



Answer Booklet Number

1512586

STUDENTS TO WRITE APPROPRIATE INFORMATION BELOW :

Degree : MBBS Question Booklet No : EM09
Branch : MEDICINE Subject Code : BMS16302
Subject : OTO RHINO LARYNGOLOGY Semester : NON-SEMESTER
No of Pages used : 15 Date : 25/3/21 Session : FN

Signature of the Candidate

G. Jeyaraj 25/3/21
Invigilator's Signature

Chief Superintendent's Signature /
Facsimile with date

Bundle Number

STUDENTS TO FILL THIS AREA FIRST

Write your Register Number and shade the Circle with Blue or Black Ballpoint Pen only.

REGISTER NUMBER

1	7	2	0	1	1	1	0	5	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
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QUESTION NUMBERS / MARKS

PART - 2

Total Marks (in Words) by the Evaluator :

Degree : MBBS Branch : MEDICINE
Subject : OTO RHINO LARYNGOLOGY No. of pages used : 15
Semester : NON-SEMESTER

Bundle Number

Evaluator's Name : _____

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Q.No.	Marks	Q.No.	Marks	Q.No.	Marks
1		11		21	
2		12		22	
3		13		23	
4		14		24	
5		15		25	
6		16		26	
7		17		27	
8		18		28	
9		19		29	
10		20		30	
Total					

TOTAL MARKS

0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9



QUESTION NUMBERS / MARKS

PART - 3

Total Marks (in Words) by the Evaluator :

Degree : MBBS Branch : MEDICINE
Subject : OTO-RHINO-LARYNGOLOGY No. of pages used : 15
Semester : NON-SEMESTER

Bundle Number

Evaluator's Name : _____

Evaluator's Signature : _____

Q.No.	Marks	Q.No.	Marks	Q.No.	Marks
1		11		21	
2		12		22	
3		13		23	
4		14		24	
5		15		25	
6		16		26	
7		17		27	
8		18		28	
9		19		29	
10		20		30	
Total					

TOTAL MARKS

0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

INSTRUCTIONS TO THE CANDIDATES

1. No Additional sheets will be provided.
2. Check whether the Answer Book Number is clear & legible.
3. Check whether Answer Booklet consist of 40 / 10 pages.
4. Ensure whether the pages are stitched or stapled properly.
5. Fill in the particulars such as

For Example

- a) Degree : B.A./B.Sc./B.Com./B.Tech./B.Arch./B.Ed./B.D.S/M.A./M.Sc./
M.Com./M.Tech./M.Arch./M.D.S/M.Phil./MBA/MCA/MBBS/BPT/
B.Pharm/D.Pharm, etc
- b) Branch : CSE / ECE / F.D / V.C / Ind. Bio - Tech. / Mech. / Prod. / Nursing / etc.
- c) Semester : I / II / III / IV / V / VI / VII / VIII / IX / X
- d) Subject Code : As per the University
- e) Subject : Name of the Subject
- f) Question Paper No. : Given in the Question Book
- g) Date : The date on which the exam is attended
- h) Session : Mention the exam is conducted during Fore Noon or After Noon (FN/AN)
- i) No. of pages : Total No. of pages used in the Answer Book for writing the exam.

Note : Do not write Name anywhere on the Answer Sheet.
Do not write your Register Number excepting the space provided.

6. Use both side of the Answer Book for writing.
7. Answers must be written in blue / black ink only.
8. Do not write in the margin.
9. Possession of ID card & Exam Hall Ticket is mandatory and has to be produced on demand.
10. Log Books, Reference Tables, hand Books, etc., must be attested by the Dept. HOD / Chief Superintendent / Hall Superintendent.
11. Borrowing is strictly prohibited.
12. Candidates are not allowed to enter the examinations hall 30 minutes after commencement of the exam and should not leave the hall during first 30 minutes.
13. Distinguishing Mark on the Answer Sheet for identifications is prohibited & punishable.
14. Possession of any incriminating material like Digital Memory Devices such as Cell Phones, Pagers, Programmable Calculators, etc and Malpractice of any nature is punishable as per rules.

ESSAY :-

1.)

STRIDOR :-

→ Noisy Respiration due to blockage or narrowing obstruction in air passages.

STRIDOR can be

- Intrinsic stridor → due to supraglottic narrowing
- Extrinsic stridor → due to larynx, pharynx
- Biphaseic stridor → due to glottic and subglottic anomaly.

CAUSES

1.) CONGENITAL

- Laryngomalacia
- Laryncocoele
- Vocal cord paralysis
- Stenosis, Atresia → Acute epiglottitis

ACQUIRED

• FEBRILE

- Retropharyngeal abscess
- Peritonsillar abscess
- Diphtheria
- Tuberculosis
- Tracheo-oesophageal fistula

CAUSES

2

- TONGUE → Due to Macroglossia
- Microstomia, ~~inward~~

LARYNX

→ Congenital :-

Laryngo malacia, laryngocele, Vocal cord paralysis, Acute epiglottitis, ~~laryngeal~~ laryngeal cyst, laryngoesophagitis, laryngeal web.

→ Inflammatory :-

laryngeal edema, cyst, swelling, surgery

→ Neoplastic :- laryngeal sarcoma, carcinoma

→ Trauma :- Foreign body, injury due to surgical procedure etc

TRACHEA :-

CONGENITAL :-

Tracheal Stenosis, Atresia etc.

Inflammatory :-

Tracheal obstruction, edema,

~~Neoplastic~~ Tracheobronchitis,

Neoplastic :- Tumors of Trachea

Trauma :- Vertical Rings, foreign body obstruction.

BRONCHI:-

→ Tracheobronchial fistula, oedema etc.

FOREIGN BODY IN AIRWAY.

1.) General management.

In case of a foreign body passed through Pyloric sphincter, it can pass through rest of the parts easily. The stool of the patients is examined for foreign body. No additional purgatives should be given.

→ ~~oecoph~~ Measures should be taken if it is not excreted within 48 hrs

→ (or) Any sharp foreign body which can tear the structures

→ (or) particle size is large and is in child of less than 2 years of age

→ (or) Any abdominal pain or Discomfort.

DEBOPHAGOSCOPY:-

→ It is the most suitable method to Remove small foreign body.

→ Soft boneless structures (or) Vegetable matter should be removed by Flexible fibroptic

oesophagoscopy .

→ Hard objects can be removed by rigid oesophagoscopy .

→ ~~The head~~

→ In case of sharp objects, an incision should be made to remove the object to prevent damage of tissues .

→ Sudden bolus obstruction should be removed immediately

→ The patient should bend backwards
In case of partial obstruction, it should not be followed as it may cause complete obstruction .

Heimlich manoeuvre :-

→ Stand behind the patient and hold behind the lower part of chest and give four strong compression to ~~the~~ Remove the foreign body ^{as} the air already present push the food outwards .

In case of failure of this method, immediate removal by ~~endoscopy~~ oesophagoscopy should be done.

→ The obstructed foreign body can be visualised by an endoscopy, x-ray of chest, lateral view to identify and type of foreign body, site (or) location.

→ Tracheostomy → To maintain the airway.

DETAILED ANSWER :-

3) Types of Tympanoplasty :-

TYPE I TYMPANOPLASTY :-

→ All the ossicles are in contact with each other. The graft is placed on the tympanic membrane (MYRINGOPLASTY)

TYPE II TYMPANOPLASTY :- (M-I-S)

→ Malleus is erodes. Incus and Stapes are in contact.

→ The graft is placed on contact with incus for ~~rest~~ ^{cu} actual continuity.

TYPE III TYMPANOPLASTY: - (M, I, S^{II})

- The malleus and Incus are eroded
- only the head of stapes is present.
- The graft is placed in contact with the head of the stapes.

This is known as myringostapedopexy
(or) columellar tympanoplasty

TYPE IV TYMPANOPLASTY: -

- Malleus, Incus, and staped^s head is absent.

→ only the stapes foot plate is present
 → A graft is placed in such a manner that the oval window and round window does not move simultaneously
 This is known as Round window Shielding effect.

TYPE V TYMPANOPLASTY: -

- It is known as 'FENESTRATION OPERATION'
- It is not followed nowadays.
 Another window is created on the horizontal semi circular canal.

MATERIALS USED IN MYRINGOPLASTY.

GRAFT

- Temporalis fascia graft
- Alar fascia
- ~~Pericardium~~ perichondrium of Pinna, nasal septum
- capillaries
- Veins etc.
- Tragal & ~~etc~~ cartilage.

5) Indications & complications of FESS.

INDICATIONS :-

These are three type of Indications
Absolute, Relative and in other surgeries.

ABSOLUTE INDICATIONS :-

- In Recurrent Acute otitis media ~~with~~ ^{where} there is pain, discharge.
- In Recurrent Bacterial sinusitis
- Chronic Bacterial Sinusitis
- sinusitis with epileptic seizures
- Fungal sinusitis
- Antrochoanal polyp.
- Removal of foreign body
- Recurrent epistaxis.
- Ethmoidal polyp
- DNS

→ Acute sinusitis with Recurrent episodes

Relative Indications:-

- ~~dent~~ Diphtheria carriers
- Streptococcal carriers
- Staphylococcal carriers.

In other surgeries :-

- In palatoglossopharyngeal surgery
- In Removal of styloid process in eagles syndrome.

COMPLICATIONS OF FESS :

MAJOR :-

- 1.) orbital cellulitis
- 2.) loss of vision
- 3.) Diplopia
- 4.) Brain abscess
- 5.) Meningitis
- 6.) Intracranial ^{hemorrhage} ~~extensions~~
- 7.) Intraorbital extensions
- 8.) Abscess
- 9.) Death.

MINOR

- Peritonsillar emphysema
- laryngeal stenosis
- Tracheal stenosis
- Retropharyngeal abscess
- lung complications etc.

6) SEPTAL PERFORATION :-

→ It is the perforation of septum due to any underlying etiology.

CAUSES :-

- 1.) Trauma
 - 2.) Septal surgery (SMR, Septoplasty)
 - 4.) Tuberculosis
 - 5.) leprosy
 - 6.) syphilis
- } perforation of bony septum
- } perforation of cartilagenous septum
- 7.) Wegers granulomatosis → causing perforation of both bony and cartilagenous septum.
- 8.) chronic infections for prolonged period

→ It is caused due to erosion of nasal septum ~~and~~ of both bony and cartilaginous part.

→ septal hematoma ~~from~~ if left untreated for septal abscess and causing septal perforation

MANAGEMENT:-

- control of causative agent (eg) TB,
- Syphilis
- ~~Ant~~ Antibiotic therapy
- Sialastic Buttons are placed in areas of septal perforation.

4) Causes & Management of Sudden sensorineural hearing loss:-

CAUSES

congenital causes

- Mickle's disease - whole of organ of Corti is destroyed
- ~~Birger~~
- Any deafness exceeds $>30\text{dB}$ in 3 consecutive findings indicate Sudden sensorineural hearing loss

ACQUIRED CAUSES:-

- ototoxic drugs
- Meiere's disease
- Trauma
- Acoustic neuroma
- Hemorrhage
- Drug abuse
- Systemic disorders like hypertension, Diabetes
- cytogenic
- Neurogenic
- miscellaneous.

MANAGEMENT:-

INVESTIGATIONS:-

- Rinne's test (+) ~~ABC~~
- Weber is lateralised to better ear
- ABC test:- shortened.
- In case of SNHL (MANAGEMENT)
 - Hearing aids, cochlear implants
 - Organ of Corti Reconstruction in case of Trauma
 - Bed Rest
 - IV fluids.
 - Patient is kept in cool temperature
 - as he can cause dizziness

2.) CAUSES AND INVESTIGATIONS OF DEAF MUTISM:

CAUSES :-

→ untreated ^{congenital} deafness before 6 months of age. The vocal functions are good but due to deafness the child doesn't try to communicate

congenital causes

- SNHL
- Meiners disease
- Acoustic neuroma

→ Acquired causes

→ Perinatal causes.

- Hypoxia
- Forceful delivery
- Birth infection

MATERNAL CAUSES :-

- Maternal infections, deficiencies
- Trauma during birth
- Radiations
- Birth asphyxia
- Low Birth weight
- Ototoxic drugs
- TORCH infections
- Dysphasia

INVESTIGATIONS:- - ABC Test

- Distraction method
- child is asked to pick objects
- Acoustic Reflex test
- child Response is tested
- Impedence Audiometry

SHORT - ANSWERS

7) REFERRED OTALGIA

- Temporomandibular joint infection
- Quinsy (Peritonsillar abscess)
- Eagles syndrome
- TB spine

8) EAGLE'S SYNDROME

- Elongation of styloid process is known as EAGLE'S SYNDROME
- ~~calcification~~ ^{strengthening} of stylohyoid muscle
- Normal styloid process is 2.5cm and size above 3cm is elongation

→ It causes otalgia due to (glossopharyngeal nerve) pressing on the 9th cranial nerve.

→ It can be treated by surgical

Removal of styloid process or section of 9th nerve.

INVESTIGATION:- CT, XRAY

9)

Acute membranous tonsillitis :-

- It is white membrane over the tonsils caused by ^{H. influenzae} ~~tonsillar~~ infection
- It does not bleed on Removal
- Symptoms may be less severe & less pain
- It Resolves ^{spontaneously} on treatment of Infections
- most common in school going children
- membrane is localized

Diphtheria :-

- It is also white membrane over tonsils. Droplet infections
- It is caused by *Corynebacterium diphtheria*
- It ~~bte~~ remains stiff on tonsil surface and bleed on Removing
- Symptoms may be painful and ~~more~~ more severe.

10)

Rhinolith :-

- Stone (or) calcific deposits on the nasal cavity is known as Rhinolith
- It is seen in adults.
- It consist of calcium and Magnesium deposits CaCO_3 , $\text{Mg}(\text{PO}_4)_2$, CaHPO_4 etc.
- It causes Foul-smelling discharge
- unilateral nasal obstruction.

→ It causes Recurrent epistaxis

→ It can be due to complication of CSOM

TREATMENT :- It includes Removal and treatment of underlying causes .

11) INDICATIONS OF CALDWELL LUC SURGERY :-

- 1) Presence of squamous epithelium in the middle ear .
- 2) CSOM which is not controlled by any medical measures
- 3) Aero-otitis media
- 4) Otitis media with effusion

11) INDICATIONS OF CALDWELL LUC SURGERY :-

- 1) ~~Antrochoanal polyp~~ Antrochoanal polyp .
- 2) oro-antral fistula
- 3) Vidian neurectomy
- 4) Removal of foreign body .

