

Dr. D.Y. PATIL VIDYAPEETH, PUNE

(Deemed to be University)

(Re-accredited by NAAC with a CGPA of 3.62 on a four point scale at 'A' Grade) (An ISO 9001 : 2015 Certified University)

Dr. A. N. Suryakar Registrar

> Ref. No. : DPU/875= vii/2019 Date : 11/09/2019

NOTIFICATION

Whereas in pursuance of the following decisions taken by the Board of Management, it is hereby notified to all concerned that the "Syllabus for III M.B.B.S. Part-I and Part II-2014-15" is revised upto July 2019 and hereby published.

- Changes in syllabus for UG and PG in General Medicine, Pulmonary Medicine and General Surgery vide Resolution No. BM-07-(iii)-4 dated 28th January, 2014.
- Updation in UG and PG syllabus of General Medicine, Obstetrics & Gynecology, Orthopedics, Anaesthesiology, ENT and Ophthalmology vide Resolution No. BM-04(i)-15, dated 31st March, 2015.
- Structure format for evolution of History taking for 3rd Semester in General Medicine vide Resolution No. BM-26(v)-15, dated 29th December, 2015.
- Replacement of the term "one line answer by one Sentence answer in the Clinical subjects" vide Resolution No. BM-26(ix)-15, dated 29th December, 2015
- Introduction of Bioethical aspects in various chapters of all subjects vide Resolution No. BM-26(xi)-15, dated 29th December, 2015
- Modifications in UG Syllabus of Psychiatry vide Resolution No. BM-17(ix)-16, dated 22nd September, 2016.
- Consideration of weightage to the journal marks in internal assessment of III MBBS Clinical Subjects as continuous day to day assessment vide Resolution No. BM-05(ii)-17, dated 7th April, 2017.
- Conduct of prelim exam of 3rd MBBS only after the end of clinical postings, vide Resolution No. BM-38(ix)-17, dated 27th December, 2017.
- Enhancement of UG syllabus of General Medicine subject vide Resolution No. BM-16(x)-18, dated 21st July, 2018.
- Conduct of P.B.L. classes in E-library in the Department of Paediatrics vide Resolution No.BM-35(ii)-18, dated 12th October, 2018.
- Graduate Attributes, Programme Outcomes (POs), Course Outcomes (Cos) and gap analysis for all courses of UG and PG Programmes for Para-Clinical and Surgical Subjects vide Resolution No. BM-10(vii)-19 dated, 12th April, 2019.
- Interdisciplinary subjects (for Surgical Subjects) of M.B.B.S, M.D./M.S. and Super-specialty (D.M./M.Ch.) Programs under the Faculty of Medicine vide Resolution No. BM-10(viii) dated 12th April, 2019.



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MAPPING OF PROGRAMME OUTCOMES [POs] AND COURSE OUTCOMES [COs] OF MBBS PROGRAMMES

| Course Code | Course Title |
|--------------------|---------------------------|
| MB401 | General Medicine & Allied |
| MB402 | General Surgery & Allied |
| MB403 | Obstetrics & Gynaecology |
| MB404 | Paediatrics |

| General Surgery and allied: (MB 402) | | | |
|--------------------------------------|---|-------------|--|
| СО | At the end of the course, the learner should | Mapped | |
| No. | be able to: | Programme | |
| | | Outcomes | |
| 402.1 | Describe aetiology, pathophysiology, | PO1,PO2, | |
| | principles of diagnosis and management of | PO4,PO5, | |
| | common surgical problems including | PO7,PO9 | |
| | emergencies in adults and children. | | |
| 402.2 | Define indications and methods for fluid and | PO1,PO2, | |
| | electrolyte replacement therapy including | PO4,PO5, | |
| | blood transfusion; | PO7, PO9 | |
| 402.3 | Define asepsis, disinfection and sterilization | PO1,PO2,PO3 | |
| | and recommend judicious use of antibiotics; | ,PO4,PO5, | |
| | | PO6,PO7,PO9 | |
| 402.4 | Diagnose common surgical conditions both | PO1,PO2, | |
| | acute and chronic, in adult and children | PO3,PO5, | |
| | | PO7, PO9 | |
| 402.5 | Plan various laboratory tests for surgical | PO1,PO2, | |
| | conditions and interpret the results; | PO3,PO4, | |
| | | PO5,PO6,PO9 | |
| 402.6 | Identify and manage patients of hemorrhagic, | PO1,PO2,PO4 | |
| | septicaemic and other types of shock | ,PO5 ,PO9 | |
| 402.7 | Be able to maintain patient air-way and | PO1,PO2, | |
| | resuscitate any critically ill patient | PO3,PO5, | |
| | | PO6,PO7,PO9 | |
| 402.8 | Monitor patients of head, chest, spinal and | PO1,PO2, | |
| | abdominal injuries, both in adults and children; | PO3,PO5,PO6 | |
| | | ,PO7,PO9 | |
| 402.9 | Acquire principles of operative surgery, | PO1,PO2, | |
| | including pre-operative, operative and | PO3,PO5, | |
| | postoperative care and monitoring. | PO6, PO9 | |
| 402.1 | Treat open wounds including preventive | PO1,PO2, | |
| | measures against tetanus and gas gangrene; | PO5,PO6, | |
| | | PO7,PO8,PO9 | |
| 402.11 | Diagnose neonatal and pediatric surgical | PO1,PO2,PO3 | |
| | emergencies and provide sound primary care | ,PO5,PO6, | |
| | before referring the patient to secondary / | PO7,PO9 | |
| | tertiary centres; | | |
| 402.12 | Recognize the importance of clinical | PO1,PO2,PO3 | |
| | Orthopaedics & diagnose and manage majority | ,PO4,PO5, | |
| | of the conditions in clinical Orthopaedics on the | PO6,PO7, | |
| | basis of clinical assessment & investigations | PO8, PO9 | |

| General Surgery and allied: (MB 402) | | |
|--------------------------------------|---|-------------|
| СО | CO At the end of the course, the learner should | |
| No. | be able to: | Programme |
| | | Outcomes |
| 401.13 | Carry out Bag Mask Ventilation and Basic Life | PO1,PO2,PO3 |
| | Support(COLS) | ,PO5,PO6, |
| | | PO7,PO9 |
| 401.14 | At the end of the course student should know | PO1,PO2,PO3 |
| | basic principles of various imaging modalities | ,PO4,PO5, |
| | to diagnose various diseases and basic | PO7,PO8,PO9 |
| | principles of recent advances | |



GENERAL SURGERY

(1) GOAL:

The broad goal of teaching of undergraduate students in Surgery is to produce graduates capable of delivering efficient first contact surgical care.

(2) **OBJECTIVES**:

2.1 Knowledge

At the end of the course the students shall be able to:

- a. Describe aetiology, pathophysiology, principles of diagnosis and management of common surgical problems including emergencies in adults and children.
- b. Define indications and methods for fluid and electrolyte replacement therapy including blood transfusion;
- c. Define asepsis, disinfection and sterilization and recommend judicious use of antibiotics;
- d. Describe common malignancies in the country and their management including prevention;
- e. Enumerate different types of anesthetic agents, their indications, mode of administration, contraindications and side effects.
- f. Diagnose common surgical conditions both acute and chronic, in adult and children

2.2 Skills

At the end of the course, the student should be able to:

- a. Plan various laboratory tests for surgical conditions and interpret the results;
- b. Identify and manage patients of haemorrhagic, septicaemic and other types of shock;
- c. Be able to maintain patient air-way and resuscitate;
 - i. A critically injured patient:
 - ii. Patient with cardiorespiratory failure.
 - iii. Drowning case.
- d. Monitor patients of head, chest, spinal and abdominal injuries, both in adults and children;

- e. Provide primary care for a patient of burns;
- f. Acquire principles of operative surgery, including pre-operative, operative and postoperative care and monitoring.
- g. Treat open wounds including preventive measures against tetanus and gas gangrene;
- b. Diagnose neonatal and paediatric surgical emergencies and provide sound primary care before referring the patient to secondary / tertiary centers;
- i. Identify congenital anomalies and refer them for appropriate management.

He / she shall have observed / assisted performed the following :

- i. Incision and drainage of abscess
- ii. Debridement and suturing open wound
- iii. Venesection.
- iv. Excision of simple cyst and tumours
- v. Biopsy of surface malignancy
- vi. Catheterisation
- vii. Nasogastric incubation
- viii. Circumcision
- ix. Meatotomy
- x. Vasectomy
- xi. Peritoneal and pleural aspirations;
- xii. Diagnostic Proctoscopy
- xiii. Hydrocele operations
- xiv. Endotracheal intubation;
- xv. Tracheostomy
- xvi. Chest tube insertion.

(3) INTEGRATION:

The undergraduate teaching in surgery shall be integrated at various stages with different pre and para and other clinical departments.

(4) LEARNING METHODS:

Following teaching and learning methods are used in Undergraduate Teaching.

4.1 Small Board Teaching

- 4.2 Clinics
- 4.3 Tutorials
- 4.4 Case Based Learning
- 4.5 Symposium
- 4.6 Skill Lab

(5) SYLLABUS :

| Semester | Lectures | Tutorials | Demonstration | Clinics |
|---------------------|--------------|--------------|---------------|----------|
| 3 rd Sem | - | - | - | 6 weeks |
| 4 th Sem | 1 (16 hours) | - | - | 4 weeks |
| 5 th Sem | - | - | - | - |
| 6 th Sem | 2 (32 hours) | 2 (32 hours) | 16 hours | 4 weeks |
| 7 th Sem | 2 (32 hours) | - | - | 4 weeks |
| 8 th Sem | 3 (48 hours) | 2 (32 hours) | 16 hours | 4 weeks |
| 9 th Sem | 2 (32 hours) | 2 (32 hours) | 12 hours | 4 weeks |
| | (160 hours) | (96 hours) | (44 hours) | 26 weeks |

(6) LECTURES, TUTORIAL (TOTAL NUMBER, TOPICS) IN EACH SEMESTER (LIST ENCLOSED)

Lecture -

| 4 th Sem | General Surgery Part I |
|---------------------|---|
| 6 th Sem | General Surgery Part II + Head, Face, Neck + Breast + |
| | Endocrine + Neurosurgery + Plastic Surgery |
| 7 th Sem | GIT Part I + Hepatobiliary + Cardiothoracic Surgery + |
| | Paediatric Surgery |
| 8 th Sem | GIT Part II + GUT + Tropical Surgery |
| 9 th Sem | Recent Advances + Revision Lectures |

Tutorials

| 6 th Sem | Operative Surgery + Instruments |
|---------------------|---------------------------------|
| 8 th Sem | Surgical Pathology + X-Ray |
| 9 th Sem | Revision |

Clinical Posting

| Semester | Clinics |
|---------------------|----------|
| 3 rd Sem | 6 weeks |
| 4 th Sem | 4 weeks |
| 5 th Sem | - |
| 6 th Sem | 4 weeks |
| 7 th Sem | 4 weeks |
| 8 th Sem | 4 weeks |
| 9 th Sem | 4 weeks |
| - | 26 weeks |

(7) EVALUATION METHODS :



- Marks of Internal Assessment will be sent to the University before the commencement of Theory examination.
- Passing in internal assessment (min 35%) will be prerequisite for appearing for final examination.
- Combined theory and practical marks will be considered for passing in Internal Assessment.

(8) PATTERN OF FINAL EXAMINATION :



THEORY (120 Marks) PAPER I - 3 hours * 60 marks

| Section A | Section B |
|-----------------------------|---------------------------|
| (38 Marks) | (22 Marks) |
| Q.1 One sentence answer | Q.1 One sentence answer |
| question (Answer any 8 out | question (Answer any 5 |
| of 10) 1*8 Marks= 8 | out of 7) 1*5 Marks |
| Q.2 Long answer question | Q.2 Long answer |
| (answer any 2 out of 3)2*9 | question (answer any 1 |
| Marks=18 | out of 2) 1 * 9 Marks = 9 |
| Q.3 Short answer question | Q.3 Short answer |
| (answer any 3 out of 5) 3*4 | question(answer any 2 |
| Marks = 12 | out of 3) 2*4 Marks=8 |

* Time for section A and Section B - 3 hrs.

Paper II - 3 hours* 60 marks

| Section A (30) | Section B (30) |
|-----------------------------|------------------|
| Q. 1 One sentence answer | Q.1 One sentence |
| question (Answer any 12 | answer question |
| out of 14) 1*12 Marks=12 | (Answer any 5 |
| | out of 7) 1*5 |
| Q. 2 Long answer question | Marks=5 |
| (answer any 1 out of 2)1*9 | |
| Marks=9 | Q.2 Short answer |
| | question (answer |
| Q.3 Short answer question | any 5 out of 7) |
| (answer any 3 out of 4) 3*3 | 5*5Marks=25 |
| Marks=9 | |

Time for section A and Section B -3 hrs

PRACTICAL (120 MARKS)

| Clinical | Long Case (Surgery) | 50 Marks |
|----------|------------------------------|----------|
| (100) | Short Case I (Surgery) | 25 Marks |
| | Short Case II (Orthopaedics) | 25 Marks |

- Time for Long Case 40 minutes
- Time for short Case 20 minutes each

| Viva -Viva I - | Surgical Pathology (5) + Instruments + Tubes / Catheters + |
|----------------|--|
| (15 marks) | Operative Surgery (5) + Radiology (5) |
| Viva II - | Radiology + Orthopaedics |
| (05 marks) | |

Clinical and Viva examinations will be conducted by a pair of examiners. Out of 6 examiners, 2 examiners (one internal and one external) will be Orthopaedics Surgeons.

RESULT

Passing will be in three separate headings -

| Exam | Total | Minimum marks |
|---------------------|----------------|---------------|
| | | for passing |
| Theory + Viva | 140 (120 + 20) | 70 |
| Clinical | 100 | 50 |
| Internal Assessment | 60 | 30 |
| Total | 300 | 150 |

| 4 th SEMESTER | - LECTURE | PROGRAM | MME |
|--------------------------|-----------|---------|-----|
|--------------------------|-----------|---------|-----|

| Sr. | Торіс | |
|-----|--|--|
| No. | | |
| 1 | Introduction / History of Surgery / Acute Infections | |
| 2 | Wound Healing | |
| 3 | Haemostasis / Haemorrhage / Blood Transfusion | |
| 4 | Chronic Infections | |
| 5 | Shock | |
| 6 | Burns | |
| 7 | Fluid Electrolyte Balance / Disorders | |
| 8 | Acid Base Balance / Disorders | |
| 9 | Gas Gangrene | |
| 10 | Neoplasia | |
| 11 | Surgical Nutrition | |
| 12 | Nosocomial Infections | |
| 13 | Tetanus | |
| 14 | Hand Infections | |
| 15 | Sterilization | |
| 16 | OT techniques / Preoperative and Postoperative Care | |

6TH SEMESTER – LECTURE PROGRAMME

| Sr. | Торіс |
|-----|--|
| No. | |
| 1 | HIV & Surgeon |
| 2 | Benign Breast Diseases |
| 3 | Ca Breast (Two Lectures) |
| 4 | Diabetic Foot |
| 5 | Diseases of Veins (Two Lectures) |
| 6 | Neck Swellings (Two Lectures) |
| 7 | Diseases of Lymphatics |
| 8 | Disease of Arteries (Two Lectures) |
| 9 | Oral Malignancy |
| 10 | Thyroid – Anatomy/Physio/Investigations |
| 11 | Benign Disorders of Thyroid |
| 12 | Cleft Lip / Cleft Palate |
| 13 | Thyroid Malignancies |
| 14 | Peripheral Nerve Injuries |
| 15 | Hyperparathyroidism |
| 16 | Head Injury |
| 17 | Polytrauma (Two Lectures) |
| 18 | Skin Grafting |
| 19 | Jaw Tumours |
| 20 | Salivary Gland Tumours / Sialoadenitis |
| 21 | CNS Tumours |
| 22 | Adrenals Gland – Hyper / Hypofunction |
| 23 | Principles of Minimally Invasive Surgery |
| 24 | Principles of Radiotherapy |
| 25 | Maxillofacial Injuries |
| 26 | Congenital Disorders – Hydrocephalus, Spina Bifida |

7TH SEMESTER – LECTURE PROGRAMME

| Sr. | Торіс |
|-----|--|
| No. | |
| 1 | Oesophagus - Anatomy / Physiology / Investigations / Causes of |
| | Dysphagia |
| 2 | Liver – Anatomy / Physiology / Investigations |
| 3 | GERD |
| 4 | Liver Abscess |
| 5 | Oesophageal Motility Disorders |
| 6 | Liver Trauma |
| 7 | Carcinoma Oesophagus |
| 8 | Liver Tumours |
| 9 | Stomach – Anatomy / Physiology / CHPS |
| 10 | Hydatid cyst of Liver |
| 11 | Peptic Ulcer |
| 12 | Peptic ulcer – Complication & Management |
| 13 | Extra Hepatic Biliary Apparatus – Anatomy / Physiology / |
| | Investigations |
| 14 | Obstructive Jaundice |
| 15 | Carcinoma Stomach |
| 16 | Cholelithiasis |
| 17 | Upper GI Bleed- Aetiology and Principles of Management |
| 18 | Cholecystitis |
| 19 | Intestinal Tuberculosis |
| 20 | Carcinoma Gall Bladder / Choledochal cyst |
| 21 | Peritonitis – Aetiology, Principles of Management |
| 22 | Intraperitoneal Abscesses |
| 23 | Spleen – Anatomy / Splenomegaly / Splenectomy |
| 24 | Chest Injuries |
| 25 | Portal Hypertension |
| 26 | Cardiac Arrest / Resuscitation |
| 27 | Acute Pancreatitis |
| 28 | Principles of Surgery of Ischaemic Heart disease |
| 29 | Pseudocyst of Pancreases & Chronic Pancreatitis |
| 30 | Pancreatic Tumours |
| 31 | Congenital Heart Diseases |
| 32 | Revision |

8TH SEMESTER – LECTURE PROGRAMME

| Sr. | Торіс | |
|-----|--|--|
| No | | |
| 1 | Anatomy of Anterior Abdominal wall & Diaphragm | |
| 2 | Hirschsprung's Disease | |
| 3 | Incisional Hernia / Epigastric Hernia | |
| 4 | Haemorrhoids / Fistula in Ano / Fissure in Ano | |
| 5 | Inguinal Hernia | |
| 6 | Lower GI Bleed – Aetiology & Principles of management | |
| 7 | Meckel's Diverticulum / Meconium ileus | |
| 8 | Atresia – Oesophageal / Intestinal, T-O Fistula | |
| 9 | Intestinal Obstruction I | |
| 10 | Biliary Atresia / Congenital Diaphragmatic Hernia | |
| 11 | Acute Abdomen – D/D & Principles of management | |
| 13 | Abdominal Tuberculosis – Aetiopathology and Principles of | |
| | management | |
| 14 | Acute Appendicitis | |
| 15 | Inflammatory Bowel Disease | |
| 16 | Phimosis / Paraphimosis | |
| 17 | Surgical Consideration in Enteric Fever / Ascariasis | |
| 18 | Filariasis / Madura Foot | |
| 19 | Carcinoma Colon | |
| 20 | Diverticular Disease / Colostomy | |
| 21 | Skin Malignancies | |
| 22 | Surgical Anatomy of Rectum & Anal Canal | |
| 23 | Anorectal Anomalies | |
| 24 | Rectal Prolapse / Anorectal Abscesses | |
| 25 | Principles of Organ Transplantation | |
| 26 | Femoral Hernia, Umbilical Hernia & Other Hernias | |
| 27 | Intestinal Obstruction | |
| 27 | Adrenal Tumours | |
| 29 | Surgical Anatomy Embryology and Developmental Anomalies of | |
| 2) | GUT | |
| 30 | Symptoms and Investigations of urinary tract | |
| 31 | Urinary Tract Infection | |
| 32 | Pathophysiology of urinary tract obstruction | |
| 33 | PUL Obstruction | |
| 34 | Urolithiasis | |
| 35 | Renal Tuberculosis | |
| 36 | Renal Tumours | |
| 50 | Reliai Tulliouis | |

| Sr. | Торіс |
|-----|---|
| No | |
| 37 | Carcinoma Urinary Bladder |
| 38 | Ectopia Vesicae / Posterior Urethral Valves / Hypospadias |
| 39 | Carcinoma Penis |
| 40 | BEP |
| 41 | Carcinoma Prostate |
| 42 | Undescended Testis / Torsion Testis |
| 43 | Testicular Tumours |
| 44 | Hydrocoele / Varicocoele |
| 45 | Urodynamic Studies / Neurogenic Bladder |
| 46 | Retention of Urine – Aetiology & Principles of management |
| 47 | Acute Renal Failure |
| 48 | Renal Transplant |
| 49 | GUT Trauma |
| 50 | Stricture Urethra |

9TH SEMESTER - LECTURE PROGRAMME

| Sr. | Торіс | |
|-----|------------------------------|--|
| No | | |
| 1 | LASER in Surgery | |
| 2 | Staplers in Surgery | |
| 3 | Universal Safety Precautions | |
| 4 | Revision Lectures | |

6TH SEMESTER – TUTORIAL PROGRAMME

| Sr. No | Торіс |
|-----------|--|
| 1 | Instruments – I |
| 2 | Incision and Drainage / Debridement / CLW suturing |
| 3 | Instruments – II |
| 4 | Venesection / Circumcision |
| 5 | Instruments – III |
| 6 | Cyst excision / Biopsies |
| 7 | Instruments – IV |
| 8 | FNAC / Pleural Tap/ Ascitic Tap |
| 9 | Instruments – V |
| 10 | Intercostal Drainage |
| 11 | Instruments – VI |
| 12 | Tracheostomy |
| 13 | Foley's catheter/ Nelaton's catheter |
| 14 | Suprapubic cystostomy |
| 15 | Ryles tube / Infant feeding tube |
| 16 | Preoperative care |
| 17 | Simple Rubber catheter / Flatus tube |
| 18 | Postoperative care |
| 19 | Dressing Trolley |
| 20 | Surgeries for Hernia |
| 21 | Bandages |
| 22 | Surgeries for Hydrocoele |
| 23 | I/V Set, Intracath, Scalp-Vein, 3 way |
| 24 | Resuscitation |
| 25 | Blood Transfusion |
| 26 | Sutures & Needles – I |
| 27 | Use of Drains |
| 28 | Sutures & Needles - II |
| 29 | Sterilization |
| 30 | Arterial disorders |
| 31 | Acute Infections |
| 32 | Venous disorders |
| 33 | Chronic Infections |

8TH SEMESTER – TUTORIAL PROGRAMME:

| Sr. | Торіс |
|-----|----------------------------------|
| No | |
| 1 | Radiology – I (GIT) |
| 2 | Radiology – II (GUT) |
| 3 | Radiology – III (Miscell) |
| 4 | Radiology – IV (GUT) |
| 5 | Short Procedures - I |
| 6 | Instruments – I (Urology) |
| 7 | Short Procedures – II |
| 8 | Instruments – II (Urology) |
| 9 | Instruments – III |
| 10 | Short Procedures – III (Urology) |
| 11 | Instruments – IV |
| 12 | Short Procedures – IV (Urology) |
| 13 | Short Procedures – V |
| 14 | Tube & Catheters – I (Urology) |
| 15 | Short Procedures – VI |
| 16 | Tube & Catheters – II (Urology) |
| 17 | Tube & Catheters – III |
| 18 | Surgical Pathology I (GUT) |
| 19 | Tube & Catheters – IV |
| 20 | Surgical Pathology II (GUT) |
| 21 | Surgical Pathology III (GIT) |
| 22 | Retention of Urine |
| 23 | Surgical Pathology IV (GIT) |
| 24 | Genitourinary Trauma |
| 25 | Surgical Pathology V (GIT) |
| 26 | Principles of Urinary Diversion |
| 27 | Surgical Pathology VI(Miscell) |
| 28 | Urolithiasis |
| 29 | Resuscitation |
| 30 | Upper GI Bleed |
| 31 | Lower GI Bleed |
| 32 | Scans in Urology |
| 33 | Portal Hypertension |
| 34 | Endoscopy in Urology |
| 35 | Obstructive Jaundice |
| 36 | Acute & Chronic Infections |

9TH SEMESTER – TUTORIAL PROGRAMME

| Sr. No | Торіс | |
|--------|-----------|--|
| 1 | Revisions | |