

MANIPAL ACADEMY OF HIGHER EDUCATION**MS (OTORHINOLARYNGOLOGY) DEGREE EXAMINATION – APRIL 2019****SUBJECT: PAPER I: BASIC SCIENCES RELATED OTOLARYNGOLOGY**

Tuesday, April 02, 2019

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essay:**

1. Discuss the anatomy of mucosal spaces and mucosal folds of middle ear with suitable diagrams.

(15 marks)

2. Describe the ultrastructure of nasal cilia and discuss the mucociliary clearance mechanism of paranasal sinuses.

(15 marks)

3. **Write short notes on:**

3A. Intranasal corticosteroids

3B. Interpretation of Electronystagmography

3C. Cerebello-pontine angle

3D. Evidence based medicine and its applications in ENT

3E. Restorative gene therapy

3F. Acoustic reflex

3G. Functions of Waldeyer's ring

3H. Rhinosporidium seeberi

3I. Microanatomy of the vocal cords

3J. Principle and uses of hyperbaric oxygen in ENT

(7 marks × 10 = 70 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION**MS (OTORHINOLARYNGOLOGY) DEGREE EXAMINATION – APRIL 2019****SUBJECT: PAPER II: PRINCIPLES AND PRACTICES OF OTOLARYNGOLOGY**

Wednesday, April 03, 2019

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays.**

1. Describe the clinical features, staging and management of juvenile nasopharyngeal angiofibroma.

(15 marks)

2. Discuss Wullstein's classification of tympanoplasty and describe various biomaterials used in ossiculoplasty.

(15 marks)

3. **Write short notes on:**

3A. Perilymph fistula

3B. Management of choanal atresia

3C. Hematoma auris

3D. Harold F. Schuknecht

3E. Kero's classification

3F. Rhinophyma

3G. Stennert Protocol

3H. Mastoid obliteration techniques

3I. Nasal bone fracture

3J. Management of vasomotor rhinitis

(7 marks × 10 = 70 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION**MS (OTORHINOLARYNGOLOGY) DEGREE EXAMINATION – APRIL 2019****SUBJECT: PAPER III: RECENT ADVANCES IN OTOLARYNGOLOGY AND HEAD NECK SURGERY**

Thursday, April 04, 2019

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays:**

1. Discuss the recent trends in cochlear implant surgery.
(15 marks)
2. Discuss the use of navigation system for endoscopic sinus surgery and their limitations.
(15 marks)

3. **Write short notes on:**

- 3A. Gene Therapy
- 3B. Sestamibi scan
- 3C. Fully implantable hearing aid
- 3D. Photodynamic therapy
- 3E. Role of highly selective embolization for vascular lesions in ENT
- 3F. Recent trends in swallowing rehabilitation
- 3G. KTP 532 laser in ENT
- 3H. Virtual endoscopy
- 3I. Bone cement for ossicular reconstruction
- 3J. Video-kymography

(7 marks × 10 = 70 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION**MS (OTORHINOLARYNGOLOGY) DEGREE EXAMINATION – APRIL 2019****SUBJECT: PAPER IV: GENERAL SURGICAL PRINCIPLES AND HEAD – NECK SURGERY**

Friday, April 05, 2019

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL questions.**

✍ **Draw neat-labeled diagrams/ flow charts wherever necessary.**

✍ **Long essay question:**

1. Discuss the clinical features and management of T3N1Mx post-cricoid malignancy in a 40-year-old female. (15 marks)

2. Discuss the complications of superficial parotidectomy. (15 marks)

3. **Short essay questions:**

3A. Factors affecting wound healing following major head & neck surgery

3B. Cricothyroidotomy

3C. Prevention and management of post-rigid esophagoscopy esophageal perforation

3D. Management of pharyngeal pouch

3E. Sulcus vocalis

3F. Lemierre's syndrome

3G. Surgical options for oral sub-mucous fibrosis

3H. Functional aphonia

3I. Fourth branchial pouch cyst

3J. Dysphagia lusoria

(7 marks × 10 = 70 marks)

