

APRIL - 2001

[KD 044]

Sub. Code : 1651

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

Branch IV — Genito Urinary Surgery

(Revised Regulations)

**Paper I — BASIC SCIENCE APPLIED TO GENITO-
URINARY SURGERY**

Time : Three hours

Maximum : 100 marks

1. Describe the development of male genitalia. Discuss the management of Extrophy-Epispadias complex. (25)
2. Describe the various growth factors with special reference to their role in the development of prostatic hypertrophy. (25)
3. Short notes on : (5 × 10 = 50)
 - (a) Sonourethrogram
 - (b) Hypokalemia
 - (c) Tumor Necrosis Factor
 - (d) Mag III
 - (e) Ambulatory Urodynamics.

NOVEMBER - 2001

[KE 044]

Sub. Code : 1651

M.Ch. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

Branch IV — Genito Urinary Surgery

**Paper I — BASIC SCIENCES AS APPLIED TO
GENITO-URINARY SURGERY**

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

- 1 Discuss effect of drugs on the ureter. (25)
 - 2 Discuss postobstructive diuresis. (25)
 - 3 Write briefly on : (5 × 10 = 50)
 - (a) Zonal Anatomy of the Prostate
 - (b) Risk factors in excretory urography
 - (c) Antibody – coated Bacteria
 - (d) Residual urine volume determination
 - (e) Sperm motility.
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MARCH - 2002

[KG 044]

Sub. Code : 1651

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch IV — Genito-Urinary Surgery

Paper I — BASIC SCIENCES AS APPLIED TO
GENITO-URINARY SURGERY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss the vascular anatomy of the kidney and its importance to the urologist in calculus disease. (25)
2. Discuss the significance of Free/total PSA, PSA-density and PSA velocity in clinical practice. (25)
- 3 Write briefly on : (5 × 10 = 50)
 - (a) Hyper oxaluria.
 - (b) Premature Ejaculation
 - (c) Lohexol.
 - (d) Testicular Torsion.
 - (e) Oncocytoma.

APRIL - 2004

[KK 044]

Sub. Code : 1651

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch IV — Genito-Urinary Surgery

Paper I — BASIC SCIENCES APPLIED TO GENITO
URINARY SURGERY — I

Time : Three hours

Maximum : 100 marks

Theory : Two hours and
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

A. Essay : (2 × 15 = 30)

(1) Describe the anatomy of Retroperitoneum and discuss the management of idiopathic retro peritoneal fibrosis with bilateral hydrouretero nephrosis with azotemia. (15)

(2) Discuss the neuroanatomy and neuro physiology of erection and discuss role of centrally acting drugs in management of erectile dysfunction. (15)

B. Write short notes on : (10 × 5 = 50)

- (1) Bladder endometrium.
- (2) Urological complications following haemorrhoid sclerotherapy.
- (3) Premature ejaculation.
- (4) Embryo genesis and zonal anatomy of prostate gland.
- (5) Role of TRUS in Urology.
- (6) Mixed gonadal dysgenesis.
- (7) Post obstructive diuresis phenomenon.
- (8) Balanitis Xerotica Obliterans (BXO).
- (9) Prostatic specific antigen.
- (10) Varicocele vis a vis male infertility.

AUGUST - 2004

[KL 044]

Sub. Code : 1651

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch IV — Genito-Urinary Surgery

**Paper I — BASIC SCIENCES APPLIED TO GENITO
URINARY SURGERY — I**

Time : Three hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay : (2 × 15 = 30)

**(1) Discuss in detail the pathophysiology of
Acute Renal Failure and its management.**

**(2) Describe the anatomy and innervation of
male urethra, the Rhabdo Sphincter and the corpora
cavernosa.**

II. Write short notes on : (10 × 5 = 50)

(a) CT angiography.

(b) Contrast induced nephropathy.

(c) Treatment of hyponatremia.

(d) Captopril Renography.

(e) Circumcaval ureter.

(f) Asymptomatic bacteriuria.

(g) Mycophenolate mofetil.

(h) Chancroid.

**(i) Office Urinary culture its advantages,
disadvantages.**

(j) Hyperchloraemic acidosis.

FEBRUARY - 2005

[KM 044]

Sub. Code : 1651

M.Ch. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch IV — Genito — Urinary Surgery

**Paper I — BASIC SCIENCES APPLIED TO GENITO
URINARY SURGERY — I**

Time : Three hours Maximum : 100 marks

**Theory : Two hours and Theory : 80 marks
forty minutes**

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

I. Essay : (2 × 15 = 30)

**(1) Discuss the gross anatomy of the prostate as
it relates to the origin of BPH and cancer. (15)**

**(2) Discuss the mechanism of action of the
newer immunosuppressants used in renal
transplantation (excluding steroids, azathioprine,
cyclosporine) (15)**

II. Write Short notes on : (10 × 5 = 50)

(a) The blood supply of the penis.

**(b) Give the divisions and branches of the
internal iliac artery.**

**(c) Filiform dilatation for urethral stricture
disease.**

**(d) Basic principles of magnetic resonance
imaging.**

(e) Non-gonococcal urethritis.

(f) The genitourinary manifestation of filiarisis.

**(g) What are the commonly used drugs in the
treatment of genitourinary candidiasis?**

(h) Fournier's gangrene.

**(i) Congenital collecting system abnormalities
apart from ureteropelvic junction obstruction.**

**(j) Laboratory tests to distinguish pre renal
azotemia and acute tubular necrosis.**

FEBRUARY - 2006

[KO 044]

Sub. Code : 1651

M.Ch. DEGREE EXAMINATION.

(Revised Regulations)

Branch IV — Genitourinary Surgery

**Paper I — BASIC SCIENCES APPLIED TO
GENTOURINARY SURGERY**

Time : Three hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay : (2 × 15 = 30)

**(1) Describe physiologic changes during
Laparoscopic Surgery.**

**(2) Embryology and clinical implications of renal
vein and inferior vena caval anomalies.**

II. Short notes : (10 × 5 = 50)

(a) Renin angiotensin system

(b) Oncogenes

(c) Hyperkalemia – Management

(d) Auto-regulation in kidney

(e) Autonomic Dysreflexia

(f) Abnormal sperms

(g) External sphincter – Recent concepts

(h) Human kalikerin – 2

(i) Neonans syndrome

(j) Central control of micturition.

AUGUST - 2006

[KP 044]

Sub. Code : 1651

M.Ch. DEGREE EXAMINATION.

(Revised Regulations)

Branch IV — Urology

**Paper I — BASIC SCIENCES APPLIED TO
GENITOURINARY SURGERY**

Time : Three hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay :

**(1) Discuss the surgical anatomy of the Ureter
with special reference to Ureteroscopy. (20)**

**(2) Describe the mechanism of action of 5- α
reductase inhibitors and its role in the management of
prostatic diseases. (15)**

**(3) Describe the mechanism of penile erection of
role played by sildinafil. (15)**

II. Write short notes on:

(6 × 5 = 30)

- (a) Vascular supply of Rt adrenal gland.**
 - (b) Descent of testis from 6 month to 9 months
intrauterine period.**
 - (c) Causes of painless total haematuria.**
 - (d) Equivocal UPJ obstruction.**
 - (e) Urinary cast and its significance.**
 - (f) Anatomical features of male
pseudohermaphrodite.**
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[KR 044]

Sub. Code : 1651

M.Ch. DEGREE EXAMINATION.

(Revised Regulations)

Branch IV — Urology

Paper I — BASIC SCIENCES APPLIED TO UROLOGY

Time : Three hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay Questions :

1. Discuss the Anatomy of retroperitoneum.

Enumerate the main retroperitoneal tumors.

**Outline their managements with special reference
to difficulty encounters during surgery. (20)**

**2. Describe the structure and anatomical
relationship of prostate gland. (15)**

**3. Discuss the etiology of renal abscess. Describe the
diagnostic and current management strategies. (15)**

II. Write short notes. (6 × 5 = 30)

(a) **Microscopic Examination of Urine.**

(b) **Recent Role of angiography in Urology.**

(c) **Evaluation of anuria after renal
transplantation**

(d) **How to overcome anatomical problems in
Ureteroscopy.**

(e) **Management of small uretric stone in
pregnancy.**

(f) **Urological Society of India.**

August - 2009

[KV 044]

Sub. Code: 1651

M.CH DEGREE EXAMINATIONS

(Higher Specialities)

(Revised Regulations)

Branch IV – Urology

Paper I – BASIC SCIENCES APPLIED TO UROLOGY

Q.P. Code: 181651

Time: Three hours

Maximum: 100 Marks

ANSWER ALL QUESTIONS

Draw suitable diagrams wherever necessary.

I. Essays: 2 x 20 = 40 Marks

1. Discuss the various mechanisms involved in the descent of testis.
2. Discuss the development of normal bladder function and micturition control in infants and children.

II. Write short notes on: 10 X 6 = 60 Marks

1. Megacalycosis.
2. Knudson's two hit theory.
3. The Ice water test.
4. Five alpha reductase.
5. Apoptosis.
6. Nephrogram.
7. Renal pseudotumors.
8. Covert bacteriuria.
9. Latex allergy.
10. Intra-operative consultation for suspected ureteric injury.

August 2010

[KX 044]

Sub. Code: 1651

M.CH DEGREE EXAMINATIONS

**(Higher Specialities)
(Revised Regulations)**

**Branch IV – Urology
Paper I – BASIC SCIENCES APPLIED TO UROLOGY
Q.P. Code: 181651**

Time: Three hours

Maximum: 100 Marks

ANSWER ALL QUESTIONS

Draw suitable diagrams wherever necessary.

I. Essays:

2 x 20 = 40 Marks

1. Describe the embryology of posterior urethral valve. Classify them and how will you evaluate and manage a child with PUV diagnosed at birth.
2. Describe the neuro vascular anatomy of penis and evaluation of a married man with erectile dysfunction.

II. Write short notes on:

10 X 6 = 60 Marks

1. ADAM (Androgen deficiency in aging male).
2. Oncogenes.
3. Ambulatory urodynamics.
4. Acute pyelonephritis in pregnancy.
5. Trosipium chloride.
6. Pathogenesis of uric acid stone.
7. Bisphosphonates.
8. Haemospermia.
9. Von Mippel Sindan disease.
10. Detrusor sphincter dyssynergia.

August 2011

[KZ 044]

Sub. Code: 1651

MASTER OF CHIRURGIAE (M.Ch.) DEGREE EXAMINATION
(SUPER SPECIALITIES)

BRANCH IV – UROLOGY

BASIC SCIENCES APPLIED TO UROLOGY

Q.P. Code: 181651

Time : 3 hours
(180 Min)

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

Pages Time Marks
(Max.) (Max.) (Max.)

- | | | | |
|---|----|----|----|
| 1. Discuss the Embryology of Horse –Shoe Kidney and management of Bilateral Stag horn calculi in Horse-Shoe Kidney. | 11 | 35 | 15 |
| 2. Describe the Lymphatic Drainage of Penis and its relevance in the management of Carcinoma Penis. | 11 | 35 | 15 |

II. Write notes on :

- | | | | |
|---|---|----|---|
| 1. Causes of management of fournier's gangrene. | 4 | 10 | 7 |
| 2. Contrast induced Nephropathy. | 4 | 10 | 7 |
| 3. Role of CT Angio in Urology. | 4 | 10 | 7 |
| 4. Clinical feature and management of Chancroid. | 4 | 10 | 7 |
| 5. Hyper Chloremic Acidosis in Urology. | 4 | 10 | 7 |
| 6. Embryogenesis and Zonal Anatomy of Prostate gland. | 4 | 10 | 7 |
| 7. Role of Trans Rectal Ultra Sonogram (TRUS) in Urology. | 4 | 10 | 7 |
| 8. Importance of Varicocele in Male Infertility. | 4 | 10 | 7 |
| 9. Testicular Torsion-Management | 4 | 10 | 7 |
| 10. Premature Ejaculation-management. | 4 | 10 | 7 |

[LB 044]

AUGUST 2012

Sub. Code: 1651

M.Ch – UROLOGY

Paper – I BASIC SCIENCES APPLIED TO UROLOGY

Q.P. Code: 181651

Time : 3 hours
(180 Min)

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. Mechanism of urinary continence in men and the role of urethral slings in male urinary stress incontinence.	16	35	15
2. Complications of the use of intestinal segments in the urinary tract.	16	35	15

II. Write notes on :

1. Tissue engineering in urology.	4	10	7
2. Metabolic complications of the use of intestinal segments in the urinary tract.	4	10	7
3. Port sites metastases.	4	10	7
4. Evaluation of the recurrent stone former.	4	10	7
5. Duloxetine in SUI.	4	10	7
6. Urological applications of botulinum toxin.	4	10	7
7. Bioeffects of shock wave lithotripsy.	4	10	7
8. Jejunal conduit syndrome.	4	10	7
9. Perfusion fluids in renal transplantation.	4	10	7
10. Multidrug resistance in renal cell carcinoma.	4	10	7

[LC 044]

FEBRUARY 2013

Sub.Code:1651

M.Ch-UROLOGY

Paper – I BASIC SCIENCES APPLIED TO UROLOGY

Q.P. Code:181651

**Time: 3 hours
(180 Min)**

Maximum :100 marks

I.Elaborate on:

(2x15marks=30marks)

1. Describe the Life cycle, presentation, diagnosis and treatment of Genito Urinary Schistosomiasis.
2. Describe the Embryogenesis, Anatomy, Variants and treatment of bladder exstrophy.

II. Write short notes on :

(10x7marks=70marks)

1. Embryology of ectopic ureter.
2. Inverted Papilloma.
3. Post obstructive diuresis.
4. Haemorrhagic cystitis.
5. Flow cytometry in Urologic practice.
6. Mixed Gonadal Dysgenesis
7. Single dose captopril test
8. Pathogenesis and management of urolithiasis in patients with Augmentation cystoplasty.
9. Fuhrman grading system in a patient with Renal cell carcinoma.
10. Saturation Biopsy of the Prostate.

M.Ch. – UROLOGY
Paper – I BASIC SCIENCES APPLIED TO UROLOGY
Q.P.Code: 181651

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. Anatomy of inguinal lymph nodes as relevant to management of penile cancer and algorithm for management of Ilioinguinal lymph nodes involvement in a patient with squamous cell carcinoma of penis.
2. Embryology of classical extrophy – epispadias complex developmental anomalies leading to extrophy – epispadias complex and outline the management.

II. Write notes on:

(10X7=70)

1. Persistent mullerian duct syndrome.
2. Mechanism of extracorporeal shock wave action.
3. Ambulatory urodynamics.
4. Mitrofanoff's principle.
5. Pathophysiology of Renovascular hypertension.
6. Bacterial Resistance.
7. Etiology and treatment on Bladder Diverticula.
8. Adjuvant and Neoadjuvant therapies in bladder cancer.
9. Bladder Botulinum toxin application.
10. Define Renal agenesis, Aplastic Kidney, Hypoplastic Kidney, Cystic Dysplastic kidney and multicystic dysplastic kidney with diagrams.

(LE 044)

FEBRUARY 2014

Sub. Code:1651

M.Ch. – UROLOGY
Paper – I BASIC SCIENCES APPLIED TO UROLOGY
Q.P.Code: 181651

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. Briefly outline the mechanism of urinary continence in women and describe conservative treatment options in the management of urinary incontinence.
2. Briefly outline the patho-physiology of rejection and write about the recent development in the field of immunosuppression.

II. Write notes on:

(10X7=70)

1. Primary reninoma.
2. Bladder outlet obstruction index.
3. Function of epididymis.
4. Abdominal leak point pressure.
5. Solifenacin.
6. Blue light cystoscopy.
7. Familial prostate cancer.
8. Duckett's triad and PUV.
9. Cystinuria.
10. Levels of evidence.
