sup> year in 2016-17.

Resolution No. 3.6(j): It was resolved to accept journal [Annexure - XVIII of BOM-45/2016] & log book [Annexure - XIX of BOM-45/2016] for 1<sup>st</sup>, 2<sup>nd</sup> & 3<sup>rd</sup> year of M.Sc. Medical Microbiology to be implemented from 2016-17 new Batch onwards and as well as for Students who have taken admission in 2015-16 and will be entering into their 2<sup>nd</sup> year in 2016-17.

Resolution No. 3.6(k): It was resolved to accept log book [Annexure – XX of BOM-45/2016] for 1<sup>st</sup>, 2<sup>nd</sup> & 3<sup>rd</sup> year of M.Sc. Medical Pharmacology to be implemented from 2016-17 new Batch onwards and as well as for Students who have taken admission in 2015-16 and will be entering into their 2<sup>nd</sup> year in 2016-17.

### Resolution No. 4.13 of BOM-55/2018: Resolved as follows:-

- (i) Slow learners must be re-designated as potential learners.
- (ii) Students scoring less than 35% marks in a particular subjects/course in the 1<sup>st</sup> formative exam are to be listed as potential learners. These learners must be constantly encouraged to perform better with the help of various remedial measures.
- (iii) Students scoring more than 75% marks in a particular subjects/course in the 1<sup>st</sup> formative exam are to be listed as advanced learners. These learners must be constantly encouraged to participate in various scholarly activities.

Resolution No. 4.4.1.3 of BOM-55/2018: Resolved to approve the revised syllabus of 'Research Methodology and Biostatistics' subject for all the PG courses (including 3 years) and to shift it in 2nd semester with effective from the batch admitted in the Academic Year 2018-19 onwards under MGM School of Biomedical Sciences. [Annexure-13]



Mansee Thakur <mansibiotech79@gmail.com>

Annexure-13

# To compulsorily include in the BOS agenda

1 message

Registrar <registrar@mgmuhs.com>
6 September 2018 at 14:17
To: drravindrai@gmail.com, inamdar123456@gmail.com, ipseetamohanty@yahoo.co.in, jaishreeghanekar@gmail.com, drspravin22@gmail.com, dr\_spravin@hotmail.com, sudhirkul1979@gmail.com, mansibiotech79@gmail.com, sbsnm@mgmuhs.com, rajani.kanade@gmail.com, mgmschoolofphyslotherapy@gmail.com, prabhadasila@gmail.com, mgmnewbombaycollegeofnursing@gmail.com, gashroff2006@gmail.com, rupalgshroff@yahoo.com, manjushreeb@yahoo.com, drshobhasalve@gmail.com, spdubhashi@gmail.com, javantkarbhase@gmail.com, veenashatolkar@gmail.com, sharathcrisp@gmail.com, mgmlpth@themgmgroup.com, anuradhamhaske@hotmail.com, principalconabad@gmail.com
Cc: registrarmgmihs@gmail.com, mgmihsaurangabad@gmail.com, dr.rajeshkadam07@gmail.com;

Dear Sir/Madam,

aradmin@mgmuhs.com

Please find attached herewith request from Dr. Rita Abbi, Professor, Biostatistics regarding Modification in the syllabus of 'Research Methodology and Biostatistics' subject and Proposal to make this subject compulsory in all the PG courses. You are requested go through this and include it in your agenda for forthcoming BOS in September, 2018.

Thanks and regards,

Dr. Rajesh B. Goel

Registrar

MGM Institute of Health Sciences, Navi Mumbai

(Deemed University u/s 3 of UGC act, 1956)

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Modification in the syllabus of Research Methodology and Biosta.pdf 2261K

### MGM SCHOOL OF BIOMEDICAL SCIENCES, NAVI MUMBAI

(A constituent unit of MGM INSTITUTE OF HEALTH SCIENCES)

(Deemed University u/s 3 of UGC Act 1956)

Grade "A" Accredited by NAAC

Sector 1, Kamothe Navi Mumbai-410209, Tel.No.:022-27437631,27432890

Email. sbsnm@mgmuhs.com / Website: www.mgmsbsnm.edu.in

To.

7-6-2018

The Director MGM School of Biomedical Sciences Kamothe.

Navi Mumbai - 410 209

Subject: Modification in the syllabus of 'Research Methodology and Biostatistics'
Subject and Proposal to make this subject compulsory in all the PG courses

Dear Madam,

Research Methodology and Biostatistics subject is a significant tool for academic research. It has been observed that majority of post graduate courses have this subject as a part of their course work. There is a need to modify the curriculum of 'Research Methodology and Biostatistics subject' due to the following reasons:

- 1. While going through the Research Methodology and Biostatistics syllabus it was found that in some courses more weightage was given to computer hardware e.g. History and development of computers(old pattern) which may not be needed now as we have witnessed the revolution in Information Technology, Students should be taught latest technology and software.
- 2. Secondly, in most of the syllabi 'Vital Statistic' is missing which is an important topic for healthcare field. Some of the essential topics like 'Normal distribution' etc are missing.
- 3. By streamlining the syllabus it will save teacher's teaching time, paper setting time. Moreover, Exam section need not call multiple examiners for the same subject, this will be economical for exam section.

This subject is well recognized as an essential tool in medical research, clinical decision making, and health management. It is recommended to streamline the syllabus and make Research Methodology and Biostatistics' compulsory in all the post graduate courses of School Biomedical Sciences. The modified syllabus is enclosed.

This is for your kind perusal and necessary action please.

With regards,

Dr. Rita Abbi

Professor, Biostatistics

Copy for information to

Registrar MGMIHS Navi Mumbai;

Hon'ble Vice Chancellor, MGMIHS Navi Mumbai

Hon'ble Medical Director, MGM Medical College

MI chair persons 50 all brown 31

BOS -> Faculty >> Academic

Commiss.

27/6

MGM Institute Of Health Sciences
NWARD NO. 5720

DATE: 25/6/1/8

2716

# MGM INSTITUTE OF HEALTH SCIENCES

# M. Sc. Students

Syllabus for Research Methodology and Biostatistics

		No. of	Hours
	I. Research Methodology:	Theory	Practical
1	Scientific Methods of Research: Definition of Research, Assumptions, Operations and Aims of Scientific Research. Research Process, Significance and Criteria of Good Research, Research Methods versus Methodology, Different Steps in Writing Report, Technique of Interpretation, Precaution in interpretation, Significance of Report Writing, Layout of the Research Report	5	N. A.
2	Research Designs: Observational Studies: Descriptive, explanatory, and exploratory, Experimental Studies: Pre-test design, post-test design, Follow-up or longitudinal design, Cohort Studies, Case Control Studies, Cross sectional studies, Intervention studies, Panel Studies.	5	
3	Sampling Designs: Census and Sample Survey, Implications of a Sample Design, Steps in Sampling Design Criteria of Selecting a Sampling Procedure, Characteristics of a Good Sample Design, Different Types of Sample Designs (Probability sampling and non probability sampling), How to Select a Random Sample?, Systematic sampling, Stratified sampling, Cluster sampling, Area sampling, Multi-stage sampling, Sampling with probability proportional to size, Sequential sampling.	5	4
4	Measurement in research: Measurement Scales, Sources of Error in Measurement, Tests of Sound Measurement, Technique of Developing Measurement Tools, Scaling Meaning of Scaling, Scale Classification Bases, Important Scaling Techniques, Scale Construction Techniques, Possible sources of error in measurement, Tests of sound measurement	5	5
5	Methods of Data Collection: Types of data, Collection of Primary Data, Observation Method, Interview Method, Collection of Primary Data	5	3
6	Sampling Fundamentals: Need and importance for Sampling, Central Limit Theorem, Sampling Theory, Concept of Standard Error, Estimation, Estimating the Population Mean Estimating Population Proportion, Sample Size and its Determination, Determination of Sample Size through the Approach Based on Precision Rate and Confidence Level.	5	3
	II. Biostatistics		
	<b>Data Presentation</b> : Types of numerical data: Nominal, Ordinal, Ranked, Discrete and continuous. Tables: Frequency distributions, Relative frequency, Graph: Bar charts, Histograms, Frequency polygons, one way scatter plots, Box plots, two way scatter plots, line graphs	3	4
2	Measures of Central Tendency and Dispersion: Mean, Median, Mode Range, Inter quartile range, variance and Standard Deviation, Coefficient of variation, grouped mean and grouped standard deviation (including merits and demerits).	3	4

	otal hours 60	60
Statistical package.  Introduction to Statistical package.  Importing data from excel, access, tab and comma separated files. Entering data, labeling coding and recoding a categorical and continuous variable. Converting data from string to variables, sorting & filtering, merging, appending data sets.  Frequencies, descriptive statistics, cross tabulations. Diagrammatic presentation include I bar chart, pie chart, scatter diagram, box plot, line chart. Parametric test of hypothesis-one sample, Independent and paired sample t test, one way ANOVA& post H Testing for normality, Chi-square test with measures of association. Pearson correlation. N parametric test	SPSS. g a variable, o numeric nistogram,	3
<ul> <li>Vital Health Statistics: Measurement of Population: rate, crude rate, specific Measurement of fertility: specific fertility rate, Total fertility rate, Reproduction Gross Reproduction Rate, Net Reproduction Rate, Measures related to mortal Death Rate (CDR), Age-specific death Rate, Infant and child mortality rate, Prelated to morbidity.</li> <li>Computer Application Use of Computer in the contraction of the con</li></ul>	ion rate, lity: Crude Measures	4
7 Nonparametric or Distribution-free Tests: Important Nonparametric or Distrib Test Sign test, Wilcoxon signed-Rank Test, Wilcoxon Rank Sum Test: Mann U test Kruskal Walli's test, Friedman's test, and Spearman Correlation test.	-Whitney	3
Analysis of Variance and Covariance: Analysis of Variance (ANOVA):Co technique of ANOVA, One-way ANOVA, Two-way ANOVA, ANOVA in I Square Design Analysis of Co-variance (ANOCOVA), ANOCOVA Techniq	Latin- ue.	4
<ul> <li>Chi-square Test: Chi-square as a Non-parametric Test, Conditions for the Chi-square test, Steps Involved in Applying Chi-square Test, Alternativ Yates' Correction, and Coefficient by Contingency.</li> <li>Measures of Relationship: Need and meaning, Correlation and Simple Reg Analysis</li> </ul>	ve Formula, gression	2
Testing of Hypotheses: Definition, Basic Concepts, Procedure for Hypoth Measuring the Power of a Hypothesis Test, Normal distribution, data transformationImportant Parametric Tests, Hypothesis Testing of Means, Hypothesis Testing for Differences between Means, Hypothesis Testing for Comparing Related Samples, Hypothesis Testing of Proportions, Hypothesis Testing for between Proportions, Hypothesis Testing for Comparing a Variance to Some Hypothesized Population Variance, Testing the Equality of Variances of Tw Populations.	ypothesis Two r Difference e ro Normal	6

 $\mathcal{L}_{\mathrm{constant}}$ 

trong on

### Resolution No. 3.1.4.2 of BOM-57/2019:

- i. Resolved to include "Gender Sensitization" into UG (from new batch 2019-2020) and PG (from existing batches) curricula. [Annexure-21]
- **ii.** Resolved to align the module of "Gender Sensitization" with MCI CBME pattern for MBBS students.
- iii. Resolved that Dr. Swati Shiradkar, Prof., Dept. of OBGY., MGM Medical College, Aurangabad will coordinate this activity at both campuses.

### **Annexure - 21**

Gender sensitization for UG (2<sup>nd</sup>, 3<sup>rd</sup>, 8<sup>th</sup> semesters) and PG (3 hours)

### **INCLUSION OF "GENDER SENSATIZATION" IN CURRICULUM**

### **Introduction:**

The health care provider should have a healthy gender attitude, so that discrimination, stigmatization, bias while providing health care will be avoided. The health care provider should also be aware of certain medico legal issues related with sex & gender.

Society particularly youth & adolescents need medically accurate, culturally & agewise appropriate knowledge about sex, gender & sexuality. So we can train the trainers for the same. It is need of the hour to prevent sexual harassment & abuse .

To fulfill these objectives, some suggestions are there for approval of BOS.

### **Outline**

- 1)For undergraduates :- Three sessions of two hours each, one in 2<sup>nd</sup> term, one in 3<sup>rd</sup> term & one in 8<sup>th</sup> term.
- 2) For Faculties and postgraduates: One session of two hrs.
- 3) For those want to be trainers or interested for their ownself, value added course, which is optional about sex, gender, sexuality & related issues.

### Responsibility

ICC of MGM, MCHA , with necessary support from IQAC & respective departments.

### **Details of undergraduate sessions**

### 1)First session in 2<sup>nd</sup> term

Aim - To make Students aware about the concept of sexuality & gender.

To check accuracy of knowledge they have,

To make them comfortable with their own gender identify & related issues.

To make them aware about ICC & it is functioning.

**Mode** – Brain storming, Interactive power point presentation experience sharing.

**Duration** – Around two hours

**Evaluation** – Feedback from participants.

# 2)Second session in 3<sup>rd</sup> / 4<sup>th</sup> term

**Aim** – To ensure healthy gender attitude in these students as now they start interacting with patients.

To ensure that the maintain dignity privacy while interacting with patients and relatives, particularly gender related.

To make them aware about importance of confidentiality related with gender issues.

To encourage them to note gender related issues affecting health care & seek solutions.

Mode – focused group discussions on case studies, Role plays & discussion.

--3--

Duration – Around two hours.

Evaluation – Feedback from participants.

Third session in 8<sup>th</sup> term.

**Aim** – To understand effect of gender attitudes on health care in various subjects.

To develop healthy gender attitude while dealing with these issues.

**Mode** – Suggested PBL by departments individually. (In collaboration with ICC till faculty sensitization is complete)

**Evaluation** – Feedback

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### **FOR POSTGRADUATES**

Session of 2-3 hrs preferably in induction program.

**Aim** – To introduce medically accurate concept of gender, sex, gender role & sex role.

To ensure healthy gender attitude at workplace.

To understand gender associated concepts on health related issues & avoid such bias wile providing health care.

To make them aware about ICC & it's functioning.

**Mode** – Interactive PPT

Role plays & discussion

**Duration** – 2 to 3 hrs

**Evaluation** – Feedback.

### **FOR FACULTIES**

Session of 2 hours may be during combined activities.

**Aim** – To ensure clarity of concept abut gender & sex.

To discuss effect of these concept on health related issues.

To identify such gender & sex related issues in indivual subject specialties.

To discuss methodology like PBL for under graduate students when whey are in  $7^{\text{th}}$ - $8^{\text{th}}$  semester.

Mode – Role play

Focused group discussion

Case studies

**Evaluation** – Feed back.

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# MGM INSTITUTE OF HEALTH SCIENCES

(Deemed to be University u/s 3 of UGC Act, 1956)

Grade 'A' Accredited by NAAC

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