

NORMS AND STANDARDS FOR MEDICAL FITNESS

- 1.0 Good mental and bodily health and a strong constitution.
- 2.0 Free from physical defect or abnormality-congenital or acquired, likely to interfere with the efficient performance of duties.
- 3.0 No evidence of maldevelopment-physical or mental
- 4.0 Joints and locomotor functions are within normal limits.
- 5.0 No deformity from old fractures or depressions of skull bones.

6.0 HEIGHT AND WEIGHT

- 6.1 **Height:** Measurement will be taken in centimeters with the individual standing bare footed and straight weight thrown on both heels kept together. Tendency to stand on toes or raise heels will be strictly avoided. The candidate will stand erect with chin drawn in to bring the vertex of the head in level under the horizontal bar of the stand and clavicles, buttocks and shoulders touching the vertical portion of the stand with body fully relaxed and spine straight but not strained.
- 6.2 The table of standard weight for various groups is given below. Candidate not meeting the standard as given in the table below may be declared temporarily unfit for a maximum period of 21 days by CMO and shall be declared fit only in case the candidate fulfills the criteria including the norms for Body Mass Index.

Height - Weight Table for Males

Height (cm)	Weight in Kg at different ages		
	20-24 years	25-29 years	30-34 years
152.5	48	49	50
155.0	49	50	51
157.5	50	51	52
160.0	51	52	53
162.5	52	53	54
165.0	53	54	56
167.0	54	56	58
170.0	56	58	60
172.5	58	60	62
175.0	60	62	64
177.0	62	64	66
180.0	64	66	68
183.0	66	68	70

- 6.3 Add 2 Kg in weight for every additional 3 cm in height
- 6.4 For females, the general state of physical development will be taken into account and body weight recorded in each case.
- 6.5 The minimum height required for Drivers is 162 cm.

7.0 BODY MASS INDEX :

In case the weight of an individual is found more than prescribed as per the height - weight table as indicated above then Body Mass Index (BMI) will be taken as deciding parameter as per the norms given below:

7.1 Age up to 35 years –BMI should be maximum of 30 Kg / m².

7.2 Age above 35 years BMI should be maximum of 32 Kg / m² .

8.0 CHEST:

Acceptable chest measurement at full expiration will be 79 cm (relaxable by 5 cm) minimum expansion 5 cm. The range of expansion up to 4 cm. i.e. a deviation of 20% will be acceptable. This is not applicable to female candidates.

Measurement: The candidate will stand with feet together and arms raised over the head. The tape will be taken round the chest horizontally with its upper edge touching interior angles of the shoulder blades. The arms will then be lowered to hang relaxed by the side of the body. The candidate will not be permitted to throw shoulders upwards or backwards so as to displace the tape. The candidate will be directed to take deep breath several times without causing contraction of chest muscles or wing out the shoulder blades. The maximum and minimum expansion of the Chest will then be recorded in centimeters thus 70-75, 78-84 etc. Fraction of cm below 0.5 will be ignored and over 0.5 taken as one.

9.0 EYE :

Standards and procedures of examination in respect of visual acuity and colour perception are as follows.

9.1 The candidate's eyes will be tested, and results of the test recorded in accordance with the following rules.

9.2 General: The candidate's eyes will be submitted to a general examination directed to the detection of any disease or abnormality. The candidate may be rejected if he suffers from morbid condition of eyes, eye-lids or contiguous structures of such a nature as would render him/her unfit for service at the time of appointment or at a future date.

9.3 Visual Acuity:

9.3.1 The examination for determining the acuity of vision includes two tests, one for distant, the other for near vision. Each will be examined separately.

9.3.2 Standard of visual acuity for personnel of various categories, with or without glasses will be as follows:

Categories of Employees	Age	Distant Vision		Near Vision	
		Better eye	Worse eye	Better eye	Worse eye
For Employees in E1 and above grade	Below 35 yrs. of age	6/9	6/9	Sn. 0.6	Sn. 0.6
		6/6	6/12	-	-
	35 yrs. of age and above	6/12	6/12	Sn. 0.8	Sn. 0.8
		6/9	6/18	-	-

Others (except security & Fire Services)	Below 35 yrs. of age	6/9	6/12	Sn. 0.8	Sn. 0.6
		6/6	6/18	-	-
		6/18	6/18	-	-
	35 yrs. of age and above	6/12	6/24	Sn. 0.8	Sn. 0.8
		6/12	6/18	-	-
		6/24	6/24	-	-
		6/18	6/36	-	-

9.4 Fundus Examination:

- 9.4.1** In every case of Myopia, fundus examination should be carried out and the results recorded. In the event of a pathological condition being present which is likely to be progressive and affect efficiency of the candidate he/she should be declared unfit.
- 9.4.2** The total amount of myopia (including the cylinder) shall not exceed - 6.00 D. The total amount of hyper metropia (including the cylinder) shall not exceed + 6.00D. in each eye
- 9.4.3** Fundus and media should be healthy and within normal limits.
- 9.4.4** No degenerative signs of vitreous or chorioretinitis to be present, suggesting progressive myopia.
- 9.4.5** Should have good binocular vision, fusion faculty and full field of vision in both the eyes.
- 9.4.6** There should be no organic disease likely to cause exacerbations or deterioration.

9.5 Colour vision :

The testing of colour vision shall be essential for all candidates. Colour vision shall be tested with Ishihara's Isochromatic plates in good light.

9.6 Field of vision:

The field of vision shall be tested by the confrontation method. Where such test gives unsatisfactory or doubtful results, the field of vision should be determined on the visual field screener/perimeter.

9.7 Ocular conditions other than visual acuity.

9.8 Colour Blindness:

9.8.1 Permissible : This will not be a disqualification for employment in purchase, sales accounts, ministerial (clerical and Store Keepers), canteen peons, sweepers, apprentices covered by Apprentices Act and any other category wherein defective colour vision is not likely to interfere with his work or create risk for others working with him.

9.8.2 Not permissible:

Colour blindness is a disqualification for the following:

- a. Industrial staff dealing with machines involving recognition of colored signals.
- b. Technicians engaged in Laboratory work and chemists.
- c. Crane operators and Pointsmen
- d. Draughtsmen
- e. Electricians

- f. Scientific Assistants
- g. Drivers of all categories
- h. Security Personnel
- i. Doctors
- j. Engineering Executive Trainees
- k. Engineering equipment erection and O&M.
- l. Other occupations where perception of colour is considered essential in view of the nature of duties of the offered post and future posts likely to be occupied by the candidate either on appointment on promotion or on job rotation / transfer.

9.8.3 Whenever an employee suffering from colour blindness is posted or transferred into a category wherein colour perception is required his eyes will be re-examined for the same along with the examination for visual acuity.

9.9 Night Blindness:

The medical officer will have the discretion to improvise such test e.g. recording of visual acuity with reduced illumination or by making the candidate recognize various objects in a dark room after he/she has been there for 20 to 30 minutes. Candidate's own statements should not always be relied upon, but they should be given due consideration.

9.10 Any organic disease or a progressive refractive error which is likely to result in lowering of the visual acuity shall be considered as disqualification.

9.11 Trachoma:

Trachoma, unless complicated shall not ordinarily be a cause for disqualification.

9.12 Squint:

For technical services skilled jobs, where the presence of binocular vision is essential, squint, even if the visual acuity is of the prescribed standards should be considered as disqualification. For other services, the presence of squint should not be considered as a disqualification if the visual acuity of each eye is of the prescribed standard.

9.13 One eyed person:

For regular service one eyed individual shall be considered as unfit except for ministerial and allied jobs where binocular vision is not considered essential. It will be ensured that the prognosis or the functioning eye is good, and its vision is not likely to be endangered by the condition of the worse eye and the prescribed visual acuity standards are fully satisfied.

9.14 Contact Lenses:

Correction with contact lenses is no bar for employment provided the prescribed standards are fulfilled.

10.0 EAR:

A candidate should be free from any active disease of the ear. The candidate should be able to whispering voice separately in both the ears at a distance of 2 feet in a quiet room. A candidate who fails in this test will be declared medically unfit.

Procedure for hearing test : The examining medical officer will test the hearing standards of a candidate in a quiet room. The test will be carried out with the medical officer and the candidate standing at a distance of 20ft, from each other. Both the ear will be examined separately. The ear not being tested will be marked by a masking apparatus or by rubbing a piece of paper against pinnae by an attendant. The candidate will face at right angles the examining medical officer with the ear under examination facing him. He will use the whispering voice (whisper produced with the residual air i.e. after an ordinary expiration). The hearing will be considered normal if the candidate can reproduce the whisper. Those with

perforated ear drum will not be accepted as cooks.

11.0 NOSE:

A candidate should be free from any active disease of nose.

12.0 THROAT:

State of tonsils-Slight hypertrophy without evidence of repeated tonsillitis is not a cause for rejection. Enlarged tonsils cause temporary unfitness until treated with tonsillectomy. Throat, palate, gums, jaws, temporo-mandibular joint and dentitions should be within normal limits.

13.0 BLOOD-PRESSURE (BP)

The normal limits of blood pressure, without involvement of target organ, shall be assessed as follows:

Age Group	Systolic	Diastolic
Up to 35 years of age	Not exceeding 140	90 mm or below
Beyond 35 years of age	Not exceeding 150	100 mm or below

14.0 ECG:

If resting ECG is abnormal then the individual shall be submitted for exercise tolerance test (TMT) and if TMT is positive the individual will be declared unfit.

15.0 GENITO URINARY SYSTEM ETC:

15.1 Testicles: Individuals detected to be having undescended testicles on one or both sides shall be declared temporarily unfit for maximum period of 21 days. Fitness can only be granted if the candidate reports back with orchidectomy with negative biopsy report for malignance, with 21 days of medical examination.

15.2 Candidates with Hydrocele, piles, varicocele and hernia shall be declared temporarily unfit for a maximum period of 21 days during which period candidate will have to undergo definitive treatment.

16.0 GLANDS :

Thyroid should be normal with no evidence of hypo or hyperthyroidism or generalized enlargement of lymphglands. Scars, if any, of the previous removal of tubercular glands should be normal and there must not have been any active disease in the last five year.

17.0 URINE:

Non orthostalic albuminuria will be a cause for rejection.

18.0 BLOOD SUGAR

18.1 All candidates with type-1 diabetes will be declared unfit irrespective of age.

18.2 Up to 35 years of age all the individuals detected to be having diabetes will be declared unfit.

18.3 Individual above 35 years of age detected to be having type-II diabetes, without organ involvement, shall be declared temporarily unfit for maximum period of 21 days during which their blood sugar has to be within normal limit otherwise they will be declared unfit.

18.4 All diabetics with any of target organ involvement shall be made unfit irrespective of age.

19.0 RADIOLOGICAL EXAMINATION:

Skiagram chest of all fresh entrants will be taken. Mass miniature radiography will be utilized in lieu, whenever available. Cases diagnosed as suffering from pulmonary tuberculosis will be declared unfit. Such candidates are considered to be unsuitable for employment in view of the industrial hazards.

20.0 VENEREAL DISEASE:

Candidates who are suffering from venereal disease will not be declared fit unless detailed examination of urethro smear and serological test proves negative.

21.0 RESPIRATORY SYSTEM:

Lungs should be sound and free from any chronic bronchial or laryngeal disease.

22.0 CARDIOVASCULAR SYSTEM:

There should be no evidence of valvular diseases or gross arteriosclerosis.

23.0 PREGNANCY:

If at the time of medical examination, a candidate is pregnant for 12 weeks or more, she shall be declared temporarily unfit until she has completed six week after confinement.

24.0 SKIN DISEASE:

Candidate suffering form leprosy or chronic and inveterate skin conditions will be declared unfit. Vitiligo cases are acceptable.

25.0 FITS:

Candidates suffering from epilepsy will be declared unfit. Those suffering from epileptic attacks are dangerous in certain occupations like Drivers, Crane Operators, Mechanists, Fire brigade, Security duties and shop floor jobs where moving machinery may cause risk to life if they suffer from a fit in the vicinity.

26.0 MISCELLANEOUS:

Signs of mental retardation, incontinence of urine or enuresis, at the time of pre- employment examination will declare candidate unfit for employment.

27.0 DEFECTS:

Congenital or acquired physical defects, if any noticed, will be recorded on the medical examination form with a clear opinion as to whether it is likely to interfere with the efficient performance of the duties for which the candidate is under consideration for employment. The norms and standards shall however be further relaxed for ***Physically Challenged*** candidates as per government guidelines.

While the above-mentioned medical norms apply for Pre-employment medical examination, the medical norms as per the Mines Act, 1952, and the Mines Rules, 1955 shall also prevail.