

Faculty of Medicine



JSS Academy of Higher Education & Research

(Deemed to be University)

Accredited "A" Grade by NAAC

Sri Shivarathreshwara Nagar, Mysuru – 570 015

Regulation & Syllabus

MCh UROLOGY
2016

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**REGULATION AND SYLLABUS FOR
SUPER SPECIALITY DEGREE PROGRAMS 2016**

MCh UROLOGY

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CHAPTER I

Regulations for Super Specialty Degree in Medical Sciences

1. Branch of Study

Super Specialty Degree courses may be pursued in the following subjects:

a. DM (Doctor of Medicine)

- i. Neurology
- ii. Medical Gastroenterology
- iii. Nephrology

b. MCh (Master of Chirurgie)

- i. Urology

2. Eligibility for Admission

Super Speciality Degree courses: A candidate should have passed recognised degree of M.D. or M.S. (or its equivalent recognised degree) in the subject shown against them in a medical college recognized by the Medical Council of India, or from a recognized medical college affiliated to any other Deemed to be University recognized as equivalent thereto and has obtained permanent registration of any State Medical Council shall be eligible for admission.

| Sl. No. | Name of the Degree | Eligibility for admission |
|---------|-----------------------------|----------------------------------|
| 1 | DM Neurology | MD (Medicine) or MD Paediatrics) |
| 2 | DM Medical Gastroenterology | MD (Medicine) or MD Paediatrics) |
| 3 | DM Nephrology | MD (Medicine) or MD Paediatrics) |
| 4 | MCh Urology | MS (Surgery) |

3. Obtaining Eligibility Certificate by the Deemed to be University before making admission

No candidate shall be admitted for any Super Speciality courses unless the candidate has obtained and produced the eligibility certificate issued by the Deemed to be University. The candidate has to make an application to the Deemed to be University with the following documents along with the prescribed fee:

- a. UG and PG pass/degree certificate issued by the Deemed to be University.
- b. Mark cards of all the Deemed to be University examinations passed before PG course.
- c. Attempt certificate issued by the Principal.
- d. Certificate regarding the recognition of the medical college by the Medical Council of India
- e. Completion of internship certificate.
- f. In case internship was done in a non- teaching hospital, a certificate from

the Medical Council of India that the hospital has been recognized for internship.

g. Registration by any state Medical Council.

h. Proof of ST/SC or Category I, as the case may be.

Candidates should obtain the eligibility certificate before the last date for admission as notified by the Deemed to be University.

A candidate who has been admitted to super speciality course should register his / her name in the Deemed to be University within a month of admission after paying the registration fee.

4. Intake of students

The intake of students to each course shall be in accordance with the MCI and GOI permissions in this regard.

5. Course of study

The course of study shall be for a period of 3 years consisting of 6 terms.

6. Method of training

The training of super specialty degree shall be residency pattern, with graded responsibilities in the management and treatment of patients entrusted to his/her care. The participation of the students in all facets of educational process is essential. Every candidate should take part in seminars, group discussions, grand rounds, case demonstration, clinics, journal review meetings, CPC and clinical meetings. Every candidate should be required to participate in the teaching and training programme of undergraduate students. Training should include involvement in laboratory and experimental work, and research studies. Basic medical sciences students should be posted to allied and relevant clinical departments or institutions. Similarly, clinical subjects' students should be posted to basic medical sciences and allied specialty departments or institutions.

7. Attendance, Progress and Conduct

- A candidate pursuing super specialty degree course, should work in the concerned department of the institution for the full period as full time student. No candidate is permitted to run a clinic/laboratory/nursing home while studying postgraduate course, nor can he/she work in a nursing home or other hospitals/clinic/laboratory while studying super specialty course.
- Each year shall be taken as a unit for the purpose of calculating attendance.
- Every student shall attend symposia, seminars, conferences, journal review meetings, grand rounds, CPC, case presentation, clinics and lectures during each year as prescribed by the department and not absent himself / herself from work without valid reasons.
- Every candidate is required to attend a minimum of 80% of the training during each academic year of the post graduate course. Provided, further, leave of any kind shall not be counted as part of academic term without prejudice to minimum 80% attendance of training period every year.
- Any student who fails to complete the course in the manner stated above shall not be permitted to appear for the Deemed to be University Examinations.

8. Monitoring Progress of Studies:

- Work diary / Log Book: Every candidate shall maintain a work diary and record his/her participation in the training programmes conducted by the

department such as journal reviews, seminars, etc. Special mention may be made of the presentations by the candidate as well as details of clinical or laboratory procedures, if any, conducted by the candidate. The work diary shall be scrutinised and certified by the Head of the Department and Head of the Institution, and presented in the Deemed to be University practical/clinical examination.

- Periodic tests: In case of degree courses of three years duration (MD/MS, DM, M Ch.), the concerned departments may conduct three tests, two of them be annual tests, one at the end of first year and the other at the end of the second year. The third test may be held three months before the final examination. The tests may include written papers, practical / clinical and viva voce. Records and marks obtained in such tests will be maintained by the Head of the Department and sent to the Deemed to be University, when called for.
- Records: Records and marks obtained in tests will be maintained by the Head of the Department and will be made available to the Deemed to be University or MCI.

9. Dissertation

- Every candidate pursuing super specialty degree course is required to carry out work on a selected research project under the guidance of a recognised post graduate teacher. The results of such a work shall be submitted in the form of a dissertation.
- The dissertation should be written under the following headings
 - a. Introduction
 - b. Aims or Objectives of study
 - c. Review of Literature
 - d. Material and Methods
 - e. Results
 - f. Discussion
 - g. Conclusion
 - h. Summary
 - i. References
 - j. Tables
 - k. Annexure
- The written text of dissertation shall be not less than 50 pages and shall not exceed 150 pages excluding references, tables, questionnaires and other annexure. It should be neatly typed in double line spacing on one side of paper (A4 size, 8.27" x 11.69") and bound properly. Spiral binding should be avoided. The dissertation shall be certified by the guide, head of the department and head of the Institution.
- Four copies of dissertation thus prepared shall be submitted to the Controller of Examinations, six months before final examination, on or before the dates notified by the Deemed to be University.
- The dissertation shall be valued by examiners appointed by the Deemed to be University. Approval of dissertation work is an essential precondition for a candidate to appear in the Deemed to be University examination.
- Before submitting the dissertation to the Deemed to be University the

candidate should have presented at least one scientific paper based on the dissertation at a national/international conference or Published or submitted for publication with acceptance, at least one scientific paper based on the dissertation in a national/international indexed journal. The candidate should be the first author.

- Guide: The academic qualification and teaching experience required for recognition by this Deemed to be University as a guide for dissertation work is as per Medical Council of India, Minimum Qualifications for Teachers in Medical Institutions Regulations, 1998. Teachers in a medical college/institution having a total of eight years teaching experience out of which at least five years teaching experience as Lecturer or Assistant Professor gained after obtaining higher specialty degree shall be recognised as post graduate teachers.
- Co Guide: A Co-guide may be included provided the work requires substantial contribution from a sister department or from another medical institution recognised for teaching/training by JSS Deemed to be University / Medical Council of India. The co-guide shall be a recognised post graduate teacher of JSS Deemed to be University.
- Change of guide: In the event of a registered guide leaving the college for any reason or in the event of death of guide, guide may be changed with prior permission from the Deemed to be University.

10. Schedule of Examination

The examination for DM and MCh courses shall be held at the end of three years.

11. Scheme of Examination

DM/MCh

The examination shall consist of theory, clinical/practical and viva voce examination.

- Theory (Written Examination): The theory examination shall consist of four question papers, each of three hours duration. Each paper shall carry 100 marks. Out of the four papers, the first paper will be on basic medical sciences. Recent advances may be asked in IV Paper.
- Practical / Clinical Examination: In case of practical examination it should be aimed at assessing competence, skills of techniques and procedures as well as testing student's ability to make relevant and valid observations, interpretations and experimental work relevant to his / her subject.
- In case of clinical examination it should aim at examining clinical skills and competence of candidates for undertaking independent work as a specialist. Each candidate should examine at least one long case and two short cases.
- The maximum marks for Practical / Clinical shall be 200.
- Viva-Voce: Viva Voce examination shall aim at assessing thoroughly, depth of knowledge, logical reasoning, confidence and oral communication skills. The maximum marks shall be 100. This also includes spotters like instruments, anaesthesia machines, drugs, ECG, X – ray.
- Examiners: There shall be at least four examiners in each subject. Out of them, two shall be external examiners and two shall be internal examiners. The qualification and teaching experience for appointment as an examiner shall be as laid down by the Medical Council of India.
- Criteria for declaring as pass in Deemed to be University Examination*: A candidate shall secure not less than 50% marks in each head of passing which shall include (1) Theory (2) Practical including clinical and viva voce

examination.

- A candidate securing less than 50% of marks as described above shall be declared to have failed in the examination. Failed candidate may appear in any subsequent examination upon payment of fresh fee to the Registrar (Evaluation).
- Declaration of distinction. A successful candidate passing the Deemed to be University examination in first attempt will be declared to have passed the examination with distinction, if the grand total aggregate marks is 75 percent and above. Distinction will not be awarded for candidates passing the examination in more than one attempt.

12. Number of Candidates per day

The maximum number of candidates for practical / clinical and viva-voce examination shall be as under:

DM /MCh Course: Maximum of 6 per day.

CHAPTER II

GOALS AND GENERAL OBJECTIVES OF SUPER SPECIALTY MEDICAL EDUCATION PROGRAM

GOAL

The goal of super specialty medical education shall be to produce competent specialists and/or medical teachers:

1. Who shall recognize the health needs of the community and carry out professional obligations ethically and in keeping with the objectives of the national health policy.
2. Who shall have mastered most of the competencies, pertaining to the speciality, that are required to be practiced at the secondary and the tertiary levels of the health care delivery system.
3. Who shall be aware of the contemporary advance and developments in the discipline concerned.
4. Who shall have acquired a spirit of scientific inquiry and is oriented to the principles of research methodology and epidemiology and
5. Who shall have acquired the basic skills in teaching of the medical and paramedical professionals.

GENERAL OBJECTIVES

At the end of the super specialty training in the discipline concerned the student shall be able to:

1. Recognize the importance to the concerned speciality in the context of the health needs of the community and the national priorities in the health section.
2. Practice the speciality concerned ethically and in step with the principles of primary health care.
3. Demonstrate sufficient understanding of the basic sciences relevant to the concerned speciality.
4. Identify social, economic, environmental, biological and emotional determinants of health in a given case, and take them into account while planning therapeutic, rehabilitative, preventive and primitive measure/strategies.
5. Diagnose and manage majority of the conditions in the speciality concerned on the basis of clinical assessment, and appropriately selected and conducted investigations.
6. Plan and advise measures for the prevention and rehabilitation of patients suffering from disease and disability related to the speciality.
7. Demonstrate skills in documentation of individual case details as well as morbidity and mortality rate relevant to the assigned situation.
8. Demonstrate empathy and humane approach towards patients and their families and exhibit interpersonal behaviour in accordance with the societal norms and expectations.
9. Play the assigned role in the implementation of national health programme, effectively and responsibly.
10. Organize and supervise the chosen/assigned health care services demonstrating adequate managerial skills in the clinic/hospital or the field situation.
11. Develop skills as a self-directed learner, recognize continuing education

- needs; select and use appropriate learning resources.
12. Demonstrate competence in basic concepts of research methodology and epidemiology, and be able to critically analyze relevant published research literature.
 13. Develop skills in using educational methods and techniques as applicable to the teaching of medical/nursing students, general physicians and para-medical health workers.
 14. Function as an effective leader of a health team engaged in health care, research or training.

STATEMENT OF THE COMPETENCIES: Keeping in view the general objectives of postgraduate training, each discipline shall aim at development of specific competencies which shall be defined and spelt out in clear terms. Each department shall produce a statement and bring it to the notice of the trainees in the beginning of the programme so that he or she can direct the efforts towards the attainment of these competencies.

COMPONENTS OF THE SUPER SPECIALTY CURRICULUM:

The major components of the super specialty curriculum shall be:

- Theoretical knowledge
- Practical and clinical skills
- Thesis skills.
- Attitudes including communication skills.
- Training in research methodology.

Chapter III Syllabus MCh Urology

Objective:

- The objective of M Ch (Urology) degree course is to produce highly competent medical manpower in Urology.
- The training ingredients should provide in-depth knowledge of the entire urology and relevant basic allied subjects.
- The course is expected to bring about a change in attitude towards better scientific approach with logic and analysis.
- More stress should be given to development of psychomotor skills.
- This should culminate in shaping of a shrewd clinician, confident surgeon and a knowledgeable teacher insured to basic research methodology.
- Basis of an ideal training programme will be a powerful urology service complete in every sense.
- Today, a urology-teaching department should include complete adult and pediatric urology services with fully developed subspecialties such as gynaecologic urology, urooncology, neuro-urology, andrology & sexual dysfunction, newer modalities of stone management like endourological techniques and extracorporeal shock wave lithotripsy and renal transplantation.

SYLLABUS

It will cover wide spectrum of the diseases of urogenital system & retroperitoneum. Apart from the clinical aspect of these subjects, candidate has to acquire indepth knowledge of the related basic subjects like applied; anatomy; embryology, physiology; biochemistry, pharmacology; pathology, microbiology epidemiology, immunology etc.

1. Anatomy and Embryology of GU tracts, adrenal & retroperitoneum.
2. Applied physiology and biochemistry pertaining to Urology, Nephrology, renal transplantation and renovascular hypertension.
3. Investigative urology & Genito-urinary radiology and imaging including nuclear medicine.
4. Male Infertility, Andrology and Urological endocrinology
5. Sexual dysfunction- investigations and management.
6. Perioperative care, management of urological complications and care of the critically ill patients.
7. Urodynamics and Neurourology.
8. Genito-urinary trauma.
9. Urolithiasis-Medical, Biochemical & Surgical aspects.
10. Uro-oncology-Adult & Paediatric
11. Reconstructive Urology.
12. Paediatric Urology-congenital malformations and acquired diseases.
13. Urinary tract infections and sexually transmitted diseases.
14. Obstructive Uropathy.
15. Renal transplantation (including transplant immunology medical & surgical aspects).
16. Renovascular Hypertension.
17. Gynaecological urology.
18. Newer developments in urology.
19. Operative Urology-open & endoscopic

20. Endourology
21. Behavioural and social aspects of urology.
22. Neonatal problems in Urology.
23. Electrocoagulation, lasers, fibre optics, instruments, catheters, endoscopes etc.
24. Retroperitoneal Diseases & Management.
25. Medical aspects of the kidney diseases.
26. Laparoscopic Urologic Surgery.

Apart from above mentioned subjects, each candidate should have basic knowledge of the following:

1. Biostatistics & Epidemiology.
2. Computer Sciences.
3. Experimental & Research methodology and Evidence Based Medicine.
4. Scientific presentation.
5. Cardio-pulmonary resuscitation.
6. Ethics in medicine.

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TRAINING & TEACHING METHODOLOGY

Besides didactic lectures (delivered by the faculty members, national & international visiting teachers, seminar symposium and journal clubs) is to be organized. Problem oriented training to be given in the form of case discussions, ward rounds, inter-disciplinary meetings and department statistical meetings. Every candidate is supposed to discuss a minimum of 2 clinico-pathological conferences. Practical training is to be imparted by full time residency training programme, where a trainee will be given full responsibility of the patients. He will be encouraged to improve and develop his decision-making ability under supervision of teachers.

Research

Each candidate has to carry out two dissertation or studies for thesis, which should be acceptable for publication in an Indian Journal or any International Journal.

1. Experimental Research Project – One may be
 - a. Animal lab work or
 - b. Associated with a Basic science Dept.
2. Clinical Research Project – At least one

TRAINING IN OPERATIVE UROLOGY

Special attention to be paid to improve the operative skill of the candidate. He shall be trained to take independent operative decisions. In a time bound schedule an opportunity will be accorded to perform all the major open as well as endoscopic procedures so as to let him develop mastery in the essential procedures. Candidates will be required to maintain a logbook of operative procedures with details of complications, if any, and their management. This will be reviewed every three

months. Completed logbook is to be submitted before the practical examination and will be reviewed by the external examiners.

First Two Years

Each Candidate should spend time for basic research specially related to animal laboratory or in collaboration with basic department i.e. biochemistry, biotechnology and pathology.

0-6 Months

A candidate is supposed to master following procedures.

1. Cystourethroscopy, filiform dilatation, retrograde pyelography. Interpretation of normal and abnormal findings in relation to gross inflammations, obstructive and neoplastic changes in the lower urinary tract.

2. Minor Urological Procedures:

Needle biopsy of the prostate, urethral dilatation, suprapubic, trocar cystostomy, open cystostomy, orchiectomy, circumcision, meatotomy/Meatoplasty Arterio-venous shunts, Excision of urethral caruncle.

3. Uro-Radiological & Imaging Techniques:

During this period a candidate should perform various uroradiological & Imaging procedures like Retrograde Urethrograms & Micturating, Cystourethrogram, cystogram, nephrostogram, sonogram, vasoseminography, antegrade pyelography, interpretation of Ultrasound & computerized tomography's scans and renography, renal angiography including Digital Substraction Angiography & venography.

06-09 Months

A candidate should learn, perform and interpret urodynamic studies like Cystometrogram, electromyography & Urethral pressure profile & Video urodynamics. He will also perform and interpret various tests of sexual dysfunction such as dynamic cavernosography, papavarin test, Penil-Brachial Index, Nocturnal penile tumescence, regiscan, sacral latency period and other evoked potential studies.

9-23 Months

He will assist and perform following procedures.

a. Endoscopic Surgery:

Internal urethrotomy, Bladder neck incision, cystolithotripsy, insertion & retrieval of ureteral stent, urethral meatotomy, endoscopic incision of bladder neck, Transurethral resection of bladder tumour.

b. Surgical Procedures:

Simple nephrectomy, radical nephrectomy, cystolithotomy ureterolithotomy, pyelolithotomy, nephrostomy, pyeloplasty, various urethroplasties. Retropubic & a transvesical prostatectomy, surgery for undescended testis, partial and total amputation of penis, extended pyelolithotomy, VVF repair.

24-36 Months

Open Surgery

Candidate should learn more complex surgical procedures like-transpubic urethroplasty, Hypospadias repair, Augmentation cystoplasty, Anatomic Nephrolithotomy under hypothermia, Boari's flap procedure, exstrophy closure, urinary diversion, ureteroneocystostomy, partial and total cystectomy, nephroureterectomy, penile prosthesis, Artificial urinary sphincter, Microsurgical Vasoepididymostomy, and vasovasostomy, Urinary diversion, Renal transplant surgery and AV fistulae, retroperitoneal lymphadenectomy.

Endoscopic Procedure

Transurethral resection of prostate, percutaneous nephrolithotomy, Uretero-rensoscopy, Laser Surgery, other endourological procedures etc.

Efforts will be made that candidate is able to perform the following minimum stipulated number of procedures within three years of his training.

1. Endoscopies 100
2. Urethroplasties 5
3. Internal urethrotomy 20
4. Urinary tract reconstructions 10
5. Repair of vesicovaginal fistulae 5
6. Pyeloplasties 5
7. Hypospadias repair 5
8. Transurethral Resection of Prostate 25
9. Uretero-Renoscopy 25
10. Percutaneous Nephrolithotomy & endopyelotomy 15
11. Donor Nephrectomies 5
12. Receptient Surgery 2

In addition to above mentioned procedures candidates will perform/assist minimum of two or five of each of following procedures depending upon the availability of the case material.

- Nephrectomy for pyonephrosis
- Surgical treatment of stress urinary incontinence
- Radical Cystoprostatectomy
- Radical Nephrectomy
- Ureteroneocystostomy
- Retroperitoneal lymphnode dissection
- Ileal replacement
- Different type of Urinary diversion of orthotopic Neobladder
- Surgical management of Renal and Urethral trauma
- Transpubic urethroplasty
- Augmentation cystoplasty
- Nephroureterectomy
- Anatomic Nephrolithotomy
- Laparoscopic Urologic Surgery
- Paediatric surgical procedures.

In course Training

Since it will be a fulltime residency cum M Ch course, a candidate will be responsible for the total care of the patients. He will be encouraged to take independent decisions. Every day there will be atleast one hour academic activity to a maximum of 10 hours/week in which all the faculty members & residents will participate. Case discussion will take place weekly with 3rd year resident as a moderator. Other academic activities like journal clubs, seminars, group discussions statistical meetings will be a fortnightly feature where deaths, complications, operations and consultations rendered will be discussed consultation to the other department and in emergency will only be attended by the IInd & IIIrd year Senior Residents. Consultations given to other departments should also be discussed every morning with the respective consultants. In OPD a candidate will see the cases independently and will make all the pertinent notes. In problematic cases and a special referral, it is mandatory to show the case to the respective consultant. A candidate will not be allowed to provide independent consultations for first six months. A candidate will have to attend all postmortem examination done for the department. Interdepartmental meetings like uro-radiology, uro-nephrology, uro-radiotherapy & medical oncology, uro pathology, uro imaging will provide an opportunity for open discussion on a common subject and it will also provide an opportunity to learn views of the specialists on these subjects.

Posting

A candidate will be sent to Nephrology department for one month to learn medical aspect of Kidney diseases (except the renal transplantation). This posting should be after one to 1.1/2 year after joining the course. It is highly desirable to formulate a reasonable teaching curriculum for this posting and a candidate is to be evaluated by the Nephrologist at the end of the posting. An unsuccessful candidate has to repeat his posting.

Exchange Programme

In view of expanding field of urology, it is difficult to see, observe and have training in all newer subspecialities. Therefore, it is imperative to include exchange programme and resident should be rotated to two or three centers as per advise by the department committee. It is also suggested that department weak in some subspeciality should invite visiting professor from other centers to strengthen the course.

SCHEME OF EXAMINATION:

Candidates will be allowed to appear for examination only if attendance (minimum 80%) and internal assessment are satisfactory and research / publication work is satisfactory.

a. Theory : 400 Marks

The theory examination shall consist of four question papers, each of three hours duration. Each paper shall carry maximum of 100 marks and the total maximum marks would be 400. The format for the theory paper shall be as follows:

| Type of Questions | No. of Questions | Marks for each question | Total Marks |
|--------------------------|-------------------------|--------------------------------|--------------------|
|--------------------------|-------------------------|--------------------------------|--------------------|

| | | | |
|-------------|----|----|-----|
| Long essay | 02 | 20 | 40 |
| Short essay | 06 | 10 | 60 |
| Grand Total | | | 100 |

● **Paper Division:**

- Paper 1 -
- Paper 2 -
- Paper 3 - Name of the papers has to be given.
- Paper 4 -

Note: The distribution of topics shown against the papers is suggestive only and may overlap or change.

Clinical Examination: 200 Marks

| Types of Cases | No. of Cases | Marks | Duration |
|----------------|--------------|------------|--------------|
| Long Case | 1 | 80 | 1 Hour |
| Short Case | 3 | 120 (40x3) | 30 mins each |
| TOTAL | 4 | 200 | |

b. Viva- Voce Examination including specimen, radiology and GI endoscopy data : 100 Marks

- Aims: To elicit candidate's knowledge and investigative/ therapeutic skills.

c. Maximum Marks:

| Theory | Clinical Examination | Viva including spotters | Grand Total |
|------------|----------------------|-------------------------|-------------|
| 400 | 200 | 100 | 700 |

d. Passing criterion:

To pass the examination the candidate must secure at least 50% of marks in each head of theory and practicals separately.

BOOKS AND JOURNALS

The following books, journals and periodicals should be made available through Central/Departmental Library for perusal of residents so as to enable them to keep abreast with latest developments in the field of Urology. It is also important that department should have an Internet facility which would enable residents to browse and use medline search.

General Urology

Book Editor

1. Campbell urology-3 Volumes Edited by Walgh, et al
2. Scientific Basis of Urology Mundy
3. Current Urological Therapy Kaufman
4. Obstructive Uropathy O'Reilly
5. Urogenital trauma Macaminch
6. Text book of Urology Whitefield & Hendry
7. Adult & Paediatric Urology Gillenwater et al

Paediatric Urology

1. Pediatric Urology Kelalis & King – 2 vol.

2. Paediatric Urology Whitakar

Uro-oncology

1. Genito-urinary cancer management Backeman & Paulson
2. Genitourinary cancer Dekerrion et al
3. Testicular cancer Javadopor

Urodynamics

1. Urodynamics principle & practise Mundy
2. Controversy in Neurourology Barret & wein
3. Neurourology & urodynamics Bradly & Hald

Stone Diseases

1. Stone disease Diagnosis & management by Rous
2. Endourology Clayman et.al
3. Endourology Carson
4. Extracorporeal shock want Lithotripsy Gravernstein
5. Endourology Arthur Smith

Infertility

1. Male Infertility Amelar
2. Reproductive infertility Silber
3. Microsurgery in male and female

Reconstructive and Female Urology

1. Operative Gynaecology Te Linde
2. Female urology Blandy
3. Urinary Incontinence Dat. D.O.'Donnel
4. Urogynaecology & urodynamics Obstargard & Bent
5. Reconstructive urologic surgery Libertino

Renal Transplantation

1. Kidney transplantation Peter morris
2. Renal transplantation Garovoy & Guttman
3. Introduction to Dialysis Logan
4. Vascular arress in Haemodialysis Bell et Al

Operative Urology

1. Glen's operative urology
2. Urologic Endoscopy Bagley et al
3. Transurethral surgery Maurmayer

Laparoscopy

1. Laparoscopic urology Ralph V. Clayman, E.M. McDougall
 2. Urologic Laparoscopy Sakti Das
 3. Laparoscopic Urologic Surgery A.K. Hemal
- Uroradiology- Emmett's –Witten-Clinical Uroradiology 3 volumes

Journals

1. Indian J. Urology
2. Journal of Urology
3. British J. Urology
4. Neurourology & Urodynamics

5. Urology (Gold Journal)
6. European Urology
7. Urologia internationalis
8. Scandinavian J. Urology & Nephrology
9. Transplantation
10. Transplant Proceedings
11. Urological Research
12. Urologic Radiology
13. World Journal of Urology

Periodicals

1. Urological clinics of North America
2. Seminars in Urology
3. Controversy in Urology
4. Recent Advances in Urology
5. Year Book of Urology
6. Modern Trend in Urology



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