

INI CET ENT

Sample Paper – 6

Duration: 14 Minutes

Maximum Marks: 15

Instructions

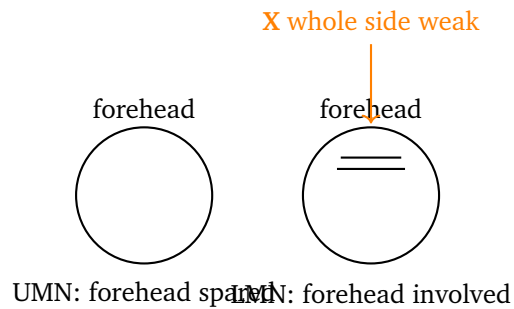
- This paper contains **15** Multiple Choice Questions (Single Best Response), modelled on the ENT (Otorhinolaryngology) content of **INI CET** (Institutes of National Importance Combined Entrance Test) conducted by AIIMS New Delhi.
- The **15-question** length matches the number of ENT items you actually 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.** On examining the ear of a patient with a long history of chronic otitis media, you see chalky-white, horseshoe-shaped plaques deposited within the substance of the tympanic membrane. These represent hyaline degeneration and calcification of the drum, and the condition is called:
- (A) Tympanosclerosis
(B) Otomycosis
(C) Bullous myringitis
(D) An attic cholesteatoma
- Q2.** A patient wakes with sudden weakness of one side of the face and cannot wrinkle the forehead or close the eye on that side, with no limb weakness



or other deficit. The schematic below contrasts the two lesion patterns; graded by the House-Brackmann scale, this presentation indicates:



- (A) An upper motor neuron facial palsy, in which the forehead is spared
- (B) A lesion of the trigeminal (fifth) nerve
- (C) A lower motor neuron facial (Bell) palsy, in which the forehead is involved
- (D) A hemispheric stroke with facial sparing

Q3. A patient complains of an intensely itchy, blocked ear. On otoscopy the canal is filled with damp debris resembling wet blotting paper, studded with black fruiting heads. The most likely organism is:

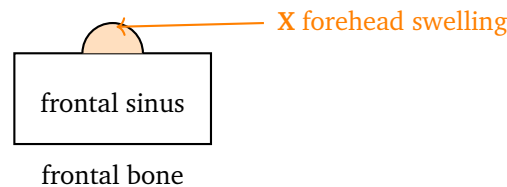
- (A) *Pseudomonas aeruginosa*
- (B) *Aspergillus niger* (otomycosis)
- (C) *Streptococcus pyogenes*
- (D) *Staphylococcus aureus*

Rhinology and Paranasal Sinuses

Q4. A patient from a rural area presents with a friable, reddish, strawberry-like polypoidal mass in the nose that bleeds readily on touch and shows sporangia on histology. The causative organism is:

- (A) *Rhinosporidium seeberi* (rhinosporidiosis)
- (B) *Klebsiella rhinoscleromatis*
- (C) *Mucor* species
- (D) *Bacillus of leprosy*

- Q5.** An elderly hypertensive man has profuse bleeding from the back of the nose that trickles into the throat and is hard to localise anteriorly. This posterior epistaxis characteristically arises from the:
- (A) Little's area (Kiesselbach plexus)
 - (B) Woodruff plexus in the posterior part of the inferior meatus
 - (C) Anterior ethmoidal artery on the roof
 - (D) Nasal vestibule skin
- Q6.** A teenager with neglected frontal sinusitis develops a tender, soft, boggy swelling over the forehead. The schematic marks the swelling at **X**. This subperiosteal collection over an osteomyelitic frontal bone is known as:



- (A) A simple sebaceous cyst
- (B) An acute frontal headache with no bony involvement
- (C) A dental abscess pointing on the face
- (D) Pott puffy tumour (frontal osteomyelitis with subperiosteal abscess)

Laryngology and the Airway

- Q7.** A professional singer with chronic voice abuse and acid reflux develops a hoarse voice. Laryngoscopy shows a granular ulcerated lesion over the vocal process of the arytenoid at the posterior part of the cords. The most likely diagnosis is:
- (A) A vocal nodule at the anterior third of the cords
 - (B) Reinke oedema of the whole cord
 - (C) A retention cyst of the cord
 - (D) A contact ulcer (contact granuloma) of the posterior cords



Q8. A conscious adult suddenly clutches the throat during a meal, cannot speak or cough, and is deeply distressed with a foreign body impacted in the larynx. The immediate first-aid manoeuvre is to:

- (A) Lay the patient flat and start chest compressions at once
- (B) Deliver back blows between the scapulae and abdominal thrusts (Heimlich manoeuvre)
- (C) Give oral sedation and observe
- (D) Arrange an urgent barium swallow first

Oral Cavity, Pharynx and Head-Neck Oncology

Q9. A middle-aged woman has a persistently dry mouth and gritty dry eyes with bilateral parotid enlargement. Blood shows anti-Ro (SS-A) and anti-La (SS-B) antibodies. The most likely diagnosis is:

- (A) Mumps parotitis
- (B) A pleomorphic adenoma of the parotid
- (C) Sjogren syndrome
- (D) Acute bacterial sialadenitis

Q10. A child has a soft, bluish, translucent swelling in the floor of the mouth to one side of the frenulum, which is a mucous retention cyst arising from a sublingual salivary gland. This is called a:

- (A) Ranula
- (B) Ludwig angina
- (C) Dermoid cyst
- (D) Thyroglossal cyst

Q11. A man presents with a unilaterally enlarged, ulcerated tonsil and an ipsilateral neck node; biopsy confirms carcinoma and p16 staining is positive. The virus most strongly linked to this tonsillar (oropharyngeal) carcinoma is:



- (A) Herpes simplex virus type 1
- (B) Measles virus
- (C) Hepatitis C virus
- (D) Human papillomavirus (high-risk type 16)

Paediatric ENT and Emergencies

Q12. A 3-year-old with a cold develops fever and severe earache. Otoscopy shows a red, bulging tympanic membrane with loss of the normal landmarks. The most likely diagnosis and the commonest causative organisms are:

- (A) Acute otitis media, commonly due to *Streptococcus pneumoniae* and *Haemophilus influenzae*
- (B) Otitis externa, commonly due to *Pseudomonas*
- (C) Cholesteatoma, due to squamous epithelium
- (D) Referred pain from teething, with a normal ear

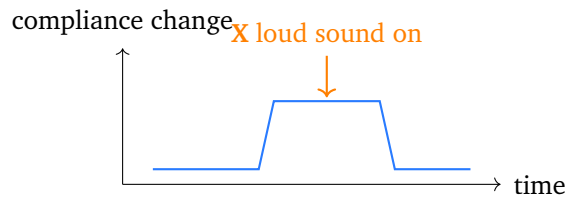
Q13. A young child has high fever, neck stiffness, drooling and a muffled voice; a lateral neck radiograph shows widening of the prevertebral soft tissue, and contrast imaging confirms a collection behind the pharynx threatening the airway. The most likely diagnosis is:

- (A) Simple viral pharyngitis
- (B) A retropharyngeal (deep neck space) abscess
- (C) Mumps
- (D) Uncomplicated tonsillitis

Audiology and Vestibular Assessment

Q14. Impedance audiometry records a middle-ear reflex when a loud sound is presented. The trace below shows the change measured at X when the sound is delivered. This reflex, produced by contraction of the stapedius muscle, is the:





- (A) The corneal reflex
- (B) The vestibulo-ocular reflex
- (C) The stapedial (acoustic) reflex
- (D) The gag reflex

Q15. You are asked to separate a central from a peripheral cause of acute vertigo at the bedside using the HINTS examination (head-impulse, nystagmus, test of skew). Which single finding points strongly to a *central* lesion?

- (A) A clearly abnormal (positive) head-impulse test with a corrective saccade
- (B) Purely horizontal nystagmus that beats in one direction only and is suppressed by fixation
- (C) Direction-changing nystagmus that reverses with gaze, with a normal head-impulse test
- (D) Tinnitus and unilateral hearing loss accompanying the vertigo



Detailed Solutions

Q1.

Solution

Concept – tympanosclerosis: Tympanosclerosis is hyaline degeneration with calcium deposition in the fibrous layer of the tympanic membrane, following healed chronic middle-ear inflammation.

Step 1 – read the otoscopy: **Chalky-white, horseshoe-shaped plaques** in the substance of the drum, on a background of long-standing chronic otitis media, are the classic sign.

Step 2 – the significance: The plaques are usually inert, but extensive disease can stiffen the drum and ossicles and cause a mild conductive loss.

Why the other options are wrong:

- B, otomycosis: is a fungal infection of the ear canal, not white plaques within the drum.
- C, bullous myringitis: gives painful haemorrhagic blebs on the drum, not chalky plaques.
- D, attic cholesteatoma: is a keratin sac in the attic, not calcified plaques.

Final Answer: Tympanosclerosis ⇒ A

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

Q2.

Solution

Concept – lower motor neuron facial palsy (Bell palsy): The facial nerve supplies all the muscles of facial expression on its side, including the frontalis (forehead) muscle.

Step 1 – localise the lesion: Because the **forehead is involved** (the patient cannot wrinkle it or close the eye), the whole half of the face is weak, which is a **lower motor neuron** lesion, that is Bell palsy.

Step 2 – the anatomy behind it: The upper face receives motor input from both cerebral hemispheres, so an upper motor neuron (central) lesion spares the forehead; only a lower motor neuron lesion of the nerve itself paralyses the forehead too.

Step 3 – grading: The severity is documented with the **House-Brackmann** scale (grade I normal to grade VI total palsy).



Why the other options are wrong:

- A and D, upper motor neuron / hemispheric stroke: would *spare* the forehead, which is not the case here.
- B, trigeminal nerve: is sensory to the face and supplies mastication, not facial expression.

Final Answer: Lower motor neuron facial (Bell) palsy with forehead involvement
⇒

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

Q3.

Solution

Concept – otomycosis: Otomycosis is a fungal infection of the external auditory canal, common in warm, humid climates.

Step 1 – match the picture: Intense itching with damp debris resembling **wet blotting paper** studded with **black fruiting heads** is typical of **Aspergillus niger**.

Step 2 – management: Meticulous aural toilet plus a topical antifungal (such as clotrimazole) and keeping the ear dry are the mainstays.

Why the other options are wrong:

- A, Pseudomonas: causes bacterial otitis externa (and malignant otitis externa in diabetics), not black fungal heads.
- C, Streptococcus pyogenes: causes a bacterial cellulitis of the canal, not this fungal debris.
- D, Staphylococcus aureus: causes a furuncle or bacterial otitis externa, not otomycosis.

Final Answer: Aspergillus niger (otomycosis) ⇒

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

Q4.

Solution

Concept – rhinosporidiosis: Rhinosporidiosis is a chronic granulomatous infection of the mucosa, endemic in parts of South Asia and linked to bathing in stagnant water.



Step 1 – name the organism: A friable, reddish, **strawberry-like** polypoidal mass that bleeds on touch and shows **sporangia** on histology is caused by **Rhinosporidium seeberi**.

Step 2 – management: Treatment is complete surgical excision with cauterisation of the base to reduce recurrence.

Why the other options are wrong:

- B, *Klebsiella rhinoscleromatis*: causes rhinoscleroma, a hardening nodular disease, not a strawberry polyp.
- C, *Mucor*: causes invasive fungal sinusitis in immunocompromised patients, with black necrotic tissue.
- D, leprosy bacillus: causes nasal deformity and crusting, not this vascular polyp.

Final Answer: *Rhinosporidium seeberi* ⇒ A

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

Q5.

Solution

Concept – posterior epistaxis and Woodruff plexus: Nosebleeds are divided into anterior (common, from the septum) and posterior (from deeper in the nose).

Step 1 – name the site: Posterior bleeding in an **elderly hypertensive** patient, trickling into the throat and hard to see anteriorly, arises from **Woodruff plexus** at the back of the inferior meatus.

Step 2 – management: Posterior bleeds often need a postnasal pack or a balloon, and control of the blood pressure.

Why the other options are wrong:

- A, Little's area: is the site of common *anterior* epistaxis in young people.
- C, anterior ethmoidal artery: bleeds are high in the nose after trauma, not this posterior pattern.
- D, nasal vestibule skin: gives minor superficial bleeding, not a brisk posterior bleed.

Final Answer: Woodruff plexus ⇒ B

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



Q6.

Solution

Concept – Pott puffy tumour: Pott puffy tumour is osteomyelitis of the frontal bone with a subperiosteal abscess, complicating frontal sinusitis.

Step 1 – match the picture: A tender, soft, **boggy forehead swelling** (marked X) over a neglected frontal sinusitis is the classic sign.

Step 2 – why it matters: It can spread intracranially to cause meningitis, epidural or brain abscess, so it needs urgent intravenous antibiotics and surgical drainage.

Why the other options are wrong:

- A, sebaceous cyst: is a painless mobile skin lump, not linked to sinusitis.
- B, simple frontal headache: has no bony swelling or osteomyelitis.
- C, dental abscess: points near the cheek or jaw, not over the frontal bone.

Final Answer: Pott puffy tumour ⇒ D

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

Q7.

Solution

Concept – contact ulcer (contact granuloma): A contact ulcer is a benign lesion over the vocal process of the arytenoid, driven by vocal abuse and acid reflux.

Step 1 – match the features: A hoarse professional voice user with reflux and a **granular ulcerated lesion at the posterior part of the cords** (over the vocal process) fits a contact ulcer or granuloma.

Step 2 – management: Voice rest, treatment of reflux (with proton pump inhibitors) and speech therapy are first line; surgery is reserved for persistent lesions.

Why the other options are wrong:

- A, vocal nodule: sits at the *anterior* third junction of the cords, not posteriorly.
- B, Reinke oedema: is diffuse swelling of the whole cord in smokers, not a posterior ulcer.
- C, retention cyst: is a smooth submucosal swelling, not a granular ulcer over the vocal process.

Final Answer: Contact ulcer (contact granuloma) of the posterior cords ⇒ D



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

Q8.

Solution

Concept – acute upper airway obstruction by a foreign body: A conscious choking patient who cannot speak or cough has a complete obstruction and needs immediate mechanical clearance.

Step 1 – the first move: Deliver **back blows between the scapulae and abdominal thrusts (the Heimlich manoeuvre)** to expel the impacted foreign body.

Step 2 – the escalation: If the patient becomes unconscious, begin cardiopulmonary resuscitation; if trained help and equipment are available, laryngoscopy or an emergency surgical airway may be needed.

Why the other options are wrong:

- A, chest compressions in a conscious patient: are not the first step; abdominal thrusts come first while he is conscious.
- C, sedation and observe: is dangerous and delays clearing a life-threatening obstruction.
- D, barium swallow: wastes time in an airway emergency and risks aspiration.

Final Answer: Back blows and abdominal thrusts (Heimlich manoeuvre) ⇒ **B**

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

Q9.

Solution

Concept – Sjogren syndrome: Sjogren syndrome is a chronic autoimmune disease that destroys the exocrine (salivary and lacrimal) glands.

Step 1 – read the clues: A **dry mouth** (xerostomia) and **dry gritty eyes** (keratoconjunctivitis sicca) with bilateral parotid enlargement and **anti-Ro (SS-A) and anti-La (SS-B)** antibodies define Sjogren syndrome.

Step 2 – the caution: There is a long-term risk of salivary gland lymphoma, so persistent parotid swelling needs monitoring.

Why the other options are wrong:

- A, mumps: is an acute painful viral parotitis in children, not a chronic dry-gland syndrome.



- B, pleomorphic adenoma: is a solitary painless benign parotid tumour, not bilateral dryness with autoantibodies.
- D, bacterial sialadenitis: is an acute tender infected gland with pus, not chronic dryness.

Final Answer: Sjogren syndrome ⇒

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

Q10.

Solution

Concept – ranula: A ranula is a mucous retention (or extravasation) cyst arising from the sublingual salivary gland in the floor of the mouth.

Step 1 – match the picture: A soft, bluish, **translucent swelling in the floor of the mouth** beside the frenulum is the classic ranula, so named for its resemblance to a frog's belly.

Step 2 – management: Treatment is surgical, usually marsupialisation or excision of the cyst with the sublingual gland to prevent recurrence.

Why the other options are wrong:

- B, Ludwig angina: is a firm, painful, spreading cellulitis of the floor of the mouth, not a cystic swelling.
- C, dermoid cyst: is a firm midline swelling, not a bluish translucent one.
- D, thyroglossal cyst: lies in the midline of the neck and moves on swallowing and tongue protrusion.

Final Answer: Ranula ⇒

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

Q11.

Solution

Concept – HPV-related tonsillar (oropharyngeal) carcinoma: Cancers of the tonsil and base of tongue are increasingly linked to human papillomavirus infection.

Step 1 – read the clues: A **unilaterally enlarged, ulcerated tonsil** with a neck node and **p16-positive** biopsy points to **high-risk HPV type 16**.

Step 2 – the significance: HPV-positive (p16-positive) oropharyngeal cancers



tend to occur in younger, non-smoking patients and carry a better prognosis than HPV-negative tumours.

Why the other options are wrong:

- A, herpes simplex: causes oral ulcers and cold sores, not tonsillar carcinoma.
- B, measles: causes an acute exanthem, not this cancer.
- C, hepatitis C: is linked to liver cancer, not tonsillar carcinoma.

Final Answer: Human papillomavirus type 16 ⇒ D

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

Q12.

Solution

Concept – acute otitis media in a child: Acute otitis media is a suppurative infection of the middle-ear cleft, very common in young children after an upper respiratory infection.

Step 1 – match the otoscopy: Fever, earache and a **red, bulging tympanic membrane** with loss of landmarks confirm acute otitis media.

Step 2 – the commonest organisms: *Streptococcus pneumoniae* and *Haemophilus influenzae* (with *Moraxella catarrhalis*) are the usual bacterial causes; first-line treatment is amoxicillin with analgesia.

Why the other options are wrong:

- B, otitis externa: affects the ear canal with tragal tenderness, not a bulging drum.
- C, cholesteatoma: is a chronic keratin sac, not an acute red bulging drum.
- D, teething with a normal ear: cannot explain a red bulging drum.

Final Answer: Acute otitis media (*Streptococcus pneumoniae* and *Haemophilus influenzae*) ⇒ A

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



Q13.

Solution

Concept – retropharyngeal abscess: A retropharyngeal abscess is a deep neck space infection in the potential space behind the pharynx, most common in young children.

Step 1 – match the picture: High fever, neck stiffness, drooling, a muffled voice and **widened prevertebral soft tissue** on the lateral neck film, with a collection on contrast imaging, define a retropharyngeal abscess.

Step 2 – why it is an emergency: It can obstruct the airway and spread down into the mediastinum, so it needs urgent intravenous antibiotics, airway protection and surgical drainage.

Why the other options are wrong:

- A, viral pharyngitis: causes a mild sore throat, not prevertebral widening and airway threat.
- C, mumps: gives parotid swelling, not a retropharyngeal collection.
- D, uncomplicated tonsillitis: does not widen the prevertebral space or threaten the airway.

Final Answer: Retropharyngeal (deep neck space) abscess ⇒ **B**

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

Q14.

Solution

Concept – the stapedial (acoustic) reflex: Impedance audiometry measures how the middle ear responds to sound, including the reflex contraction of the stapedius muscle.

Step 1 – identify the reflex: A change in middle-ear compliance when a **loud sound** is presented (marked X), produced by contraction of the **stapedius** muscle, is the **stapedial (acoustic) reflex**.

Step 2 – its use: The reflex arc runs through the cochlea, the facial nerve and the stapedius; testing it helps localise lesions and gives an objective estimate of hearing.

Why the other options are wrong:

- A, corneal reflex: is a trigeminal-facial blink reflex of the eye, not a middle-ear reflex.



- B, vestibulo-ocular reflex: stabilises gaze during head movement, not an acoustic reflex.
- D, gag reflex: is a pharyngeal reflex, unrelated to impedance audiometry.

Final Answer: Stapedial (acoustic) reflex $\Rightarrow$

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

Q15.

Solution

Concept – central versus peripheral vertigo (HINTS): The HINTS examination (head-impulse, nystagmus, test of skew) separates a dangerous central cause from a benign peripheral one.

Step 1 – pick the central sign: Direction-changing nystagmus that reverses with the direction of gaze, together with a *normal* head-impulse test, points strongly to a **central** lesion.

Step 2 – the reasoning: In a peripheral lesion the head-impulse test is abnormal (a corrective saccade) and the nystagmus is unidirectional; a reassuringly normal head-impulse test with reversing nystagmus is the worrying combination.

Why the other options are wrong:

- A, abnormal head-impulse test with a corrective saccade: actually indicates a *peripheral* lesion.
- B, unidirectional nystagmus suppressed by fixation: is typical of a *peripheral* cause.
- D, tinnitus and hearing loss: usually accompany peripheral (labyrinthine) disease.

Final Answer: Direction-changing nystagmus with a normal head-impulse test $\Rightarrow$

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



Answer Key

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

