### APPENDIX II

### REGULATIONS RELATING TO THE PHYSICAL EXAMINATION OF CANDIDATES

These regulations are published for the convenience of candidates and in order to enable them to ascertain the probability of their coming up to the required physical standard, the regulations are also intended to provide guidelines to the medical examiners and a candidate who does not satisfy the minimum requirements prescribed in the regulations cannot be declared Fit by the medical examiners. However, while holding that a candidate is not fit according to the norms laid down in these regulations, it would be permissible for a Medical Board to recommend to the Government of India for reasons specifically recorded in writing that he may be admitted to service without disadvantage to Government.

- Note: The Medical Board while conducting medical examination of the candidates who have applied against the posts reserved for physically handicapped category will keep in view the relevant provisions of the Persons with Disabilities (Equal Opportunity, Protection of Right and Full Participation) Act, 1995 wherein the extent of permissible disability has been defined.
- 2. (a) The Government of India reserve to themselves absolute discretion to reject or accept any candidate after considering the report of the Medical Board.
- (b) To be passed as fit for appointment, a candidate must be in good mental and bodily health and free from any physical defect likely to interfere with the efficient performance of the duties on his/her appointment.
- 3. (a) In the matter of the correlation of age, height and chest girth of candidates of Indian (including Anglo-Indian) race, it is left to the Medical Board to use whether correlation figures are considered most suitable as a guide in the examination of the candidates, if there be any disproportion with regard to height, weight and chest girth, the candidates should be Hospitalised for investigation and X-ray of the chest taken before the candidate is declared fit or not by the Board.
- (b) However, for certain Services the Minimum standards for height without which candidate cannot be accepted are as follows:—

# Name of Services Height

Railway Engineering Service
(Civil, Electrical, Mechanical and
Signal), Central Engineering
Service Group A, CES (Roads),
Central Electrical & Mechanical
Engineering Service Group A in
the C.P.W.D. Military Engineer
Services (IDSE) CWES, BRES. Gr.
'A' in Border Roads Organisation,
Indian Skill Development Service
(ISDS).

(a) For Male Candidates
152 cm
(b) For Female Candidates

The minimum height prescribed is relaxable in case of candidate belonging to Scheduled Tribes and to races such as Gorkhas, Garhwalis, Assamese, Nagaland Tribes, etc. whose average height is distinctly lower.

- (c) For all services Chest expansion should be minimum 5 cm. Absolute values of measurement during inspiration and expiration should not be adhered to for disqualification.
- 4. The candidate's height will be measured as follows:—

He will remove his shoes and be placed against the standard with his feet together and the weight thrown on the heels and not on the toes or other sides of the feet, he will stand erect without rigidly and with the heels, caves, buttocks and shoulders touching the standard, the chin will be repressed to bring the vertex of the head level under the horizontal bar and the height will be recorded in centimetres and parts of a centimetres to halves.

5. The candidate's chest will be measured as follows:—

He will be made to stand erect with his feet together and to raise his arms over his head. The tape will be so adjusted round the chest that its upper edge touches the interior angles of the shoulders blades behind and lies in the same horizontal plane when the tape is taken round the chest. The arms will then be lowered to hang loosly by the side and care will be taken that the shoulders are not thrown upwards or backwards so as to displace the tape. The candidate will then be directed to take a

deep inspiration several times and the maximum expansion of the chest will be carefully noted and the minimum and maximum will then be recorded in centimetres, 83—89, 86—93.5 etc. In recording the measurements fraction of less than half a centimetre should not be noted.

N.B.—The height and chest of the candidate should be measured twice before coming to a final decision.

- 6. The candidate will also be weighted and his weight recorded in kilograms—fraction of a Kilogram should not be noted.
- 7. The candidate's eye-sight will be tested in accordance with the following rules. The result of each test will be recorded:-
- (i) **General.**—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 suffers from any morbid conditions of eye, eyelids or contiguous structure of such a sort as to render or are likely at future date to render him unfit for service.
- (ii) **Visual Acuity.**—The examination for determining the acuteness of vision includes two tests—one for distant the other for near vision. Each eye will be examined separately.

There shall be no limit for maximum naked eye vision but the naked eye vision of the candidates shall however, be recorded by the Medical Board or other medical authority in every case as it will furnish the basic information in regard to the conditions of the eye.

The standards for distant and near vision with or without glasses shall be as follows:—

Service	Distant Vision		Near	Vision
	Better	Worse	Better	Worse
	Eye	Eye	Eye	Eye
	(corrected		(corrected	
	Vision)		Vision)	
(1)	(2)	(3)	(4)	(5)
A. Technical				
1 . Railway Engi-	6/6	6/12	J/I	J/II
neering Service	or	6/9		
(Civil,	6/9			
Electrical,				
Mechanical				
and Signal)				
2 . Central Engi-	6/6	6/12	J/I	J/II
neering Service		or		
Group A, Cen-	-6/9	6/9		
tral Electrical				
and Mechanical				
Engineering Ser-				
vice Group A				
Central Water				
Engineering				

Service Group

A, Central

Power Engineer-

ing Service

Group A and Group 'B'

Central Engineering

Service

(Roads) Group

'A',

Indian Radio Regulatory Service, Group 'A'

Indian Telecommunication Service Gr. 'A', J.T.O Gr. B, Assistant Executive Engineer in P&T Building works (Gr. 'A') Service

Indian Naval Armament Service, Indian Naval Stores Service, Indian Ordnance Factories Service Group A. Survey of India Gr 'A' Service, Defence Aeronautical Quality Assurance Service, Indian Skill Development Service.

#### 3. Assistant Execu-

tive Engineer

(Group 'A') in the 6/6 6/18 J/I J/II

Corps of EME or or

Military Engineer 6/9 6/9

Service Group

'A'.

(IDSE), AEE(QS&C) in MES Surveyor

Cadre, BRES Gr. 'A' in Border Roads

Organisation.

# B. Non-Technical

4. Indian Railway 6/9 6/12 J/I J/II

Stores Service,

Geological Survey of India Gr 'A' Service.

# **NOTE** (1):

(a) In respect of the Technical Service mentioned at A above, the total amount of myopia (including the cylinder and spherical) shall not exceed 6D. Total amount of Hypermetropia (including the cylinder) shall not exceed 4D. For Myopia more than 6 dioptres (including cylinder and spherical) and Hypermetropia more than 4 dioptres candidate is unfit for all technical services. However, after special Medical Board, candidate may be considered fit for non-technical services, if no degenerative changes involving macular region are found by the Myopia Board.

Provided that in case a candidate in respect of the Services classified as "Technical" is found unfit on grounds of high myopia the matter shall be referred to a special boards of three Opthalmologists to declare whether this myopia is Pathological or not. In case it is not pathological the candidate shall be declared fit provided he fulfils the visual requirements otherwise.

- (b) In every case of myopia fundus examination should be carried out and the results recorded. In the event of any pathological condition being present which is likely to be progressive and affect the efficiency of the candidate, he shall be declared unfit.
- (c) Intra Ocular Lenses (IOL) and Implanted Contact Lenses(ICL) shall be considered as disqualification for all categories. However, Radial Keratotomy/Laser Correction (Lasik) may be permitted for all categories if on Pachymetry, remaining bed of cornea should not be less than 425 micron (including flap) and surgery should be at least 1 year old subject to examination of retina by Special Opthalmic Board(SOB).

NOTE (2): The testing of colour vision shall be essential in respect of the Technical Services mentioned at A above.

Colour perception should be graded into higher and lower grade depending upon the size of aperture in the lantern as described in the table below :—

Grade	Higher Grade of colour perception	Lower Grade of colour Perception
1 . Distance between  The lamp and the candidate	16 feet	16 Feet
<ul><li>2 . Size of aperture</li><li>3 . Time of exposure</li></ul>	1.3 mm 5 seconds	13 Mm 5 seconds

For the Railway Engineering Services (Civil, Electrical, Signal and Mechanical) and other service connected with the safety of the public, Higher grade of colour vision is essential but for others lower grade of colour vision should be considered sufficient.

The categories of Services/posts which require higher or lower grade colour perception are as indicated below :—

Technical Services or posts requiring higher grade colour Perception :—

- (i) Railway Engineering Services (IRSE, IRSME, IRSEE, IRSSE).
- (ii) Indian Defence Service of Engineer (IDSE).
- (iii) Central Engineering Service (Roads).
- (iv) Central Power Engineering Service. (Gr. 'A' and Gr. 'B')
- (v) Assistant Executive Engineer (Group 'A') in the Corps of EME.
- (vi) BRES Group 'A' in Border Roads Organisation.
- (vii) Survey of India, Group 'A' Service.
- (viii) Assistant Executive Engineer(QS&C) in Military Engineer Service(MES) Cadre.

Technical Services or posts requiring lower grade colour perception :—

- (i) Central Engineering Service.
- (ii) Central Electrical and Mechanical Engineering Service.
- (iii) Indian Naval Armament Service.
- (iv) Indian Naval Stores Service.
- (v) Indian Ordnance Factory Service.
- (vi) Central Water Engineering Service.
- (vii) Indian Radio Regulatory Service.
- (viii) Geological Survey of India Gr 'A' Service.
- (ix) Asstt. Executive Engineer in P&T Building Works Gr 'A' Service.
- $(x)\ Defence\ Aeronautical\ Quality\ Assurance\ Service (DAQAS).$
- (xi) Indian Skill Development Service.

Services for which colour perception is not required:-

- (i) Indian Telecommunication Service Group 'A'.
- (ii) Junior Telecom Officer (General Central Service Group 'B' Gazetted, Non-ministrial)
- (iii) Indian Railway Store Service, Group 'A'.

Satisfactory colour vision constitutes, recognition with case and without hesitation of Red, Green and Yellow colours. The use of Ishihara's plates, shown in good light and a suitable lantern like Edrige Green's shall be considered quite dependable for resting colour vision. Both the Ishihara's plates and Edrige Green's lantern shall be used for testing colour vision of candidates for appointment to the technical services.

**NOTE** (3): Field of vision—The field of vision shall be tested in respect of all services by the confrontation method. Where such test gives unsatisfactory or doubtful results the field of vision should be determined on the perimeter.

**NOTE** (4): For Night Blindness—Night blindness need not be tested as a routine but only in special cases. No standard test for the testing of night blindness or dark adaption is prescribed. The Medical Board should be given the discretion to improvise such rough test e.g. recording of visual acuity with reduced illumination or by making the candidate recognise various objects in a darkened room after he has been therefor 20 to 30 minutes. Candidates own statements should not always be relied upon but they should be given due consideration.

**NOTE** (5): For Central Engineering Services/CES (Roads)—Candidates may be required to pass the colour vision test and undergo test for night blindness when considered necessary by the Medical Board for Survey of India Group 'A' service the candidate may be required to pass a 'steroscopic fusion' test.

**NOTE** (6): Ocular conditions, other than visual acuity:—

- (a) Any organic disease or a progressive refractive error, which is likely to result in lowering the visual acuity, should be considered as a disqualification.
- (b) Squint with absent binocularity is unfit for all technical services. May be considered fit only for non-technical services. Squint with present binocularity is fit for all services.
- (c) Candidates with one eye are unfit for all technical services and fit only for non-technical services subject to other parameters being in the normal range.

NOTE (7): — Contact lenses—During the medical examination of a candidate, the use of contact lenses is not to be allowed.

**NOTE** (8):— It is necessary that when considering eye test the illumination of the type letters for distant vision should have an illumination of 15 foot candles.

**NOTE** (9):—It shall be open to Government to relax anyone of the condition in favour of any candidate for special reasons.

## 8. Blood Pressure

The Board will use its discretion regarding Blood Pressure. A rough method of calculating normal, maximum, systolic pressure is as follows:—

- (i) With young subjects 15—25 years of age the average is about 100 plus age.
- (ii) With subject over 25 years of age general rule of 110 plus half the age seems quite satisfactory.

N.B.—1. As a general rule any systolic prescription 140 mm and diastolic over 90 mm should be regarded as suspicious and the candidate should be hospitalised by the Board before giving their final opinion regarding the candidate's fitness or otherwise. The hospitalisation report should indicate whether the rise in blood pressure is of a transient nature due to excitement etc. or whether it is due to any organic disease. In all such cases X-ray and electro cardiographic examinations of heart and blood urea clearance test should also be done as routine. Candidate with hypertension (if diagnosed by the Medical Board) should be declared permanent unfit.

# 2. Method of taking Blood Pressure (II)

The mercury manometer type of instrument should be used as a rule. The measurement should not be taken within fifteen minutes of any exercise of excitement. Provided the patient and particularly his arm is relaxed, he may be either lying or sitting. The arm is supported comfortably at the patient's side in a more or less horizontal position. The arm should be free from clothes to the shoulder. The cuff completely deflated, should be applied with the middle of the rubber over the inner side of the arm and its lower edge an inch or two above the bend of the elbow. The following turns of cloth bandage should spread evenly over the bag to avoid bulging during inflation.

The brachial artery is located by palpitation at the bend of the elbow and the stethoscope is then applied lightly and centrally over it below, but not in contact with the cuff. The cuff is inflated to above 200 mm. Hg. and then slowly deflated. The level at which the column stand when soft successive sounds are heard represents the Systolic Pressure. When more air is allowed to escape the sounds will be heard to increase in intensity. The level at which the column well heard clear sounds change to soft muffled fading sounds represents the diastolic pressure. The measurements should be taken in a fairly brief period of time as prolonged pressure of the cuff is irritating to the patient and will vitiate the readings. Re-checking if necessary, should be done only a few minutes after complete deflaction or the cuff. (Sometimes as the cuff is deflaled sounds are heard at a certain level they may disappear as pressure, falls and reappear at a still lower level. This "Silent Gap" may cause error in reading.)

### 9. Diabetes Mellitus

The urine (passed in the presence of the examiner) should be examined and the results recorded. When a Medical Board finds sugar present in a candidate's urine by the usual chemical tests the Board will proceed with the examination with all its other aspects and will also specially note any signs or symptoms suggestive of diabetes. If except for the Glycosuria the Board finds the candidates conforms to the standards of medical fitness required they may pass the candidate fit subject to the Glycosuria 'being non-diabetic' and the Board will refer the case to a specified specialist in Medicine who has hospital and laboratory facilities at his disposal. The Medical specialist will carry out whatever examinations, clinical and laboratory he considers necessary including a standard blood sugar tolerance test and will submit his opinion to the Medical Board upon which the Medical Board will use its final opinion fit or unfit. The candidates will not be required to appear in person before the Board on the second occasion. To exclude the effects of medication it may be necessary to retain candidate for several days in hospital under strict supervision. Candidates with Diabetes Mellitus(if diagnosed by the Medical Board) should be declared permanent unfit.

- 10. A women candidate who as a result of test is found to be pregnant should be declared temporary unfit until the confinement is over. She should be re-examined for a fitness certificate six weeks after the date of confinement subject to the production of a medical certificate of fitness from a registered medical practitioner.
- 11. The following additional points should be observed:—
  - (a) that the candidate's hearing in each ear is good and that there is no sign of disease of the ear. In case it is defective the candidate should be got examined by the ear specialist provided that if the defect in hearing is remediable by operation or by use of a hearing aid a candidate cannot be declared unfit on the account provided he/ she has no progressive disease in the ear. This provision is not applicable in the case of Railway Services, other than Indian Railway Stores Services, the Military Engineer Services, Central Engineering Service Group A, Central Engineering Service (Roads), Central Electrical Engineering Service Group 'A' and Border Roads Engineering Service Group 'A'. The following are the guidelines for the medical examining authority in this regard:—

2 3 Marked for total deafness in one ears Fit for non-technical job if the deafness is up to 30 decibles in (1)higher frequency. other being normal. (2) Perceptive deafness in both ears in which Fit in respect of both technical and non-technical jobs if the some improvement is possible by a deafness is upon 30 decibles in speech frequencies of 1000 to hearing aid. 4000. Perforation of tympanic membrance of (3) (i) One ear normal other ear perforation of tympanic membrane Central or marginal type. present temporarily unfit. Under improved conditions of Ear Surgery a candidate with marginal or other Perforation in both ears should be given a chance by declaring him temporarily unfit. (ii) Since, all marginal/attic perforations are unsafe, they are temporarily unfit whether present in one or both ears. Post surgery patient can be made fit only if both ears have hearing of 30 decibles or better. (iii) Central perforation both ears – Temporarily unfit. Ears with mastoid cavity sub-normal (i) Either ear normal hearing other ear, Mastoid cavity—Fit (4) for both technical and non-technical jobs. hearing on one side/on both sides. (ii)Mastoid Cavity is temporarily unfit whether present in one or both ears. Post surgery, patient can be made fit only if both ears have hearing of 30 decibles or better. (5) Persistently discharging ear operated/un-Temporarily Unfit for both technical and non-technical jobs. operated.

(6)Chronic inflamatory/allergic conditions of (i) A decision will be taken as per circumstance of individual nose with or without bony deformities of cases. If deviated nasal septum is present with Symptoms nasal septum. Temporarily Unfit. (7) Chronic inflamatory/condition of tonsils (i) Chronic inflammatory conditions of tonsils and/or Larynixand/or Larynix. (ii) Hoarseness of voice of severe degree if present then temporarily Unfit. (8) Benign or locally malignant tumours of (i)Benign tumours also need treatment and this treatment has its E.N.T. own failure and complications, including death. Hence, all benign tumours are temporarily unfit and can only be fit after successful treatment/surgery. (ii) Malignant Tumours - Unfit (9)Otosclerosis. If the hearing is within 30 decibles after operation or with the help of hearing aid Fit. (10)Congenital defects of (i) If non-interfering with functions Fit. (ii) Stuttering of severe degree-Unfit. ear, nose or throat. (11)Nasal Poly Nasal Polyps also need treatment and this treatment has its own failure and complications. Hence, all Nasal Polyps are temporarily unfit and can only be made fit after successful treatment/surgery.

- (b) that his/her speech is without impediment;
- (c) that his/her teeth are in good order and he/she is provided with dentures where necessary for effective metication (well filled teeth) will be considered as sound;
  - (d) that the chest is well formed and his chest expansion is sufficient and that his heart and lungs are sound;
  - (e) that there is no evidence of any abdominal diseases;
  - (f) that he is not raptured;
  - (g) that he does not suffer from hydrocele, varicose, veins or piles. To be declared 'Temporarily unfit' and fit only after successful surgery.
  - (h) that his limbs, hands and feet are well formed and developed and that there is free and perfect motion of all his joints. However, candidate may be considered fit for all services if condition is not degenerative and there are no associated secondary deformities
  - (i) that he does not suffer from any inverterate skin disease;
  - (j) that there is no congenital malformation or defect;
  - (k) that he does not bear traces of acute chronic disease pointing to an impaired constitution;
  - (1) that he bears marks of efficient vaccination; and
  - (m) that he is free from communicable disease.
  - (n) Grade-I Haemorrhoids should be declared 'Fit.
  - (o) Agenesis or absence of both testes is permanent unfit. In case of single impalpable testes it is impossible on routine examination to differentiate between agenesis of testes and impalpable undescended testes. Undescended testes is 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.
  - (p) All candidates having transplanted organs should be declared 'Unfit'.
  - (q) All candidates with malignancies detected at the time of entry into service should be declared 'Unfit'.
  - (r) Morbid obesity is a diseased state. It limits the ability of the persons to perform and is an independent risk factor for Index)various other diseases. These candidates are 'Temporarily Unfit' and can become 'fit' if they achieve BMI(Body Mass Index)<35 without resorting to surgical or interventional therapies. This is because, such therapies have several long term complications of their own. Temporarily unfit in BMI>35. May be declared 'Fit'

- if BMI improves to <35 within stipulated time for appeal. Permanently unfit if BMI corrected by any surgery or interventional procedure.
- (s) History and evidence of organ donation is not in itself a reason to declare a candidate unfit if he/she is in otherwise normal state of health.
- 12. Radiographic examination of the chest for detecting any abnormality of the heart and lungs, which may not be apparent by ordinary physical examination will be restricted to only such candidates who are declared finally successful at the concerned Engineering Services Examination.

The decision or the Chairman of the Central Standing Medical Board (conducting the medical examination of the concerned candidate) about the fitness of the candidate shall be final.

13. In case of doubt regarding health of a candidate the Chairman of the Medical Board may consult a suitable Hospital Specialist to decide the issue of fitness or unfitness of the candidate for Government Service e.g. if a candidate is suspected to be suffering from any mental defect or aberration; the Chairman of the Board may consult a Hospital Psychiatrist/Psychologist etc.

When any defect is found it must be noted in the Certificate and the medical examiner should state his opinion whether or not, it is likely to interfere with the efficient performance of the duties which will be required of the candidate.

- 14. The Candidates who desire to file an appeal against the decision of the Medical Board are required to deposit an appeal fee of Rs. 100 in such a manner as may be prescribed by the Government of India, Ministry of Railways (Railways Board) in this behalf. This fee will be refundable only to those candidates who are declared fit by the Appellate Medical Board whereas in the case of others it will be forfeited. Along with, 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 a Medical Board. The medical fitness certificate submitted by a candidate is only a prerequisite for appealing against the findings of the First Medical Board. Candidates must have a copy of this certificate when, they present themselves before the Medical Board. The appeals should be submitted within 7 working days from the date of communication(Email) in which the decision of the first Medical Board is conveyed to the candidate; otherwise request for medical examination by an appellate Medical Board will not be entertained. The medical examination by the Appellate Medical Board will be arranged only a candidate's own cost. No travelling allowance or daily allowance will be admissible for the journeys performed in connection with the medical examination of the Appellate Medical Board. Necessary action to arrange medical examination by the Appellate Medical Board will be taken by the Ministry of Railways (Railway Board) on receipt of appeals accompanied by the prescribed fee within the stipulated time.
- 15. The decision of the Appellate Medical Board will be final and no appeal shall be against the same.

#### MEDICAL BOARD'S REPORT

The following intimation is made for the guidance of the Medical Examiner:

1. The standard of physical fitness to be adopted should make due allowance of the age and length of service, if any of the candidate concerned.

No person will be deemed qualified for admission to the Public Service who shall not satisfy ......

Government or the appointing authority as the case may be that he has no disease, constitutional affliction, or bodily infirmity, unfitting him or likely to unfit him for that service.

It should be understood that the question of fitness involves the future as well as the present and that one of the main objects of medical examination is to secure continuous effective service and in the case of candidates for permanent appointment to prevent early pension or payment in case of premature death. It is at the same time to be noted that the question is one of the likelihood of continuous effective service, and that rejection of a candidate need not be advised on account of the presence of a defect which in only a small proportion of cases is found to interfere with continuous effective service.

A lady doctor will be co-opted as member of the Medical Board whenever a woman candidate is to be examined.

The report of the Medical Board should be treated as confidential.

In case where a candidate is declared unfit for appointment in the Government service, the ground for rejection may be communicated to the candidate in broad terms without giving minute details regarding the defects pointed out by the Medical Board. Please note that detailed reasons for medical unfitness will not be put on public domain whereas the individual concerned will be informed the reasons. However, status of the medical examination as Fit/Unfit/Partially Unfit/Temporarily Unfit will be uploaded on the official website of Indian Railways viz. <a href="www.indianrailways.gov.in/railwayboard>News&Recruitment>Engineering Services updates">www.indianrailways.gov.in/railwayboard>News&Recruitment>Engineering Services updates</a>.

In case where a Medical Board considers that a minor disability disqualifying a candidate for Government service can be cured by treatment (medical or surgical) a statement to that effect should be recorded by the Medical Board. There is no objection to a candidate being informed of the Board's opinion to this effect by appointing authority and when a cure has been effected it will be open to the authority concerned to ask for another Medical Board.

In the case of candidates who are to be declared "Temporarily Unfit" the period specified for re-examination should not ordinarily exceed six months at the maximum. On re-examination after the specified period these candidates should not be