

Paper II: Technical Subject

1. Anatomy and embryology

- 1.1 Surgical anatomy and embryology of the Retroperitoneum, Adrenal glands, Kidneys, Ureters
- 1.2 Applied anatomy and embryology of lower urinary tract and male genitalia
- 1.3 Applied anatomy of bony pelvis, anterior abdominal wall soft tissue of the pelvis, pelvic circulation, pelvic innervations, pelvic viscera, perineum

2. Signs and Symptoms of the genitourinary tract disorders

3. Urologic laboratory examinations of blood, serum and urine

4. Radiology of the urinary tract and retroperitoneal structures

- 4.1 Ultra sonogram
- 4.2 KUB & IVU
- 4.3 CT Scan
- 4.4 Magnetic resonance imaging and Retogende pyclogam (RPG)
- 4.5 Renal isotope study (DTPA, DMSA, MAG-3)
- 4.6 Micturating cystogram (MCU), Antegrade /Retrograde urethrogeam

5. Paediatric urology

- 5.1 Embryology of genitourinary system, testis and its related anomalies
- 5.2 Phimosis / Paraphimosis
- 5.3 Reflux Uropathy
- 5.4 Bladder extorphy
- 5.5 Hypospadias and epispadias
- 5.6 Ectopic Ureter / Kidney
- 5.7 Primary megaureter
- 5.8 Congenital polycyclic kidney disease
- 5.9 Duplex ureter and its consequences
- 5.10 Intersexuality
- 5.11 Congenital diverticulum of urinary bladder
- 5.12 Congenital PUJ obstruction

6. Renal pathophysiology and renal transplant

- 6.1 Physiology and pathology of the renal pelvis and ureter
- 6.2 Pathophysiology and management of the urinary tract obstruction
- 6.3 Basic principles of immunology and renal transplantation
- 6.4 Renovascular hypertension, ischaemic nephropathy and obstructive uropathy
- 6.5 Acute and chronic renal failure
- 6.6 Infection and inflammations of the genitourinary tract

7. Voiding function and dysfunction of lower urinary tract

- 7.1 Pathophysiology of the bladder and urethra
- 7.2 Neurourologic evaluation and urodynatic study
- 7.3 Neuromuscular dysfunction of the lower urinary tract and its management

- 8. Bladder outlet obstruction, its pathophysiology and management**
 - 8.1 Prostate
 - 8.2 Urethra
 - 8.3 Prepuce
- 9. Genito urinary tract trauma**
 - 9.1 Kidney injuries
 - 9.2 Ureter injuries
 - 9.3 Bladder Injury (intra / extra peritoneal)
 - 9.4 Urethral injuries (anterior / posterior) and strictures
 - 9.5 Penile injuries and factures
 - 9.6 Scrotal and testicle injuries
- 10. Urinary stones**
 - 10.1 Pathophysiology of stone formation
 - 10.2 Investigations of urinary stones
 - 10.3 Management of urinary stones including ESWL
- 11. Endourology**
 - 11.1 Optical procedures: TURN, OID, PCNL
 - 11.2 Energy used in endourology (Electricity, Ballistic and LASER)
 - 11.3 Retrograde intrarenal surgery (RIRS)
- 12. Neoplasm of the genitourinary tract**
 - 12.1 Nephto-blastoma (Wilm's Tumor)
 - 12.2 Renal cell carcinoma
 - 12.3 Transitional cell carcinoma and other bladder tumors
 - 12.4 Testicular carcinoma
 - 12.5 Carcinoma of penis
 - 12.6 Tumor of the adrenal glad
- 13. Male reproductive function and male infertility**
- 14. Abnormality of sexual determination and differentiation**
- 15. Sexual function and dysfunction**
- 16. Disorders of the testes, scrotum, spermatic cord and external genitalia**
- 17. Operative surgery**
 - 17.1 Renal surgery
 - 17.1.1 Radical / Simple nephrectomy/ Donor nephrectomy
 - 17.1.2 Nephroureterectomy
 - 17.1.3 Nephro / pyelolithotomy
 - 17.1.4 Pyeloplasty
 - 17.2 Ureter Surgery
 - 17.2.1 Ureterolitotomy
 - 17.2.2 Ureterorenoscopy (URS)
 - 17.2.3 Ureterocystoneostomy (UCN)

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नेपाल स्वास्थ्य सेवा, सर्जरी समूह, युरोसर्जरी उपसमूह, एघारौं (११) तहको खुला र आन्तरिक प्रतियोगितात्मक
लिखित परीक्षाको पाठ्यक्रम

- 17.3 Bladder surgery
 - 17.3.1 Cystolithotomy
 - 17.3.2 Cystectomy (partial /single /total/ radical)
 - 17.3.3 Urinary diversion (incontinent / continent)
- 17.4 Prostate surgery
 - 17.4.1 Retropubic / Transvesicle prostatectomy
 - 17.4.2 Redical prostatectomy and orthotopic neobladder
 - 17.4.3 Prostate biopsy
 - 17.4.4 Laser prostectomy
- 17.5 Urethral Surgery
 - 17.5.1 Urethroplasty
 - 17.5.2 Penile reconstructions
- 17.6 Laparoscopic surgery
- 18. Radiotherapy and chemotherapy of urological malignancy**
