

# Medical Fitness Criteria for UPSC Engineering Services

(As per the UPSC Gazette)

*Simplified by*



**MADE EASY**  
An Institute for ESE, GATE & PSUs

After the declaration of final results of ESE, all the candidates who make it to the final list must undergo medical fitness tests conducted by the Medical Board. This medical examination assesses the candidate's suitability for various services/departments for which he/she has opted. The final cadre is allocated only after the medical board sends the recommendations through the medical reports of the candidate that the candidate is fit for the opted service.

Below is the list of medical tests and the criteria for each test which decides whether the candidate is fit or unfit for the selected services:

## Height

All those candidates seeking appointment in

- Central Engineering Services Group A
- Central Engineering Service (Roads)
- Central Electrical and Mechanical Engineering Service Group A in the CPWD
- Military Engineer Services (IDSE)
- Central Water Engineering Service (CWES)
- BRES Group A in Border Road Organisation
- Indian Skill Development Service (ISDS)

Height criteria for male candidates: **152cm**

Height criteria for female candidates: **150cm**

**Note:** The minimum height prescribed is relaxable in case of candidates belonging to Scheduled Tribes (STs) and races such as Gorkhas, Garhwalis, Assamese, Nagaland Tribes, etc.

The height of the candidate shall be measured twice before coming to a final decision.

## Chest Expansion

- For all services, Chest expansion should be a minimum of 5 cm.

The candidate will then be directed to take a deep inspiration several times and the maximum expansion of the chest will be carefully noted. In recording the measurements fraction of less than half a centimetre should not be noted.

The chest expansion of the candidate shall be measured twice before coming to a final decision.

## Weight Measurement

The candidate's weight will also be measured and recorded in kilograms—a fraction of a Kilogram will not be noted.

**Obesity:** If a candidate has **BMI > 35** then he/she will be declared temporarily unfit and can become fit only if they achieve **BMI < 35** without any surgery or interventional therapies.

## Eye Sight Test

The candidate's eyesight will be tested by the following rules. The result of each test will be recorded:-

- (i) **General Examination:** The candidate's eyes will be subjected to a general examination directed to the detection of any disease or abnormality. The candidate will be rejected if he/ she suffers from any morbid conditions of the eye, eyelids or contiguous structure of such a sort as to render or are likely at a future date to render him/ her unfit for service.
- (ii) **Visual Acuity:** The examination for determining the acuteness of vision includes two tests, one for distant and the other for near vision. Each eye will be examined separately.

Service	Distant Vision		Near Vision	
	Better Eye (Corrected Vision)	Worse Eye	Better Eye (Corrected Vision)	Worse Eye
<b>A. For Technical Services</b>				
<ul style="list-style-type: none"> <li>Central Engineering Services Group A</li> <li>Central Electrical and Mechanical Engineering Service Group A</li> <li>Central Water Engineering Service Group A</li> <li>Central Power Engineering Service (Gr A and Gr B)</li> <li>Central Engineering Service (Roads) Group A</li> <li>Indian Radio Regulatory Service Group A</li> <li>Indian Telecommunication Service Group A</li> <li>Junior Telecom Officer (General Central Service Gr. B Gazetted)</li> <li>Assistant Executive Engineer in P&amp;T Building Works Gr. A Service</li> <li>Indian Naval Armament Service</li> <li>Indian Naval Material Management Service</li> <li>Indian Ordnance Factory Service Group A</li> <li>Survey of India, Group A service</li> <li>Defence Aeronautical Quality Assurance Service (DAQAS)</li> <li>Indian Skill Development Service (ISDS)</li> </ul>	*6/6 or *6/9	*6/12 or *6/9	*J/I	*J/II
<ul style="list-style-type: none"> <li>Indian Defence Service of Engineer (IDSE)</li> <li>AEE (QS &amp; C) in Corps of EME, MES</li> <li>AEE(QS&amp;C) in MES Surveyor Cadre</li> <li>BRES Group A in Border Road Organisation</li> </ul>	*6/6 or *6/9	*6/18 or *6/9	*J/I	*J/II
<p><b>For Technical Services :</b></p> <ul style="list-style-type: none"> <li>The total amount of Myopia (including cylindrical and spherical) shall not exceed 6D.</li> <li>The total amount of Hypermetropia (including the cylinder) shall not exceed 4D.</li> </ul> <p>If the candidate has myopia and hypermetropia more than the above-mentioned limits then the candidate is unfit for the technical services. And, such candidates will be forwarded to a special medical board for consideration if they are fit for non-technical services.</p>				
<b>B. For Non- Technical Services</b>				
<ul style="list-style-type: none"> <li>Geological Survey of India, Group A Service</li> <li>Assistant Development Officer (Engg.)</li> </ul>	*6/9	*6/12	*J/I	*J/II

- \*6/6 - where one can read a certain line of letters from a distance of six feet.
- 6/9 - vision can only read a line at six feet that a normal individual could read at nine feet.
- 6/12 - vision can only read a line at six feet that a normal individual could read at twelve feet.
- To evaluate near vision, the eye doctor may use a small hand-held card called a Jaeger eye chart. A Jaeger eye chart contains several blocks of successively smaller text, generally ranging in size from J10 (large print) to J1 (very small print). The type scale on a modern Jaeger eye chart usually ranges from J10 (approximately 14-point type for Times New Roman font) to J1 (approximately 3-point type, Times New Roman).

- NOTE:**
1. In case a candidate has higher myopia then it will be referred to three Ophthalmologists to examine whether it is Pathological Myopia or not. In every case of Myopia Fundus examination will be carried out to ensure the condition is not progressive and will not affect the efficiency of the candidate in future.
  2. Candidates with Intra intra-ocular lenses i.e. the lens that is implanted in the eye as a treatment of myopia and Implanted Contact Lenses (ICL) will be disqualified from all the services.
  3. In cases of **Radial Keratotomy/Laser Correction (Lasik)** may be permitted subjected to examination by a Special Ophthalmic Board, if and only if the bed of the cornea is not less than 425 microns (including flap) on Pachymetry.
    - The surgery should be at least 1 year old.
    - During the medical test candidate is not allowed to wear contact lenses.

## Colour Blindness

The testing of colour vision is essential for the Technical Services mentioned at A above. This is conducted to assess the response of recognition (without hesitation) of Red, Green and Yellow colours.

This is done by Ishihara's plates shown in good light and by Edrige Green's Lantern.

Colour perception can be classified into two categories depending on the size of the aperture and exposure time:

- Higher grade of colour perception
- Lower grade of colour perception

Grade	Higher grade of colour perception	Lower grade of colour perception
Distance between the lamp and the candidate	16 feet	16 feet
Size of aperture	1.3 mm	13 mm
Time of Exposure	5 second	5 second

### Technical Services or posts requiring Higher Grade Colour Perception :

- Indian Defence Service of Engineer (IDSE)
- Central Engineering Service (Roads)
- Central Power Engineering Service (Gr A and Gr B)
- Assistant Executive Engineer (Group A) in the Corps of EME
- BRES Group A in Border Road Organisation
- Survey of India, Group A Service
- Assistant Executive Engineer (QS & C) in Military Engineer Service (MES) Cadre

### Technical Services or posts requiring Lower Grade Colour Perception :

- Central Engineering Service.
- Central Electrical and Mechanical Engineering Service.
- Indian Naval Armament Service.
- Indian Naval Material Management Service
- Indian Ordnance Factory Service.
- Central Water Engineering Service.
- Indian Radio Regulatory Service Group 'A'.
- Geological Survey of India Gr 'A' Service.
- Asstt. Executive Engineer in P&T Building Works Gr 'A' Service.
- Defence Aeronautical Quality Assurance Service(DAQAS).
- Indian Skill Development Service (ISDS)

### Services for which Colour Perception is NOT required :

- Indian Telecommunication Service Group 'A'.
- Assistant Development Officer (Engg.)
- Junior Telecom Officer (General Central Service Group 'B' Gazetted, Non-ministrial)

## Field of Vision

The field of vision shall be tested in respect of all services. The confrontation method will be used to test the field of vision.

## Night Blindness

Night blindness is not tested as a routine but only in special cases. The Medical Board will be given the discretion to conduct such rough tests. In this test candidate's visual acuity is recorded in reduced illumination or the candidate is asked to recognise objects in a darkened room after he/she has been there for 20-30 minutes.

- For **Central Engineering Services (Roads)** candidates may be required to pass the night blindness test.
- For Survey of India Group A services, candidates may be required to pass the '**Stereoscopic Fusion Test**'.

### **Ocular conditions, other than visual acuity:-**

- Any organic disease or a progressive refractive error, which is likely to result in lowering the visual acuity, will be considered as a disqualification.
- A squint with absent binocularity is unfit for all technical services while a squint with present binocularity is fit for all services.
- Candidates with one eye are unfit for all technical services and fit only for non-technical services.

## Hearing Disorder

Marked for total deafness in one ear other being normal.	If the deafness is up to 30 decibels in higher frequency - <b>Fit for non technical jobs</b>
Perceptive deafness in both ears in which some improvement is possible by a hearing aid	If deafness is up to 30 decibels in speech frequencies of 1000-4000, <b>Fit in respect of both technical and non-technical jobs</b>
Perforation of tympanic membrane of central or marginal type	(i) One ear normal; other ear perforation of tympanic membrane* present- <b>temporarily unfit</b> . Under improved conditions of ear surgery, a candidate with marginal or other perforation in both ears should be given a chance by declaring him/her temporarily unfit. <i>*Tympanic membrane</i> is commonly known as the eardrum. (ii) Since all marginal/attic*perforations are unsafe, they are <b>temporarily unfit</b> whether present in one or both ears. Post-surgery if the candidate is able to hear 30 decibels or better then he/she will be considered. <i>*Marginal Perforation</i> means perforation occurring at the margin of the eardrum. <i>*Attic Perforation means</i> perforation occurring on the superior part of the eardrum (iii) Central Perforation of both ears – <b>Temporarily Unfit</b>
Ears with mastoid cavity sub-normal hearing on one or both sides	(i) Either ear normal hearing, other ear with mastoid cavity -fit for both technical and non-technical jobs. (ii) Mastoid cavity both sides- <ul style="list-style-type: none"> <li>• <b>Unfit</b> for technical jobs.</li> <li>• <b>Fit</b> for non-technical jobs if hearing improves to 30 decibels in either ear with or without hearing aid.</li> </ul>
Persistently discharging ear-operated/unoperated	<b>Temporarily unfit</b> for both technical and non-technical jobs.
Chronic inflammatory/allergic conditions of nose with or without bony deformities of nasal septum	Decisions will be taken depending on the individual case. If a deviated nasal septum* is present then the candidate will be <b>temporarily unfit</b> . <i>*Deviated Nasal Septum</i> - the bone and cartilage that divide the nasal cavity of the nose in half - is significantly off-centre, or crooked, making breathing difficult.
Chronic inflammatory conditions of tonsils and /or larynx	(i) Chronic inflammatory conditions of tonsils and/or larynx. - <b>Fit</b> . (ii) Hoarseness of the voice of severe degree if present - <b>temporarily unfit</b>
Benign or locally malignant tumours of the ear, nose, or throat	(i) Benign tumours- <b>temporarily unfit</b> can be fit after successful surgery/treatment (ii) Malignant Tumours – <b>Unfit</b>
<b>*Otosclerosis</b> <b>*Otosclerosis</b> is the abnormal growth of bone in the ears which leads to hearing loss.	If the hearing is within 30 decibels after the operation or with the <b>help of hearing aid-Fit</b> .
Congenital defects of the ear, nose, or throat	i) If not associated with functions-Fit ii) Stuttering* of severe degree-Unfit <i>*Stuttering</i> also known as stammering is a speech disorder where involuntary repetitions of words/sounds take place.
Nasal Polyp	Nasal Polyps are <b>temporarily unfit</b> and can be made fit after successful completion of treatment/surgery.

## Blood Pressure

Blood pressure is measured by the mercury manometer type of instrument and the range is set by a Rough Method for calculating the blood pressure:

- (i) With young candidates 15-25 years of age – the average is about 100 plus the age
- (ii) With candidates over 25 years – 110 plus half the age is satisfactory.

If the systolic pressure is over 140mm and diastolic above 90mm then it is regarded with suspicion and then the candidate is required to undergo further tests to examine whether the increase is due to a transient nature like excitement, nervousness etc. or whether there is a medical condition responsible for the same.

- Candidates diagnosed with hypertension are unfit for any of the services.

## Diabetes Mellitus

The urine test should test negative for sugar, but in case if the medical board finds sugar then the case will proceed for further examination. If standards of medical fitness are met then they pass the candidate as fit.

- If it is the case of Glycosuria then after further examinations and tests medical board will come to their conclusion. Candidate having Diabetes Mellitus is declared unfit.

## Apart from all the points mentioned above candidate should fulfil elow mentioned criteria as well :

- I. Candidate's speech should be without impediment.
- II. Candidate's teeth should be in good order and he/she is provided with dentures wherever necessary.
- III. There should be no evidence of abdominal disease.
- IV. If a candidate is suffering from hydrocele, varicose veins, piles etc. then candidates is declared temporarily unfit and will be considered fit after treatment/surgery. If candidate is suffering from Grade – I haemorrhoids is declared fit.
- V. If limbs, hands, feet are well formed or the condition is not degenerative and has motion of all limbs required to do service efficiently then he/she is considered fit for the service.
- VI. Candidate should not suffer from congenital malformation or defect.
- VII. Candidate should not suffer from any inveterate skin disease.
- VIII. Candidate should not have traces of chronic disease.
- IX. Candidate should be free from communicable diseases.
- X. Agenesis or absence of both testes is permanent unfit. Undescended testes are temporarily unfit till after its surgical removal or repositioning in a visible/normal position. Agenesis may be declared fit but the onus of proof that it is a case of agenesis and not undescended testes lies with the candidate.
- XI. If candidate has transplanted organs then he/she is unfit for the services.
- XII. If a candidate has history of organ donation then he/she is fit if the candidate is in normal state of health.
- XIII. If any malignancies are detected, then the candidate is declared unfit.

## Appeal against the Decision of the Medical Board

Candidates can file an appeal against the decision of the Medical Board within 7 working days from the date of communication on which the Medical Board conveyed medical results to the candidate through mail, by depositing an appeal fee of Rs. 100 as prescribed by the Government of India, Ministry of Communications, Department of Telecommunications in this behalf.

Along with the appeal, the candidates must submit a medical certificate by a registered doctor specifically mentioning that he is aware of the candidate having been declared unfit by the medical board.

