

SURGERY AND ALLIED SPECIALITIES

Minimum time period of training excluding period for University Examination.

| | | |
|------|---|----------|
| I. | GENERAL SURGERY (including cardiothoracic and ... Vascular Surgery, Urology, Paed. Surgery, Plastic Surgery Neurosurgery, and casualty) | 300 hrs |
| II. | ANAESTHESIOLOGY | 20 Hrs. |
| III. | ORTHOPAEDIC SURGERY | 100 Hrs. |
| IV. | PHYSICAL MEDICINE | 20 Hrs. |
| V. | RADIO DIAGNOSIS AND RADIOTHERAPY | 20 Hrs. |
| VI. | DENTISTRY. | 10 Hrs. |

SURGERY AND ALLIED SPECIALITIES (WARD CLINICS) -3 HRS/DAY (9 am-12 NOON)

| Subject | 3 rd . Sem (18 wks) | 4 th . Sem (22 wks) | 5 th . Sem (18 wks) | 6 th . Sem (22 wks) | 7 th . Sem (18 wks) | 8 th . Sem (22 wks) | 9 th . Sem (22 wks) | Total (142 wks) |
|--|---|---|---|---|---|---|---|-----------------------|
| I.GENERAL SURGERY AND ANAESTHESIOLOGY | 6 | | 4 | | 4 | 6 | 6 | 26 |
| II.ORTHO.SURGERY AND PHYSICAL MEDICINE | | | 4 | 4 | | | 2 | 10 |
| III. CASUALTY | | | | | 2 | | | 2 |
| IV.RADIO DIAGNOSIS | | | | | 2 | | | 2 |
| V. DENTISTRY | | | | | 2 | | | 2 |
| | 6 | X | 8 | 4 | 10 | 6 | 8 | 42 |

- Ward ending examinations should be taken preferably on the last day of the particular allotted ward.
- Students should not be placed in ward clinics during preparatory leave of not more than 10 days for Final Internal assessment Examination and not more than 15 days for Final University Examination for each professional examination.(dates of such examination should be announced well before for proper planning and execution).
- Time table for different examination needs to be displayed at the beginning of academic session.

SURGERY AND ALLIED SPECIALITIES
THEORETICAL DIDACTIC LECTURES.

4th & 5th Semester (50 Hrs.)

| | | |
|-------|---|-------|
| I. | Asepsis, Antisepsis, Sterilisation | ... 2 |
| II. | Nonspecific and specific surgical infections, Lymphadenopathy, tetanus, Gasgangrene, Leprosy, TB, Syphilis, AIDS, Nosocomial infections. Filariasis | ... 5 |
| III. | Wounds -classification and management, Wound Healing, wound infections. | ... 3 |
| IV | Shock, Haemorrhage, Blood transfusion | ...3 |
| V. | Burns | ...2 |
| VI | Nutrition and fluid therapy in surgery (Basics of Electrolyte and acid base balance). | ... 3 |
| VII. | Cysts, Haematomas, Ulcers, sinus, Fistula, Tumours-Benign and malignant and Management of Malignant tumour | ... 3 |
| VIII. | Peripheral vascular diseases -ischaemic limbs, varicose veins, Lymphoedema. | ... 4 |
| IX. | Abdominal Wall, Umbilicus, hernia | ...2 |
| X. | Acute abdomen, Peritonitis and intraabdominal Abscess, Management of abdominal trauma. | ... 3 |
| XI. | Principle of organ + tissue transplantation | ... |
| XII. | Anaesthesia -General principles & techniques Patient preparation, complications, CPR, | ...5 |
| XIII. | Orthopaedic Surgery- | ...15 |
| | (A) Classification of bone and joint injuries diagnosis, principles of treatment of closed and open injuries, complications. | |
| | (B) Specific orthopaedic injuries of upper and Lower limbs and spinal trauma. | |

6th & 7th Semester (45 Hrs)

| | | |
|------|------------------------------------|------|
| I. | Liver, GB, CBD | ...4 |
| II | Pancreas, spleen | ...4 |
| III. | Stomach & Duodenum, Upper G.I. Hge | ...3 |
| IV. | Intestinal Obstruction, Mesentery | ...3 |

| | | |
|-------|--|--------------|
| V. | Appendix, large gut including rectum and anal canal, Lower G.I.Hge | ... 4 |
| VI. | Breast | ...3 |
| VII. | Thyroid | ...2 |
| VIII. | Para thyroid. Adrenal | ...2 |
| IX. | Orthopaedic Surgery | ...16 |
| | 1. Bone and joint infections -non specific and specific | |
| | 2. Tumours. | |
| | 3. Deformities -congenital and paralytic | |
| | 4. Metabolic bone diseases. | |
| | 5. Arthritis and degenerative diseases. | |
| | 6. Amputation And disarticulations. | |
| X. | Physical Medicine & Rehabilitation | ...4 |
| | <u>8th & 9th Semester (30 Hrs. + 25 Hrs.)</u> | |
| I. | Head injuries, Intracranial SOL's Pituitary. | ...5 |
| II | Chest injuries Post op. chest complications, Bronchial carcinoma Dysphagia -Oesophageal, strictures and malignancy. | ...5 ...5 |
| III. | Mouth, Tongue, jaw swellings, salivary glands, Peripheral nerve injury. | ...6 |
| IV. | Common paediatric surgical problem. | ...4 |
| V. | Urology -Congenital anomalies, Urolithiasis, Genitourinary Trauma, TB, Tumours, Haematuria, Retention of urine Prostate, Urethra, Scrotal pathologies -Testis, epididymis, Hydroceles. Diseases of penis, Male infertility. | ...10 |
| VI. | Radiotherapy and Chemotherapy | 4 |
| VII. | Tutorial classes (May be in batches) | 25 |
| | A. Operative surgery and surgical anatomy (including instruments). | |
| | B. Surgical pathology and specimens. | |
| | C. Radiodiagnosis. | |
| | D. Pre-op. preparation and post op. management and complications. | |
| | E. Surgical emergencies. | |
| | F. Recent advances. | |

**SURGERY AND ALLIED SPECIALITIES
(SEMESTERWISE DISTRIBUTION)**

CONTINUOUS INTERNAL ASSESSMENT EXAMINATION

| THEORETICAL | PRACTICAL/CLINICAL |
|---|--|
| I. At the end of 5 Semester classes II. At the end of 7th. Semester classes III. At the end of 9th Semester classes | 2nd PROFESSIONAL |
| | I. Ward ending 3 rd Semester 6 wks (Genl.Surgery) |
| | II. Ward ending 5 semester- |
| | (a) 4 wks (General Surgery) |
| | (b) 4 wks (Ortho. Surgery) |
| | III Ward ending 6th Semester |
| | (Orthopedics, Physical Medicine, Casualty) |
| | 3rd PROFESSIONAL |
| | IV) Ward ending 7 th Semester |
| | (General Surgery, Radiology, Dentistry) |
| | V) Ward ending 8 th Semester |
| | (General Surgery) |
| | VI) Ward ending 9 th semester |
| | (General Surgery & Ortho.) |

FINAL INTERNAL ASSESSMENT EXAMINATION

| THEORETICAL | PRACTICAL/CLINICAL |
|---------------------|---------------------|
| During 9th semester | During 9th semester |

**FINAL UNIVERSITY EXAMINATION
3RD PROFESSIONAL PART II**

| THEORETICAL | PRACTICAL/CLINICAL |
|---------------------|---------------------|
| During 9th semester | During 9th semester |

MARKS DISTRIBUTION

| Continuous Internal Assessment | | Final Internal Assessment | | <u>Total Internal Assessment</u> | | |
|--------------------------------|------------------------|---------------------------|------------------------|---|----------------------------------|----------|
| Theory (a) | Practical/Clinical (b) | Theory (c) | Practical/Clinical (d) | Theory (a) + (c) = e | Practical Clinical (b) + (d) = f | (e)+ (f) |
| 15 | 15 | 15 | 15 | 30 | 30 | 60 |

FINAL UNIVERSITY EXAMINATION (3rd.Prof. Part-II)

↓↓
 Theory paper I& II
 2 ½ Hr / each
 60 Marks Paper =120

↓↓
 Oral
 = 20

↓↓
 Practical/Clinical
 = 100

ORTHOPAEDIC SURGERY
(4TH AND 5TH . SEMESTER) LECTURE CLASSES
Total 15 lectures.

| | | |
|----|--|----|
| A. | Classification of bone and joint injuries and their diagnosis | -1 |
| | Principles of treatment of closed and open injuries | -1 |
| | Complications -Early & Late, Local & Systemic | -1 |
| | Healing of fractures | -1 |
| B. | Orthopaedic trauma of upper limbs | |
| | 1. Fracture clavicle | } |
| | 2. Injuries around shoulder joint | |
| | Rotator cuff injury | |
| | Acromioclavicular dislocation | |
| | Shoulder dislocations | } |
| | Fracture of upper end of humerus | |
| | 3. Fracture of shaft of humerus | } |
| | 4. Injuries around elbow joint | |
| | Supracondylar and transcondylar fractures of humerus | |
| | Dislocation of Elbow | |
| | Fracture of radial head and olecranon | } |
| | 5. Fracture of forearm bones and Monteggia and Galeazzi | |
| | Injuries around wrist joint | } |
| | Colles' fracture and other fractures of distal radius | |
| | Fracture scaphoid | |
| | Bennett's fracture dislocation | |
| | 6. Injuries around wrist joint | } |
| | Colles' fracture and other fractures of distal radius | |
| | Fracture scaphoid | |
| | Bennett's fracture dislocation. | |
| C. | Orthopaedic trauma of pelvis lower limbs and spine - | |
| | 1. Stable and unstable fractures of pelvis }-1 | } |
| | 2. Dislocation of hip | |
| | 3. Fracture of neck of femur and trochanteric/subtrochanteric fractures -2 | } |
| | 4. Fracture of shaft of femur | |
| | 5. Injuries around knee joint | } |
| | Supracondylar and condylar injuries | |
| | Internal derangement of knee | |
| | Fractures of patella -2 | |
| | Proximal tibial injuries | } |
| | 6. Fracture of shaft of tibia and fibula | |
| | 7. Injuries around ankle and foot injuries. | } |
| | 8. Spinal trauma. | |

ORTHOPAEDIC SURGERY
(6TH AND 7TH . SEMESTER) LECTURE CLASSES.
[Total 16 lectures]

| | |
|--|----|
| 1. Bone and joint infections | -3 |
| Acute and chronic pyogenic osteomyelitis. | |
| Septic arthritis | |
| Bone and joint tuberculosis -Hip, Knee, Spine. | |

- | | |
|---|------------------|
| <p>2. Bone tumours</p> <p>Classification</p> <p>Osteochondroma</p> <p>Chondroma</p> <p>Chondrosarcoma</p> <p>Osteosarcoma</p> <p>Giant cell tumours</p> <p>Ewing's tumour</p> <p>Multiple myeloma</p> <p>Secondary bone tumours</p> | <p>-3</p> |
| <p>3. Deformities -Congenital and paralytic</p> <p>Syndactyly & Polydactyly.</p> <p>Exostosis</p> <p>Fibrous dysplasia</p> <p>Osteogenesis imperfecta</p> <p>Congenital dislocation of hip (developmental dysplasia)</p> <p>Torticollis</p> <p>CTEV</p> <p>Genu Valgum & Varum</p> <p>Spina bifida -occulta & cystica</p> <p>Scoliosis and Kyphosis</p> <p>Basics of Poliomyelitis and cerebral palsy.</p> | <p>-5</p> |
| <p>4. Metabolic and degenerative diseases and arthritis</p> <p>Gout</p> <p>Rheumatoid arthritis</p> <p>Spondylosis and spondylolisthesis</p> <p>Osteoarthritis</p> <p>Ankylosing spondylitis</p> <p>Disc prolapse</p> <p>Perthes' disease.</p> | <p>-3</p> |
| <p>5. Amputations and disarticulations</p> <p>a) General principles, Indications, types, complications.</p> <p>b) Symes', Gritti-stokes, Below knee, Above knee, Forearm, Arm, Fingers and toes.</p> | <p>-2</p> |

**SYLLABUS FOR M.B.B.S. COURSE IN PHYSICAL MEDICINE
& REHABILITATION. - [4 Classes]**

1. Introduction -History, Scope, definition, terminology and facets of Rehabilitation.
2. Treatment modalities used in Physical Medicine and Rehabilitation -Heat, Cold, Electricity, Exercise, Traction etc.
3. Rehabilitation in different conditions-
e.g. CVA, Paraplegia, Cerebral palsy, PPRP, Myopathy, Arthritis etc,
4. Rehabilitation of Amputees, Prosthesis, Orthosis and aids to mobility.
Disability Evaluation and certification.

ANAESTHESIOLOGY –[10 classes]

| | | |
|---------------------------------------|--|-----------------|
| GENERAL PRINCIPLES & TECHNIQUES - | Introduction Regional Anaesthesia -Spinal -Epidural Local Anaesthesia -Safety -Complication -Diagnosis & Management. | -[3 Lectures] , |
| PATIENT PREPARATION - | Assessment Preparation Premedication | -[3 Lectures.] |
| COMPLICATIONS - | Hypoxia Hypotension -[1 Lecture] Post Operative lung complications -[1 lecture.] | |
| CPR - Paediatrics / Neonate -Adult | | -[2 Lectures.] |

WEST BENGAL UNIVERSITY OF HEALTH SCIENCES

Model Questions :-

SURGERY

First Paper .

Full Marks -60

Time: 2.30hrs

The figures in the margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable.

Section -I

1. Define shock? Classify different types of shock. Describe the management of hypovolaemic shock. 2+8+5 = 15
2. What are causes of lump in Rt. Iliac fossa? Describe the management of acute appendicular lump? 5+5+5 = 15

OR

A 40 yrs old female patient present with lump over Rt. Upper abdomen with obstructive jaundice - how will you proceed to investigate such a case?

Describe the pre-operative preparation of a jaundice patient.

8+7=15

3. Write short answers on (any five): 5 x 5 = 25
 - a) Intercostal drain.
 - b) ATLS
 - c) Septicaemia
 - d) Active immunization against tetanus
 - e) MODS
 - f) Electric burns

Section -II

4. Write short notes on (any five)

4 x 5 = 20

- a) Carpal tunnel syndrome
- b) Wrist drop
- c) Non-union of fracture.
- d) Brodie's abscess
- e) Scoliosis
- f) Sequestrum
- g) Tension band wiring

Surgery:

Paper I included :

- 1. General Surgery
- 2. Gastro-intestinal including colo-rectal surgery. Abdominal Wall & Hernia, Hepatubilliary System, Pancreas, Spleen, Peritoneum Retroperitonent.
- 3. Breast
- 4. Head Neck surgery
- 5. Orthopaedics

Paper II included: General Surgery including venous, arterial & lymphatic diseases.

- 1. Genitourinary System.
- 2. Endocrinology
- 3. Anaesthesiology
- 4. Radiology & Radiotherapy
- 5. Dental Surgery
- 6. Special Surgery – Paediatric Surgery, Cardio-Vascular Surgery, Neurosurgery, Plastic Surgery and Traumatology

Scheme of Examination:
Total marks: 60
Time: 2.30 Hours
Paper I

- | | |
|---|-------|
| 1) Broad question on general surgery | 15 |
| 2) Broad question on G.I. System etc. | 15 |
| With alternative (Division marks is required) | |
| 3) Short notes on any two out of four | 2 x 5 |
| 4) Short notes on any five (Orthopaedics) | 5 x 4 |

Paper-II

- | | |
|--|-------|
| 1. Broad question on Genitourinary System, endocrinology, with one alternative | 15 |
| 2. Write short answer on any three out of five | 3 x 5 |
| 3. Write short answer on any three out of five | 3 x 5 |

in the following subjects

- a) Paediatric Surgery
- b) Plastic Surgery & Casualty
- c) Radiology & Radiotherapy
- d) Anaesthesiology

- | | |
|--|-------|
| 4. Write short answer on any three out of five | 3 x 5 |
|--|-------|

Dental Surgery

Physiotherapy & Rehabilitation

Cardiothoracic Surgery

Neuro Surgery