

INI CET ENT

Sample Paper – 2

Duration: 14 Minutes

Maximum Marks: 15

Instructions

- This paper contains **15** Multiple Choice Questions (Single Best Response), modelled on the ENT (Otorhinolaryngology) content of **INI CET** (Institutes of National Importance Combined Entrance Test) conducted by AIIMS New Delhi.
- The **15-question** length matches the number of ENT items you actually meet in the real 200-question paper.
- Each correct answer carries **+1 mark**. There is **negative marking of one-third (0.33) mark** for every incorrect answer; unattempted questions carry no penalty.
- Every question has **exactly one best answer**. Choose the single most appropriate option.
- Attempt this practice paper in one timed sitting of about **14 minutes**, the pace the real computer-based test demands.

Otology and Hearing

Q1. A 5-year-old with an upper respiratory infection develops earache, fever and a bulging red tympanic membrane. This acute suppurative otitis media typically passes through a stage of tubal occlusion, then presupuration, suppuration and resolution. The single commonest bacterial cause is:

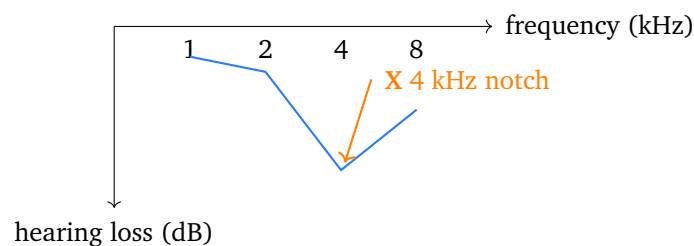
- (A) *Pseudomonas aeruginosa*
- (B) *Streptococcus pneumoniae*
- (C) *Escherichia coli*
- (D) *Candida albicans*



Q2. A 40-year-old has recurrent attacks of spinning vertigo lasting minutes to hours, together with a fluctuating low-frequency sensorineural hearing loss and tinnitus, and a sense of aural fullness. The most likely diagnosis is:

- (A) Meniere disease (endolymphatic hydrops)
- (B) Otosclerosis
- (C) Acute otitis media
- (D) Bell's palsy

Q3. The pure-tone audiogram below is from a factory worker with long-term loud-noise exposure. It shows a selective dip at **4 kHz** that recovers slightly at 8 kHz. This 4 kHz notch (marked **X**) is characteristic of:



- (A) Noise-induced hearing loss
- (B) A conductive hearing loss
- (C) Otosclerosis with a Carhart notch
- (D) Normal age for age hearing

Rhinology and Paranasal Sinuses

Q4. A patient has seasonal sneezing, watery rhinorrhoea, nasal itching and watery eyes, with pale boggy nasal mucosa and raised specific IgE. This allergic rhinitis is a type I hypersensitivity reaction. The most appropriate first-line pharmacological treatment is:

- (A) A prolonged course of oral broad-spectrum antibiotics
- (B) Intranasal corticosteroids with oral antihistamines
- (C) Long-term oral decongestants alone



(D) Systemic antifungal therapy

Q5. A child has a single, smooth, greyish, insensitive polyp arising from the maxillary antrum, passing through the ostium and hanging in the nasopharynx, giving unilateral nasal obstruction. This antrochoanal polyp is best distinguished from bilateral ethmoidal polyps, which are:

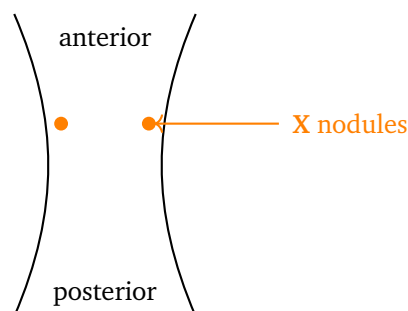
- (A) Always unilateral and vascular
- (B) Multiple and bilateral, arising from the ethmoidal sinuses
- (C) Confined to the maxillary antrum only
- (D) Solitary and arising from the nasal septum

Q6. After head trauma a patient has clear watery fluid dripping from one nostril that increases on bending forward. To confirm that this is cerebrospinal fluid rhinorrhoea, the most specific laboratory test is detection of:

- (A) Glucose on a urine dipstick alone
- (B) Serum C-reactive protein
- (C) Beta-2 transferrin in the fluid
- (D) A raised total leucocyte count

Laryngology and the Airway

Q7. A professional singer has chronic hoarseness. Laryngoscopy shows small symmetrical swellings on both vocal cords at the point marked X. These vocal (singer's) nodules classically sit at the junction of the:



- (A) Posterior commissure and the arytenoids



- (B) Middle and posterior thirds of the cords
- (C) Aryepiglottic fold and the false cords
- (D) Anterior third and the posterior two-thirds of the cords

Q8. A healthy neonate has inspiratory stridor that worsens when supine and on crying but improves when prone, with normal cry and feeding, and settles by 18 to 24 months. Laryngoscopy shows an omega-shaped epiglottitis with collapse on inspiration. The commonest cause of this congenital stridor is:

- (A) Bilateral vocal cord palsy
- (B) A laryngeal web
- (C) Laryngomalacia
- (D) Subglottic haemangioma

Oral Cavity, Pharynx and Head-Neck Oncology

Q9. A long-term tobacco chewer has an adherent white patch on the buccal mucosa that cannot be wiped off and cannot be attributed to any other disease. This oral leukoplakia is important mainly because it is:

- (A) A potentially malignant (pre-malignant) lesion
- (B) A harmless colour change of no consequence
- (C) An acute bacterial infection
- (D) A congenital developmental anomaly

Q10. A middle-aged adult has a slow-growing, painless, mobile lump in the tail of the parotid gland with a normal overlying facial nerve. The commonest benign tumour of the parotid, which this represents, is:

- (A) Adenoid cystic carcinoma
- (B) Mucoepidermoid carcinoma
- (C) Warthin tumour
- (D) Pleomorphic adenoma (benign mixed tumour)



- Q11.** A patient with a lower molar dental infection develops a rapidly spreading, tense, bilateral swelling of the submandibular and sublingual region with a raised, firm floor of mouth and a protruded tongue. This Ludwig angina is a surgical emergency mainly because of the risk of:
- (A) Permanent facial nerve palsy
 - (B) Sudden sensorineural hearing loss
 - (C) Chronic nasal obstruction
 - (D) Airway obstruction from tongue and floor-of-mouth swelling

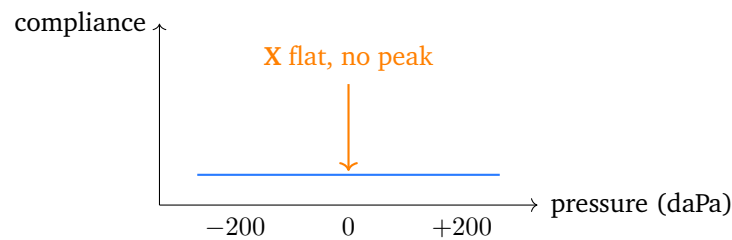
Paediatric ENT and Emergencies

- Q12.** A 4-year-old has abrupt high fever, severe sore throat, muffled voice, drooling of saliva and sits leaning forward on the hands (tripod position). Attempts to examine the throat are avoided for fear of complete obstruction. The most likely diagnosis is:
- (A) Acute epiglottitis, classically from *Haemophilus influenzae* type b
 - (B) Simple viral common cold
 - (C) Allergic rhinitis
 - (D) Chronic tonsillitis
- Q13.** A 2-year-old, a few days after a throat infection, has fever, refusal to feed, neck stiffness with the neck held extended, and a bulge on one side of the posterior pharyngeal wall; a lateral neck X-ray shows widened prevertebral soft tissue. The most likely diagnosis is:
- (A) Peritonsillar abscess (quinsy)
 - (B) Acute laryngotracheobronchitis (croup)
 - (C) Retropharyngeal abscess
 - (D) Ludwig angina

Audiology and Vestibular Assessment



- Q14.** The tympanogram below is from a child with a dull, retracted drum and reduced hearing. The trace is a flat line with no peak (type B, marked X). This pattern is most consistent with:



- (A) A completely normal middle ear
(B) Otosclerosis with a peak at negative pressure
(C) Middle-ear effusion (secretory otitis media)
(D) A patulous Eustachian tube
- Q15.** A 50-year-old has slowly progressive unilateral sensorineural hearing loss with tinnitus and poor speech discrimination out of proportion to the pure-tone loss. Gadolinium MRI shows a mass at the cerebellopontine angle. The most likely diagnosis is:
- (A) Otosclerosis
(B) Vestibular schwannoma (acoustic neuroma)
(C) Benign paroxysmal positional vertigo
(D) Presbycusis



Detailed Solutions

Q1.

Solution

Concept – acute suppurative otitis media: This is a bacterial infection of the middle-ear cleft, usually spreading from the nasopharynx through the Eustachian tube in a child with a cold.

Step 1 – recall the stages: It classically evolves through tubal occlusion, presup-puration (the drum turns red and bulges), suppuration (pus, and possible drum perforation) and finally resolution.

Step 2 – name the commonest organism: The single most common bacterial cause is *Streptococcus pneumoniae*, followed by *Haemophilus influenzae* and *Moraxella catarrhalis*.

Why the other options are wrong:

- A, *Pseudomonas*: is typical of chronic suppurative otitis media and otitis externa, not the acute pneumococcal infection.
- C, *Escherichia coli*: is a gut and urinary organism, not a common middle-ear pathogen.
- D, *Candida*: is a fungus that causes otomycosis of the ear canal, not acute suppurative otitis media.

Final Answer: *Streptococcus pneumoniae* ⇒ B

Answer: (B) [Go Back to Q1](#)

Q2.

Solution

Concept – Meniere disease: Meniere disease is caused by an excess of endolymph (endolymphatic hydrops) in the inner ear.

Step 1 – recall the triad: It is defined by the triad of **episodic rotatory vertigo**, **fluctuating sensorineural hearing loss** (typically low frequency early on) and **tinnitus**, often with a sense of aural fullness.

Step 2 – match the case: Attacks lasting minutes to hours with all three features fit Meniere disease precisely.

Why the other options are wrong:

- B, otosclerosis: gives a painless progressive *conductive* loss, not episodic ver-



tigo with fluctuating sensorineural loss.

- C, acute otitis media: is a painful febrile infection of the middle ear, not recurrent vertigo.
- D, Bell's palsy: is a lower-motor-neuron facial weakness, not a vestibular disorder.

Final Answer: Meniere disease $\Rightarrow$ A

Answer: (A) [Go Back to Q2](#)

Q3.

Solution

Concept – noise-induced hearing loss: Prolonged exposure to loud noise damages the outer hair cells of the cochlea, especially at the basal turn.

Step 1 – read the audiogram: The tracing shows a selective sensorineural dip at 4 kHz (the X notch) with partial recovery at 8 kHz, the hallmark of noise-induced hearing loss.

Step 2 – the mechanism: The 4 kHz region of the cochlea is most vulnerable because of the resonance of the ear canal and its relatively poor blood supply.

Why the other options are wrong:

- B, conductive loss: would show an air-bone gap with normal bone conduction, not an isolated high-frequency notch.
- C, Carhart notch of otosclerosis: is a bone-conduction dip at 2 kHz, not a 4 kHz notch, and belongs to a conductive picture.
- D, normal hearing: a clear 4 kHz dip is abnormal and points to noise damage.

Final Answer: Noise-induced hearing loss $\Rightarrow$ A

Answer: (A) [Go Back to Q3](#)

Q4.

Solution

Concept – allergic rhinitis: Allergic rhinitis is an IgE-mediated **type I hypersensitivity** reaction of the nasal mucosa to inhaled allergens.

Step 1 – confirm the diagnosis: Seasonal sneezing, watery rhinorrhoea, nasal itching and watery eyes with pale boggy mucosa and raised specific IgE are typical.

Step 2 – choose the treatment: First-line control combines **intranasal corticosteroids**.



teroids (the most effective single agent) with **oral antihistamines**, along with allergen avoidance.

Why the other options are wrong:

- A, prolonged antibiotics: are useless because this is an allergic, not a bacterial, condition.
- C, long-term oral decongestants alone: risk rebound and do not treat the underlying allergy.
- D, systemic antifungals: have no role in allergic rhinitis.

Final Answer: Intranasal corticosteroids with oral antihistamines ⇒ **B**

Answer: (B) [Go Back to Q4](#)

Q5.

Solution

Concept – nasal polyps: Nasal polyps are oedematous prolapses of sinus mucosa; the two classic patterns are the antrochoanal polyp and bilateral ethmoidal polyps.

Step 1 – characterise each type: The **antrochoanal polyp** is usually solitary, arises from the maxillary antrum, and is common in children. **Ethmoidal polyps** are **multiple and bilateral** and arise from the ethmoidal sinuses in adults.

Step 2 – select the contrast: The feature that distinguishes ethmoidal polyps from the antrochoanal polyp is that they are multiple and bilateral, arising from the ethmoid sinuses.

Why the other options are wrong:

- A, always unilateral and vascular: ethmoidal polyps are bilateral and avascular, not vascular.
- C, confined to the maxillary antrum: describes the antrochoanal polyp, not the ethmoidal one.
- D, arising from the septum: polyps arise from the lateral wall and sinuses, not the septum.

Final Answer: Multiple and bilateral, arising from the ethmoidal sinuses ⇒ **B**

Answer: (B) [Go Back to Q5](#)



Q6.

Solution

Concept – cerebrospinal fluid rhinorrhoea: A breach of the skull base after trauma can let cerebrospinal fluid leak into the nose.

Step 1 – pick the confirmatory test: The most specific marker is **beta-2 transferrin**, a protein found in cerebrospinal fluid (and perilymph) but not in ordinary nasal secretions, so its presence confirms the fluid is cerebrospinal fluid.

Step 2 – why it is preferred: It is far more reliable than the old bedside glucose test, which gives false positives from nasal mucus contamination.

Why the other options are wrong:

- A, urine glucose dipstick: is non-specific and easily fooled by nasal secretions.
- B, serum C-reactive protein: reflects inflammation, not a cerebrospinal fluid leak.
- D, a raised leucocyte count: indicates infection, not the presence of cerebrospinal fluid.

Final Answer: Beta-2 transferrin in the fluid ⇒ C

Answer: (C) [Go Back to Q6](#)

Q7.

Solution

Concept – vocal (singer's) nodules: Vocal nodules are bilateral, symmetrical swellings caused by chronic voice abuse and phonotrauma, common in singers and teachers.

Step 1 – locate them: They classically form at the **junction of the anterior third and the posterior two-thirds** of the vocal cords (the **X** points), which is the point of maximum vibratory contact.

Step 2 – the management: Voice rest and speech therapy are first-line; surgical excision is reserved for persistent nodules.

Why the other options are wrong:

- A, posterior commissure and arytenoids: is the site of contact ulcers, not vocal nodules.
- B, middle and posterior thirds: is not the classic contact point for nodules.



- C, aryepiglottic fold and false cords: are supraglottic structures, not the true-cord site of nodules.

Final Answer: Anterior third and the posterior two-thirds of the cords ⇒ D

Answer: (D) [Go Back to Q7](#)

Q8.

Solution

Concept – laryngomalacia: Laryngomalacia is a floppiness of the supraglottic larynx that collapses inward on inspiration.

Step 1 – match the picture: Inspiratory stridor that worsens supine and on crying but eases when prone, with a normal cry and feeding, an omega-shaped epiglottis and spontaneous resolution by about 2 years, is classic. It is the **commonest cause of congenital stridor** in infants.

Step 2 – the course: Most cases are mild and self-limiting; surgery (supraglottoplasty) is needed only for severe feeding or breathing difficulty.

Why the other options are wrong:

- A, bilateral vocal cord palsy: gives a weak cry and severe airway distress, not this benign positional stridor.
- B, laryngeal web: causes a weak or abnormal cry from birth, not the omega epiglottis picture.
- D, subglottic haemangioma: often worsens over the first months and may show cutaneous haemangiomas, unlike self-limiting laryngomalacia.

Final Answer: Laryngomalacia ⇒ C

Answer: (C) [Go Back to Q8](#)

Q9.

Solution

Concept – oral leukoplakia: Leukoplakia is a clinical term for a white patch of the oral mucosa that cannot be rubbed off and cannot be ascribed to any other definable disease.

Step 1 – state its importance: Its main significance is that it is a **potentially malignant (premalignant) lesion**, carrying a real risk of transformation to squamous cell carcinoma.



Step 2 – the action: Biopsy is needed to look for dysplasia, and risk factors such as tobacco chewing and smoking must be stopped.

Why the other options are wrong:

- B, harmless colour change: is wrong; leukoplakia carries malignant potential and must not be ignored.
- C, acute bacterial infection: leukoplakia is a chronic mucosal change, not an acute infection.
- D, congenital anomaly: it is an acquired lesion linked to tobacco and irritation, not congenital.

Final Answer: A potentially malignant (premalignant) lesion ⇒ A

Answer: (A) [Go Back to Q9](#)

Q10.

Solution

Concept – parotid tumours: Most salivary gland tumours arise in the parotid, and most parotid tumours are benign.

Step 1 – name the commonest: The commonest benign parotid tumour is the **pleomorphic adenoma** (benign mixed tumour), which presents as a slow-growing, painless, mobile lump with a normal facial nerve.

Step 2 – the caution: It is treated by superficial parotidectomy; simple enucleation is avoided because it recurs and it can undergo malignant change if long-standing.

Why the other options are wrong:

- A, adenoid cystic carcinoma: is a malignant tumour with perineural spread, not a benign lump.
- B, mucoepidermoid carcinoma: is the commonest *malignant* salivary tumour, not the commonest benign one.
- C, Warthin tumour: is benign but far less common than pleomorphic adenoma and typically occurs in older male smokers.

Final Answer: Pleomorphic adenoma ⇒ D

Answer: (D) [Go Back to Q10](#)



Q11.

Solution

Concept – Ludwig angina: Ludwig angina is a rapidly spreading cellulitis of the submandibular and sublingual spaces, usually from a lower molar dental infection.

Step 1 – recognise the danger: The tense bilateral swelling elevates the floor of the mouth and pushes the tongue up and back, so the chief threat is **airway obstruction**.

Step 2 – the management: It is a surgical emergency needing airway protection, intravenous antibiotics and surgical drainage.

Why the other options are wrong:

- A, facial nerve palsy: is not a feature of Ludwig angina.
- B, sudden sensorineural hearing loss: is an inner-ear problem unrelated to this floor-of-mouth infection.
- C, chronic nasal obstruction: is a nasal complaint, not a consequence of Ludwig angina.

Final Answer: Airway obstruction from tongue and floor-of-mouth swelling ⇒ **D**

Answer: (D) [Go Back to Q11](#)

Q12.

Solution

Concept – acute epiglottitis: Acute epiglottitis is a rapidly progressive inflammation of the epiglottis that can obstruct the airway within hours.

Step 1 – read the signs: Abrupt high fever, severe sore throat, a muffled 'hot potato' voice, drooling and the forward-leaning **tripod position** in a young child are classic, and the disease is typically caused by *Haemophilus influenzae* type b.

Step 2 – the safe approach: Do not examine the throat with a spatula, as this can precipitate complete obstruction; secure the airway first, then give intravenous antibiotics.

Why the other options are wrong:

- B, common cold: is a mild self-limiting illness without drooling or airway threat.
- C, allergic rhinitis: causes sneezing and rhinorrhoea, not high fever with drooling.



- D, chronic tonsillitis: is a recurrent low-grade throat problem, not an acute airway emergency.

Final Answer: Acute epiglottitis from *Haemophilus influenzae* type b $\Rightarrow$ A

Answer: (A) [Go Back to Q12](#)

Q13.

Solution

Concept – retropharyngeal abscess: In a young child, pus can collect in the retropharyngeal space, usually after an upper respiratory infection suppurates the prevertebral lymph nodes.

Step 1 – match the features: Fever, refusal to feed, a stiff extended neck, a unilateral bulge of the posterior pharyngeal wall and **widened prevertebral soft tissue** on a lateral neck X-ray define a retropharyngeal abscess.

Step 2 – the management: It needs incision and drainage plus intravenous antibiotics, with attention to the airway.

Why the other options are wrong:

- A, peritonsillar abscess: pushes the tonsil and uvula, causing trismus, rather than bulging the posterior pharyngeal wall.
- B, croup: gives a barking cough and inspiratory stridor, not a retropharyngeal bulge.
- D, Ludwig angina: is a submandibular floor-of-mouth cellulitis, not a posterior pharyngeal collection.

Final Answer: Retropharyngeal abscess $\Rightarrow$ C

Answer: (C) [Go Back to Q13](#)

Q14.

Solution

Concept – tympanometry: Tympanometry measures how the tympanic membrane and middle ear respond to changing ear-canal pressure, plotting compliance against pressure.

Step 1 – read the trace: A flat line with no peak (type B, marked X) indicates a stiff, immobile drum, most consistent with a **middle-ear effusion** (secretory otitis media, 'glue ear').



Step 2 – correlate clinically: This fits a child with a dull, retracted drum and a conductive hearing loss.

Why the other options are wrong:

- A, normal middle ear: would give a type A peak at around zero pressure, not a flat trace.
- B, otosclerosis: typically gives a shallow type As curve with a present but reduced peak, not a flat type B.
- D, patulous Eustachian tube: gives compliance swings with breathing, not a flat trace of effusion.

Final Answer: Middle-ear effusion (secretory otitis media) ⇒ C

Answer: (C) [Go Back to Q14](#)

Q15.

Solution

Concept – vestibular schwannoma (acoustic neuroma): This is a benign tumour of the Schwann cells of the vestibular nerve, growing at the cerebellopontine angle.

Step 1 – match the features: Slowly progressive **unilateral** sensorineural hearing loss with tinnitus and speech discrimination that is poorer than the pure-tone loss would predict is the classic warning combination.

Step 2 – confirm it: **Gadolinium-enhanced MRI** is the investigation of choice and shows the cerebellopontine angle mass.

Why the other options are wrong:

- A, otosclerosis: causes a bilateral *conductive* loss, not a unilateral sensorineural one with a mass.
- C, benign paroxysmal positional vertigo: gives brief positional vertigo with normal hearing, not progressive unilateral deafness.
- D, presbycusis: is a symmetrical age-related high-frequency loss, not a unilateral cerebellopontine angle lesion.

Final Answer: Vestibular schwannoma (acoustic neuroma) ⇒ B

Answer: (B) [Go Back to Q15](#)



Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	B	2	A	3	A	4	B	5	B
6	C	7	D	8	C	9	A	10	D
11	D	12	A	13	C	14	C	15	B

