Reg. No.	Reg. No.								
----------	----------	--	--	--	--	--	--	--	--

MANIPAL ACADEMY OF HIGHER EDUCATION M.Ch. (UROLOGY) DEGREE EXAMINATION – JULY 2019 SUBJECT: PAPER I: BASIC SCIENCES AS APPLIED TO UROLOGY

Tuesday, July 09, 2019

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

- Nour answer should be specific to the questions asked.
- Z Draw neat labeled diagrams wherever necessary.
- ∠ Long Essays:
- 1. Discuss physiology of normal erection. Describe the principles of evaluation and management of a 40 year old diabetic male with erectile dysfunction.

(20 marks)

2. Discuss the evaluation and management of acute renal failure.

(20 marks)

- 3. Short Essays:
- 3A. Apoptosis.
- 3B. Positron Emission Tomography.
- 3C. Role of Botulinum toxin in Urology.
- 3D. Physiology of Male Urethral Sphinctor.
- 3E. Post-operative management of renal transplant recipient.
- 3F. Medical management of Urolithiasis.

Reg. No.

MANIPAL ACADEMY OF HIGHER EDUCATION

M.Ch. (UROLOGY) DEGREE EXAMINATION – JULY 2019

SUBJECT: PAPER II: GENERAL UROLOGY, FEMALE UROLOGY AND ANDROLOGY

Wednesday, July 10, 2019

Time: 14:00 - 17:00 Hrs.

Max. Marks: 100

- Answer should be specific to the questions asked.
- **∠** Draw neat labeled diagrams wherever necessary.
- ∠ Long Essays:
- 1. Discuss the recent advances in the management of castrate resistant prostate carcinoma.

(20 marks)

2. Describe current diagnostic, staging and management options of Urothelial tumours of the renal pelvis and ureter.

(20 marks)

- 3. Short Essays:
- 3A. Bladder preserving protocols in Ca. bladder
- 3B. Von-Hippel Lindau disease
- 3C. Management options in posterior urethral stricture
- 3D. Medical Management of Peyronie's Disease
- 3E. Mirabegron
- 3F. Failed pyeloplasty



Reg. No.

MANIPAL ACADEMY OF HIGHER EDUCATION

M.Ch. (UROLOGY) DEGREE EXAMINATION - JULY 2019

SUBJECT: PAPER III: OPERATIVE UROLOGY, URO-ONCOLOGY AND PAEDIATRIC UROLOGY

Thursday, July 11, 2019

Time: 14:00 - 17:00 Hrs.

Max. Marks: 100

- The answer should be specific to the questions asked.
- Draw neat labeled diagrams wherever necessary.
- ∠ Long Essays:
- 1. Discuss the post-radical prostatectomy management options for a patient with rising serum PSA.

(20 marks)

2. Describe the etiopathogeneis, clinical evaluation and management of undescended testis.

(20 marks)

- 3. Short Essays:
- 3A. Surgical approaches to the adrenal gland.
- 3B. Role of percutaneous biopsy in small renal masses.
- 3C. Partial orchidectomy for testicular mass.
- 3D. Role of narrow band imaging in non muscle invasive bladder cancer.
- 3E. Role of PET scanning in Urological malignancies.
- 3F. Immune check point inhibitors in metastatic urothelial malignancy.



Reg. No.	
----------	--

MANIPAL ACADEMY OF HIGHER EDUCATION

M.Ch. (UROLOGY) DEGREE EXAMINATION - JULY 2019

SUBJECT: PAPER IV: RECENT ADVANCES IN UROLOGY

Friday, July 12, 2019

Time: 14:00 - 17:00 Hrs.

Max. Marks: 100

- Z The answer should be specific to the questions asked.
- ∠ Long Essays:
- 1. Discuss the current status of Urodynamics in follow up of patients with neurogenic bladder.

(20 marks)

2. Describe recent advances in the systemic therapy in muscle invasive bladder cancer.

(20 marks)

- 3. Short Essays:
- 3A. Recent advances in surgical options for the enlarged, obstructing benign prostate.
- 3B. Current status of chemodenervation with Botox in the treatment of OAB.
- 3C. Current status of Proteomic Assay in CA prostate.
- 3D. Wisconsin Stone Quality of Life Questionnaire.
- 3E. Utility of Sex hormone binding globulin in hypogonadism and infertile male.
- 3F. Management of Penile urethral strictures.

