

MAHARASHTRA STATE BOARD OF VOCATIONAL EDUCATION EXAMINATION, MUMBAI

| 1 | Name of Course | C. C. IN OPERATION THEATRE TECHNICIAN (W.E.F. 2015-16) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2 | Course Code | 201201 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Max.No.of Students Per Batch | 25 Student | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Duration | 1 year | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Type | Full Time | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | No.Of Days / Week | 6 Days | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | No.Of Hours /Days | 7 hrs. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Space Required | 1) Class Room = 200 Sq feet 2) <u>Practical Lab = 200 Sq feet</u> Total = 400 Sq feet 3) Organization should have MOU with 1 Major OT & 1 Minor OT functioning hospital with relevant facilities. 4) Distance between Hospital and Institute Should not be more than 10 Km. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | Minimum Entry Qualification | S.S.C. Pass | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | Objective Of Course | To assist in various surgical procedure in Operation Theater Setting | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | Employment Opportunity | In Operation Theatres of Surgical , maternity Homes & Hospitals to assist qualified person | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | Teacher's Qualification | P.G. Degree / Degree in Medical branch./BSc Nursing /GNM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | Training System | Training System Per Week <table><tr><td>Theory</td><td>Practical</td><td>Total</td></tr><tr><td>12 hrs</td><td>30 hrs</td><td>42 hrs</td></tr></table> | | | | | | | Theory | Practical | Total | 12 hrs | 30 hrs | 42 hrs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Theory | Practical | Total | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 hrs | 30 hrs | 42 hrs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | Exam. Scheme | <table><tr><th>Sr. No.</th><th>Paper Code</th><th>Name of Subject</th><th>TH/PR</th><th>Hours</th><th>Max. Marks</th><th>Min. Marks</th></tr><tr><td>1</td><td>20120111</td><td>Anatomy Physiology</td><td>TH-1</td><td>3 hrs.</td><td>100</td><td>35</td></tr><tr><td>2</td><td>20120112</td><td>Principles & Practice Of Theatre Management And Material</td><td>TH-2</td><td>3 hrs.</td><td>100</td><td>35</td></tr><tr><td>3</td><td>20120113</td><td>Personal Management Of Hospital Staff Controlling Supervision</td><td>TH-3</td><td>3 hrs.</td><td>100</td><td>35</td></tr><tr><td>4</td><td>20120121</td><td>O.T. Maintenance</td><td>PR-1</td><td>3 hrs</td><td>100</td><td>50</td></tr><tr><td>5</td><td>20120122</td><td>Maintenance Of Medical Equipments</td><td>PR-2</td><td>3 hrs.</td><td>100</td><td>50</td></tr><tr><td>6</td><td>20120123</td><td>Maintenance Of Non-Medical Equipments</td><td>PR-3</td><td>3 hrs</td><td>100</td><td>50</td></tr><tr><td></td><td></td><td>Total</td><td></td><td></td><td>600</td><td>255</td></tr></table> | Sr. No. | Paper Code | Name of Subject | TH/PR | Hours | Max. Marks | Min. Marks | 1 | 20120111 | Anatomy Physiology | TH-1 | 3 hrs. | 100 | 35 | 2 | 20120112 | Principles & Practice Of Theatre Management And Material | TH-2 | 3 hrs. | 100 | 35 | 3 | 20120113 | Personal Management Of Hospital Staff Controlling Supervision | TH-3 | 3 hrs. | 100 | 35 | 4 | 20120121 | O.T. Maintenance | PR-1 | 3 hrs | 100 | 50 | 5 | 20120122 | Maintenance Of Medical Equipments | PR-2 | 3 hrs. | 100 | 50 | 6 | 20120123 | Maintenance Of Non-Medical Equipments | PR-3 | 3 hrs | 100 | 50 | | | Total | | | 600 | 255 | | | | | | |
| Sr. No. | Paper Code | Name of Subject | TH/PR | Hours | Max. Marks | Min. Marks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 20120111 | Anatomy Physiology | TH-1 | 3 hrs. | 100 | 35 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 20120112 | Principles & Practice Of Theatre Management And Material | TH-2 | 3 hrs. | 100 | 35 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 20120113 | Personal Management Of Hospital Staff Controlling Supervision | TH-3 | 3 hrs. | 100 | 35 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 20120121 | O.T. Maintenance | PR-1 | 3 hrs | 100 | 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 20120122 | Maintenance Of Medical Equipments | PR-2 | 3 hrs. | 100 | 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 20120123 | Maintenance Of Non-Medical Equipments | PR-3 | 3 hrs | 100 | 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Total | | | 600 | 255 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Curriculum :- OPERATION THEATRE TECHNICIAN

Theory I :- ANATOMY & PHYSIOLOGY

Introduction of Human body with Anatomical and Physiological aspect.

- 1 Cell tissues, organ and Body Regions.
- 2 Musculoskeletal system, Bones, Joints, Muscles.
- 3 Digestive System, metabolism, Carbohydrate, Protein and Nutrition.
- 4 Circulatory System
- 5 Respiratory System
- 6 Endocrine System
- 7 Nervous System
- 8 Excretory System - Kidney and Skin.
- 9 Reproductive System.

PRACTCAL - I – O.T. MAINTAINANCE

| | |
|----|---|
| 1 | Hygiene – General –of O.T. & personnel and used of various disinfectants / solution for clearing. |
| 2 | Upkeep of instruments / Equipments etc. (Details of sterilization of equipment/Purchase/ Storage) |
| 3 | Equipment maintenance & Bio-med. Engg. |
| 4 | Water supply, Electric; wastage disposal; drainage systems of O.T. |
| 5 | Replacing new equipment, disposing old ones & & report to O.T in- charge for purchase. |
| 6 | Guidance from surgeons & nurses from equipment maintenance |
| 7 | Linen requirements of operation theatre |
| 8 | How to arrange line for various operations |
| 9 | Linen keeping & maintenance |
| 10 | Dis-infection & Sterilization of linen |
| 11 | Operation theatre cleanliness |
| 12 | Arranging of equipment trays required for specific surgeries |
| 13 | Preparing for inspection of the operation theatre |
| 14 | How to organize operation theatre of various super-specialties |
| 15 | Use of computer in Theatre for billing and documenting various records and activities. |
| 16 | Maintenance of Colour of walls, flooring roof etc. |
| 17 | Maintenance of Air-conditioning. |
| 18 | Laminar airflow system in operation theatre |
| 19 | Emergencies in O.T. and active plan for various emergencies |
| 20 | Central oxygen, vacuum systems |
| 21 | Use of computer in Billing, inventory |
| 22 | Any other topics related & not related. |

THEORY - II

PRINCIPLES & PRACTICE OF THEATRE MANAGEMENT AND MATERIAL

MANAGEMENT OF THEATRE

| | |
|----|--|
| 1 | Need & why OT planning is required |
| 2 | Structural designing & planning of OT in 20 bedded up to 100 bedded hospitals. |
| 3 | Planning and strategic analysis of activities and their implementation |
| 4 | Organizing, Co-ordinating & controlling. |
| 5 | Interpersonal relation & communication (Obstacle & improvement of the same oral & written) |
| 6 | Dynamics of Group behaviour – conflicts & solutions with motivations. |
| 7 | Staff patient relationship |
| 8 | Organizing with theatre staff |
| 9 | Zoning & circulation of OT |
| 10 | Patient care Motivation guidance / Psychological support. |
| 11 | Patient escort to & from the OT. |
| 12 | Communication & Interacting with General Ward Staff about O.T. procedures, information / Guidance about treatment etc. |
| 13 | Care of O.T. before surgery/ during surgery and after surgery. |
| 14 | Record keeping / Documentation – (Both- of No of surgery / patient & no of instruments, equipments etc.) and O.T. staff records. |
| 15 | Principles of Material Management – Definition / scope. Functional Objectives. |
| 16 | Integrated Material Management Aims; Advantages, problems with hospital etc. |
| 17 | Material planning – Indenting guidelines, materials Classification. |
| 18 | Inventory Control – Safety Storage ABC & VED analysis |
| 19 | Utilization of O T – Stores handling & management etc. |
| 20 | Remedial measures : Drugs reviewing, control of pilferage & wastage. |
| 21 | Detailed documentation of present material, cost charting equipment cost etc. |
| 22 | Classification of used & unused material before and after surgery and its planning prior to surgery. |
| 23 | Consumable & non consumable store, utilization and documentation |
| 24 | Baseline stock and systems for billing of operation theatre material. |
| 25 | Control / Record of all medical/ surgical material and how to demand as & when required. |

PRACTICAL - II - MAINTENANCE OF MEDICAL EQUIPMENTS

| | |
|---|---|
| 1 | Operation Theatre routine working |
| 2 | Preoperative requirement of patient by indoor staff |
| 3 | Checking of documents pre operatively |
| 4 | Preparation of various trays for operative procedures |
| 5 | Surgical instruments for Orthopedic, Gynec., E.N.T. Ophthalmology Hand and plastic, General surgery, etc. |
| 6 | Surgical tools & handling. |
| 1 | How to find out recovery of patient from anesthesia |
| 2 | Anesthesia equipments & accessories |
| 3 | Anesthesia drugs and its stocking from drugs safety |
| 4 | Surgical disposable material and its handling |
| 5 | Sterilization & disinfecting techniques |
| 6 | Theatres supportive services maintaining such as gas vacuum, electricity, A/C. |
| 7 | Maintenance of surgical instruments. |

THEORY – III

PERSONAL MANAGEMENT OF HOSPITAL STAFF CONTROLLING SUPERVISION

Bio-medical physics – Electrical Equipment handling and management

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|----|--|
| 1 | Role & aim of personnel management |
| 2 | Duties, job analysis of theatre staff |
| 3 | Moral & motivation / Advantages & disadvantages of each hospital set-up/ Staff-training / duties. |
| 4 | Management / Relations with doctors (Surgeon); nurses, Paramedical persons. Specifying & scheduling of work in consultation with in-charge of O.T. preparation before & after surgery. |
| 5 | Supervision of staff for material / instruction, inspection of various article & equipment. |
| 6 | Basic of electricity / Physics, voltage / Amp; conductor-charge. |
| 7 | Various equipments details (Nature of electrical supply voltage / stabilizer etc.) |
| 8 | Functioning / Principles of each equipment such as suction machine, X-ray, anaesthesia apparatus, ventilators, operating microscope, defibrillators, suction machine cautery, O.T. Trolley, Lamp Shadowless, bore drills, endoscopes, E.C.G., I.I. system etc. |
| 9 | Records of each equipment. |
| 10 | Training for Assisting doctors with equipment and appliances |
| 11 | How to identify and anticipate defects of various equipments. |

PRACTICAL - III - MAINTENANCE OF NON- MEDICAL EQUIPMENTS

| | |
|---|--|
| 1 | Maintenance of non- medical equipments |
| 2 | Shifting of transfer of patient to ward & recovery room |
| 3 | Gowning & gloving / degloving procedures |
| 4 | Post operative procedures |
| 5 | Bacteriological monitoring |
| 6 | Cleanliness & house keeping |
| 7 | Emergencies in operation theatre how to assist |
| 8 | Methods & procedures of assisting O.T. staff during operations & theatre activities. |
| 1 | Theatre linen handling |
| 2 | Nature of duties and supervision by staff in-charge |
| 3 | Plaster technique, splints & bandage, dressing |
| 4 | Assisting Radiology procedure Preoperatively & assists operation theatre |
| 5 | Operation theatre waste handling & disposal |
| 6 | Use of computer in Operation Theatre |
| 7 | Documentation of Operation Theatre activities |
| 8 | Helping Anesthetists in O.T. |

Hospital should have following infrastructure and equipments

Casualty Department:

| Sr. No. | NAME OF EQUIPMENT | Quantity |
|---------|---|-----------|
| 1 | Oxygen Cylinders | 02 |
| 2 | Operation Trolleys | 02 |
| 3 | Suction Machine | 02 |
| 4 | Saline Stand | 02 |
| 5 | Surgical Instrument Set | 02 |
| 6 | Operation Table | 01 |
| 7 | Shadowless lamp | 01 |
| 8 | Sterilizer | 01 |
| 9 | Mobile X-ray Machine | 01 |
| 10 | Plaster cutting Instruments Set | 02 |
| 11 | Dressing Trolley | 01 |
| 12 | Tracheotomy Set | 01 |
| 13 | Laryngoscope | 01 |
| 14 | Gastric tubes and Catheters | 02 dozens |
| 15 | Boyle's Apparatus | 01 |
| 16 | Thomas Splints and other Varieties of splints | 20 |

O. T. COMPLEX EQUIPMENTS :-

| Sr. No. | NAME OF EQUIPMENT | NUMBER |
|---------|---|---------|
| 1. | Defibrillator | One |
| 2. | Monitors | Three |
| 3. | Ventilators | Three |
| 4. | Operation tables (Hydraulic) | Three |
| 5. | Orthopaedic Tables | Two |
| 6. | Suction Machine | Seven |
| 7. | (Flashautoclave – 10 MIN) | Two |
| 8. | Operation Instrument sets for Orthopaedic Surgery | Four |
| 9. | Arthroscopy Instrument set (T.V. Cassettes) | One |
| 10. | Implants of various sizes | One set |
| 11. | A.O. Equipment | |
| | A.O. Mini Fragment Set | One |
| | A.O. Mini Instrument Set | One |
| | A.O. Basic Instrument Set | One |
| 12. | Oticare | Four |
| 13. | Surgical Diathermy | Four |
| 14. | Emergency Trolleys | Two |
| 15. | Image Intensifier | One |
| 16. | Instrument Steriliser | One |
| 17. | Electrical Drill | Two |
| 18. | Pneumatic Drill | One |
| 19. | Shadowless Halogen Lamps (Four in one) | Two |
| 20. | Horizontal Autoclave | One |
| 21. | Electronic Tourniquet | One |
| 22. | Electronic Warmer | One |
| 23. | Head Lamp | One |

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|-----|----------------------------------|---------|
| 24. | Portable Lamps | Three |
| 25. | Ceiling Shadowless Lamps | One |
| 26. | Clean Air System | Two |
| 27. | Mini Bone Set | One |
| 28. | Oxygen Cylinders | Fifty |
| 29. | Nitrous Cylinders | Thirty |
| 30. | Instruments Trolleys | Fifteen |
| 31. | Overhead Steel Trolleys | One |
| 32. | Laryngoscopes | Six |
| 33. | E. C. G. Machine | One |
| 34. | External Fixator Instrument Set | Three |
| 35. | Wagner's Implant Set | Fifty |
| 36. | Ilizarov Equipment sets | One |
| 37. | Joint replacement Instrument Set | One |
| 38. | Spine Instrumentation Set. | One |

General Surgery Equipments:-

1. Babcoc Forceps
2. Mixer's Forceps
3. Abdominal Self Retractor
4. Intestinal Clamp
5. Bulldog Clamp

Plastic Surgery Instrumentation Set

Note :- Routine all surgical instruments like retractors, Elli's forceps, Artery forceps of all types and sizes, Kocher's forceps should be in stock

Cordiothoracic Surgery :

General instrument set & fanistrator – retractor set.

Neuro Surgery, Plastic Surgery, Genitourinary Surgery :

Opening artery forceps

Hudson Brace with

Burr Bayonets forceps

Micro forceps Adson forceps

Adson Dura

Separator Self

retained retractor

Gigli Saw

Bone Nibbler

Hambee's Knife &

Blade Pine Plane

forceps Urethral

sound set

Male Metal Catheters

Female Metal Catheters

Folley's Catheter Introducer

Male cot Catheter Introducer

Excision Clamp

Rectal Forceps Perineal Scissor Anal

Retractors Rectal Speculum set

Sets of Equipments in obstetrics and gynecology, general Surgery, E.N.T., Ophthalmology etc. should available for demonstrations and training during practice.

ANESTHESIOLOGY EQUIPMENTS :-

| Sr. No. | EQUIPMENT | NUMBER |
|---------|--|---------|
| 1 | Boyle's Apparatus (Three with ventilators) | Four |
| 2 | Open Drop anesthesia | Two |
| 3 | General Anesthesia Equipment | Three |
| 4 | Paramedical Anesthesia Equipments | Three |
| 5 | Vaporizers | Two |
| 6 | Resuscitation & Suction Sets | Four |
| 7 | Laryngoscopes | Two |
| 8 | Endotracheal Tubes & accessories | Twenty |
| 9 | Oxygen Therapy Equipment | Central |
| 10 | B.P. Instruments | Two |
| 11 | Ambu Bag with Bellow's Apparatus | Two |
| 12 | Pulseoximeter | Four |
| 13 | N.I.B.P. Monitor | Two |
| 14 | Oxygen concentrator | One |

Equipment required to be available in Institute

| Sr.No. | EQUIPMENT | Quantity |
|--------|----------------------------------|--------------------|
| 1 | Autoclave Sterilizer | 01 |
| 2 | Scrub's & Disinfection Materials | As per requirement |
| 3 | Instruments for common Surgeries | As per requirement |
| 4 | Tools Charts | As per requirement |
| 5 | O.T. Tray / Trolley | As per requirement |
| 6 | Bed | 02 |
| 7 | B.P. Instrument | 02 |
| 8 | Stethoscope | 25 |
| 9 | Suction Machine | 01 |
| 10 | Instrument Kit | 01 |

Reference books required :-

| Sr. No. | Name of the Book | Author |
|---------|--|---------------------------|
| 1 | Effective Interaction with Patients (Xerox) | Ann Faulkner |
| 2 | Effective Interaction with Patients (Xerox) | Ann Faulkner |
| 3 | Learning to care in the Operation Department (Xerox) | Kate Nightangale ctal |
| 4 | Learning to care in the Operation Department (Xerox) | Kate Nightangale ctal |
| 5 | A First Handbook of Medical Instruments | A. Bhowmick G. Chatterjea |
| 6 | Handbook of Hospital Personal Management | R. C. Goyal |
| 7 | Manual of Straight Instrument and Procedures | M. M. Kapur |
| 8 | Companion for Obstetrics & Gynee Practical Examination | Dr. Haresh U. Doshi |
| 9 | Anatomy & Physiology for Nurses | Evelyn Pearce |
| 10 | Pocket Guide to the Operating Room | Maxine A. Goldman |
| 11 | Anatomy & Physical Illustrated | S.S. Nadkarni |
| 12 | Physics & Equipment in imaging modalities | Stepharic Mass |
| 13 | Clinical Manual of Medical procedures | Shashank V. Parulekar |
| 14 | Handbook of surgical instruments for undergraduates | |
| 15 | Synopsis of Medical Instruments & Procedures | Arora, Yadav |
| 16 | Hospital and Health Care Administration | Shakti Gupta, Sunil Kant |
| 17 | Handbook of Human Physiology | Vidya Ratan |
| 18 | Principals of Hospital Administration & Planning. | B. M. Sakharkar |
| 19 | Traction and Orthopaedics appliances | Stewart & Hallett |
| 20 | Traction and Orthopaedics appliances | Stewart & Hallett |
| 21 | Surgical Appliances | John Bell |
| 22 | Gary's Anatomy | D. W. Sifton |
| 23 | Gary's Anatomy | D. W. Sifton |
| 24 | Atlas of Orthopaedics anatomy | Frant H. Netten |
| 25 | A companion to manuals practical anatomy | E.B. Jamicson |
| 26 | Cunningham's Manual of Practical Anatomy upper & lower limbs | G. J. Romanes |
| 27 | Cinningham's Manual of Practical Anatomy Thorax & abdomen | G. J. Romanes |
| 28 | Cinningham's Manual of Practical Anatomy | G. J. Romanes |
| 29 | Clinical Anatomy for Medical Student | R.S. Snell |
| 30 | Physiology (MCQ) | |
| 31 | Physiology | Bullock Wang |
| 32 | Source book of modern technology for hospitals and health care | ISHA |
| 33 | Hospitals Administration | Francis |
| 34 | Hospital waste management a holistic approach | Ananad |
| 35 | Management information reports for operating managers | Kulkarni |
| 36 | Hospital stores management | Shakti Gupta |
| 37 | Hospital and health care administration | Shakti Gupta |
| 38 | Principle of hospital administration | Sakharkar |
| 39 | Hospitals Planning and administration | Davics |
| 40 | Pre-Hospital emergency care secrets | Pous |
| 41 | Hospital organization management | Darr |

Audio Visual Cassettes :-

| Sr. | Title |
|------------|--|
| 1 | Rheumatology |
| 2 | Total Hip Replacement – Arthroplasty |
| 3 | C/D – ICL/Up –Date |
| 4 | Orthopaedics up -Date |
| 5 | Orthopaedics up –Date |
| 6 | Orthopaedics up –Date |
| 7 | Orthopaedics up –Date |
| 8 | Total Hip Replacement |
| 9 | Total Hip Replacement |
| 10 | 2 nd National Conference and Hand on Workshop on total Hip Replacement and Total Knee Replacement |
| 11 | Surgical Techniques – Dr. M.N. Shahane |
| 12 | Surgical Techniques – Dr. M.N. Shahane |
| 13 | Posterior Lumbar Inter Body Fusion – Dr. P. S. Ramani. |
| 14 | Total Condylar Knee System. |
| 15 | Total knee replacement |
| 16 | MRI/Auto & Allo Graft with Steffee Plating – Dr. Ramani |
| 17 | Dr. Chormale M.G. |
| 18 | Techniques of fracture fixation |
| 19 | Unmasked – The Word lectures series 1997 – Dr Christian Barnard |
| 20 | Internal Decompression for Spinal Stenosis – Dr. P.S. Ramani |
| 21 | Orthoscopy |
| 22 | Ring fixation system in Orthopaedics |
| 23 | Orthopaedics Update |
| 24 | Orthopaedics Update, Anterior Retro peritoneal Approach a fusion of the lumbar spine |
| 25 | A film by Narendra Dale |
| 26 | Thoracic Potts Spine Case |
| 27 | Total hip replacement |

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