



STUDY GUIDE

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UROLOGY

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POST IMM FELLOWSHIP TRAINING

DURATION OF TRAINING 5 YEARS

**NOTE: THE CURRICULUM IS APPLICABLE TO BATCHES INDUCTED IN
JANUARY 2023 OR ONWARDS.**



**COLLEGE OF
PHYSICIANS AND
SURGEONS
PAKISTAN**

2023

THIS IS AN EVOLVING DOCUMENT.

The College of Physicians and Surgeons Pakistan would appreciate any criticism, suggestions, advice from the readers and users of this document. Comments may be sent in writing or by e-mail to the CPSP at:

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ABOUT THE COLLEGE

The College was established in 1962 through an ordinance of the Federal Government. The objectives/functions of the College include promoting specialist practice of Medicine, Obstetrics & Gynaecology, Surgery and other specialties by securing improvement of teaching and training, arranging postgraduate medical, surgical and other specialists training, providing opportunities for research, holding and conducting examinations for awarding College diplomas and admission to the Fellowship of the College.

Since its inception, the College has taken great strides in improving postgraduate medical and dental education in Pakistan. Competency- based structured Residency Programs have now been developed, along with criteria for accreditation of training institutions, and for the appointment of supervisors and examiners. The format of examinations has evolved over the years to achieve greater objectivity and reliability in methods of assessment. The recognition of the standards of College qualifications nationally and internationally, particularly of its Fellowship, has enormously increased the number of trainees and consequently the number of training institutions and the supervisors. The rapid increase in knowledge base of medical sciences and consequent emergence of new subspecialties have gradually increased the number of CPSP fellowship disciplines to eighty including specialties in dentistry. After completing two years of core training during IMM, the trainees are allowed to proceed to the advance phase of FCPS training in the specific specialty of choice for 2-3 years. However, it is mandatory to qualify IMM examination before taking the FCPS-II exit examination. The work performed by the trainee is to be recorded in the e-logbook on daily basis. The purpose of the e-log is to ensure that the entries are made on a regular basis and to avoid belated and fabricated entries. It will hence promote accuracy, authenticity and vigilance on the part of trainees and the supervisors.

The average number of candidates taking CPSP examinations each year is to a minimum of 32,000. The College conducts examinations for FCPS-I (11 groups of disciplines), IMM, FCPS-II (80 disciplines), MCPS (22 disciplines), including MCPS in Health Professions Education and Health Care System Management. A large number of Fellows and senior medical teachers from within the country and overseas are involved at various levels of examinations of the College.

The College, in its endeavor to decrease inter-rater variability and increase fairness and transparency, is using TOACS (Task Oriented Assessment of Clinical Skills) in IMM and FCPS-II Clinical examinations. Inclusion of foreign examiners adds to the credibility of its qualifications at an international level. It is important to note that in the overall scenario of health delivery over 85% of the total functioning and registered health care specialists of the country have been provided by the CPSP. To coordinate training and examination, and provide assistance to the candidates stationed in cities other than Karachi, the College has established 14 Regional Centers (including five Provincial Headquarter Centers) in the country. The five Provincial Headquarter Centers, in addition to organizing the capacity building workshops/short courses also have facilities of libraries, I.T, and evaluation of synopses and dissertations along with providing guidance to the trainees in conducting their research work. The training towards Fellowship can be undertaken in more than 306 accredited medical institutions throughout the country and 84 accredited institutions abroad. The total number of trainees in these institutions is over 32,659 who are completing residency programs with around 5,245 supervisors. These continuous efforts of the College have even more importantly developed a credible system of postgraduate medical education for the country. The College strives to make its courses and training programs 'evidence' and 'needs based' so as to meet international standards as well as to cater to the specialist healthcare needs not only for this country but also for the entire region.

Prof. Mohammad Shoaib Shafi

President

College of Physicians and Surgeons Pakistan

FELLOWSHIP DISCIPLINES

The list of fellowship programmes, first and second fellowship, are given below:

Disciplines for First Fellowship

- | | |
|--------------------------------|--|
| 1. Anatomy | 24. Nuclear Medicine |
| 2. Anesthesiology | 25. Obstetrics and Gynaecology |
| 3. Biochemistry | 26. Operative Dentistry & Endodontics |
| 4. Cardiac Surgery | 27. Ophthalmology |
| 5. Cardiology | 28. Oral & Maxillofacial Surgery |
| 6. Cardio Thoracic Anaesthesia | 29. Orthodontics |
| 7. Chemical pathology | 30. Orthopaedic Surgery |
| 8. Clinical Haematology | 31. Otorhinolaryngology (ENT) |
| 9. Community Medicine | 32. Paediatric Surgery |
| 10. Dermatology | 33. Paediatrics |
| 11. Diagnostic Radiology | 34. Periodontology |
| 12. Emergency Medicine | 35. Pharmacology |
| 13. Family Medicine | 36. Physical Medicine & Rehabilitation |
| 14. Forensic Medicine | 37. Physiology |
| 15. Haematology | 38. Plastic Surgery |
| 16. Histopathology | 39. Prosthodontics |
| 17. Immunology | 40. Psychiatry |
| 18. Medicine | 41. Pulmonology |
| 19. Medical Oncology | 42. Radiation Oncology |
| 20. Microbiology | 43. Surgery |
| 21. Nephrology | 44. Thoracic Surgery |
| 22. Neurology | 45. Urology |
| 23. Neurosurgery | 46. Virology |

Disciplines for Second Fellowship

- | | |
|---|--|
| 1. Breast Surgery | 18. Paediatric Endocrinology and Diabetes |
| 2. Child and Adolescent Psychiatry | 19. Paediatric Dermatology |
| 3. Clinical Cardiac Electrophysiology | 20. Paediatric Gastroenterology and Hepatology |
| 4. Community and Preventive Paediatrics | 21. Paediatric Haematology Oncology |
| 5. Critical Care Medicine | 22. Paediatrics Infectious Diseases |
| 6. Developmental and Behavioural Paediatrics | 23. Paediatric Nephrology |
| 7. Endocrinology | 24. Paediatric Neurology |
| 8. Gastroenterology | 25. Paediatric Ophthalmology & Strabismus |
| 9. Gynecological Oncology | 26. Pain Medicine |
| 10. Hepato-Pancreato-Biliary & Liver Transplant Surgery | 27. Palliative Medicine |
| 11. Infectious Diseases | 28. Reproductive Endocrinology and Infertility |
| 12. Interventional Cardiology | 29. Rheumatology |
| 13. Maternal and Fetal Medicine (MFM) | 30. Spine Surgery |
| 14. Neonatal Paediatrics | 31. Surgical Oncology |
| 15. Orbit and Oculoplastics | 32. Urogynaecology |
| 16. Paediatric Cardiology | 33. Vitreo Retinal Ophthalmology |
| 17. Paediatric Critical Care Medicine | 34. Vascular Surgery |

CPSP COMPETENCY MODEL

College of Physicians and Surgeons Pakistan has moved to competency-based medical education and has developed its own competency model shown below. A generic explanation of the model is given below and it is expected that all its residency training programmes follow the components of this model in accordance to the requirements of each specialty.



Patient or population care occupies the pivotal center. Patient care includes all clinical skills such as history taking, physical examination, ordering investigations, making diagnoses and managing the care. The inner leaves of the model represent the five major competencies directly related to patient care, while the three competencies in the outer circle are mega-competencies related to patient care and also incorporate education, professionalism, leadership, advocacy and population health.

By the end of the Residency Programme, residents are expected to acquire these competencies and their constituent learning outcomes, and provide promotive, preventive, curative and rehabilitative patient-centered (or population-centered) care.

Patient or population

Inner Leaves:

1. Knowledge and Critical Thinking
2. Technical Skills
3. Communication Skills
4. Teamwork
5. Research

education, leadership,
population health

Outer Leaves:

6. Professionalism
7. Pedagogy
8. Advocacy

1. Knowledge and Critical Thinking

- Demonstrate application of wide and current readings to critical thinking and problem solving
- Relate the alteration of body function to the presenting condition
- Interpret and integrate history and examination findings to arrive at an appropriate provisional and credible differential diagnoses
- Sequentially order, justify and interpret appropriate investigations
- Apply knowledge and reasoning skills to
 - Analyze data for problem identification and to rule in and rule out contending conditions
 - Synthesize and evaluate solutions for decision-making in solving familiar and less familiar problems based on best current evidence
 - Prioritize different problems within a time frame.
 - Select, outline and provide, with evidence-based justifications, appropriate pharmacological and non-pharmacological management strategies
 - Assess new medical knowledge and apply it to resolve patient problems (Evidence-based practice)
 - Apply quality assurance procedures in daily work. (Professionalism)
 - Demonstrate shared-decision-making with the patient or family
 - Provide cost-effective care while ordering investigations and in management
 - Use resources appropriately
 - Demonstrate awareness of bio-psycho-social factors in assessment and management of a patient.

2. Technical Skills

- Demonstrate International Patient Safety Goals (IPSG)
- Demonstrate competent performance of all required technical skills and procedures in the specialty, including:
 - Obtaining informed consent
 - Preoperative planning
 - Pre-interventional care and preparation
 - Intra-Intervention technique including exposure and closure, global and task specific items, and communication and team skills
 - Post-interventional care
 - Follow-up Care.

3. Communication Skills

- Written Communication Skills
 - Maintain clear, concise, accurate and updated medical records
 - Write clear, focused, evidence-based and logical management plans and discharge summaries
 - Write respectful, clear and focused letters and referrals to other colleagues.
- Verbal Communication Skills: Demonstrate
 - Effective interpersonal communication skills: clear, considerate and sensitive towards patients, their relatives, other health professionals and the public, and towards students
- Non-verbal communication skills:
 - Empathy and respect towards patients and their relatives
 - Effective counseling of the patient and the family with cultural sensitivity: explain options, educate them and promote joint decision-making.
 - Appropriate verbal and body language on the campus and all work situations including seminars, bedside sessions, outpatient sessions and others
 - Respect and tolerance for all health care professionals, including peers, juniors and seniors
 - Clear, focused and logical presentation of cases.

4. Teamwork

- Demonstrate constructive team-communication skills.
- Facilitate collaborative group interaction as a team member to build strong teams demonstrating respect, tolerance and interdependence.
- Support other team members to grow
- Demonstrate willingness to assume responsibility and leadership as needed.

5. Research

- Interpret and use results of various research studies (critical appraisal)
- Conduct a research study individually or in a group by using appropriate
- Selection of research question(s) and objectives
- Research design and statistical methods to answer the research question
- Ethical and R&RC approval of the synopsis
- Demonstrate competence in academic writing by writing an appropriate dissertation and/or publishing research article(s) as a step towards resolving issues or concerns in their specialty
- Guide others in conducting research by advising about research methodology including study designs and statistical methods
- Demonstrate clear, focused and logical presentations of their research.

6. Professionalism

- Demonstrate the highest level of personal integrity: honesty, punctuality, regularity, timely task completion
- Deal with all patients in a non-discriminatory, prejudice-free manner, demonstrating the same level of care for every human being irrespective of gender, age, ethnic background, culture, socioeconomic status and religion
- Establish a trusting relationship with patients, their relatives and care-givers
- Deal with all patients with honesty, empathy and compassion, putting patients' needs first (altruism)

- Facilitate transfer of information important for promotion of health, prevention and management of disease
- Encourage questioning by the patient and be receptive to feedback
- Pursue self-directed and life-long learning. Keep abreast of medical literature and assess new knowledge and apply it to resolve patient problems
- Know one's limitations and ask for help as needed from colleagues, consultations or referrals
- Apply quality assurance procedures for improvement in daily work
- Be a role model for others.

Ethics

- Maintain patient autonomy by demonstrating shared-decision-making with the patient and/or family
- Obtain informed consent, maintain patient confidentiality and do no harm
- Provide cost-effective care while ordering investigations and in management and use resources appropriately.

Leadership

- Demonstrate accountability for their decisions and actions, and that of their team
- Demonstrate willingness to assume leadership role(s) when needed in given situations or events (rush call/code).
- Change and bring about change as necessary, as a leader or supportive leader.

7. Pedagogy

Should be able to demonstrate competence in teaching skills:

- Effective clinical/community-based teaching
- Some evidence of acquisition of theory regarding learning and education
- Practice some of the best teaching methods.

8. Advocacy

Advocacy is needed at multiple levels

- Advocacy for the Patient
 - Doctors and nurses are the advocates of the patients, otherwise patients are likely to be lost in the system. All care should be timely, putting patients first.
- Advocacy for the Practice
 - Working in a service or practice, doctors must highlight limitations and issues
 - They must identify solutions for the problems, and recommend and implement improvements for the practice(s) and institutional system(s).
- Advocacy for the Health System and Society
 - Know one's role in the Health System(s) and build strong referral systems
 - Keep patient and community interests paramount, above one's own personal or professional interest
 - Demonstrate advocacy for elimination of the social determinants of health
 - Demonstrate advocacy for prevention of serious illnesses of their specialty/sub-specialty.
- For the Profession
 - Strive for building trust in the public for your profession
 - Demonstrate improvement and enhancement of profession, specialty and sub-specialty
 - Be conscientious gate-keepers of their profession, specialty and subspecialty.

GENERAL REGULATIONS

The following regulations shall apply to all fellowship trainees during residency training and FCPS-II examination. Candidate will be admitted to the examination in the name (surname and other names) as given in the MBBS degree. CPSP will not entertain any application for change of name on the basis of marriage/divorce/deed.

ELIGIBILITY REQUIREMENTS FOR ENTERING FELLOWSHIP PROGRAMME IN UROLOGY

- Passed FCPS Part I in General Surgery
- Completed two years of R&RC registered training of IMM in Surgery & Allied

DURATION OF TRAINING IN UROLOGY

Total duration of training is five years divided into following two phases:

- Intermediate Module in Surgery & Allied for first two years after which the resident becomes eligible to appear in the Intermediate Module Examination.. For further details about the Intermediate Module refer to the booklet titled "Intermediate Module in Surgery & Allied" published separately by the College.
- Last three years consists of advanced training in Urology (FCPS II).

All training inclusive of rotations is to be completed one month before the date of theory examination for FCPS-II.

ROTATIONS

The supervisor must ensure that the resident attends six weeks rotation in a transplant unit or observes five transplant cases, duly certified by the transplant surgeon.

MANDATORY WORKSHOPS

It is mandatory for all residents to attend the following CPSP certified workshops in the first two years of Intermediate Module training:

1. Introduction to Computer and Internet
2. Research Methodology Biostatistics & Dissertation Writing
3. Communication Skills
4. BLS (Basic Life Support) course
5. Primary Surgical Skills

However, if not attended earlier for any reason, they have to be completed during this phase of training. The trainee may also be required to attend any other workshop as may be introduced by the CPSP.

RESEARCH

One of the training requirements is a dissertation or two research papers on a topic related to the field of specialization. Synopsis of the dissertation or research papers must be approved from the Registration & Research Cell (R&RC) of CPSP before starting the research work. The dissertation must be submitted for approval to the R&RC before or during the first six months of fifth year of training program.

APPROVED TRAINING CENTRES

Training must be undertaken in units/departments/institutions approved by the College.

A current list of approved locations is available from the College and its regional offices as well as on the College website: www.cpsp.edu.pk.

REGISTRATION AND SUPERVISION

All training must be supervised and residents are required to register with the Registration and Research Cell (R&RC) and submit the name of their supervisor(s) by the date indicated on the registration form. The supervisor will normally be a Fellow of the College.

E-LOGBOOK

The CPSP council has made e-logbook system mandatory for all Residency program trainees inducted from July 2011. Upon registration with R&RC each trainee is allotted a registration number and a password to log on and make entries of all work performed and the academic activities undertaken in e-logbook on a daily basis. The concerned supervisor is required to verify the entries made by the trainee. This system ensures timely entries by the trainee and prompt verification by the supervisor. It also helps in monitoring the progress of trainees and the vigilance of the supervisors.

AWARD OF FELLOWSHIP

Fellowship of the College of Physicians and Surgeons Pakistan is awarded to those applicants who have:

- a recognized medical degree;
- completed one year house job in a recognized institution
- passed the relevant FCPS Part I Examination;
- registered with the Registration & Research Cell (R&RC);
- undergone specified years of supervised accredited training on whole time basis.
- passed IMM examination in Urology
- obtained approval of dissertation / two research articles (related to the specialty) published / accepted for publication in CPSP approved journal(s);
- completion of entries in e-logbook along with validation by the supervisor;
- been declared successful in examinations carried out by the Examination Department of the CPSP; and
- been elected by the College Council It is important to note that all applicants must undergo a formal examination before being offered Fellowship of the relevant specialty, except in case of Fellowship without examination.

TRAINING ENQUIRES AND REGISTRATION

All residents should notify the College in writing of any change of address and proposed changes in training (such as change of Supervisor; change of department, break in training etc.) as soon as possible.

ROLE AND RESPONSIBILITIES OF SUPERVISOR

Supervision of a resident is a multifaceted job. Arbitrarily the task is divided into the following components for the sake of convenience. This division is by no means exhaustive or rigid. It is merely meant to give semblance to this abstract and versatile role.

EXPERT TRAINER

- This is the most fundamental role of a supervisor. S/he has to not only ensure and monitor adequate training but also provide continuous helpful feedback (formative) regarding the progress of the training
- This would entail observing the resident's performance and rapport with all the people within his/her work environment
- S/he should teach the residents and help them overcome the hurdles during the learning process
- It is the job of the supervisor to make the residents develop the ability to interpret findings in their patients and act suitably in response
- The supervisor must be adept at providing guidance in writing dissertation / research articles (which are essential components of training)
- Every supervisor is required to participate actively in Supervisors' workshops, conducted regularly by CPSP, and do his/her best to implement the newly acquired information/skills in the training. It is his/her basic duty to keep abreast of the innovations in the field of expertise and ensure that this information percolates to residents of all years under him/her

RELIABLE LIAISON

- The supervisor must maintain regular contact with the College regarding training and the conduct of various mandatory workshops and courses
- It is expected that the supervisor will establish direct contact with relevant quarters of CPSP if any problem arises during the training process, including the suitability of resident
- S/he must be able to coordinate with the administration of his/her institution/organization in order to ensure that his/her residents do not have administrative problems hampering their training

PROFICIENT ADMINISTRATOR

- The supervisor must ensure that the residents regularly fill their e-logbook
- S/he must provide quarterly feedback regarding each resident through e-log system
- S/he might be required to submit confidential reports on resident's progress to the College
- The supervisor should notify the College of any change in the proposed approved training program
- In case the supervisor plans to be away for more than two months, he/she must arrange satisfactory alternate supervision during the period

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ROLE AND RESPONSIBILITIES OF RESIDENT

Given the provision of adequate resources by the institution, residents should

- accept responsibility for their own learning and ensure that it is in accord with the requirements of the particular discipline
- play an informed role in the selection of the supervisor
- seek reasonable infrastructure support from their institution and supervisor, and use this support effectively
- ensure that all outlined aspects of training are covered during the defined training period
- work with their supervisors in writing the synopsis/research proposal and submit the synopsis/research proposal by the end of first year of their registration with the R&RC
- accept responsibility for the dissertation and plan to execute the research within the time limits defined
- be responsible for arranging regular meetings with the supervisor to discuss and document progress. If the supervisor is not able/willing to meet with the resident on a regular basis, he/she must notify the College
- provide the supervisor with word processed updated synopsis and dissertation drafts (ensure it has been checked for spelling, grammar and typographical errors, prior to submission) and provide the raw data to the supervisor if required
- submit completed dissertation to R&RC or evidence of publication/acceptance for publication of two research papers in CPSP approved journal(s) or JCPSP six months before the completion of (last year of) training. The resident should be the first or second author of both papers and the synopsis of both papers must have a prior approval of R&RC
- follow the College complaint procedure if serious problem arises
- complete all requirements for sitting an examination

TRAINING PROGRAMME

CURRICULUM: AIM, GOALS AND COMPETENCIES

AIM

The aim of the Fellowship Programme in Urology is to produce specialists in the field who have attained the required competencies.

GOALS

The goal of the training programme is to produce urologists with competencies under the over arching framework of CPSP competency model with integration of knowledge, skills and attitudes for the specialist care of Urology patients.

COMPETENCIES

The CPSP Competency Model is equally applicable to the discipline of Urology, like all other clinical specialities. The competencies given below are to be acquired by following a road map given under objectives.

Patient Care: The central competence around which revolve all other competencies is patient care. A Urologist needs to be fully conversant with the structure and function of human body particularly the uro-genital system, clinical skills to diagnose and treat the urological problems as well as technical skills to perform various surgical interventions.

Knowledge and Critical Thinking: This competence requires each resident not only to acquire a knowledge base related to the practice of Urology, but also to think critically so that the acquired knowledge is applied to interpret and analyze problems, synthesize multiple solutions and select the most appropriate one. The required knowledge base is summarized under the syllabus.

Communication Skills: This set of skills is needed to communicate with the patients and their carers, clinicians and other members of medical and scientific community for the optimum patient care. Hence the residents have to be fully conversant with both verbal and written communication skills.

Technical Skills: The technical skills include competencies required to carry out various surgical procedures and interventions along with patient safety.

Team Work: The urologists have to work as a team with their clinical counterparts and other members of health profession.

Research: Research is one of the essential competencies required for the CPSP fellowship qualification. All residents are required to submit either a dissertation or publish two research papers in a CPSP approved journal.

Advocacy: Urologists like their counterparts of other clinical disciplines need the competence in advocacy for educating patients, their attendants, masses about the benefits of early diagnosis and treatment and counseling at times. The competence is also required for interaction with professional colleagues and other health professionals to offer advice on matters related to the discipline of Urology, and with the decision makers for promotion of the discipline as well as its scientific practice.

Pedagogy: Post graduate medical education (PGME) is learner-centered form of education in which both teachers and residents share equal responsibilities. The supervisors are duly trained in learning how to learn and teach (pedagogy) before they assume supervisorship. The need is that the residents are also made familiar with the principles of adult learning at the outset.

Acquisition of competencies, particularly skill-based, requires close supervision and monitoring, which could be made possible by assigning and delegating some of the responsibilities of supervision and teaching to the senior residents so that they can play their role in Peer Assisted Learning (PAL) in PGME.

Professionalism: Medical profession is termed as a noble profession because of a social contract of trust between the society and the profession to uphold following basic principles of professionalism:

- Keep the interest of the patient supreme (altruism)
- Keep one-self competent, current, updated
- Maintain confidentiality
- Be considerate, caring and empathetic
- Exercise ethical principles in the practice of discipline
- Assume leadership role

OBJECTIVES

1. Initially assessing the patient seeking advice for problems related to the kidneys and urinary tract through:
 - Obtaining pertinent history.
 - Performing physical examination correctly.
 - Formulating a working diagnosis.
 - Deciding whether the patient requires.
- Ambulatory care or hospitalization.
- Referral to other health professionals.
- Emergency care including life saving measures.
2. Managing patients requiring treatment by:
 - Planning an enquiry strategy i.e. ordering appropriate investigations and interpreting the results.
 - Performing specified surgical procedures independently and competently.
 - Dealing effectively and promptly with complications which may occur during the course of disease.
 - Maintaining records of patients including summarization and indexing.
 - Seeking consultation from seniors when needed.
 - Carrying out effective and efficient management of emergency situations.
3. Undertake research and publish findings.
4. Acquiring new information; assessing its utility and making appropriate applications.
5. Recognizing the role of teamwork and functioning as an effective member/leader of the team.

SYLLABUS

APPLIED PATHO-PHYSIOLOGY, NEPHROLOGY, TRANSPLANTATION AND PRINCIPLES OF UROLOGY

Urology residents should have knowledge of principles of basic sciences (anatomy, biochemistry physiology, pharmacology, and pathology) at the time of entry into the program. During training the core knowledge to be acquired includes basic sciences as well as clinical sciences related to Urology as under:

BASIC SCIENCES

Knowledge specific to specialty including regional anatomy, molecular biology, laboratory based scientific research and relevant systemic pathology. Some of these points are outlined in individual sections given below with particular reference to:

- Normal structure; (macroscopic and microscopic), physiology and function, including relevant neurology, neuropharmacology, biochemistry and cellular & molecular biology
- Disordered function; etiology, pathophysiological response (at macroscopic, microscopic and molecular level) and local, distant and systemic consequences
- Knowledge of statistics and trial design
- Principles of cell biology, cell structure and biochemistry
- Principles of renal physiology, effects of disease, renal failure
- Common metabolic problems seen in urological patients
- Principles of stone formation
- Structure and function of lower urinary tract
- Male sexual function & rogen receptor, prostate physiology
- Embryology and intersex
- Principles of immunology
- Clinical trials and screening
- Principles of wound healing, inflammation and coagulation

CORE SURGICAL KNOWLEDGE

- Scientific principles of surgical and non surgical treatment of urological disorders
- General principles of tumor biology applied to urology
- Principles of anesthesia and local anesthesia
- Pain control

- Applied cardio-respiratory patho-physiology relevant to clinical examination and surgery
- Patho-physiology in children, elderly and those with intercurrent disease

INVESTIGATIVE & TECHNICAL ASPECTS

- Understanding of biochemical, hematological and bacteriological tests used in urology
- Measurement of renal function by biochemical means
- Methods used in histopathology with specific reference to biopsy techniques & initial handling of surgical specimens
- Principles of urological investigations with particular emphasis on safe use of X-rays, radioisotopes and lasers
- Imaging urinary tract radiologically and by ultrasound; use of nuclear medicine techniques
- Principles of sterilization and asepsis, particularly as applied to endoscopes
- Radiobiology and principles of therapeutic use of external beam radiotherapy and radioisotopes
- Principles of diathermy and associated hazards

SPECIFIC UROLOGICAL CONDITIONS

Benign Prostatic Hyperplasia

- Anatomy of prostate with particular reference to "zones" and glandular/stromal tissue
- The embryology of prostate-Growth factors in prostate
- Function of prostate and its role in ejaculation and fertility
- Endocrine control of prostate
- Etiology and pathogenesis of BPH o Pathology of BPH
- Clinical features of BPH
- Concepts of benign prostatic hyperplasia, prostatic enlargement, bladder outflow obstruction & lower urinary tract symptoms; their interrelationship and correlation
- Role and value of symptom scores in the assessment of patients with lower urinary tract symptoms
- Appropriate use of investigations and their pitfalls, particularly in relation to flow rate studies & urodynamics
- Interpretation of flow rates and urodynamic studies in relation to the diagnosis of outflow obstruction.
- The urodynamic nature and pathophysiology of outflow obstruction

- Urodynamic definition of outflow obstruction; the relationship between detrusor instability and outflow obstruction
- Inter-relationship between BPH, detrusor instability, detrusor failure and ageing
- Management of BPH and bladder outflow obstruction
- Management of acute and chronic retention of urine and other complications of BPH
- Standard surgical treatments of prostate, particularly transurethral resection and their complications
- Follow up and assessment of results of treatment of bladder outflow obstruction
- TUR and other alternatives to prostatectomy in treatment of BPH; their results shown in literature
- Physiological basis of alpha blockers and 5 alpha reductase inhibitors ;indications and their value
- Catheterisation - role of lasers, stents and other new technology

Andrology

- Spermatogenesis, sexual behaviour, erection & ejaculation and their endocrine control
- Age related changes in erectile dysfunction and fertility
- Effect of urological disease and its treatment on erectile function, ejaculation and fertility
- Causes of erectile dysfunction
- Causes and treatment of retrograde ejaculation
- Causes of infertility
- Investigation of erectile dysfunction with an appreciation of sources of error in their interpretation.
- Role of penile prosthesis in the treatment of erectile dysfunction
- Peyronie's disease-its nature, clinical features & treatment
- Priapism-its causes, their differentiation and treatments available
- Controversy surrounding varicocele and its effect on fertility; technique, pitfalls and interpretation of semen analysis and use of hormone assays
- Role of scrotal exploration, vasography & testicular biopsy
- Treatment of infertility including appropriate use of surgery and non-surgical treatments

- Vasectomy including counselling prior to vasectomy, techniques, early and late complications
- Vasectomy reversal including pre-operative counselling, technique and results
- Various types of artificial conception and principles of such treatments

Bladder Dysfunction

- Anatomy, physiology & pharmacology of the lower urinary tract
- Physiology and hydrodynamics of bladder filling and emptying and higher centers involved in their control.
- The effect of various pharmacological agents on these activities and their mechanism of action
- Clinical assessment of bladder dysfunction and its pitfalls
- Urodynamic evaluation of lower urinary tract function
Distinction between disorders of contractility & disorders of compliance
- Detrusor instability - its nature, causes, diagnosis and treatment
- Impaired detrusor contractility- its nature, causes, clinical features, diagnosis and treatment and particularly its association with ageing & with bladder outflow obstruction
- Clean intermittent self-catheterization; its use, value and complications
- Drugs used in treatment of bladder dysfunction and details of their pharmacological action and side effects
- Contributions of the ISC Standardization Committee
- Role of electrical stimulation in the treatment of bladder dysfunction
- Neuro-urology, management of spinal injuries with respect to disordered bladder function.
- Surgical management of neurogenic bladder dysfunction

Trauma

- Assessment and general management of a patient following injury
- Hypovolemic shock; patho-physiology, clinical features, diagnosis and management
- The nature, presentation and distinction between different types of blunt and penetrating injury

- Inter-relationship between urological and other types of injury and their relative importance
- Renal injury - types, classification, investigation, management and indications for surgery
- The causes, presentation, investigation and management of ureteric injury with particular reference to gynecological and urological iatrogenic trauma
- Causes, presentation, investigation and management of bladder trauma
- Causes, presentation, investigation and management of urethral trauma with particular reference to pelvic fracture injuries and straddle injuries
- Causes, presentation, assessment and management of genital injury including fractured penis & domestic injuries

Female Urology

- Hormonal influences on female bladder function, effects of pregnancy (infection and ureteric obstruction)
- Use of antibiotics, including pregnancy and with oral contraceptives
- Urethral syndrome-nature, presentation, diagnosis and management
- Interstitial cystitis and related sensory disorders- nature, presentation, diagnosis and management
- Urinary fistulae of female genital tract-causes, presentation, diagnosis and management
- Nature, presentation and effect of vaginal prolapse and its inter-relationship with urinary and ano-rectal dysfunction
- Assessment and management of females with genuine stress incontinence alone and when combined with detrusor instability, voiding dysfunction or prolapse
- Causes, pathophysiology, clinical features, investigation and treatment of genuine stress incontinence including non-surgical and surgical treatments
- Role of transvaginal and open surgery; techniques, success rates and complications (short and long-term). The artificial urinary sphincter and its role in genuine stress incontinence
- Role of periurethral injections and other minimally invasive treatments in genuine stress incontinence

- Urethral diverticulum - causes, presentation, diagnosis and management
- Cystic/mass lesions palpable through the anterior vaginal wall

Reconstructive Urology

- Role of reconstructive surgery in treatment of patients with congenital anomalies of urinary tract
- Indications and techniques of augmentation and substitution cystoplasty and continent diversion
- Long-term complications of enterocystoplasty with particular reference to acid base balance and its consequences, bacteriuria and malignant change
- Role of urethroplasty in treatment of patients with urethral strictures
- Techniques used in management of ureteric injury
- Medico-legal aspect of iatrogenic and traumatic injury and their implications in management of such patients
- Adolescents with urological problems as a result of congenital anomalies and their sexual connotation

Oncological Urology

- General pathology of cancer:
 - Causes
 - Development
 - Invasion and spread
 - Clinical features and diagnosis
 - Tumour markers and related diagnostic and prognostic factors
 - Role of surgery, radiotherapy, chemotherapy and immuno therapy
 - Care of terminally ill patient
 - Genetic basis of urological malignancies
- Histopathology, presentation, investigation, assessment and management of a patient with renal cell carcinoma including results of surgical treatment and role of radiotherapy, chemotherapy, immuno therapy, endocrine therapy and embolisation
- Technique of radical nephrectomy

- Tumours simulating renal cell carcinoma; their distinction and management
- Role of partial nephrectomy in managing renal tumours- Von Hippel-Lindau disease and other conditions with which renal cell carcinoma is associated
- Transitional cell carcinoma -etiology, pathology, staging, grading and progression including its presentation as an industrial disease
- Chromosomal and molecular biological factors involved in progression from normal urothelium to malignancy and invasiveness and metastases
- Clinical presentation, assessment and management of transitional cell carcinoma
- Superficial bladder cancer; incidence, determination and prognostic factors, surgical treatment and role of intravesical chemotherapy.
- Industrial bladder cancer, occupations at risk, principles of case control studies and other methods of investigation
- Surgical treatment of advanced bladder cancer and role of radiotherapy
- Role of systemic chemotherapy in locally advanced or metastatic bladder cancer
- Techniques of orthotopic bladder substitution or continent urinary diversion as an alternative to ileal conduit diversion after cystectomy
- Transitional cell carcinoma of renal pelvis and ureter; presentation, diagnosis and management
- Squamous cell carcinoma and adenocarcinoma of the bladder; etiology, prognosis and management
- Prostate cancer:
 - Etiology, pathology, staging, grading, invasion & spread
 - Epidemiology including geographical and racial variations in incidence and familial prostate cancer
 - Clinical features and presentation
 - PSA; its role in screening, diagnosis and follow up
 - T1 prostate cancer, with reference to incidental disease found at TURP and T1c disease
 - Investigation including appropriate use of PSA, bone scan and other staging investigations

- Management of early cancer, selection of patients for radical prostatectomy and radiotherapy
- Role of wait & watch policy, hormonal treatment and radiotherapy in with advanced cancer
- Principles of endocrine therapy-the treatment of metastatic cancer
- Inter-relationship between gynaecological and colorectal malignancy and urinary tract
- Penis; pre-malignant lesions, etiology, histopathology, development, spread, diagnosis and management of squamous cell carcinoma of penis
- Tumors of testis:
 - Etiology
 - Classification with particular reference to seminoma and non-seminomatous germ cell tumors
 - Tumor markers & their role in diagnosis, management and follow up
 - Carcinoma in situ of the testis and the role of contralateral testicular biopsy
 - Management of testicular tumors other than adult germ cell tumors including the role of surgery, chemotherapy and radiotherapy
 - The principles of statistics with particular reference to trial design and studies of cancer treatment

Paediatric Urology

- Peri-natal urology
- Embryology of renal tract, anatomy and physiology.
- Assessment of renal function in neonate
- Antenatal diagnosis and management of anomalies.
- Foreskin, its anomalies and complications.
- Circumcision; history, indications, techniques, results and complications. Relationship to penile cancer
- Undescended testis; current views on etiology, presentation, diagnosis, management and its association with infertility and testicular tumors.
- Acute scrotum in childhood:
 - Torsion of testis and torsion of Hydatid.
- Scrotal swellings in childhood, congenital hydrocoele and its management.

- Penile abnormalities:
 - Hypospadias; clinical assessment and principles of surgical correction
- Chordee, epispadias and micropenis - general principles. Diagnosis and investigation of urinary tract infection in neonates and in childhood. Significance of urinary tract infection in boys and in girls
- Vesico-ureteric reflux; pathophysiology, grades of severity, implications for renal function, assessment & management. Principles and rationale of surgical treatment
- Renal masses and their differential diagnosis. Pathology and management of Wilms' tumor
- Assessment and management of urinary incontinence in childhood
- Pelvi-ureteric junction obstruction; nature, pathophysiology, presentation, diagnosis and treatment including diagnostic problems and the relative roles of available investigational modalities.
- Duplications of upper urinary tract and ectopia; understanding of basic anatomy and clinical relevance
- "Wide ureter"; classification, diagnosis and management
- Posterior urethral valves; clinical diagnosis
- Congenital conditions (e.g. prune belly syndrome) which can be associated with urological abnormalities
- Intersex - basic overview including clinical diagnosis and principles of surgical management of common conditions such as congenital adrenal hyperplasia
- Imaging techniques in children; differences with investigation of adults.
- The role and interpretation of antenatal ultrasound in detection of urinary tract abnormalities in fetus

Stones and Endourology

- Stone disease; etiology, presentation, investigation and management
- Biochemical and biophysical factors involved in generation of urinary stone disease with particular reference to calcium oxalate, urate and triple phosphate stone disease
- Biochemical investigation of patients with recurrent urinary stone disease

- Surgical treatment of renal calculi including PCNL & open surgery
- Mode of action of extracorporeal energy sources used in the treatment of stone disease and their application to patients with renal and ureteric calculi
- Significance and management of infective staghorn calculi
- Ureteric calculi and their endoscopic treatment
- Assessment and management of bladder stones; PCNL, ureteroscopy and other aspects of endourology
- Endourological treatment of upper tract malignancy
- Principles of laparoscopy
- Laparoscopic procedures applied to urology

Urinary Tract Infection

- Bacteriology of acute pyogenic upper and lower urinary tract infection
- Etiology, presentation, clinical features, investigation, diagnosis and treatment of upper and lower urinary tract infection
- General principles of antibiotic chemotherapy and chemoprophylaxis with reference to urinary tract
- Diagnosis and management of gram negative septicaemia
- Etiology, clinical features, investigation, diagnosis and treatment of prostatitis
- Viral diseases of genital tract including urethral condylomata, AIDS and herpes
- Etiology, clinical features, investigation, diagnosis, surgical and non-surgical treatment of tuberculosis of urinary tract
- Management of radiation induced cystitis
- Etiology, clinical features, investigation, diagnosis, non-surgical and surgical treatment of schistosomiasis affecting the urinary tract
- Drug and chemical induced cystitis; management and prophylaxis

Nephrology and Transplantation

- Structure and function of kidney including glomerular and tubular physiology
- Obstructive nephropathy with particular reference to pelvi-ureteric junction obstruction, its pathophysiology, investigation and treatment
- Etiology, pathophysiology, diagnosis and treatment of acute renal failure with particular reference to hypovolemic shock, septicemic shock and obstructive nephropathy
- The causes, investigation and management of chronic renal failure from surgical perspective
- Inter-relationship between hypertension and renal disease.
- Analgesic nephropathy
- Glomerular and tubular disease of kidney; manifestations and investigations
- Role of peritoneal dialysis, haemodialysis and haemofiltration in management of acute and chronic renal failure
- General principles of access surgery
- Techniques of renal retrieval and renal transplantation including ethical issues and selection of organ donors
- Principles of immunology and immuno-suppression
- Results and complications of renal transplantation with particular reference to urological complications

PROCEDURAL COMPETENCIES

The clinical skills, which a specialist must have, are varied and complex.

A complete list of the same necessary for trainees and trainers is given below. It is arranged year wise and the level of competence to be achieved each year is arranged as follows:

1. Observer status
2. Assistant status
3. Performed under supervision
4. Performed independently

A candidate is expected to attain the laid down level of competence for the following procedures by the end of each year as given below:

COMPETENCIES							TOTAL # OF CASES
	YEAR-1		YEAR-2		YEAR-3		
	Level	Cases	Level	Cases	Level	Cases	
KIDNEY							
OPEN							
SIMPLE NEPHRECTOMY	2	5	2	10	3	5	20
DONOR NEPHRECTOMY	-	-	-	-	2	5	5
RADICAL NEPHRECTOMY	1	5	2	5	3	3	13
RADICAL NEPHRECTOMY WITH CAVAL THROMBECTOMY	-	-	-	-	1	1	1
PARTIAL NEPHRECTOMY	1	2	2	3	2	3	8
NEPHROURETERECTOMY	2	2	2	3	3	1	6
PYELOLITHOTOMY	2	5	3	5	4	5	15
PYELOPLASTY	2	5	2	5	3	5	15
DRAINAGE OF ABSCESS	2	5	3	5	4	5	15
PER CUTANEOUS NEPHROSTOMY	2	5	3	5	4	10	20
PERCUTANEOUS RENAL BIOPSY	1	3	1	3	2	3	9
RENAL TRANSPLANTATION	-	-	-	-	2	5	5
LAPAROSCOPIC*							
NEPHRECTOMY	1	5	2	5	2	5	15
NEPHROURETERECTOMY	1	1	2	1	2	2	4
DECORTICATION OF CYST	1	3	2	3	3	3	9
PYELOPLASTY	1	2	2	2	2	3	7

COMPETENCIES	YEAR-1		YEAR-2		YEAR-3		TOTAL # OF CASES
	Level	Cases	Level	Cases	Level	Cases	
PERCUTANEOUS /ENDOSCOPIC							
PCNL	2	10	2	10	3	10	30
URETEROSCOPY							
RIGID	2	20	3	20	4	10	50
FLEXIBLE	1	5	2	5	2	5	15
RETROGRADE PYELOGRAPHY	2	20	3	20	4	20	60
INSERTION OF D.J STENT	2	10	3	20	4	20	50
URETER							
OPEN							
URETEROLITHOTOMY	2	5	3	5	4	3	13
URETEROLYSIS	-	-	-	-	1	3	3
URETEROCALICOSTOMY	-	-	-	-	1	2	2
URETERIC RE-IMPLANTATION	1	3	2	3	2	3	9
BOARI'S FLAP	1	2	2	2	2	2	6
URETERO-URETEROSTOMY	-	-	-	-	1	2	2
URETEROSTOMY	-	-	-	-	1	2	2

COMPETENCIES							TOTAL # OF CASES
	YEAR-1		YEAR-2		YEAR-3		
	Level	Cases	Level	Cases	Level	Cases	
BLADDER							
OPEN							
VESICOLITHOTOMY / CYSTOLITHOTOMY	2	5	3	5	4	5	15
SUPRAPUBIC CYSTOSTOMY/ SUPRA PUBIC CATHETER	3	5	4	10	4	5	20
VESICAL DIVERTICULECTOMY	1	3	2	3	3	3	9
PARTIAL CYSTECTOMY	1	1	2	1	2	1	3
RADICAL CYSTECTOMY	1	3	2	3	2	3	9
REPAIR FISTULA, VESICO COLIC, VESIOURETERIC , VVF	1	2	2	3	2	3	8
AUGMENTATION CYSTOPLASTY ADULT*	1	3	2	3	2	3	9
ENDOSCOPIC							
CYSTOLITHOLAPAXY	2	5	4	5	4	5	15
CYSTOSCOPY (FLEXIBLE)	2	10	4	10	4	10	30
CYSTOSCOPY (RIGID)	3	10	4	20	4	20	50
TUR-BT	2	10	2	10	3	10	30
REMOVAL OF DJ STENT	2	10	4	10	4	20	40
BIOPSY OF BLADDER LESIONS	2	5	3	5	4	10	20

COMPETENCIES							TOTAL # OF CASES
	YEAR-1		YEAR-2		YEAR-3		
	Level	Cases	Level	Cases	Level	Cases	
PROSTATE							
OPEN							
TRANSVESICAL PROSTATECTOMY	1	3	2	3	3	3	9
SIMPLE RETROPUBIC PROSTATECTOMY	1	3	2	3	3	3	9
RADICAL RETROPUBIC PROSTATECTOMY*	1	2	2	2	2	3	7
ENDOSCOPIC							
TURP	2	10	3	15	4	15	40
TUIP	2	5	3	5	4	7	17
LASER PROSTATECTOMY*	1	2	1	3	2	3	8
URETHRA							
URETHRAL CATHETERIZATION	4	30	4	30	4	30	90
URETHRAL DILATATION	2	10	3	10	4	10	30
OPEN							
URETHROPLASTY	1	5	2	5	2	5	15
URETHERECTOMY	-	-	1	1	2	1	2
INSERTION OF SPHINCTER*	-	-	-	-	1	1	1
REPAIR OF HYPOSPADIAS (PROXIMAL)	2	3	2	3	2	3	9
REPAIR OF HYPOSPADIAS (DISTAL)	2	3	2	3	3	2	8
REPAIR OF FISTULAE	1	1	1	1	2	1	3
REPAIR OF EPISPADIAS*	-		-		1	2	2

COMPETENCIES	YEAR-1		YEAR-2		YEAR-3		TOTAL # OF CASES
	Level	Cases	Level	Cases	Level	Cases	
ENDOSCOPIC							
OPTICAL URETHROTOMY	2	10	3	10	4	10	30
PENIS							
CORRECTION OF CORDAE (PEYRONIC'S DISEASE)	1	1	1	1	1	1	3
CORRECTION OF PRIAPISM	1	2	2	2	3	2	6
INTRACAVERNOSAL	2	3	3	3	4	3	9
CIRCUMCISION	3	5	4	5	4	5	15
PENECTOMY*	-	-	-	-	1	1	1
INSERTION OF PROSTHESIS*	-	-	-	-	1	1	1
VAGINA							
NEOVAGINAL RECONSTRUCTION*	-	-	-	-	1	1	1
REPAIR OF FISTULAE (VVF) VAGINALLY	1	2	2	2	2	2	6
AMBIGUOUS GENITALIA							
CLITORECTOMY	-	-	-	-	1	1	1
PHALLOPLASTY *	-	-	-	-	1	1	1

COMPETENCIES	YEAR-1		YEAR-2		YEAR-3		TOTAL # OF CASES
	Level	Cases	Level	Cases	Level	Cases	
TESTIS							
OPEN							
TESTICULAR BIOPSY	1	2	2	2	3	5	9
ORCHIDECTOMY	2	5	3	5	4	5	15
RADICAL ORCHIDECTOMY	2	5	3	5	4	3	13
LAPAROSCOPIC							
ORCHIDOPEXY	1	2	2	2	2	2	6
SCROTUM							
OPEN							
HYDEROCELECTOMY	2	5	4	5	4	5	15
VASECTOMY	2	5	4	5	4	5	15
EXCISION OF EPIDIDYMAL CYST	2	5	4	5	4	5	15
HIGH LIGATION OF VARICOCCLE (OPEN)	2	5	3	5	4	3	13
INSERTION OF TESTICULAR PROSTHESIS *	-		-		1	1	1
LAPAROSCOPIC							
VARICOCELE LIGATION/MICROSOPIC VARICOCELECTOM IF FACILTIV EXISTS *	2	5	2	5	3	5	15

COMPETENCIES							TOTAL # OF CASES
	YEAR-1		YEAR-2		YEAR-3		
	Level	Cases	Level	Cases	Level	Cases	
RECONSTRUCTIVE PROCEDURES							
URETEROSIGMOIDOSTOMY	1	2	2	2	2	2	6
ILEAL CONDUIT	1	5	2	5	3	3	13
CONTINENT RESERVOIR RECONSTRUCTION (INSERT NUMBER AGAINST PROCEDURE)*	1	2	1	3	2	3	8
KOCK POUCH							
ILEAL NEOBLADDER							
ILEOCOLIC NEOBLADDER							
GASTROCYSTOPLASTY							
SIGMOID NEOBLADDER							
MISCELLANEOUS							
OPEN							
PELVIC LYMPHADENECTOMY	1	5	2	5	3	3	13
RETROPERITONEAL LYMPHADENECTOMY	1	2	2	2	2	2	6
INGUINAL HERNIA REPAIR	3	3	4	3	4	3	9
PELVIC EXTENTERATION	-	-	-	-	1	1	1
SEMINAL VESICULECTOMY*	-	-	-	-	1	1	1
OPEN ADRENALECTOMY	1	2	1	2	2	2	6
VASOVASOTOMY*	-	-	-	-	1	1	1

COMPETENCIES							TOTAL # OF CASES
	YEAR-1		YEAR-2		YEAR-3		
	Level	Cases	Level	Cases	Level	Cases	
LAPAROSCOPIC							
PELVIC LYMPH NODE DISSECTION*	1	1	1	1	1	1	3
ADRENALECTOMY *	-	-	-	-	1	1	1
TVT/TOT	1	2	2	3	2	3	8
ICSI/ TESSA*	-	-	-	-	1	2	2
TRAUMA							
NEPHRECTOMY	1	1	2	2	2	2	5
REPAIR OF URINARY TRACT INJURIES	1	1	2	2	2	2	5
PAEDIATRIC PROCEDURES							
OPEN							
NEPHRECTOMY SIMPLE	1	5	2	5	3	3	13
WILMS NEPHRECTOMY	1	2	2	2	2	2	6
PYELOPLASTY	2	5	2	5	3	3	13
URETEIC REIMPLANT	1	5	2	5	2	5	15
URETEROSTOMY	1	5	2	5	3	5	15
VESICOSTOMY	1	5	2	5	2	5	15
CLOSURE VESICOSTOMY	1	5	2	5	3	3	13
ORCHIDOPEXY FOR UNDESCENDED TESTIS OPEN	2	5	3	5	4	5	15
TORSION TESTIS	2	5	4	5	4	5	15
HYPOSPADIAS DISTAL REPAIR	2	5	3	5	4	3	13

COMPETENCIES	YEAR-1		YEAR-2		YEAR-3		TOTAL # OF CASES
	Level	Cases	Level	Cases	Level	Cases	
HYPOSPADIAS 2 STAGE REPAIR	1	5	2	5	2	5	15
HYPOSPADIAS FISTULA REPAIR	2	5	2	5	3	3	13
AUGMENTATION OF BLADDER*	1	3	2	3	2	5	11
MITROFANOFF PROCEDURE*	1	3	2	3	2	5	11
PAEDIATRIC PROCEDURES ENDOSCOPIC							
CYSTOSCOPY	2	5	3	5	4	5	15
URETEROSCOPY	1	5	2	5	3	5	15
FULGRATION PUV	1	5	2	5	2	5	15
INJECTION DEFLUX/ MACROPLASTIQUE FOR VUR *	1	5	2	5	2	5	15
PCNL IN CHILD	2	10	2	10	3	5	25
LAPAROSCOPIC NEPHRECTOMY CHILD*	1	5	2	5	2	5	15
LAPAROSCOPIC PYELOPLASTY CHILD*	1	3	2	3	2	3	9
ESWL	1	10	1	20	3	10	40
URODYNAMICS (INSERT NUMBER AGAINST PROCEDURE)	1	10	3	10	4	10	30
CYSTOMETRY							
UPP							
VIDEOURODYNAMICS*							

COMPETENCIES							TOTAL # OF CASES
	YEAR-1		YEAR-2		YEAR-3		
	Level	Cases	Level	Cases	Level	Cases	
VASCULAR ACCESS SURGERY*							
AVF	2	5	3	5	4	5	15
VASCULAR GRAFT	1	2	1	2	2	2	6
PERM CATHETER	1	2	1	2	1	2	6
TENCHKOFF	-	-	-	-	1	1	1
RADIOLOGY							
X-RAYS REPORTING	3	20	4	20	4	20	60
IVU REPORTING	3	20	4	20	4	20	60
CT SCAN REPORTING	2	10	3	10	3	10	30
MRI REPORTING	2	5	2	5	2	5	15
PET SCAN* REPORTING	1	2	1	2	2	2	6
ULTRASOUND							
PERFORMING ULTRASOUND ABDOMEN (KUB)	2	10	3	20	4	20	50
PERFORM TRUS*	1	5	2	5	3	5	15
PERFORM TRUS BIOPSY	1	5	2	5	3	5	15
RENAL ANGIOGRAPHY	1	2	1	2	1	2	6
ULTRASOUND GUIDED DRAINAGE KIDNEY	1	5	2	5	2	5	15
MCUG	2	10	3	10	4	10	30
URETHROGRAM	2	10	3	10	4	10	30
ISOTOPE SCANS	1	5	2	5	3	5	15
OTHER							

COMPETENCIES	YEAR-1		YEAR-2		YEAR-3		TOTAL # OF CASES
	Level	Cases	Level	Cases	Level	Cases	
SKILLS DEVELOPMENT TRAINING							
ENDOTRAINER*	3	20HR	3	20 HR	3	20 HR	60HR
SIMULATOR TRAINING*	3	5HR	3	5HR	3	20HR	30HR
HANDS ON WORKSHOPS	3	5HR	3	5HR	3	5HR	15HR
RESEARCH AND SCHOLARSHIP							
PUBLICATIONS	ANY AUTHOR SELF PRESENTED	1	ANY AUTHOR SELF PRESENTED	1	ANY AUTHOR SELF PRESENTED	1	3
PRESENTATIONS AT SCIENTIFIC MEETINGS		1		1		2	4
PARTICIPATION IN UROLOGY MEETINGS, LOCAL/REGIONAL/NATIONAL OR INTERNATIONAL		5		5		5	15

FOR PROCEDURES MARKED WITH ASTERISK (*), TRAINEES MAY HAVE TO GO TO CENTRES WHERE THIS FACILITY EXISTS

RECOMMENDED READING MATERIAL

A comprehensive urological knowledge requires regular reading, both of textbooks and journals. Teaching as part of training programmes can supplement, but not replace, regular planned study throughout training. The following books are recommended for Urology.

- Campbell's "Urology",
- Smith Urology
- EUA Guidelines
- AUA Guidelines
- Gillenwater's "Adult and Paediatric Urology", "Surgery",
- Blandy and Fowler's "Urology",
- Mundy, Fitzpatrick, Neal and George: "Basic Science in Urology".
- Krane, Siroki and Fitzpatrick's "Clinical Urology" A candidate will be expected to have a knowledge of the important publications on a subject and their authors, particularly in recent editions of important journals like
- BJU International
- The Journal of Urology.
- Urologic Clinics of North America
- European Urology

ASSESSMENT

FORMATIVE ASSESSMENT:

College of Physicians and Surgeons Pakistan, in order to implement competency based education in letter and spirit, is introducing Work Placed Based Assessment (WPBA) in addition to institutional/ departmental assessments. To begin with college is introducing Mini-CEX and DOPS to ensure that the graduates are fully equipped with the clinical competencies.

Mini Clinical Evaluation Exercise (Mini-CEX)

During training in Urology one Mini-CEX in each quarter on any of the following topics is to be conducted as under:

- Mini-CEX is entirely a formative tool of assessment and is to be accompanied with constructive feedback
- Each Mini-CEX encounter extends for about 20 minutes with 05 minutes for feedback and further action plan
- In case of unsatisfactory performance of the resident, a remedial has to be completed within stipulated time frame
- The topics given below are to be covered accordingly, focusing each time on a different topic
- Non-compliance by the resident has to be reported in quarterly feedback.
- The performance is reported online on the prescribed form (sample given below)

Topics List of Mini-CEX:

First Year:

- History taking for Flank Pain
- History taking for Haematuria
- Counseling/Informed Consent for Surgery
- Pre-operative Management (Preparation) of Diabetic Patient for Surgery
- Pre-operative Management (Preparation) of Hypertensive Patient for Surgery
- Pre-operative Management (Preparation) of Ischemic Heart Disease Patient for Surgery
- Proper Writing of the Calls to Different Departments
- Proper Discharge Plan (Report)
- External Genitalia Examination for Hydrocele

- External Genitalia Examination for Varicocele
- External Genitalia Examination for Epididymal cyst
- Hypospadias Examination
- Digital Rectal Examination
- Suprapubic Catheter Examination
- Abdominal Incision Examination

Second Year:

- Structured IPSS History
- Prescription Writing for Medical Management of Benign
- Enlarged Prostate
- Pre-operative Counseling
- Pre-operative Patient Education
- Reviewing a Patient for Discharge
- Extrophy-Epispadias Examination
- Urethral Fistula Examination
- Perineal Scar(s) Examination
- Peyronie's Disease Examination
- Forearm/Arm Examination for Suitability of Arteriovenous
Fistula
- AV Fistula Examination

Third Year:

- Management Plan for Non-Muscle Invasive Bladder Cancer (NMIBC)
- Management Plan in Active Intervention for Urolithiasis
- Decision Making for Surgical Options
- Management Plan for Renal Cell Carcinoma (Partial Nephrectomy vs. Radical Nephrectomy)
- Assessment of Renal Transplant Patient
- Post-Operative Patient Education
- Write Follow up Plan for Urocancers
- Counsel the Patient: Dietary Modification for Prevention of Urolithiasis
- PCN Tube Examination
- Renal Mass Examination
- Abdominal Mass Examination
- Double Lumen Examination
- Grafted Kidney Examination
- Femoral Line Examination

- Post-operative Drain(s) Examination
- Examination for Ambiguous Genitalia
- Testicular Tumor Examination



COLLEGE OF
PHYSICIANS AND
SURGEONS
PAKISTAN

MINI CLINICAL EVALUATION EXERCISE (CEX)

SPECIALTY: UROLOGY

Time Duration = 20 mins (15 mins assessment and 5 mins feedback)

PLEASE COMPLETE THE QUESTIONNAIRE BY FILLING/CHECKING APPROPRIATE BOXES

Assessor: _____ Assessment Date: _____

Resident's Name: _____

Hospital Name: _____ R&RC Number: _____

Year of Residency: ☐ R1 ☐ R2 ☐ R3 ☐ R4 ☐ R5

Quarter: ☐ 1st ☐ 2nd ☐ 3rd ☐ 4th

Setting: ☐ Ward ☐ Outdoor (Hospital/Community) Other: _____

Diagnosis of Patient: _____ Patient Age: _____ Sex: _____

Clinical Area: _____

Complexity of Case/ Procedure: ☐ Low/Easy ☐ Moderate/Average ☐ High/Difficult ☐ N/A

Focus of Clinical Encounters: ☐ History taking ☐ Physical Examination ☐ Management

☐ Communication Skills ☐ Other: _____

Please grade the following areas on the given scale:	Not Observed / Applicable	Below Expectations		Satisfactory	Above Expectation	Excellent
		1	2	3	4	5
Informed Consent of patient						
Interviewing Skills						
Systematic Progression						
Presentation of positive & significant negative findings						
Justification of actions						
Professionalism						
Organization/Efficiency						
Overall clinical competence						

Assessor's Satisfaction with Mini-CEX:

(Low) 1 2 3 4 5 (High)

Resident's Satisfaction with Mini-CEX:

(Low) 1 2 3 4 5 (High)

Strengths	Suggestions for Improvement

Encounter to be repeated ☐ YES ☐ NO

Signature _____

Direct Observation of Procedural Skills (DOPS)

During training in Urology one DOPS in each quarter on any of the following topics is to be conducted as under:

- DOPS is entirely a formative tool of assessment and is to be accompanied with constructive feedback
- Each DOPS encounter extends for about 20 minutes with 05 minutes for feedback and further action plan
- In case of unsatisfactory performance of the resident, a remedial has to be completed within stipulated time frame
- The topics given below are to be covered accordingly, focusing each time on a different topic/procedure
- Non-compliance by the resident has to be reported in quarterly feedback.
- The performance is reported online on the prescribed form (sample given below)

Topics List of DOPS:

First Year:

- IV Cannulation
- IM Injection
- Blood Transfusions
- Urethral Catheterization
- Positioning of Critical Patients in Ward
- Making Lithotomy Position in OT
- Making Flank Position in OT
- Assembly of Equipment

Second Year:

- Percutaneous Nephrostomy (PCN)
- Ultrasound KUB
- Suprapubic Catheterization
- Flexible Cystoscopy
- Rigid Cystoscopy
- Double J-Stent (DJS) Placement
- Assembly of Trans-urethral Resection (TUR) System
- Rolly Ball in Trans-urethral Resection (TUR)
- Retrograde Pyelogram (RGP) in Percutaneous Nephrolithotomy (PCNL)
- Percutaneous Nephrolithotomy (PCNL) Puncture

Third Year:

- Extracorporeal Shock Wave Lithotripsy (ESWL)
- Urodynamics
- Suprapubic Catheterization
- Trans-urethral Incision of the Prostate (TUIP)
- Trans-urethral Resection of the Prostate's (TURP) Median Lobe only
- Opening / Closing for Open Surgery
- Trans-urethral Resection of Bladder Tumor (TURBT) [Small Tumor]
- Percutaneous Nephrolithotomy (PCNL) Tract Dilatation
- Nephroscopy and Stone Retrieval



COLLEGE OF
PHYSICIANS AND
SURGEONS
PAKISTAN

DIRECT OBSERVATION OF PROCEDURAL SKILLS (DOPS)

SPECIALTY: UROLOGY

Time Duration = 20 mins (15 mins assessment and 5 mins feedback)

PLEASE COMPLETE THE QUESTIONNAIRE BY FILLING/CHECKING APPROPRIATE BOXES

Assessor: _____ Assessment Date: _____

Resident's Name: _____

Hospital Name: _____ R&RC Number: _____

Year of Residency: ☐ R1 ☐ R2 ☐ R3 ☐ R4 ☐ R5

Quarter: ☐ 1st ☐ 2nd ☐ 3rd ☐ 4th

Setting: ☐ O.T. ☐ Procedure Room Other: _____

Diagnosis of Patient: _____ Patient Age: _____ Sex: _____

Name of Procedure: _____

Complexity of Case/ Procedure: ☐ Low/Easy ☐ Moderate/Average ☐ High/Difficult ☐ N/A

Number of times procedure performed by Resident: _____

Please grade the following areas on the given scale:	Not Observed / Applicable	Below Expectations		Satisfactory	Above Expectation	Excellent
		1	2	3	4	5
Indications, anatomy & steps of procedure						
Informed consent, with explanation of procedure and complications						
Preparation for procedure						
Use of Anesthesia, Analgesia or sedation						
Observance of asepsis						
Safe use of instruments						
Use of accepted techniques						
Management of unexpected event (or seeks help)						
Post-procedure instructions to patient and staff						
Professionalism						
Overall ability to perform whole procedure						

Assessor's Satisfaction with DOPS:

(Low) 1 2 3 4 5 (High)

Resident's Satisfaction with DOPS:

(Low) 1 2 3 4 5 (High)

Strengths	Suggestions for Improvement

Encounter to be repeated ☐ YES ☐ NO

Signature _____

SUMMATIVE ASSESSMENT:

The Eligibility Requirements for Residents Appearing in FCPS-II Examination are:

- To have passed FCPS-I in Surgery and Allied or been granted official exemption.
- To have undertaken two years training in Intermediate Module in Surgery and Allied.
- To have undertaken three years specified training in Urology
- To provide certificate of having passed Intermediate Module Examination in Surgery and Allied.
- Completion of entries in e-logbook along with validation by the supervisor
- To provide a certificate of approval of dissertation or acceptance of two research papers which must accompany the application form.
- To provide a certificate of attendance of mandatory workshops.

EXAMINATION SCHEDULE

- CPSP theory examinations may be held once or twice a year depending upon the number of candidates.
- Theory examinations are held in various cities of the country usually at Abbottabad, Bahawalpur, Faisalabad, Hyderabad, Islamabad, Karachi, Lahore, Larkana, Multan, Peshawar, Quetta and Rawalpindi, centres. The College shall decide where to hold oral/practical examination depending on the number of candidates in a city and shall inform the candidates accordingly.
- English shall be the medium of examination for the theory/practical/ clinical and viva examinations.
- The College will notify of any change in the centres, the dates and format of the examination.
- A competent authority appointed by the College has the power to debar any candidate from any examination if it is satisfied that such a candidate is not a fit person to take the College examination because of using unfair means in the examination, misconduct or other disciplinary reasons
- Each successful candidate in the Fellowship examination shall be entitled to the award of a College Diploma after being elected by the College Council and payment of registration fees and other dues.

EXAMINATION FEES

- Fees deposited for a particular examination shall not be carried over to the next examination in case of withdrawal/absence/exclusion.
- Applications along with the prescribed examination fees and required documents must be submitted by the last date notified for this purpose before each examination.
- The details of examination fee and fees for change of centre, subject, etc. shall be notified before each examination.

REFUND OF FEES

If, after submitting an application for examination, a candidate decides not to appear, a written request for a refund must be submitted before the last date for withdrawal with the receipt of applications. In such cases a refund is admissible to the extent of 75% of fees only. No request for refund will be accepted after the closing date for receipt of applications.

If an application is rejected by the CPSP, 75% of the examination fee will be refunded, the remaining 25% being retained as a processing charge. No refund will be made for fees paid for any other reason, e.g. late fee, change of centre/subject fee, etc.

FORMAT OF EXAMINATION

Every candidate applying for the fellowship of the College of Physicians and Surgeons Pakistan must pass both parts of the Fellowship examination unless exemption is approved. Since the College is continually seeking to improve its examinations, changes are likely from time to time and candidates will be notified in advance of such changes.

PART-I: THEORY EXAMINATION:

Paper-I: 100 Multiple Choice Questions (MCQs)

Paper-II: 100 Multiple Choice Questions (MCQs)

Only those candidates who pass through the written examination will be allowed to appear in clinical examination.

PART-II CLINICAL EXAMINATION

The clinical section comprises of two components:

- **First Component:**
 - TOACS: 14-16 Stations
- **Second Component:**
 - One Long Case
 - Four Short Cases (Patients maybe Physical/Virtual)

Only those candidates who pass through TOACS examination will be allowed to appear in the remaining components of clinical examination.

FORMAT OF TOACS

Task Oriented Assessment of Clinical Skills (TOACS) has been introduced since November, 2001 in FCPS examinations. TOACS will comprise of 14-16 stations including one station on e-log. All stations are required to be "Interactive". At these stations, the candidates will be required to perform a task, for example, taking history, performing clinical examination, counseling, assembling an instrument or any other task. One examiner will be present at each interactive station and will rate the performance of the candidate and ask questions testing critical thinking and problem-solving skills.

FORMAT OF LONG CASE

Each candidate will have one hour for long case in which 30 minutes will be allotted for history taking and clinical examination where as 40 minutes will be for case discussion. Candidates should take a careful history from the patient (or relative) and after a thorough physical examination identify the problems which the patient presents with. During the period a pair of examiners will observe the candidate. In this section the candidates will be assessed on the following areas:

Interviewing Skills

- Introduces one self. Listens patiently and is polite with the patient.
- Is able to extract relevant information.

Clinical Examination Skills

- Takes informed consent
- Uses correct clinical methods in a systematic manner (including appropriate exposure and re-draping).

Case Presentation / Discussion

- Presents skillfully
- Gives correct findings
- Gives logical interpretations of findings and discusses differential diagnosis
- Enumerates and justifies relevant investigations.
- Outlines & justifies treatment plan (including rehabilitation)
- Discusses prevention and prognosis
- Has knowledge of recent advances relevant to the case
- During case discussion the candidate may ask the examiners for laboratory investigations which shall be provided, if available. Even if they are not available and are relevant, candidates will receive credit for the suggestion

FORMAT OF SHORT CASES

Candidates will be examined in at least four short cases for a total of 40 minutes jointly by a pair of examiners. Candidates will be given a specific task to perform on patients (physical / virtual), one case at a time.

During this part of the examination, the candidate will be assessed in:

Clinical Examination Skills

- Takes informed consent.
- Uses correct clinical methods.
- Examines systematically.

Discussion

- Gives correct findings.
- Gives logical interpretations of findings.
- Justifies diagnosis/es.

As the time for this section is short, the answers given by the candidates should be precise, succinct and relevant to the patient under discussion.

NOTE: The resident is required to fill a self-explanatory 'feedback proforma' at the end of the examination.

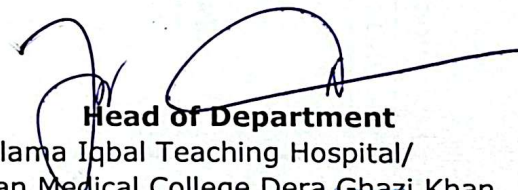
THE COLLEGE RESERVES THE RIGHT TO ALTER/AMEND ANY RULES/REGULATIONS

Any decision taken by the College on the interpretation of these regulations will be binding on the applicant.



Internal Review Committee
Urology Department

Sr.NO.	Name	Designation
1	Prof. Dr Muhammad Khalid	Professor / HOD
2	Dr Hussain Rafiq	PGR 3
3	Dr Muhammad Luqman	PGR 3



Head of Department
Allama Iqbal Teaching Hospital/
D.G.Khan Medical College Dera Ghazi Khan

Admin Register
Urology Department
Teaching Hospital, D.G.Khan

TIME TABLE

Days	8:00-9:00 am	9:00-10:00 am	10:00 am- 12:00 pm	12:00-2:00 pm
Monday	OT pre-operative case discussion	OT Surgery	OT Surgery	Post operative Case Discussion
Tuesday	Round preparation	Ward Round	Case discussion & presentation	Round orders, research work & journal club
Wednesday	Round preparation	Ward Round	Case discussion & presentation	Round orders, research work & journal club
Thursday	OT pre-operative case discussion	OT Surgery	OT Surgery	Post operative Case Discussion
Friday	OPD	OPD	OPD	OPD
Saturday	Round preparation	Ward Round	Case discussion & presentation	Round orders, research work & journal club



UROLOGY DEPARTMENT

شعبہ یورالوجی ڈیپارٹمنٹ
علامہ اقبال ٹیچنگ ہسپتال ڈیرہ غازی خان
پی-جی-آر ڈیوٹی رولسٹر - دسمبر - 2025



ALLAMA IQBAL
TEACHING HOSPITAL
DERA GHAZI KHAN

سہ ماہ	مارنگ ڈیوٹی	ایوننگ ڈیوٹی	رات کے وقت ڈیوٹی	ادبی ڈی	اد-بی
1.	ڈاکٹر حسین	ڈاکٹر حسین	ڈاکٹر حسین	ڈاکٹر حسین	
2.	ڈاکٹر حسن	ڈاکٹر لقمان	ڈاکٹر لقمان	ڈاکٹر لقمان	
3.	ڈاکٹر حسین	ڈاکٹر حسن	ڈاکٹر حسن	ڈاکٹر حسن	
4.	ڈاکٹر حسین	ڈاکٹر حسین	ڈاکٹر حسین	ڈاکٹر لقمان	
5.	ڈاکٹر لقمان	ڈاکٹر لقمان	ڈاکٹر لقمان	ڈاکٹر حسین	ڈاکٹر حسن
6.	ڈاکٹر حسن	ڈاکٹر حسن	ڈاکٹر حسن	ڈاکٹر حسین	
7.	ڈاکٹر لقمان	ڈاکٹر لقمان	ڈاکٹر لقمان	ڈاکٹر حسین	
8.	ڈاکٹر حسن	ڈاکٹر حسن	ڈاکٹر حسن	ڈاکٹر حسین	
9.	ڈاکٹر لقمان	ڈاکٹر حسین	ڈاکٹر حسین	ڈاکٹر حسین	
10.	ڈاکٹر لقمان	ڈاکٹر حسن	ڈاکٹر حسن	ڈاکٹر حسن	
11.	ڈاکٹر لقمان	ڈاکٹر لقمان	ڈاکٹر لقمان	ڈاکٹر حسین	ڈاکٹر حسن
12.	ڈاکٹر حسین	ڈاکٹر حسین	ڈاکٹر حسین	ڈاکٹر حسن	
13.	ڈاکٹر لطیف حسین	ڈاکٹر لقمان	ڈاکٹر لقمان	ڈاکٹر حسین	
14.	ڈاکٹر حسن	ڈاکٹر حسن	ڈاکٹر حسن	ڈاکٹر حسین	
15.	ڈاکٹر حسین	ڈاکٹر حسین	ڈاکٹر حسین	ڈاکٹر حسین	
16.	ڈاکٹر حسن	ڈاکٹر لقمان	ڈاکٹر لقمان	ڈاکٹر لقمان	
17.	ڈاکٹر حسن	ڈاکٹر حسین	ڈاکٹر حسین	ڈاکٹر حسین	
18.	ڈاکٹر لقمان	ڈاکٹر حسن	ڈاکٹر حسن	ڈاکٹر حسن	
19.	ڈاکٹر حسین	ڈاکٹر حسین	ڈاکٹر حسین	ڈاکٹر حسین	ڈاکٹر لقمان
20.	ڈاکٹر لقمان	ڈاکٹر حسن	ڈاکٹر حسن	ڈاکٹر حسن	
21.	ڈاکٹر لقمان	ڈاکٹر لقمان	ڈاکٹر لقمان	ڈاکٹر حسین	
22.	ڈاکٹر حسین	ڈاکٹر حسین	ڈاکٹر حسین	ڈاکٹر حسین	
23.	ڈاکٹر حسن	ڈاکٹر لقمان	ڈاکٹر لقمان	ڈاکٹر لقمان	
24.	ڈاکٹر حسین	ڈاکٹر حسن	ڈاکٹر حسن	ڈاکٹر حسن	
25.	ڈاکٹر لقمان	ڈاکٹر لقمان	ڈاکٹر لقمان	ڈاکٹر حسین	
26.	ڈاکٹر حسن	ڈاکٹر حسن	ڈاکٹر حسن	ڈاکٹر حسین	ڈاکٹر حسن
27.	ڈاکٹر حسین	ڈاکٹر حسین	ڈاکٹر حسین	ڈاکٹر لقمان	
28.	ڈاکٹر حسن	ڈاکٹر حسن	ڈاکٹر حسن	ڈاکٹر حسین	
29.	ڈاکٹر لقمان	ڈاکٹر لقمان	ڈاکٹر لقمان	ڈاکٹر لقمان	
30.	ڈاکٹر حسین	ڈاکٹر حسین	ڈاکٹر حسین	ڈاکٹر حسن	
31.	ڈاکٹر لقمان	ڈاکٹر حسن	ڈاکٹر حسن	ڈاکٹر حسین	

24 گھنٹے کے بعد گھنٹے چلے گی۔

دوران ڈیوٹی پی پی آر ملا سکتے ہیں۔

ہیل آف شعبہ یورالوجی ڈیپارٹمنٹ
علامہ اقبال ٹیچنگ ہسپتال ڈیرہ غازی خان

Admin Registrar
Urology Department
Teaching Hospital, D.G.Khan

CURRICULUM

The aim of the Fellowship Programme in Urology is to produce specialists in the field who have attained the required competencies. By the end of the residency programme, the graduate will be able to

- Take appropriate histories
- Demonstrate proficiency in the requisite physical examinations
- Justify the ordering and interpretation of tests and investigations
- Appropriately diagnose and rule in and rule out contending conditions
- Manage the problem in a cost effective manner
- Apply the requisite knowledge and skills to think critically and solve problems
- Be an effective team player, leading the team if necessary
- Communicate effectively with:
 - o patients and their attendants with empathy and compassion, in interviewing, counseling, breaking bad news, behavioural modification and shared decision-making, recognizing the impact of the condition on the patients and their families
 - o seniors, peers, juniors, learners and other health professionals;
- Demonstrate risk analysis and emphasis on prevention
- Ensure patient safety
- Manage emergencies related to the specialty
- Present well in clinics, rounds and conferences
- Document concise and accurate histories, prescriptions, progress notes, discharge summaries and referrals
- Keep up to date and practice evidence based medicine
- Demonstrate putting patients first
- Demonstrate honesty, integrity and timeliness (punctuality and task completion)
- Maintain confidentiality, patient autonomy, take appropriate consent and do no harm
- Consults with colleagues and refer as necessary
- Demonstrates effective teaching skills

- Exhibit advocacy for their patients, practice (service/ department), profession (discipline/specialty) and population-based problems related to their specialty
- Participate in clinical governance and clinical audit
- Demonstrate research, and use of research in improving clinical practice
- Maintain highest standards of practice
- Demonstrate conflict resolution, management skills and leadership

The competencies outlined above have been reflected in the Competency model of CPSP as depicted below:



Following is a global and extensive, yet not the total, list of learning outcomes recommended by the College.

✓ **LEARNING OUTCOMES RELATING TO: COGNITION**

The learning outcomes will all be at the application level since that is the gold standard. Therefore, the resident will be able to:

- Relate how body function gets altered in disease states
- Request and justify investigations and plan management for medical disorders.
- Assess new medical knowledge and apply it to their setting.
- Practice quality assurance procedures.

SKILLS

WRITTEN COMMUNICATION SKILLS

The residents will be able to:

1. Write medical records, which are clear, concise and accurate.
2. Write clear management plans, discharge summaries and letters for outpatients.
3. Demonstrate competence in academic writing

VERBAL COMMUNICATION SKILLS

The residents will be able to:

- Establish professional relationships with patients and their relatives or caregivers in order to obtain a history, conduct a physical examination and provide appropriate management.
- Demonstrate usage of appropriate language in seminars, bedside sessions outpatients and other work situations.
- Demonstrate the ability to communicate clearly, considerately and sensitively with patients, relatives, other health professionals and the public.
- Demonstrate competence in presentation skills.

EXAMINATION SKILLS

The residents will be able to:

- Perform an accurate physical and mental state examination in complex medical problems often involving multiple systems.
- Interpret physical signs after physical examination so as to formulate further management.

PATIENT MANAGEMENT SKILLS

The residents will be able to:

- Interpret and integrate the history and examinations findings and arrive at an appropriate differential diagnosis and final diagnosis.
- Demonstrate competence in problem identification, analysis and management of the problem at hand by the use of appropriate resources, interpretation of investigations.
- Prioritize different problems within a time frame.

SKILLS IN RESEARCH

The residents will be able to:

- Use evidence based medicine and evidence based guidelines
- Conduct research individually by using appropriate research methodology and statistical methods.
- Correctly guide others in conducting research by advising about study designs, research methodology and statistical methods that are applicable.
- Interpret and use results of various research articles.

ATTITUDES

TOWARDS PATIENTS

The residents will be able to:

1. Establish a positive relationship with all patients in order to ease illness and suffering.
2. Facilitate the transfer of information important to the management and prevention of disease.
3. Demonstrate awareness of bio-psycho-social factors in the assessment and management of a patient.
4. Demonstrate sensitivity in performing any examination.
5. Consistently show consideration of the interests of the patient & the community as paramount, and these interests should never be subservient to personal or professional interest.

TOWARDS SELF DEVELOPMENT

The resident will be able to:

- Demonstrate, consistently, respect for every human being irrespective of ethnic background, culture, socioeconomic status and religion.
- Deal with patients in a non-discriminatory and prejudice-free manner.
- Deal with patients with honesty and compassion.
- Demonstrate flexibility and willingness to adjust appropriately to changing circumstances.
- Foster the habit and principle of self-education and reflection in order to constantly update and refresh knowledge and skills and as a commitment to continuing education.

- Recognize stress in self and others
- Deal with stress and support medical colleagues and allied health workers.
- Handle complaints including self-criticism or criticism by colleagues or patients.
- Understand the importance of obtaining and valuing a second opinion.

TOWARDS SOCIETY

The resident will be able to:

1. Understand the social and governmental aspects of health-care provision.
2. Offer professional services keeping in consideration, the cost effectiveness of individual forms of care.
3. Utilize hospital and community-based resources available for patients and care givers in rural areas.
4. Understand the use of 'telemedicine' in practicing health.

SPECIFIC LEARNING OUTCOMES

Manage patient presenting with stone disease:

- recognize presentation of stone disease
- recognize patient presenting with acute ureteric colic, urinary obstruction with sepsis and manage appropriately
- order appropriate investigation (CT, IVU and ultrasound) and involve other specialists if appropriate.
- treat straightforward lower ureteric stones safely and appropriately
- treat straightforward bladder stones safely and effectively; referring complicated cases to senior colleagues as appropriate.
- treat straightforward renal stones by means of extracorporeal shock wave lithotripsy
- undertake appropriate metabolic assessment and treatment of straightforward urinary tract calculi

Manage patient presenting with acute or chronic abdominal pain referable to the urinary Tract

- diagnose the underlying cause of renal pain
- manage patient presenting with acute or chronic loin pain
- refer to other specialists if appropriate.

- manage patient presenting with upper urinary tract obstruction
- recognize modes of presentation of upper tract obstruction (retroperitoneal fibrosis, ureteric stricture) and manage them, seeking help from other specialists if necessary
- undertake cystoscopy and stenting accordingly

Manage patients presenting with lower urinary tract symptoms (LUTS)

- manage patient presenting with LUTS
- perform diagnostic cystoscopy, urodynamics, Bladder neck incision and TURP in patients with bladder outflow obstruction.
- manage patient presenting with acute or chronic urinary retention
- manage patient presenting with acute or chronic retention
- perform diagnostic cystoscopy, urodynamics, bladder neck incision and TURP in patients with bladder outflow obstruction.

Manage patient presenting with haematuria

- diagnose common causes of haematuria using appropriate radiological and endoscopic techniques and perform effective resuscitation.
- perform diagnostic cystoscopy, bladder biopsy and TURBT in patients with bladder lesions
- evaluation and management of patients with ureteric obstruction
- recognize indications for referral to specialist units; patients with muscle invasive bladder cancer

Manage the patient presenting with urethral stricture

- evaluate and manage patients with urethral stricture
- Manage urinary tract infections
- manage pyelonephritis, renal and peri-renal abscess
- manage patients presenting with recurrent UTI
- diagnose and assess patients with different forms of cystitis (interstitial cystitis etc)
- diagnose, assess and manage men with different forms of prostatitis and epididymitis
- diagnose, assess and manage men with different forms of gonococcal and non-gonococcal urethritis and other STDs

Manage benign & malignant lesions of skin of male genitalia

- recognize common malignant and potentially malignant conditions of penis, including phimosis, paraphimosis, viral lesions, squamous carcinoma; their current management protocols and implications for early management
- diagnose, excise or treat conservatively common swellings of skin and subcutaneous tissues of penis and genitalia
- apply simple plastic surgical techniques for primary wound closure

Manage patients presenting with a scrotal swelling

- diagnose and manage patients presenting with scrotal symptoms such as hydrocele, epididymal cyst, varicocele, post vasectomy pain, testicular torsion, abscess etc.
- diagnose and manage initially, neoplastic conditions of testis and refer onwards to other specialists as appropriate
- initial diagnosis, assessment and management of serious infections such as acute necrotising fasciitis, seeking advice and onward referral as and when appropriate

Manage patient presenting with urinary incontinence

- diagnose and manage patients presenting with urinary incontinence including provision of operative intervention including Botulinum toxin and TVT, onward referral as and when appropriate.
- recognize presentation of voiding dysfunction and incontinence in patients with neurological disease

Manage patient with prostate cancer

- diagnose and manage patients presenting with an elevated PSA including provision of trans-rectal ultrasound and biopsy
- evaluation and management of patients with organ confined prostate cancer
- recognize indications for referral to specialist units; patients with organ confined and locally advanced prostate cancer
- evaluation and management of patients with metastatic prostate cancer

Manage patient with bladder cancer

- diagnose and manage patients presenting with bladder cancer including provision of cystoscopy, TURBT, intra-vesical chemotherapy etc

- order appropriate investigation (CT, MRI etc) in such situations, involving other specialists as appropriate
- refer to specialist units; patients with locally advanced bladder cancer

Manage patient with renal cancer

- diagnose and initially manage patients presenting with renal cancer
- order appropriate investigation (CT, MRI etc), involve other specialists as appropriate.
- recognize indications for referral to specialist units and other colleagues

Manage patient presenting with infertility, ejaculatory disorders etc.

- diagnose, assess and manage appropriately and refer on to other colleagues as appropriate.

Manage patient presenting with erectile dysfunction

- diagnose, assess and manage appropriately and refer to other colleagues as appropriate.

Manage patient presenting with penile deformity, priapism, penile fracture etc

- diagnose, assess and manage appropriately; refer to other specialist colleagues if required
- manage common urological conditions of childhood
- diagnose, assess and manage appropriately children presenting with urinary tract infections; refer and involve other colleagues if the situation requires.
- diagnose, assess and manage appropriately patients presenting with common inguinoscrotal conditions of childhood (phimosis, torsion of the testis, hernia, undescended testis); referring and involving other specialist colleagues if the situation requires.
- recognize important surgical conditions of childhood, their presentation (elective/emergency case) and indications for urgent assessment and diagnosis (e.g. acute appendicitis, intussusception, volvulus)

Manage patient presenting with renal failure

- diagnose, assess and initially manage patients presenting with renal failure / anuria; involving other specialist colleagues as the situation requires

- recognize indications for treatment with haemodialysis or peritoneal dialysis
- assess bladder function in patients under consideration for renal transplantation

Manage patient with multiple injuries.

- assess and resuscitate patient with multiple injuries in accordance with the ATLS standards.
- work as part of the trauma team, participating at a level appropriate to the situation either as member or leader. Conduct initial management of gun-shot and other penetrating wounds involving the urinary tract, calling in other expertise as necessary.
- participate as an effective member of major incident team as required.

Manage trauma of renal tract according to accepted protocols.

- diagnose and manage patient with possible injury to urogenital tract from blunt and penetrating renal trauma
- diagnose, resuscitate and transfer to specialist units; patients suffering from renal and other trauma

GOALS

The goal of the training programme is to produce urologist with knowledge, skills and attitudes necessary to assume responsibility for the care of urological patients by;

1. Initially assessing the patient seeking advice for problems related to the kidneys and urinary tract by:
 - obtaining pertinent history.
 - performing physical examination correctly.
 - formulating a working diagnosis.
 - deciding whether the patient requires.
 - ambulatory care or hospitalization.
 - referral to other health professionals.
 - emergency care including life saving measures.
2. Managing patients requiring treatment by:
 - Planning an enquiry strategy i.e. ordering appropriate investigations and interpreting the results.
 - Performing specified surgical procedures independently and competently.
 - Dealing effectively and promptly with complications which may occur during the course of disease.
 - Maintaining records of patients including summarization and indexing.
 - Seeking consultation from seniors when needed.
 - Carrying out effective and efficient management of emergency situations.
3. Undertake research and publish findings.
4. Acquiring new information; assessing its utility and making appropriate applications.
5. Recognizing the role of teamwork and functioning as an effective member/leader of the team.

6. Advising the community on matters relating to promotion of health and disease prevention.

7. Training paraprofessionals and other junior members of the team.

Assessment Policy for Postgraduate Students

1. Individual programs will follow the guidelines provided by the relevant regulatory or accreditation body (CPSP for FCPS and UHS for MD/MS).
2. The institute's Educational and Assessment Committee will define the specific summative and formative assessment tools.
3. The individual departments will develop learning objectives outlining what the students will have learned upon completion of a course, module, or rotation. These objectives will include a plan for organized learning opportunities that will assist in achieving the stated learning objectives.
4. An Objective Assessment Map will be developed and completed for each Course, Module, or Rotation which will provide details of how the achievement of the learning objectives by the students will be assessed.
5. Appropriate assessment methods will be selected to ensure that the assessment covers the modalities of knowledge, skills, and attitudes. This will involve the use of a wide range of assessment methods and multiple assessors.
6. Assessment Blueprints will be developed based on the Table of Specifications (TOS) for major/summative assessment procedures or wherever appropriate.
7. Assessment planning documents (objective maps, plans, and blueprints) will be reviewed and subsequently approved by the Assessment Committee to ensure the compatibility of assessment practices with educational outcomes and instructional methods.

8. There will be one formative exam with constructive feedback monthly and two summative exams on the assessment pattern given by the university/CPSP in a year (after every 6 months).

9. Students' results should preferably be given in grade point average except for degrees provided by CPSP.

- The formula for calculating GPA = $\frac{\text{credit hours} \times \text{grade point}}{\text{total number of credit hours of the semester/year}}$

10. There will be implementation of pre-, per- and post-exam quality assurance procedures in assessment.

11. If the students miss 20% of contact hours, he/she cannot claim the complete credit hours for that module/semester/course and must do extra work in the form of skill work/ assignments, if allowed by the program provider otherwise.

12. If the attendance of the module/semester/course/annual system is less than 75%, the student will not be allowed to take the examination.

13. If the student secures less than 60 % marks cumulatively, he/she will not qualify for the degree award.

14. Calculation of Grade (suggestive)

Break down of 100% for the grade can be:

40-50% assignments

30-40 % examination

10-20 % internal assessment (Attendance 10%, Attitude 5%, Participation during sessions 5%).

15. For graduation, the minimum qualifying CGPA for Master's Students is 2.0.
Whenever an undergraduate student's GPA decreases from 2.0, she/he will be on first probation for the next semester.
16. If the student does not come out by increasing his/her C.GPA to 2.0 then again, she/he will go on Last Probation".
17. If the student who was earlier on 1st probation does not come out in the last probation by achieving the minimum desired C.GPA, he will not qualify for the degree. Freezing of the Semester will only be allowed after successful completion of 1st Semester.
18. Log books will be maintained by the students as per the established rules and regulations of CPSP and UHS as applicable.
19. The departments will encourage the students to make their assessment portfolios.
20. In case of any grievance or complaint by the students regarding the assessment process and outcomes of the same the students will be eligible to appeal to the PG Trainee Oversight Committee.
21. External examiners will be called for assessment of the postgraduate students.

ASSESSMENT

ELIGIBILITY REQUIREMENTS FOR FCPS PART-II EXAMINATION

The eligibility requirements for residents appearing in FCPS Part II are:

- To have passed FCPS Part-I in Surgery and allied, or been granted official exemption.
- To have undertaken two years training in Intermediate Module in Surgery and Allied.
- To have undertaken three years of specific training in Urology.
- To provide certificate of having passed Intermediate Module Examination in Surgery and Allied.
- Completion of entries in e-logbook along with validation by the supervisor
- To provide a certificate of approval of dissertation or acceptance of two research papers which must accompany the application form.
- To provide a certificate of attendance of mandatory workshops.

EXAMINATION SCHEDULE

- The FCPS Part-II theory examination will be held twice a year.
- Theory examinations are held in various cities of the country usually at Abbottabad, Bahawalpur, Faisalabad, Hyderabad, Islamabad, Karachi, Lahore, Larkana, Multan, Peshawar, Quetta and Rawalpindi, centres. The College shall decide where to hold oral/practical examination depending on the number of residents in a city and shall inform the residents accordingly.
- English shall be the medium of examination for the theory/practical/ clinical and viva examinations.
- The College will notify of any change in the centres, the dates and format of the examination.
- A competent authority appointed by the College has the power to debar any resident from any examination if it is satisfied that such a resident is not a fit person to take the College examination because of using unfair means in the examination, misconduct or other disciplinary reasons.

- Each successful resident in the Fellowship examination shall be entitled to the award of a College Diploma after being elected by the College Council and payment of registration fees and other dues.

EXAMINATION FEES

- Applications along with the prescribed examination fees and required documents must be submitted by the last date notified for this purpose before each examination.
- The details of examination fee and fees for change of center, subject, etc. shall be notified before each examination.
- Fees deposited for a particular examination shall not be carried over to the next examination in case of withdrawal/ absence/ exclusion.

REFUND OF FEES

- If, after submitting an application for examination, a candidate decides not to appear, a written request for a refund must be submitted before the last date for withdrawal with the receipt of applications. In such cases a refund is admissible to the extent of 75% of fees only. No request for refund will be accepted after the closing date for withdrawal of applications.
- If an application is rejected by the CPSP, 75% of the examination fee will be refunded, the remaining 25% being retained as a processing charge. No refund will be made for fees paid for any other reason, e.g. late fee, change of centre/subject fee, etc.

FORMAT OF EXAMINATIONS

Every candidate vying for the Fellowship of the College of Physicians and Surgeons Pakistan must pass both parts of the Fellowship examination unless exemption is approved. Since the College is continually seeking to improve its examinations, changes are likely from time to time and candidates will be notified in advance of such changes.

PART I THEORY EXAMINATION:

Two papers each of 3 hours duration:

Theory Examination:

Paper- I 10 Short Answer Questions (SAQs) 3 hours

Paper- II 100 Multiple Choice Questions (MCQs) 3 hours

PART II CLINICAL EXAMINATION

The Clinical section comprises of two components, the first component consists of long case and short cases, and the second component – Viva voce.

FORMAT OF LONG CASE

Each resident will be allotted one long case and allowed 30 minutes for history taking and clinical examination. Residents should take a careful history from the patient (or relative) and after a thorough physical examination identify the problems which the patient presents with. During this period a pair of examiners will observe the resident. In this section the residents will be assessed on the following areas:

INTERVIEWING SKILLS

- Introduces one self. Listens patiently and is polite with the patient.
- Is able to extract relevant information.

CLINICAL EXAMINATION SKILLS

- Takes informed consent
- Uses correct clinical methods systematically (including appropriate exposure and re-draping).

CASE PRESENTATION/ DISCUSSION

- Presents skillfully
- Gives correct findings
- Gives logical interpretations of findings and discusses differential diagnosis.
- Enumerates and justifies relevant investigations.
- Outlines and justifies treatment plan (including rehabilitation).
- Discusses prevention and prognosis.

- Has knowledge of recent advances relevant to the case.
- During case discussion the resident may ask the examiners for laboratory investigations which shall be provided, if available. Even if they are not available and are relevant, residents will receive credit for the suggestion.

FORMAT OF SHORT CASES

- Residents will be examined in at least four short cases for a total of 40 minutes jointly by a pair of examiners. Residents will be given a specific task to perform on patients, one case at a time.

During this part of the examination, the resident will be assessed in:

CLINICAL EXAMINATION SKILLS

- Takes informed consent.
- Uses correct clinical methods including appropriate exposure and re-draping.
- Examines systematically.

DISCUSSION

- Gives correct findings.
- Gives logical interpretations of findings.
- Justifies diagnosis.

As the time for this section is short, the answers given by the residents should be precise, succinct and relevant to the patient under discussion.

VIVA VOCE

The viva voce examination will last for 30 minutes and will be conducted by a pair of examiners. This part of the examination will assess the resident's ability to solve problems, reaction in an emergency situation, concepts and overview of current issues relevant to speciality. The art of communicating the knowledge in the relevant field of medicine in a concise manner will also be tested. Questions will also be asked on the basis of clinical experience documented in the resident's logbooks.

NOTE

The resident is required to fill a self explanatory 'feedback proforma at the end of the examination. This will help the College in making future examination more resident friendly.

THE COLLEGE RESERVES THE RIGHT TO ALTER/AMEND ANY RULES/REGULATIONS.

Any decision taken by the College on the interpretation of these regulations will be binding on the applicant.

NOTE

The resident is required to fill a self explanatory 'feedback proforma at the end of the examination. This will help the College in making future examination more resident friendly.

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PGRs ASSESSMENT TOOLS

Multiple assessment procedures and methods will be used and their application will be either continuous or periodic.

Continuous assessment methods	Periodic assessment methods
Case based discussion during rounds	MCQs, SAQs, Case reports
Direct observation of procedural skills	OSCE, TOACS, Short and Long cases
Case presentation (CPC)	360 degree multisource feedback
Journal club	Clinical supervisor's report
Mini-Clinical Evaluation Exercise (Mini-CEX)	

RECOMMENDED READING MATERIAL

A comprehensive urological knowledge requires regular reading, both of textbooks and journals. Teaching as part of training programmes can supplement, but not replace, regular planned study throughout training. The following books are recommended for Urology.

- o Campbell's "Urology",
 - o Smith Urology
 - o EUA Guidelines
 - o AUA Guidelines
 - o Gillenwater's "Adult and Paediatric Urology",
 - o Whitfield and Hendry's "Textbook of Genito-Urinary Surgery",
 - o Blandy and Fowler's "Urology",
 - o Mundy, Fitzpatrick, Neal and George: "Basic Science in Urology".
 - o Krane, Siroki and Fitzpatrick's "Clinical Urology"
- A candidate will be expected to have a knowledge of the important publications on a subject and their authors, particularly in recent editions of important journals like
- o BJU International
 - o The Journal of Urology.
 - o Urologic Clinics of North America
 - o European Urology

- Q1. 3 years BCG dose given for
- Increase Disease free survival (DFS)
 - Decrease progression of disease
 - Increase DFS + Decrease progression
 - Increase DFS + Decrease progression + Increase survival
- Q2. Narrow beam imaging uses:
- Identify high grade tumor including carcinoma in situ
- Q3. Patient has +ve cytology. Cystoscopy + CTU normal. Next how to see
- Cystoscopy with Photodynamic Hemamino Levulinate
 - Cystoscopy with Photodynamic Heptaamino Levulinate
 - Narrow band imaging
- Q4. According to the AUA guidelines, following partial nephrectomy for pathologic stage T3aN0M0 RCC, It is recommended to perform surveillance abdominal CT scanning with what frequency?
- Never
 - Every 6 months for at least 3 years and then annually for 3 years
 - Every year to year 5
 - Every 2 years
 - Every year for 2 years and then at year 5
- (Ref Campbell U-ology Review MCQ 12th Ed Ch 97 MCQ 6 Pg 372)
- Note: They change stem Every 6 months for at least 3 years and then annually to 5 years to 3 years
- Q5. Prostate TNM asked. Post TURP > 5% involvement with Ca Prostate with Normal DRE + PSA 7.0
- T1b
 - T1a
- Q6. Testis NSGCT. Not included in good risk:
- LDH > 3 times
 - BCG < 5000
 - AFP < 1000
 - Testis / Retroperitoneal primary
 - No non-pulmonary visceral metastasis
- Q7. 50 years female. 1st time bladder tumor. NMIBC risk:
- 70-80%
 - 90-100%
- Q8. Prenatal U/S show right sided HDN with HU. Baby delivered full term via normal vaginal delivery. Cause:
- VUR
 - PUJO
 - Posterior urethral valve
 - Anterior urethral valve
- Q9. 70 years patient known case of multiple sclerosis and diabetes. M3 blocker for him:
- Solifenacin
 - Darifenacin
 - Tolterodine
 - Trospium
 - Oxybutynin

Q10. Patient recently diagnosed Hypertension with LUTS for 1 year. Treatment:

- a. TURP
- b. Doxazocin??
- c. Alfuzosin
- d. Tamsulosin

Q11. A patient came with complaint of urgency, frequency, weak stream almost always, incomplete emptying and intermittency more than half the time, he strains and has nocturia about half the time, what is his IPSS SCORE?

- a. 19
- b. 29
- c. 23

Q12. Calculate Renal Nephrometry Score. Mass is posterior. 28mm lower pole mass. Crossing polar line. Near PCS. <50% exophytic mass

- a. 8p
- b. 7p
- c. 9p
- d. 10p
- e. 12p

Q13. Calculate BOOI. Pdet @ Qmax 85 , Qmax 14

- a. 57

Q14. A 73 years old male presented with incidental finding of 2.5 cm mass in right kidney on ultrasonogram of abdomen. His CT-scan showed well margined, homogeneous, solid, enhancing tumor consistent with Renal cell carcinoma. What is the most appropriate treatment: (PAPER 2)

- a. Open radical nephrectomy
- b. Laproscopic Radical nephrectomy
- c. Nephron sparing surgery
- d. Laproscopic partial nephrectomy
- e. Active Surveillance

(Ref Feroz Pharma MCQ 48)

Q15. 80 years female. Having dull abdomen pain. Workup 3 cm renal mass with contrast enhancement. Option

- a. Active Surveillance

Q16. PLESS Trial:

- a. Decrease risk of retention in <50%

Q17. RTA. CT done only Right Renal Grade IV Injury. 3-pint whole blood transfused. Still hypotensive:

- a. Nephrectomy
- b. One shot IVP

Q18. A 30 years old male presented with 2 years H/O primary infertility and findings of azoospermia on two semen analysis. Volume of semen was 3.5ml and qualitatively positive fructose test. He has history of bilateral inguinal herniorrhaphies in childhood. His physical examination was unremarkable and his FSH, LH and testosterone levels were normal. Next step in evaluation would be

- a. A quantitative fructose test
- b. A testicular biopsy
- c. A vasogram
- d. An inguinal vasovasotomy
- e. Percutaneous epididymal sperm aspiration PESA

(Ref Feroz Pharma MCQ 55)

Q19. AML in right kidney 8cm. Left kidney AML 15cm. Before surgery, which medical treatment given to decrease size of AML?

- a. Everolimus

Q20. Prostate TNM asked, DRE mass feel T3. MRI shows seminal vesical involvement, obturator lymph node enlarged. Also Para-aortic lymph node enlarges.

- a. T3N3Mx
- b. T3N1M1a
- c. T3N1M1b
- d. T3N1M0
- e. T3NxMx

Q21. Patient having PSA 3.6. Anxious. Want to know about Free to Total PSA:

- a. Use when PSA 4 – 10
- b. No use in Prostate Cancer

Q22. Prostate CA, T1c, PSA 4.7, Gleason 3 +3. Management:

- a. Active Surveillance

Q23. Prostate Cancer. PSA 19, Gleason 4 + 4, T3. What further needed: (PAPER II).

- a. Bone scan
- b. Xray pelvis
- c. Mp MRI only
- d. Bone scan + MRI scan

Q24. Prostate CA. Gleason 4+4, PSA 9, T3. Further test required: (PAPER 1)

- a. Bone scan
- b. Xray pelvis
- c. Mp MRI
- d. Bone scan + MRI scan

Q25. A 12-year-old boy is seen for the evaluation of recurrent nephrolithiasis. He has spontaneously passed three stones over the previous 4 years and has recently undergone shockwave lithotripsy twice without success. He has been treated in the past with an unknown medication, but this was discontinued because the parents believed it to be of no benefit. Urinalysis demonstrates hexagonal crystals. The likely metabolic diagnosis contributing to this patient's recurrent stone formation is:

- a. Hypocitraturia.
- b. Hyperoxaluria
- c. Low urine volumes.
- d. Gouty diathesis.
- e. Cystinuria

(Ref Campbell Urology Review MCQ 12th Ed Ch 92 MCQ 17 Pg 353)

Q26. Horse Shoe Kidney puncture:

- a. Lower Pole
- b. CT is misleading
- c. More lateral than left kidney
- d. Decrease chances of hemorrhage than general population

- Q27. A patient underwent RTA, he is hemodynamically stable with large areas of collection around kidney with laceration in kidney parenchyma extending upto PCS, what will be your next step?
- PCN
 - Drain
 - Explore
 - Observe
- Q28. Post transplant 6 weeks. Collection around graft. Patient concerned for recurrence. Which treatment prevent recurrence:
- Laparoscopic Fenestration
 - Drain
- Q29. Patient with known case Peyronie Disease with sudden erectile dysfunction for 3 months. Cavernosography done was unremarkable. Cause:
- Venous leak
 - Due to penile pain no erection
 - Psychogenic
- Q30. Male with 5 days history burning micturition. History of fever. C/O right testis pain. On elevation pain relief. Diagnosis:
- Epididymo-orchitis
- Q31. Patient penile blood gas analysis shows $PO_2 < 30$, $pCO_2 > 60$, $pH < 7.25$. what is most likely diagnosis?
- Stuttering priapism
 - Ischemic priapism
 - Non ischemic priapism
 - Penile fracture
 - Peyronies disease
- (Ref Feroz Pharma MCQ 93)
- Q32. Prostate trauma:
- More prostate and Bladder neck injury
 - Mechanism different from adult
- Q33. A 45 years old patient received live related renal allograft. On 3rd postoperative day, the patient developed hematuria, oliguria, swelling and tenderness at the graft site. On urgent ultrasonography, the graft was swollen, hypoechoic with lack of venous and arterial flow and reverse arterial diastolic flow. Which of the following is most likely diagnosis?
- Renal artery thrombosis
 - Acute rejection
 - Renal vein thrombosis
 - Renal artery stenosis
 - Renal artery aneurysm
- (Ref Rafiq Anjuri MCQ Book Ch 21 MCQ 19 Pg 390)
- Q34. A post-transplant patient presented with neurological signs and tremors, which drug is responsible?
- Tacrolimus
 - Sirolimus
 - Cni
 - Mmf

Q35. A 32-year-old man has a renal stone 3 years following laparotomy and ileal resection for Crohn's disease. What metabolic factor most likely accounts for this?

- a. Hypocitraturia
- b. Hyperoxaluria
- c. Hyperuricosuria
- d. Hypercalciuria
- e. Hypocalciuria

(Ref Urology At A Glance by Hashim & Prokar MCQs (2017) Ch 6 MCQ 2)

Q36. A 68-year-old man presents with recurrent urinary tract infection (UTI). He has a history of recurrent renal stones and has three previous percutaneous nephrolithotomies in the right kidney. Current evaluation confirms a recurrent 3 cm stone in the right renal pelvis. An isotope study (DMSA) performed 3 months after treatment of his UTI shows 5% function in the right kidney. What is the best treatment strategy for the right renal stone?

- a. Extracorporeal shock wave lithotripsy (ESWL)
- b. Flexible ureterorenoscopy (FURS) with stone fragmentation
- c. Percutaneous nephrolithotomy (PCNL)
- d. Nephrectomy
- e. Conservative treatment

(Ref Urology At A Glance by Hashim & Prokar MCQs (2017) Ch 6 MCQ 3)

Q37. Patient has overactive bladder treated with medical therapy and Botox all failed. Then undergone a failed stage I sacral neuromodulation. Still symptoms of severe refractory urgency urinary incontinence persisted. Treatment:

- a. anticholinergic therapy.
- b. B3 agonist therapy
- c. Bilateral stimulation.
- d. Botulinum toxin A injections.
- e. Augmentation

(Ref Campbell Urology Review MCQ 12th Ed Ch 122 MCQ 10 Pg 465)

Q38. What would be the best treatment option for a 63-year-old man who developed severe stress urinary incontinence following a radical prostatectomy for prostate cancer 3 years previously followed by radiotherapy. He has been performing pelvic floor exercises since his operation with no significant benefit and continues to wear seven heavy pads a day.

- a. Duloxetine
- b. Artificial urinary sphincter
- c. Ileal conduit urinary diversion
- d. Male sling
- e. Sacral neuromodulation

(Ref Urology At A Glance by Hashim & Prokar MCQs (2017) Ch 9 MCQ 5)

Q39. Young boy with history of 24 hours of scrotal pain. On examination testis tender. Torsion intra-op diagnosis. Still black testis after detorsion. Next Step:

- a. Repeat U/S after 24 hours
- b. Observe
- c. Orchiectomy

Q40. Testicular pain with some wing sign. Next step:

- a. Exploration

Q41. Male patient who is smoker. Friend's father died because of bladder cancer secondary to smoking. Still he is smoking and wants to continue smoking. Risk:

- a. 10-20%
- b. 5-10 %

Q42. Patient has glans lesion of 1cm. Biopsy shows SCC. No lymph node enlarges. Treatment:

- a. Partial penectomy
- b. Nd: Yag LASER
- c. Partial penectomy with inguinal LND
- d. Total Penectomy
- e. 5-FU

(Note: No option of CO₂ LASER or Glans resurfacing)

Q43. Cause of stone in Hyperparathyroidism:

- a. Renal Leak
- b. Absorptive Hypercalciuria
- c. Resorptive Hypercalciuria

(Ref Pocket Guide to Urology 6th Ed Non-Onco Pg 397)

Q44. 13-year male with right testicular tumor with supraclavicular lymph node. Diagnosis

- a. Choriocarcinoma
- b. Seminoma
- c. Lymphoma
- d. Yolk sac

Q45. 20 years male with testis tumor with both AFP and BCG raised. Diagnosis

- a. Seminoma
- b. Teratoma
- c. Lymphoma
- d. Choriocarcinoma
- e. Spermatocytic tumor

(NOTE: No option of Yolk Sac or Embryonal carcinoma)

Q46. A 37-year-old man presents for treatment of a 1.2-cm left testicular mixed GCT confined to the testis without evidence of lymphovascular invasion. His postorchiectomy serum tumor marker levels are within normal limits. Chest CT shows no evidence of metastatic disease. Abdominopelvic CT shows a 7-mm nodule in the paracaval location just inferior to the right renal hilum. The remainder of the CT study is unremarkable. His medical history is also unremarkable. The most appropriate management is:

- a. CT-guided biopsy of the paracaval lesion.
- b. RPLND.
- c. Two cycles of chemotherapy with bleomycin-etoposide-cisplatin.
- d. Observation.
- e. Three cycles of chemotherapy with bleomycin-etoposide-cisplatin.

(Ref Campbell Urology Review MCQ 12th Ed Ch 76 MCQ 14 Pg 285)

Q47. A 67 years old male chronic smoker presented with painless hematuria. Investigations reveal 2cm, high grade urothelial carcinoma in left renal pelvis. He has no co-morbid and contralateral kidney is normal. Metastatic workup is negative. Which of the following is an appropriate management?

- a. Conservative
- b. Radical nephroretectomy with excision of bladder cuff
- c. Wide excision of tumor
- d. Radical radiotherapy
- e. Systemic chemotherapy

(Ref Rafiq Anjum MCQ Book Ch 10 MCQ 6 Pg 220)

Q48. Patient has bladder growth of 7cm in bladder growth. Biopsy adenocarcinoma. Treatment:

- a. Radical cystectomy

Q49. Patient has enlarged kidney with calcification. Multiple scattered stones on xray. U/s same finding. IVP dilated collecting ducts with brush like pattern of contrast:

- a. Medullary sponge kidney
- b. ADPKD
- c. Sarcoidosis
- d. XGN

Q50. During transplant along with main renal artery also lower pole artery. How to proceed:

- a. Anastomose lower pole artery with main artery

Q51. Patient with ESRD. Under went renal transplant from deceased donor. Short right renal vein. How to fulfil gap:

- a. Take renal vein with patch of IVC
- b. Renal vein attach with recepint gonadal vein

Q52. Incontinence after TURP occurs in:

- a. 0-1%
- b. 1-4 %
- c. 5-10%
- d. 10-15%
- e. >15%

(Ref EBU Extra File)

Q53. Which of the following is an indication to repeat vasectomy if motile sperm present in semen?

- a. 3 months
- b. 6 months
- c. 9 months
- d. 12 months

(Ref Campbell Urology Text 12th Ed Ch 83 Pg 1853)

Q54. ESRD patient diagnosed with 15cm Renal Mass. Radical Nephrectomy done. Wait how long for transplant:

- a. No need
- b. 2 years

Q55. Kidney transplant female patient, wants pregnancy. What will your advice:

- a. Immune suppression needs reduction
- b. Can have pregnancy after 2 years
- c. Will always need c-section

Q56. Hypospadias child. When best time for hypospadias surgery:

- a. 6 – 18 months
- b. After 2 years
- c. After 5 years
- d. Any age

Q57. Erectile dysfunction is often associated with Peyronie's Disease. Many factors are involved to explain this disorder in Peyronie's Disease. Among these factors which is the most important:

- a. Curvature
- b. Psychogenic
- c. Venous Leak
- d. Pain during erection

(Ref EBU Extra File)

Q58. Which of the following effect sildenafil metabolism?

- a. Fatty meal
- b. Ranitidine
- c. Ketoconazole
- d. Erythromycin
- e. Warfarin

(Ref Pocket Guide to Urology 6th Ed Non-Onco Pg 522)

Q59. After a 7-hour-long, complex urethral reconstruction performed in the extended lithotomy position, a patient has severe thigh and buttock pain. The creatinine phosphokinase (CPK) is dramatically elevated. The next step is:

- a. Dopamine infusion
- b. Plasmapheresis.
- c. Dobutamine infusion.
- d. Forced alkaline diuresis
- e. Dialysis

(Ref Campbell Urology Review MCQ 12th Ed Ch 87 MCQ 4 Pg 334)

Q60. Patient with RTA , landed in ER , nurse tells you that his bp is 90/60, pulse 110, he was noticed to have fracture of pelvic girdle with palpable crepitus in suprapubic region, you are the first person to see him in the er what will you do?

- a. Pelvic binder
- b. SPC
- c. Retrograde urethrography + cystoscopy

Q61. A newly diagnosed patient with metastatic clear cell RCC is referred for discussion of systemic therapy options. You determine that he has intermediate risk disease based on standard prognostic criteria and that systemic therapy should be commenced. Which of the following decisions would be supported by data from randomized phase 3 studies?

- a. Sunitinb
- b. Nivolumab and ipilimumab
- c. Pazopanib and nivolumab
- d. Lenvatinib and everolimus

(Ref Campbell Urology Review MCQ 12th Ed Ch 104 MCQ 10 Pg 402)

Q62. Doing URS ureter avulsed. Treatment:

- a. Immediate open and ureteroureterostomy
- b. PCN & Delay repair

Q63. A 40-year-old woman with a history of hypertension and recurrent nephrolithiasis presents with a 5-cm proximal right ureteral stricture following an iatrogenic injury in a recent abdominal surgery. She has had an indwelling right nephrostomy tube for more than 6 months. Her baseline serum creatinine is 2.5 mg/dL. Renal scan shows split function of 65% in the right kidney. Her bladder capacity is found to be less than 300 mL. The next step is:

- a. Ureteroureterostomy.
- b. Boari flap.
- c. Transureteroureterostomy.
- d. ileal ureteral substitution.
- e. Autotransplantation

(Ref Campbell Urology Review MCQ 12th Ed Ch 89 MCQ 20 Pg 341)

Q64. Before transplant. Indication of Nephrectomy:

- a. Polycystic kidney
- b. Pyelonephritis
- c. Control HTN on Medicine

- Q65. Untreated renal stone. Now present with hematuria and CT shows pelvis calyceal system involve with fat strandings with stone in lower pole 2.8cm:**
- Xanthogranulomatous pyelonephritis
 - Squamous cell carcinoma
 - Emphysematous pyelonephritis
- Q66. In chronic Graft Rejection, histopathology shows?**
- Fibrosis, hyalinized vessels, tubular atrophy
 - Interstitial Lymphocytes infiltration, vasculitis
- Q67. Chronic Graft rejection:**
- Change in vascular architecture
- Q68. Antibiotics for URS to cover all complications Intra-op and post-op. Duration:**
- Antibiotics for less than 24 hours
 - Antibiotics for 2 days
 - Antibiotics for 3 days
 - Antibiotics for 4 days
 - Antibiotics for 5 days
- Q69. For transperineal biopsy. Which antibiotic give for prophylaxis:**
- Fluoroquinolone
 - Urine C/S based antibiotics
 - Cefixime
 - Sulfooperazone and sulbactam
- Q70. 1 year male. Testis not found initially as irritable child. Then found in groin and bring to the scrotum. Next step:**
- Orchidopexy
 - Observe & serial F/U
- (Note no option of sub-dartos pouch)
- Q71. Regarding prostatic urethral lift. Most common complication of urethral lift:**
- Infection
 - Dysuria
- (Note: No option of incontinence)
- Q72. What is the preferred treatment approach for a 10-mm renal calculus in a patient who weighs 175Kg?**
- SWL
 - Flexible ureteroscopy
 - PNL
 - SWL using the "blast path" technique
 - Open surgery
- (Ref Campbell Urology Review MCQ 12th Ed Ch 93 MCQ 10 Pg 358)
(Note they change the question from pound to KG)
- Q73. A patient was having right flank pain, ct scan showed 0.8 cm ureteric stone in right mid ureter and 15mm in lower pole of right kidney. Patient wants clearance in single setting. What is the single best treatment option?**
- DJ with ESWL
 - Endoscopic combined & Intra-renal Surgery (ECIRS)
 - PCNL
 - Alpha blocker
 - URS

Q74. A young male presented with right testicular mass, which is hard on palpation, tumor markers are normal, what will you do next?

- a. Inguinal exploration + frozen section
- b. Ultrasonography duplex
- c. CT scan

(Note: No option of Orchiectomy)

Q75. Ca prostate patient has gleason 3+4. PSA less than 12. T2. Treatment:

- a. Radical Prostatectomy
- b. Active surveillance

Q76. Patient with history of Monti diversion conduit. B/L knee pain. Bone scan +ve everywhere. MRI no bony mets. Alkaline phosphatase 800. What to do:

- a. Bone mineral density

Q77. 50 year old female pt with painless visible hematuria, Chance of TCC Bladder:

- a. 5 %
- b. 12%
- c. 40 %
- d. 50%.

(Note no option of 20 or 25 while in Campbell Chance of TC- Gross Hematuria: 20.4%, Micro Hematuria 2.5-3.5%)

Q78. Penoscrotal hypospadias. B/L Impalpable testis. Next:

- a. Laparoscopy
- b. Genetic sampling

(Note: No word karyotype use, instead use genetic sampling)

Q79. Patient with Painful Penile ulcer with painful lymphadenopathy, diagnosis:

- a. Secondary syphilis
- b. Lymphogranuloma inguinale
- c. Herpes simple
- d. Granuloma venereum
- e. Chancroid

Q80. Anterior urethra stricture 1cm anastomosis done end to end. More likely will lead to

- a. Chordee
- b. Impotence
- c. RE

Q81. Transplant patient with post renal biopsy hematuria on and off. On investigation pseudoaneurysm, management:

- a. Embolization
- b. Observe
- c. Explore

Q82. Post PCNL after 8 days. Bleeding. Cause:

- a. AV fistula
- b. Pseudoaneurysm

Q83. 50 years male with recent marriage with LUTS due to BPH, want to preserve his fertility best option:

- a. Rezum
- b. Turp
- c. Tuip
- d. Robotic prostatectomy

(Note: No option of urolift , neither comment on median lobe)

Q84. Anxious mother with precious child come. Come is irritable with history of fever. O/E B/L scrotal swelling. Next:

- a. Reassurance
- b. Scrotal exploration as B/L Spermatic cord torsion
- c. Urine C/S + CBC

Q85. Intravaginal torsion mechanism:

- a. Low investment of tunica vaginalis with cord
- b. High investment of tunia vaginalis with cord
- c. Gubernaculum

Q86. 35 years old male ptn presented with history of RTA blunt trauma to flank had bp of 90/50 mmHg, pulse 110, hypotensive, fluid and 2 pints blood transfused now vitally stable, bp of 100/60mmhg pulse of 98 b/min, what to do further:

- a. Admit, serial Observation, vital monitoring, serial labs
- b. Exploration
- c. Discharge

Q87. Patient with history of urethral trauma with superior and inferior rami fracture. Which of the following provides the most accurate diagnostic information in injuries of the posterior urethra associated with pelvic fracture:

- a. Pelvic CT scan
- b. MRI of the Pelvis
- c. Retrograde urethrography
- d. Transrectal ultrasonography

(Ref EBU Extra File)

Q88. Patient has bladder cancer on multiple sites. In NMIBC pT1 which is the strongest prognostic factor:

- a. Grade
- b. T stage
- c. Multiplicity

Q89. Wilms tumour stage with capsule and after nephrectomy surgical margins involved. Stage:

- a. Stage 3
- b. Stage 1
- c. Stage 5
- d. Stage 4
- e. Stage 2

Q90. A case of Triple vessel disease with low-risk CA Prostate. PSA 6. Next

- a. Active surveillance

Q91. During ureteric reimplant with psoc hitch. Structure damage. Cause anterior thigh numbness. Which nerve:

- a. Genitofemoral nerve

Q92. The finding most suggestive of renal artery stenosis on duplex ultrasonography is:

- a. Decreased diastolic flow.
- b. Turbulent systolic flow.
- c. Increased peak systolic velocity
- d. Renal aortic ratio < 3.5 .
- e. Resistive index < 0.8

(Ref AUA 2005 MCQ 61 Pg 106)

Q93. Post transplant Calcineurin level Normal then decreased then again normal. By which drug decrease:

- a. Rifampicin
- b. Erythromycin
- c. Ketoconazole
- d. Diltiazem
- e. Fluconazole

Q94. What is mismatch in patient , two different sets were given

Donor = A3, A15, B14, B17, DR17, DR20

Recipient = A3, A12, B14, B17, DR5, DR17

- a. One A mismatch , 1 B mismatch , 1 DR mismatch

Q95. A 45-year-old male with a history of recurrent calcium oxalate stones returns for counseling regarding a recent 24-hour urine test. A single 24-hour urine collection reveals abnormal elevations in calcium, oxalate, uric acid, sodium, and potassium. Urinary volume is 4.5 L, pH is 5.8, and 24-hour creatinine per kilogram is 47. These findings are most likely explained by:

- a. dietary indiscretion
- b. steroid administration
- c. overcollection
- d. undercollection
- e. contamination

(Ref Campbell Urology Review MCQ 12th Ed Ch 92 MCQ 4 Pg 352)

Q96. Male patient with history of sexual contact. Next Step

- a. Urethral swab + Culture

Q97. A 6-year-old boy who had a tubularized preputial flap hypospadias repair as an infant presents with a slow urinary stream and stranguria worsening over the past year. Physical examination is unremarkable, but the peak flow is 3 mL/s with a postvoid residual of 75 mL (estimated bladder capacity of 240 mL). At surgery cystoscopy shows a 5-mm stricture near the original meatus. This stricture is best corrected by:

- a. Urethral dilation.
- b. Direct vision internal urethrotomy (dviu).
- c. Dviu with cic for 3 months.
- d. Inlay buccal urethroplasty
- e. Staged buccal graft reoperation

(Ref Campbell Urology Review MCQ 12th Ed Ch 45 MCQ 20 Pg 156)

Q98. A 56 years old male is seeking advice to improve his sexuality. He has read that Testosterone supplement can increase his desire and performance and man in his age are often testosterone deficient. The statement that reflects correct understanding on androgen and sexual performance is:

- a. Additional testosterone administration in important males without androgen deficiency increases sexual potency
- b. Androgens are essential for penile erection
- c. The relationship between androgens and penile erection is not clear
- d. Changes in circulating testosterone concentration correlate with sexual activity
- e. Oral testosterone supplement are safe for long-term use

(Ref EBU Extra File)

Q99. Gram negative diplococci treatment:

- a. 1 gm ceftriaxone + 1 gm azithromycin

Q100. Surgical exploration of the kidney in blunt renal trauma is required in what percentage of cases:

- a. 0%
- b. 10%
- c. 50%
- d. 80%

(Ref EBU Extra File)

Q101. The risk of bladder cancer formation in a spinal cord-injured patient who is on chronic SPC:

- a. 1%.
- b. 3%.
- c. 20%.
- d. 40%.
- e. 60%.

(Ref Campbell Urology Review MCQ 12th Ed Ch 135 MCQ 37 Pg 520)

(Note they change the option from <5%, but in explanation of similar question older studies have suggested a 2.5% to 10% incidence of squamous cell carcinoma in the spinal cord-injured population, with a mean delay of 17 years after the spinal cord injury (Kaufman et al., 1977). More recent analysis of the association of spinal cord injury and bladder cancer formation has shown a remarkably lower risk of bladder cancer formation of 0.38%, most likely because of better catheter care (Bickel et al., 1991)

Q102. Amount of fluid absorbed in 1 hour of TURP

- a. Less than 100 ml
- b. 100 to 300ml
- c. 300 to 800 ml
- d. 800 to 1000ml
- e. 1500 to 1800ml

Q103. Adult with multiple sclerosis with urinary incontinence with fecal incontinence:

- a. AUS urethra
- b. AUS urethra + Anal AUS
- c. Mitrofinoff + ACE channel

Q104. Patient has history of end colostomy in childhood. Not want to do prostate biopsy. Route:

- a. Trans vesicle
- b. Trans perineal

Q105. Advantage of trans peritoneal prostate biopsy:

- a. Pick lesion of apex

Q106. For fusion biopsy numbers of cores required:

- a. 16-24 cores
- b. 12 cores
- c. 6 cores

Q107. Retroperitoneal fibrosis is in its early stage characterized by:

- a. Uremia
- b. Ureter-colic
- c. Edema of the lower extremities
- d. Malaise, anorexia, weight loss and fever

(Ref EBU Extra File)

Q108. Consultant doing PCNL. Suddenly assistant said only fluid left in OT is glycine. Then medical officer ask urologist what is the appropriate irrigating solution for PCNL?

- a. 3% sorbitol
- b. Sterile water
- c. Glycine
- d. Dilute contrast material
- e. 0.9% saline

(Ref Campbell Urology Review MCQ 12th Ed Ch 94 MCQ 25 Pg 362)

Q109. Extravesicle ureter reimplant:

- a. Lead Better Pollitano
- b. Lich Gregor
- c. Gustilo Anderson
- d. Transvesicle endoscopic
- e. Cohen cross trigonal

Q110. A major pathway in prostatic involution is apoptosis (programmed cell death). Which enzyme is involved in the involution:

- a. Kinase
- b. Protease
- c. Peroxidase
- d. Endonuclease

(Ref EBU Extra File)

Q111. What histological changes in ileal conduit wall are characteristically seen in biopsy taken at least a year after constriction:

- a. Partial villous atrophy
- b. Increase in goblet cells in the epithelium
- c. Infiltration of mast cells in the submucosa
- d. Infiltration of eosinophils in the submucosa

(Ref EBU Extra Files)

Q112. The most common indication for sacral foramen neurostimulation is:

- a. Stress incontinence
- b. Interstitial cystitis
- c. Detrusor hyper-reflexia
- d. Drug-resistant detrusor instability

(Ref EBU Extra File)

Q113. Cause of renal deterioration in any conduit:

- a. Pyelonephritis
- b. Reflux

Q114. Hot flashes in Ca prostate. Treatment:

- a. Megestrol acetate

Q115. When the cuff of an artificial urinary sphincter (AUS) is placed around the urethra, the:

- a. Cuff must be the same size as the vesical neck
- b. Cuff can be placed in any segment of the urethra
- c. Risk of erosion is similar to a bladder neck cuff implantation
- d. Incidence of urinary stress incontinence is higher than when a bladder cuff is used

(Ref EBU Extra File)

Q116. In a patient where bladder symptoms result mainly from hypersensitivity which of the following drugs can be useful by decreasing sensory input:

- a. Capsaicin
- b. Terazosin
- c. Verapamil
- d. Prostaglandins

(Ref EBU Extra File)

Q117. During partial nephrectomy. Need to see margin intra-op. Which U/S frequency use:

- a. 3.5-5 MHz curved
- b. 12-18 MHz

Q118. A 3-year-old circumcised boy presents with urinary incontinence, stranguria, and occasional afebrile urinary tract infections. A renal ultrasound reveals moderate bilateral hydroureteronephrosis. The next most appropriate urological evaluation for this child would be:

- a. Ordering a repeat renal ultrasound in 6 months.
- b. Treatment of dysfunctional elimination syndrome with timed voiding and laxative.
- c. Beginning an alpha receptor blocker.
- d. Botox injection to the external urethral sphincter.
- e. Voiding cystourethrogram

(Ref Campbell Urology Review MCQ 12th Ed Ch 33 MCQ 7 Pg 106)

Q119. A 12-year-old girl presented to the emergency department with an acute episode of left flank pain and was diagnosed with 5-mm left distal ureteral stone. She responded well to conservative therapy (intravenous hydration and pain medication) and her pain subsides. The next step in management is:

- a. Analgesics, trial of passage, and interval ultrasound imaging
- b. Analgesics, tamsulosin, trial of passage, and interval ultrasound imaging.
- c. Ureteroscopy.
- d. Shock wave lithotripsy (swl).
- e. No further urologic management

(Ref Campbell Urology Review MCQ 12th Ed Ch 43 MCQ 2 Pg 147)

Q120. Patient referred by gynecologist, 35 weeks pregnant. 7mm proximal ureteric stone. TLC normal. Urine D/R 4-5 pus cells. Treatment:

- a. Tamsulosin
- b. Observe
- c. DJ stent
- d. URS
- e. ESWL

Q121. A 6-month-old infant without other known medical problems is referred for proximal penile hypospadias. He is also found to have ventral penile curvature, a deep scrotal cleft, and penoscrotal transposition, but both testes are normally situated in the dependent scrotum. The next step is:

- a. proceed with surgery
- b. Obtain a karyotype.
- c. Order a voiding cystourethrogram (vcug) to rule out the presence of a utricle.
- d. Obtain renal sonography to rule out a renal anomaly.
- e. Delay surgery until 12 months of age to allow for interval penile growth.

(Ref Campbell Urology Review MCQ 12th Ed Ch 45 MCQ 7 Pg 154)

Q122. Benign prostatic hyperplasia (BPH) arises from the:

- a. Central zone.
- b. Transition zone
- c. Transition + central zone
- d. Peripheral zone.
- e. Stroma

(Ref Campbell Urology Review MCQ 12th Ed Ch 63 MCQ 10 Pg 233)

(Note: They change the options. No option of transition + periurethral zone)

Q123. What is the single most important factor when choosing among SWL, ureteroscopic stone removal, and PNL for renal calculi?

- a. Stone composition
- b. Stone location
- c. Anatomic abnormalities
- d. Stone burden
- e. Body habitus

(Ref Campbell Urology Review MCQ 12th Ed Ch 93 MCQ 4 Pg 358)

Q124. What is the preferred treatment approach for a symptomatic 1.5-cm stone in a lower pole calyceal diverticulum?

- a. SWL
- b. Flexible ureteroscopy
- c. PCNL
- d. PCNL with fulguration of the diverticulum
- e. Laparoscopic diverticulectomy

(Ref Campbell Urology Review MCQ 12th Ed Ch 93 MCQ 8 Pg 358)

Q125. What is the preferred treatment option for a patient with a symptomatic 1.5-cm renal calculus and a coagulopathy?

- a. SWL
- b. SWL after administration of fresh-frozen plasma
- c. Indwelling ureteral stent
- d. Flexible ureteroscopy
- e. PNL

(Ref Campbell Urology Review MCQ 12th Ed Ch 93 MCQ 11 Pg 358)

Q126. 5mm stone in distal ureter. Chance of spontaneous expulsion:

- a. 60%
- b. 70%
- c. 80%

Q127. To minimize the risk of lung and pleura injury during supracostal upper pole access for PNL:

- a. The puncture should be performed during full expiration
- b. The puncture should be performed during full inspiration.
- c. Co2 should be injected through the ureteral catheter to identify the upper pole calyx.
- d. The puncture should be done with local anesthesia.
- e. The puncture should be performed by a radiologist

(Ref Campbell Urology Review MCQ 12th Ed Ch 94 MCQ 20 Pg 362)

Q128. Malignant hypertension. K 3.0, Na 151. Test to reach diagnosis:

- a. Plasma renin activity
- b. 24 hours urinary Aldosterone
- c. 24 hours urinary Metanephrine

Q129. A healthy 45-year-old man with no family history of cancer is found to have a 6-cm enhancing mass in the upper pole of his right kidney. A 2-cm solitary nodule is noted on preoperative chest radiography. Computed tomography (CT) confirms a solitary nodule in the lower lobe of the right lung. What is the most appropriate treatment course?

- a. Systemic chemotherapy alone
- b. Radical right nephrectomy and postoperative chemotherapy
- c. Biopsy of pulmonary nodule
- d. Radical nephrectomy and simultaneous pulmonary metastasectomy
- e. Radical nephrectomy with staged resection of pulmonary nodule 6 weeks postoperatively

(Ref Campbell Urology Review MCQ 12th Ed Ch 101 MCQ 1 Pg 391)

Q130. During resection of a large right renal mass, the main renal artery is identified, ligated, and divided, but the renal vein fails to decompress. What is the most likely explanation for this?

- a. Renal vein tumor thrombus
- b. Subclinical renal arteriovenous malformation
- c. Bleeding disorder
- d. Arterial collateral branch vessels
- e. Extensive venous collateral obstruction

(Ref Campbell Urology Review MCQ 12th Ed Ch 101 MCQ 19 Pg 392)

Q131. A 57 years old male underwent radical prostatectomy (RP) for prostatic cancer. He now complains of erectile dysfunction. Which of the following nerves may have been damaged during the surgical procedure?

- a. Genitofemoral nerve
- b. Cavernous nerves
- c. Ilio-hypogastric nerve
- d. Dorsal nerve of penis
- e. Ilio-inguinal nerve

(Ref Rafiq Anjum MCQ Book Ch 16 MCQ 29 Pg 297)

Q132. Regarding bladder compliance:

- a. Cholinergic effect
- b. Autonomic effect
- c. Vesicoelastic effect

Q133. A 41-year-old male presents with his second urinary tract infection in the past 4 months. He is growing the same E. coli as his previous culture. Evaluation should include:

- a. Computed tomography (CT) urogram
- b. Uroflow and postvoid residual urine to rule out retention
- c. Cystoscopy
- d. Four-glass urine test
- e. Nuclear amplification test for gonorrhea and chlamydia

(Ref Campbell Urology Review MCQ 12th Ed Ch 56 MCQ 7 Pg 196)

Q134. The increased risk of developing bladder cancer for a man who has a sister with bladder cancer is:

- a. Twofold.
- b. 10-fold.
- c. 20-fold.
- d. 40-fold.
- e. 60-fold

(Ref Campbell Urology Review MCQ 12th Ed Ch 135 MCQ 13 Pg 518)

Q135. 48 years old banker female. If she stops smoking for 10 years at 38 years age, after 30 pack-years of smoking, her risk of developing bladder cancer:

- a. Is the same as if she still smoked.
- b. Is the same as if she never smoked.
- c. Is unrelated to the intensity of smoking.
- d. Is very low because of her gender.
- e. Gradually decreases with time

(Ref Campbell Urology Review MCQ 12th Ed Ch 135 MCQ 19 Pg 519)

Q136. Smoking is responsible for what percent of bladder cancer in males?

- a. 5%
- b. 20%
- c. 40%
- d. 60%
- e. 80%

(Ref Campbell Urology Review MCQ 12th Ed Ch 135 MCQ 32 Pg 520)

Q137. Regarding BCG in carcinoma in situ:

- a. 100% cure with BCG
- b. It is serious disease and progression in 40-80%

Q138. An asymptomatic 65-year-old man undergoes a prostate biopsy because of an indistinct prostate asymmetry on digital rectal examination. The PSA value is 2.2 ng/mL. Pathology reveals extensive glandular and periglandular infiltration with acute and chronic inflammatory cells. What is the best next step?

- a. Observation
- b. Four weeks of antibiotics and then reassess
- c. Four weeks of antibiotics and anti-inflammatories and then reassess
- d. Repeat biopsy
- e. Cystoscopy

(Ref Campbell Urology Review MCQ 11th Ed Ch 13 MCQ 17 Pg 49)

Q139. Testis orchidectomy done. T1 N0 M0 S1. NSGCT. Management:

- a. Carboplatin
- b. No need to F/U
- c. Serial history, examination and follow up with imaging
- d. Combine chemotherapy + Radiation

Q140. 1 cm stricture at Bulbomembranous urethra. Treatment:

- a. DVIU

Q141. Cross match mismatch score when called it positive, when score is:

- a. 2
- b. 3
- c. 7

Q142. Before transplant between siblings. Cross match 2/10. Then give what combinations:

- a. Steroid + Azathioprine + CNi
- b. ATG + Azathioprine
- c. Steroid

Q143. Azathioprine mechanism of action:

- a. Purine synthesis inhibitor

Q144. Patient on U/S Mild Hydronephrosis. (Scenario guiding towards ptotic kidney)

- a. IVP

Q145. For follow up of clear cell RCC what is used:

- a. 2003 Leibovich Score
- b. UISS
- c. Alvarado score
- d. Venus Score

Q146. Intermediate risk NMIBC. BCG Duration:

- a. 1 year
- b. 3 year

Q147. 35 years old patient with known case of PUJO. On U/S Hydronephrosis but no hydroureter. MAG-3 O'Reiley curve 4 Homysy sign. Next step

- a. Plan surgery
- b. Observe
- c. Repeat MAG-3 F+20
- d. Repeat MAG-3 F-15

Q148. Patient undergoes Radical prostatectomy. Experience dysorgasm. How to fell dysorgasm post-op

- a. <50%

Q149. DM and HTN patient. Drug interaction. Patient develop ED. Which need to stop

- a. Metformin
- b. Glimepride
- c. Ascard
- d. Fluoxetine

Q150. Diabetic patient with costovertebral angle tenderness. Fever. Started antibiotics. No fever relieved after 5 days of antibiotics. Diagnosis:

- a. Emphysematous pyelonephritis
- b. Xanthogranulomatous pyelonephritis
- c. RCC
- d. Pyonephrosis

Q151. Patient with Premature ejaculation.

- a. On demand depoxetine
- b. On demand fluoxetine
- c. On demand pyerodine

Q152. 1 month infant. Come for circumcision. Best anesthesia for neonate for circumcision:

- a. Caudal
- b. Spinal
- c. General
- d. Local
- e. No anesthesia

Q153. A person having DSD surgery for gender change. Which structure is used for phallus reconstruction in meatidoplasty:

- a. Clitoris enlargement by hormonal aid
- b. Skin from supra-pubic area
- c. Skin from groin
- d. Cartilage
- e. Arm tissue

Q154. Prostate biopsy shows High Grade PIN in 3 cores. Next:

- a. No need of follow up
- b. Biopsy in one year

Q155. First-line medical treatment for the prevention of recurrent cystine stones would be aimed at:

- a. Urinary acidification.
- b. Increasing the solubility of cystine.
- c. Decreasing urinary sodium.
- d. Decreasing the solubility of cystine.
- e. Binding of cystine within the intestines

(Ref Campbell U-rology Review MCQ 12th Ed Ch 92 MCQ 18 Pg 353)

Q156. Ca prostate T3A , PSA 9, Gleason 4+4. Next:

- a. Radiotherapy
- b. Radical prostatectomy
- c. Radical prostatectom + radiotherapy + hormonal

Q157. Prostate TNM. Capsular breech on 2 sides:

- a. T3a
- b. T3b
- c. T2c

Q158. Patient with testicular teratoma. Radical orchidectomy done. Retroperitoneal mass 9cm. Chemotherapy given. Then 4cm mass. Next:

- a. RPLND
- b. Salvage chemotherapy
- c. Observe

Q159. During transplant graft insertion proximal ureter transected. Management

- a. Pyeloneocystostomy
- b. Pelvis attaches to native ureter

Q160. Child with non-palpable left UDT. During laparoscopy remnants of testis found. No vessel going into inguinal canal. Next:

- a. Remove remnants
- b. Abandoned
- c. Bring remnant to inguinal canal

Q161. A healthy 55-year-old man undergoes resection of a 2.0-cm bladder tumor in a posterior wall bladder diverticulum. Pathology demonstrates a pT1G3 bladder tumor with associated areas of CIS. Muscularis mucosa is involved, but there is no definite muscularis propria in the specimen. Optimal management includes

- a. Repeat resection to stage the cancer.
- b. Intravesical bcg therapy.
- c. Partial cystectomy with excision of the diverticulum.
- d. Radical cystectomy and urinary diversion
- e. Chemotherapy and radiation therapy.

(Ref Campbell Urology Review MCQ 12th Ed Ch 136 MCQ 6 Pg 526)

Q162. After a bilateral vasoepididymostomy, a patient remained azoospermic in two semen analyses until 6 months postoperative, when the analysis revealed 8 million sperm/mL with 60% motility. What is the next management step?

- a. A plan for intrauterine insemination with ejaculated sperm
- b. A plan for assisted reproduction with intracytoplasmic sperm injection (ICSI) and ejaculated sperm
- c. Cryopreservation of semen
- d. No follow-up necessary
- e. Scrotal ultrasound

(Ref Campbell Urology Review MCQ 12th Ed Ch 67 MCQ 10 Pg 247)

Q163. Use of external condom catheter causes:

- a. Pressure necrosis

Q164. On postoperative day 2 after radical nephrectomy for a 14-cm complex left renal tumor using an anterior midline incision, there are overt signs of peritonitis. The patient is 72 years old with significant atherosclerotic disease. At exploration, the entire small bowel is necrotic and nonviable. What artery was inadvertently ligated?

- a. Celiac
- b. Left gastric
- c. Inferior mesenteric
- d. Superior mesenteric
- e. Right gastroepiploic

(Ref Campbell Urology Review MCQ 12th Ed Ch 101 MCQ 18 Pg 392)

Q165. Which paraneoplastic syndrome associated with RCC can often be managed or palliated medically?

- a. Polycythemia
- b. Stauffer syndrome
- c. Neuropathy
- d. Hypercalcemia
- e. Cachexia

(Ref Campbell Urology Review MCQ 12th Ed Ch 97 MCQ 33 Pg 375)

Q166. Pregnant patient having suspected stone. On U/S equivocal. Next:

- a. CT scan with full dose w/o contrast
- b. Ct scan with full dose with contrast
- c. Ct scan with low dose w/o contrast
- d. Ct scan with low dose with contrast

(Note: All 5 options of CT scan)

Q167. Smoker for 10 years. History of trauma 3 years back. Cause of ED:

- a. Arteriogenic

Q168. Transrectal ultrasonography confirms a large prostatic abscess. What is the best next step?

- a. Transperineal drainage
- b. Transrectal aspiration
- c. Transurethral drainage
- d. Open drainage
- e. Suprapubic aspiration

(Ref Campbell Urology Review MCQ 11th Ed Ch 13 MCQ 14 Pg 49)

Q169. Recurrent renal mass. Previous radical nephrectomy done. Now:

- a. Surgical resection
- b. Radiation
- c. Observe

Q170. Patient having Cr 2.5. On PCN for 6 months. Foley output 600ml/day. PCN 800ml/day. Next: (Another MCQ)

- a. Autotransplant

Q171. Patient having hematuria. Proteinuria 2+. Brown color urine. Next step:

- a. Microscopy of urine

Q172. Child has run over by lorry. Blood at meatus. Next:

- a. Retrograde urethrogram

Q173. After simple retropubic prostatectomy, which is the most common complication at 8 weeks post op?

- a. Bladder neck contracture
- b. Retrograde ejaculation
- c. DVT
- d. MI
- e. Infection

Q174. UFM decrease per year:

- a. 0.1 ml/sec/year
- b. 0.2 ml/sec/year
- c. 0.3 ml/sec/year
- d. 0.4 ml/sec/year
- e. 0.5 ml/sec/year

Q175. Docitaxel treated Ca prostate. Disease progressed. Next:

- a. Cabazitaxel

Q176. The most reliable diagnostic tool for impalpable testis is

- a. MRI
- b. CT scan
- c. Laparoscopy
- d. Selective testicular arterial angiogram

(Ref Feroz Pharma MCQ 18)

Q177. L3-L4 lesion. Effect on bladder:

- a. Overactive bladder, Normal compliance, striated sphincter dyssynergia

Q178. Child age 4 years. Has grade 4 VUR with HDN with HU. Disease stable. No UTI and stable Creatine. Next:

- a. Conservative with bladder training with anticholinergic
- b. Reimplant
- c. Injection bulking agent
- d. Ureteroscopy

Q179. After transplant large collection. All labs normal. Next:

- a. DTPA
- b. Fluid drain for Cr

Q180. Transplant patient after 3 months Cr 1.6 on Tacrolimus, Prednisolone, Mycophenolate. Started Lisinopril 10mg for HTN. After weeks Cr 3.1. Cause:

- a. Tacrolimus toxicity
- b. ATG
- c. Hypotension

Q181. 50 years old, smoker with ca bladder > 5cm growth. Showed T1 high grade TURBT done. Whats next:

- a. Intravesical therapy
- b. Partial cystectomy
- c. Radical cystectomy
- d. Chemo-radiation

(Note: No option of Re-TURBT)

Q182. An 11-year-old child presents with flank pain and hematuria. There is left hydronephrosis to the ureteropelvic junction. There is no ureteral dilation. Diuretic renography shows symmetric uptake in both kidneys and a very delayed washout time with a half-life of 50 minutes. At the time of surgery, a retrograde pyelogram shows a proximal ureteral filling defect. The best course of action is:

- a. Abandon the procedure and obtain computed tomography (CT) imaging with contrast.
- b. Perform ureteroscopic biopsy.
- c. Perform radical nephroureterectomy.
- d. Perform ureteroscopic excision of the presumed fibroepithelial polyp.
- e. Proceed with dismembered pyeloplasty and resect a fibroepithelial polyp

(Ref Campbell Urology Review MCQ 12th Ed Ch 41 MCQ 15 Pg 141)

Q183. Female with post ESWL having steinstrasse and fever:

- a. PCN
- b. DJ
- c. ESWL

Q184. A 12-year-old boy is sent to the emergency department for evaluation of vomiting and decreased urination. He has a blood urea nitrogen (BUN) level = 40 mg/dL and a creatinine = 1.8 mg/dL. His urinary sodium level = 20 meq/L, fractional excretion of sodium (FENa) = 0.8%, and urinary osmolality = 600 mOsm/kg. The most likely cause of his elevated creatinine is:

- a. Posterior urethral valves.
- b. Dehydration.
- c. Interstitial nephritis.
- d. Hemolytic uremic syndrome

(Ref Campbell Urology Review MCQ 12th Ed Ch 21 MCQ 14 Pg 61)

Q185. History of chemical exposure. Risk factor for Bladder Ca:

- a. Aromatic amine

Q186. Patient has trauma, have urethral trauma. Blood at meatus. Next
a. Urethrography under sterile condition

Q187. 60 years male with B/L testicular tumor:
a. Lymphoma