

INI CET ENT

Sample Paper – 8

Duration: 14 Minutes

Maximum Marks: 15

Instructions

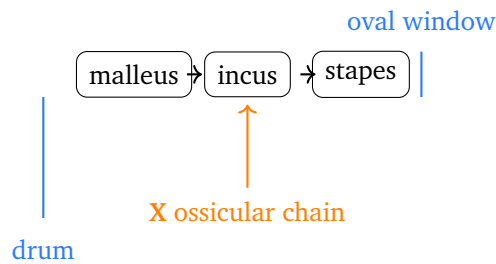
- This paper contains **15** Multiple Choice Questions (Single Best Response), modelled on the ENT (Otorhinolaryngology) content of **INI CET** (Institutes of National Importance Combined Entrance Test) conducted by AIIMS New Delhi.
- The **15-question** length matches the number of ENT items you actually 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 child recovering from acute otitis media suddenly develops severe rotatory vertigo, vomiting, spontaneous nystagmus and a sensorineural hearing loss in the same ear. The most likely diagnosis is:
- (A) Benign paroxysmal positional vertigo
(B) An acoustic neuroma
(C) Acute suppurative labyrinthitis
(D) A simple furuncle of the ear canal
- Q2.** The ossicular chain of the middle ear is shown below. Sound from the tympanic membrane is transmitted through these three bones, in order,



before it reaches the oval window. The correct sequence from drum to inner ear is:



- (A) Incus, malleus, stapes
- (B) Stapes, incus, malleus
- (C) Malleus, incus, stapes
- (D) Malleus, stapes, incus

Q3. A cochlear implant, rather than a conventional hearing aid, is indicated in a patient who has:

- (A) A mild conductive hearing loss due to wax
- (B) Bilateral severe-to-profound sensorineural hearing loss that gains no useful benefit from hearing aids
- (C) A single episode of reversible serous otitis media
- (D) Unilateral otosclerosis with a normal opposite ear

Rhinology and Paranasal Sinuses

Q4. The principal blood supply of a juvenile nasopharyngeal angiofibroma, which is embolised the day before surgery to reduce bleeding, is the:

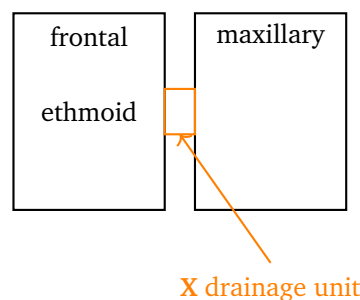
- (A) Internal maxillary artery (a branch of the external carotid)
- (B) Anterior ethmoidal artery (a branch of the ophthalmic)
- (C) Facial artery
- (D) Superior thyroid artery

Q5. A patient with nasal polyps, asthma and severe respiratory symptoms after taking aspirin has the classic Samter triad. The best label for this presentation is:



- (A) Simple allergic rhinitis
- (B) Aspirin-exacerbated respiratory disease (chronic rhinosinusitis with nasal polyps, asthma and aspirin sensitivity)
- (C) Isolated deviated nasal septum
- (D) Acute bacterial sinusitis

Q6. The schematic below marks the key common drainage channel targeted in functional endoscopic sinus surgery, into which the maxillary, anterior ethmoid and frontal sinuses drain. This unit is the:



- (A) Osteomeatal complex (middle meatus)
- (B) Sphenoethmoidal recess
- (C) Eustachian tube orifice
- (D) Inferior meatus

Laryngology and the Airway

Q7. A neonate has a weak cry and mild stridor from birth, and laryngoscopy shows a thin membrane joining the anterior parts of the two vocal cords. The most likely diagnosis is:

- (A) Bilateral vocal cord palsy
- (B) Acute epiglottitis
- (C) Congenital laryngeal web
- (D) A vocal cord nodule

Q8. A child extubated after a long stay in intensive care develops progressive biphasic stridor. Endoscopy shows a narrowing of the airway just below the vocal cords. This is best described as:



- (A) Supraglottic cyst
- (B) Glottic web
- (C) Subglottic stenosis
- (D) Tracheo-oesophageal fistula

Oral Cavity, Pharynx and Head-Neck Oncology

- Q9.** A salivary gland tumour that is notorious for spreading along nerves (perineural invasion) and for late distant metastases, most often arising in the minor salivary glands, is:
- (A) Adenoid cystic carcinoma
 - (B) Pleomorphic adenoma
 - (C) Warthin tumour
 - (D) A simple mucous retention cyst
- Q10.** A ranula that extends through the mylohyoid muscle to present as a soft swelling in the submental region of the neck is called a:
- (A) Simple (oral) ranula confined to the floor of the mouth
 - (B) Thyroglossal cyst
 - (C) Branchial cyst
 - (D) Plunging (cervical) ranula
- Q11.** A pulsatile mass at the carotid bifurcation in the lateral neck that is mobile side-to-side but not up-and-down, and splays the internal and external carotid arteries on imaging, is most likely a:
- (A) Simple reactive lymph node
 - (B) Carotid body tumour (paraganglioma)
 - (C) Thyroglossal duct cyst
 - (D) Ludwig angina

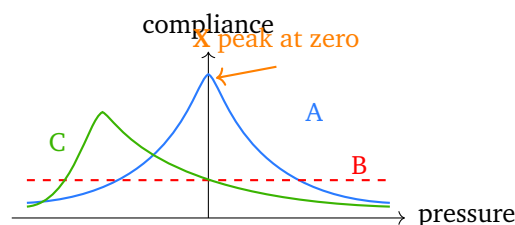
Paediatric ENT and Emergencies



- Q12.** A 4-year-old with no history of ear discharge or previous surgery has a white pearly mass seen behind an intact, normal tympanic membrane. The most likely diagnosis is:
- (A) Acute otitis media
 - (B) A retained ventilation tube
 - (C) Otomycosis of the canal
 - (D) Congenital cholesteatoma
- Q13.** A child arrives with acute upper-airway obstruction but is still breathing spontaneously. The most appropriate immediate sequence of management is:
- (A) Immediately sedate and lie the child flat
 - (B) Allow a position of comfort, give humidified oxygen and prepare for a definitive airway if deterioration occurs
 - (C) Perform a blind finger sweep of the throat at once
 - (D) Give oral antibiotics and send the child home

Audiology and Vestibular Assessment

- Q14.** The three tympanogram tracings below are labelled A, B and C. A type A (normal) curve has a sharp peak near zero pressure, a type B is a flat line (middle-ear fluid) and a type C peaks at a negative pressure (Eustachian dysfunction). The curve marked X, with a normal peak at around zero, is:



- (A) A normal middle ear (type A)
- (B) A middle-ear effusion (type B)
- (C) Eustachian tube dysfunction (type C)



(D) A perforated tympanic membrane

Q15. The recruitment phenomenon, an abnormally rapid growth of loudness once sound rises above threshold, localises a hearing lesion to the:

- (A) External auditory canal
- (B) Middle-ear ossicles (a conductive lesion)
- (C) Eighth nerve (a retrocochlear lesion)
- (D) Cochlea (a sensory, end-organ lesion)



Detailed Solutions

Q1.

Solution

Concept – acute labyrinthitis: Labyrinthitis is inflammation of the membranous labyrinth, affecting both the cochlea and the vestibular apparatus.

Step 1 – read the clues: A child recovering from otitis media who suddenly develops severe rotatory vertigo, vomiting, nystagmus *and* a sensorineural hearing loss on the same side has **acute suppurative labyrinthitis**, where the middle-ear infection has spread into the inner ear.

Step 2 – why both systems are hit: Because the labyrinth houses both hearing and balance organs, its inflammation produces vertigo together with a sensorineural loss, unlike a purely balance disorder.

Why the other options are wrong:

- A, BPPV: gives brief position-triggered vertigo with *no* hearing loss and no preceding infection.
- B, acoustic neuroma: causes slowly progressive unilateral hearing loss, not an acute post-infective attack.
- D, a furuncle: is a painful boil of the ear canal with no vertigo or hearing loss.

Final Answer: Acute suppurative labyrinthitis $\Rightarrow$ C

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

Q2.

Solution

Concept – the ossicular chain: Three tiny bones link the tympanic membrane to the oval window and transmit sound into the inner ear.

Step 1 – name the order: From the drum inward the sequence is **malleus, then incus, then stapes**, with the stapes footplate seated in the oval window.

Step 2 – the function: This lever chain, together with the size difference between drum and oval window, boosts sound pressure to overcome the impedance of the cochlear fluid.

Why the other options are wrong:

- A, incus-malleus-stapes: starts with the wrong bone; the malleus is attached



to the drum.

- B, stapes-incus-malleus: is the reverse order.
- D, malleus-stapes-incus: puts the incus and stapes out of sequence.

Final Answer: Malleus, incus, stapes $\Rightarrow$

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

Q3.

Solution

Concept – cochlear implant indications: A cochlear implant bypasses damaged hair cells and stimulates the auditory nerve directly.

Step 1 – identify the right patient: The implant is indicated in **bilateral severe-to-profound sensorineural hearing loss** that gains no useful benefit from well-fitted hearing aids.

Step 2 – the logic: A hearing aid only amplifies sound and needs surviving hair cells; when these are largely gone, amplification fails and the implant is the next step.

Why the other options are wrong:

- A, wax-related conductive loss: is corrected simply by removing the wax.
- C, reversible serous otitis media: settles on its own or with grommets.
- D, unilateral otosclerosis with a normal other ear: is managed by surgery (stapedectomy) or a hearing aid, not an implant.

Final Answer: Bilateral severe-to-profound sensorineural loss unhelped by hearing aids $\Rightarrow$

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

Q4.

Solution

Concept – blood supply of angiofibroma: Juvenile nasopharyngeal angiofibroma is a highly vascular tumour, so its feeding vessel is central to planning surgery.

Step 1 – name the artery: Its main supply is the **internal maxillary artery**, a terminal branch of the external carotid.

Step 2 – why pre-operative embolisation: Blocking this vessel a day before



surgery greatly reduces the profuse bleeding that this tumour would otherwise cause when resected.

Why the other options are wrong:

- B, anterior ethmoidal artery: is a minor, inconsistent feeder from the internal carotid system.
- C, facial artery: does not supply the nasopharynx significantly.
- D, superior thyroid artery: supplies the thyroid and larynx, not this tumour.

Final Answer: Internal maxillary artery ⇒ A

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

Q5.

Solution

Concept – Samter triad: This is the combination of chronic rhinosinusitis with nasal polyps, asthma and aspirin sensitivity.

Step 1 – match the triad: Nasal polyps, asthma and worsening respiratory symptoms after aspirin together define **aspirin-exacerbated respiratory disease** (Samter triad).

Step 2 – the mechanism: Aspirin blocks cyclo-oxygenase and shunts arachidonic acid down the leukotriene pathway, driving airway and nasal inflammation.

Why the other options are wrong:

- A, simple allergic rhinitis: does not include the asthma-plus-aspirin reaction or florid polyps.
- C, deviated septum: is a mechanical problem, not this inflammatory triad.
- D, acute bacterial sinusitis: is a short-lived infection, not a chronic polyp-forming syndrome.

Final Answer: Aspirin-exacerbated respiratory disease (Samter triad) ⇒ B

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



Q6.

Solution

Concept – the osteomeatal complex: This is the final common drainage pathway of the anterior sinuses and the key target of endoscopic sinus surgery.

Step 1 – identify the unit: The **osteomeatal complex** in the middle meatus (marked X) receives drainage from the maxillary, anterior ethmoid and frontal sinuses.

Step 2 – the surgical relevance: Clearing disease here restores natural ventilation and drainage, which is the whole principle behind functional endoscopic sinus surgery.

Why the other options are wrong:

- B, sphenothmoidal recess: drains only the sphenoid and posterior ethmoid, not this group.
- C, Eustachian tube orifice: belongs to the ear, not the sinuses.
- D, inferior meatus: drains only the nasolacrimal duct.

Final Answer: Osteomeatal complex (middle meatus) ⇒ A

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

Q7.

Solution

Concept – congenital laryngeal web: A laryngeal web is a membrane bridging the vocal cords, usually anteriorly, from a failure of the larynx to recanalise in fetal life.

Step 1 – match the picture: A neonate with a weak cry and stridor from birth, whose cords are joined anteriorly by a thin membrane, has a **congenital laryngeal web**.

Step 2 – the site and effect: Most webs sit at the anterior glottis, narrowing the airway and altering the voice; thick webs need surgical division.

Why the other options are wrong:

- A, bilateral cord palsy: shows immobile cords, not a joining membrane.
- B, epiglottitis: is an acute febrile infection, not a lifelong membrane present from birth.
- D, vocal cord nodule: is an acquired lesion of voice overuse in older children and adults.



Final Answer: Congenital laryngeal web $\Rightarrow$

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

Q8.

Solution

Concept – subglottic stenosis: This is narrowing of the airway just below the vocal cords, at the level of the cricoid ring.

Step 1 – read the story: A child who develops progressive **biphasic stridor** after prolonged intubation, with narrowing seen just below the cords, has post-intubation **subglottic stenosis**.

Step 2 – why biphasic: The subglottis is a fixed, non-collapsible ring, so obstruction there produces stridor in both inspiration and expiration.

Why the other options are wrong:

- A, supraglottic cyst: sits above the cords and gives inspiratory stridor.
- B, glottic web: is a membrane at cord level, usually congenital.
- D, tracheo-oesophageal fistula: presents with feeding-related coughing and aspiration, not fixed subglottic narrowing.

Final Answer: Subglottic stenosis $\Rightarrow$

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

Q9.

Solution

Concept – adenoid cystic carcinoma: This is a slow-growing salivary gland malignancy with a distinctive spread pattern.

Step 1 – match the hallmark: A salivary tumour famous for **perineural invasion** and late distant (especially lung) metastases, common in the minor salivary glands, is **adenoid cystic carcinoma**.

Step 2 – the clinical consequence: Its habit of tracking along nerves explains pain, facial nerve involvement and frequent local recurrence even after apparently complete removal.

Why the other options are wrong:

- B, pleomorphic adenoma: is the commonest *benign* salivary tumour, not a



perineural-spreading cancer.

- C, Warthin tumour: is a benign tumour of the parotid, often bilateral.
- D, mucous retention cyst: is a simple non-neoplastic swelling.

Final Answer: Adenoid cystic carcinoma $\Rightarrow$ A

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

Q10.

Solution

Concept – plunging ranula: A ranula is a mucous extravasation cyst arising from the sublingual gland.

Step 1 – distinguish the two forms: A simple ranula stays in the floor of the mouth, whereas a **plunging (cervical) ranula** herniates through the mylohyoid muscle to appear as a submental neck swelling.

Step 2 – the significance: Because it dips into the neck, complete removal usually includes excising the sublingual gland, not just draining the cyst.

Why the other options are wrong:

- A, simple oral ranula: is confined above the mylohyoid and does not present as a neck lump.
- B, thyroglossal cyst: lies in the midline near the hyoid and moves with swallowing and tongue protrusion.
- C, branchial cyst: sits at the upper lateral neck along the sternomastoid, not the submental region.

Final Answer: Plunging (cervical) ranula $\Rightarrow$ D

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

Q11.

Solution

Concept – carotid body tumour (paraganglioma): This is a slow-growing tumour of the chemoreceptor tissue at the carotid bifurcation.

Step 1 – match the signs: A **pulsatile** lateral neck mass that moves side-to-side but not vertically, and **splays the carotid bifurcation** on imaging, is a carotid body tumour.

Step 2 – the classic imaging clue: The widening (lyre sign) of the angle be-



tween the internal and external carotid arteries is characteristic, best shown on angiography or contrast imaging.

Why the other options are wrong:

- A, reactive lymph node: is not pulsatile and does not splay the carotids.
- C, thyroglossal cyst: is a midline swelling that moves with tongue protrusion.
- D, Ludwig angina: is a diffuse infective swelling of the submandibular space, not a discrete pulsatile mass.

Final Answer: Carotid body tumour (paraganglioma) ⇒ **B**

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

Q12.

Solution

Concept – congenital cholesteatoma: This is a keratin-filled epithelial rest present from birth, sitting behind an intact drum.

Step 1 – read the clues: A young child with **no** history of ear discharge or surgery who has a **white pearly mass behind an intact tympanic membrane** has a **congenital cholesteatoma**.

Step 2 – the contrast with the acquired type: Unlike acquired cholesteatoma, there is no retraction pocket or perforation; it arises from embryonic epithelial remnants and is found incidentally or as a whitish mass.

Why the other options are wrong:

- A, acute otitis media: gives a red bulging painful drum, not a static white mass.
- B, retained ventilation tube: would be visible as a grommet with a surgical history.
- C, otomycosis: affects the ear canal, not the space behind an intact drum.

Final Answer: Congenital cholesteatoma ⇒ **D**

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



Q13.

Solution

Concept – managing a child with a threatened airway: In a child who is still breathing, the priority is to avoid distress that could tip a partial obstruction into a complete one.

Step 1 – the correct sequence: Let the child stay in a **position of comfort**, give **humidified oxygen**, keep the child calm, and be ready to secure a **definitive airway** if things worsen.

Step 2 – why gentle handling: Forcing the child to lie flat, sedating, or probing the throat can provoke crying, laryngospasm or bleeding and precipitate total obstruction.

Why the other options are wrong:

- A, sedate and lie flat: removes the child's protective posture and can cause collapse.
- C, blind finger sweep: may push an object deeper or cause laryngospasm.
- D, oral antibiotics and discharge: ignores an immediately life-threatening airway.

Final Answer: Position of comfort, oxygen, then a definitive airway if needed ⇒

B

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

Q14.

Solution

Concept – reading a tympanogram: Tympanometry plots middle-ear compliance against ear-canal pressure and sorts results into types A, B and C.

Step 1 – identify the tracing: The curve marked X has a sharp **peak at around zero pressure**, which is a **type A** tracing indicating a **normal middle ear**.

Step 2 – contrast the others: A type B is flat (fluid in the middle ear) and a type C peaks at negative pressure (Eustachian tube dysfunction and retraction).

Why the other options are wrong:

- B, type B effusion: would be a flat line with no peak, not the peaked curve shown.
- C, type C: would peak on the negative-pressure side, not at zero.



- D, perforation: gives a very high canal volume with no compliance peak at all.

Final Answer: A normal middle ear (type A) $\Rightarrow$ A

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

Q15.

Solution

Concept – the recruitment phenomenon: Recruitment is an abnormally rapid growth of perceived loudness once sound climbs above the raised threshold.

Step 1 – localise the lesion: Positive recruitment points to a **cochlear (sensory, end-organ) lesion**, where surviving hair cells respond steeply to increasing intensity.

Step 2 – the diagnostic value: It helps separate a cochlear loss (recruitment present, as in Meniere disease) from a retrocochlear or nerve loss (recruitment usually absent, with tone decay instead).

Why the other options are wrong:

- A, external canal: a canal problem is conductive and does not cause recruitment.
- B, ossicles: a conductive lesion gives an air-bone gap, not recruitment.
- C, eighth nerve: a retrocochlear lesion typically shows *absent* recruitment with abnormal tone decay.

Final Answer: A cochlear (sensory) lesion $\Rightarrow$ D

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



Answer Key

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

