GOVERNMENT OF INDIA
MINISTRY OF HOME AFFAIRS
(POLICE DIVISION–II)

GUIDELINES FOR RECRUITMENT MEDICAL EXAMINATION IN CENTRAL ARMED POLICE FORCES AND ASSAM RIFLES

Revised Guidelines as on May 2015

Acknowledgement

The medical examination is an important event before appointment in public services. A person is to satisfy the Government that he/she has no disease, constitutional infirmity which makes him/her unfit for government service.

The medical fitness criteria have due allowances for the age of the candidate yet it should be understood that the question of fitness involve future as well as present and that one of the main object of medical examination is to secure a continuous effective service and to prevent early pension or payment due to premature discharge from service or death. The instructions of medical examination had been issued by MHA for Asstt.Commandant, Sub Inspectors and Constable in CAPFs separately and have been amended as and when need arose. During past there have been court judgments which were overriding the existing instructions. The medical advancement has also brought the treatment technology to a stage where a disease or disability is curable to normal functional status. A need to revise and redraft the medical examination guidelines in a more exhaustive and illustrative manner and encompassing the fruits of advancement in medical technology was felt and thus a board of specialists and experienced medical officers from CAPFs was constituted under the Chairmanship of Dr Mukesh Saxena, IG/Director (Med) BSF for the purpose. The board examined existing instructions on medical examinations of the MHA, Indian Army as well as Armed Forces of other nations and has prepared the present medical examination guidelines in a consolidated manner for all ranks of the CAPFs. The guidelines have illustration of various medical conditions for better understanding. I place on record my sincere thanks to Dr Mukesh Saxena, IG/Director(Med) BSF and all the board members who have taken great pains in drafting and preparing these guidelines. I believe that these guidelines will be helpful to medical officers & recruiting authorities of CAPFs & ARs.

(**Dr Surendra Pal**)
ADG(Med) CAPFs, NSG & AR

New Delhi
Dated the 20th May, 2015

A.VI-1/2014-Rectt(SSB)
Government of India
Ministry of Home Affairs
(Pers.II Desk)

North Block, New Delhi
Dated the 20th May 2015.

OFFICE MEMORANDUM

Subject:- **Revised uniform guidelines for recruitment medical examination for recruitment of GOs and NGOs in the CAPFs &AR.**

The undersigned is directed to refer to this Ministry's UO No.V-18011/24/ADG(Med)/WP-RKV/2014 dated 05th Dec 2014 forwarding therewith the draft uniform guidelines (Booklet) for medical examination test for recruitment of GOs and NGOs in the CAPFs & AR prepared by the Committee headed by Dr Mukesh Saxena, IG (Med), BSF with Medical Officers from other CAPFs and the comments/suggestions furnished by the CAPFs & AR thereof and to say that the draft uniform guidelines on the subject was examined in this Ministry in consultation with the ADG(Med), CAPFs &AR and approved by the competent authority.

2. The booklet (90 pages) containing approved revised uniform guidelines for recruitment medical examination for recruitment of GOs and NGOs in the CAPFs &AR is enclosed herewith for implementation.

3. This issues with the approval of Union Home Minister.

Encl:- **Booklet(90 pages)**

(R.P Sati)
Under Secretary (Pers.II)
Tel-23092889

DG, CRPF
DG, BSF
DG, SSB
DG, ITBP
DG, CISF
DG, Assam Rifles
ADG (Medical), CAPFs &AR

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UNIFORM GUIDELINES FOR MEDICAL EXAMINATION TEST (MET) FOR RECRUITMENT IN CAPFs, NSG& AR

Introduction

For much of the 19th century, the army was recruited in a wide variety of places, and many of its recruits were mercenaries. These mercenaries were hired out by the rulers on contracted terms and mainly consisted of natives. Thus, the Army has traditionally relied upon volunteer recruits, the only exceptions to this being during the latter part of the First World War, and then again during the Second World War, when the necessity of medical examination of the recruits was felt first time as the involvement of the troop was global, to prevent enrollment of the emotionally unstable and other candidates harboring various diseases.

The difficult and hostile terrain where CAPF's personnel guards, requires a high level of mental and physical standard to cope with the stressful strictly regimental life away from family under a strict disciplinary code 24 hours a day, about 300 days in a year, at times under the shadow of the gun and deployed at high altitudes, snow-bound areas, deserts and other difficult terrains etc.

In medical colleges doctors are taught to listen to history carefully from the patient, followed by detailed examination and thus a provisional diagnosis is formed. Keeping in mind many differential diagnoses, the relevant investigations are ordered and thus when there is a perfect marriage among these three, a final diagnosis is formulated and accordingly treated. Whereas, during the medical examination for the purpose of recruitment, it's neither feasible on ground to elicit history nor do the candidates reveal their disease. Moreover, to complete medical examination within stipulated time with limited investigations and in absence of true past history, the chances of various diseases which are totally based on history cannot be ruled out at the juncture; so, in such inevitable circumstances, the recruiting medical officer is left with no choice but to make decision only on clinical findings. Therefore, the medical officers need to be careful, meticulous and judicious during recruitment medical examination.

On the other hand, It is important to understand that a candidate rejected for enrolment on medical grounds does not necessarily mean that he has a disease as the Recruitment medicals are distinct from annual medicals (i.e., SHAPE system) & clinical practice.

1. AIMS

The purpose of medical standards is to ensure that medically FIT personnel, accepted into the central armed police forces of the union of India, are:

(a) Free of contagious diseases which are likely to endanger the health of other personnel.

(b) Free of medical conditions or physical defects/ infirmity that would lead to loss of man-hours on the ground of medical unfitness, necessary treatment or hospitalization etc.

(c) Medically and physically capable of satisfactorily completing required training. Besides he may be asked to undergo strenuous courses like commando, jungle warfare etc.

(d) Adaptable to the combatised environment without the necessity of geographical area limitations as he may be required to serve in high mountains, air, sea or desert etc.

(e) Capable of performing duties without aggravation of existing physical defects or medical conditions.

(f) Free from physical defects/ infirmity causing any hindrance in proper wearing of uniform combatised footwear or protective gears etc.

(g) Able to render continuous effective service, so that the force does not have to pay early pension or payments in case of premature death.

2. GENERAL INSTRUCTIONS FOR RECRUITMENT BOARD

a) The recruiting medical officer, while conducting medical examination of a candidate, if finding the candidate to be unfit, would record the parameter with reference where-to unfit has been opined. A reference would be made to the requisite standards prescribed or known to be prescribed and accepted as such by the experts in the field. This particular instruction should be strictly adhered to. For example, in case of unfitness due to tachycardia, it should be written as pulse rate 110/ min (Normal range-60 to 100 /min) or carrying angle 18^0 (Normal range- 10^0 to 15^0).

b) Cause of rejection should be mentioned with reference to its location, size, side of the body and other parameters as per applicability. Minor acceptable defects will also be written in the appropriate paragraph of the form, with opinion of the recruiting medical officer that the defect is not likely to interfere with the efficient performance of the duties which will be required of the candidate.

c) Recruitment Medical Officer will put his signature, name, rubber stamp, date and place of medical examination at relevant paragraphs in the Medical Examination Booklet.

d) Measurement of physical standards viz. height, weight, and chest is the responsibility of the Physical Standard Test Board (PST Board) for all categories of candidates i.e GOs, SOs and Ors. Medical officers will not be part of PST board both for Male & Female candidates. Since presence of a female is required at the time of recording of physical standard (PST), a female non medical staff may be associated with PST board. Recruiting medical officer need not record to physical measurements. Recruiting medical officer will mention physical standard in the medical examination form as recorded by the PST board. In borderline cases of overweight, BMI should also be considered to arrive at conclusion and variation of 5Kg +/- from the minimum/maximum limit may be accepted. Similarly while measuring height fraction of cm less that 0.5 will be ignored and 0.5 cm & more will be rounded off to the next higher cm.Standard height- weight chart is attached at **ANNEXURE- I.**

e) Identification marks should be noted concisely and clearly. Ideally two identification marks are to be noted by the medical officer. These should be of a durable nature, preferably on a visible/exposed part of the body and not on limbs if possible. Very distinctive, marked/big features, if available, should be used. The two marks should be on different parts of the body. Identification marks should be mentioned with precise parameters as under:

I. Side of the body, e.g., Rt/Lt, Front/Back etc.
II. Distance from nearby landmark, e.g., distance from spine in case of upper back
III. Direction from nearby or underlying landmark, e.g., front/back/tip of shoulder, anterolateral to Rt nipple, 3 o'clock position for abdominal mark etc.
IV. Size and shape of the mark when applicable, e.g., birth mark, scar etc.
V. Colour of the mark if distinctive, e.g. in case of mole.
VI. As far as possible, high sounding / medical terminology should not be used.

f) Ideally, all investigations are to be conducted at central government/ state government / CPAFs hospitalsor their empanelled private institutions, failing which, services of non-empanelled private laboratories may be availed after observing proper codal formalities as per GFR.

g) Only combatised medical officer will be detailed for recruitment (DME) duty. A training syllabus at least for one week to be kept during combatisation course of doctors to educate them for recruitment procedures.

h) Human body may contain so many defects/deformities that it is not possible to list all causes of unfitness in the medical recruitment instructions that may militate against efficient discharge of service. Neither is it possible to list all trifling cases where the candidate may be accepted/ rejected. Therefore, the recruiting medical officer needs to use his clinical acumen, to the best of his knowledge and keeping in view the best interests of the forces. If the cause of rejection is not mentioned in these instructions, it has to be co-related to an infirmity with reference to either known medical literature on the subject or a parameter set out. In case of unfitness, where no known references are available the defect/infirmity may be elaborately justified with reference to service requirement for which the candidate is being rejected.

i) Briefing of the candidates regarding fitness/unfitness is to be done gently and politely by the presiding officer. The rejection certificate, as given in **Annexure-III**, will be signed by the recruiting medical officer and countersigned by the presiding officer.

j) A declaration, as given in **Annexure-II**, is to be obtained from the candidate regarding history or presence of diseases and treatment taken if any, evidence of which is not readily obtainable during the initial medical examination. Any false declaration in this aspect, discovered later at any stage of service, will make the candidate liable for disciplinary action including termination of service. An undertaking to this effect will form part of the declaration.

k) Appeal for Review Medical Examination will be accompanied by certificate from a doctor of the concerned specialty fromappropriate level of Government Hospitals as applicable to the candidate (Go's, SO' and OR's, as given in **Annexure-IV Annexure-V**.)

l) Refusal to undergo medical examination at any stage or absenting oneself from the same will renderthe candidate unfit.

m) Medical Examination should be conducted in a quiet, well lit and ventilated room having sufficient space.

n) One trained and experienced paramedical/ nursing staff should be associated to assist the Recruiting Medical Officer. A ministerial staff should invariably be deputed by concerned administrative authority to provide secretarial assistance to the recruiting medical board.

o) Medical Examination of recruits should be carried out in good day light and never after sunset. Ideally, it should be completed half an hour before sunset.

p) Not more than **20 candidates** should be examined by Medical Officer/Medical Board in a day.

q) All the columns of Medical Examination Booklet/Health Certificate must be filled up by the recruiting medical officer himself and no columns should be left unfilled.

r) All candidates who are subjected to medical examination will be examined thoroughly to assess their mental and physical fitness to perform all types of duties in any part of the country or abroad. Candidates may be advised a day before medical examination to get their ears cleaned of wax, if any, and should have proper bath before reporting for medical examination.

s) At some stages of medical examination male candidates are required to be examined in nude. Loin cloth is to be permitted except for, when genitalia and perineum is being examined.

3. INVESTIGATIONS:

i. Recommended for all candidates- Hemoglobin, Urine routine/microscopic examination and X-Ray chest (PA view).

ii. For all female candidates- Urine test for pregnancy. (The urine test for pregnancy to be done before a female candidate is subjected to CXR. If UPT is positive, guidelines as given under Examination of Female candidates are to be followed.)

iii. Special tests:

a) Relevant investigation for any post operative scar;

b) Any investigation advised by specialist when candidate is referred to the specialist.

iv. Recruiting medical officer may need additional days for arranging specialist opinion in some cases and therefore complete report on the same day may not be insisted upon.

v. Medical officer should be associated with the recruitment board only from the time of final medical examination and not from the very beginning.

vi. In case of medical board consisting of specialists the specific specialist observation/comments by the specialist, the onus of the correctness will lie on the concerned specialist. However, the Presiding Officer will also be responsible.

4. EQUIPMENT FOR MEDICAL EXAMINATION:

It will be the responsibility of the administrative authority of the recruitment venue to provide the following equipment to the recruiting medical officer.

a. Measuring Tape. (ISI Mark)
b. Snellen's chart (Multilingual)
c. Near vision chart (Hindi and English)
d. Ishihara's book (Original)
e. Auroscope
f. Nasal Speculum
g. Torch (6 Volts)
h. Stethoscope
i. Measuring wooden blocks (7 cm and 5 cm)
j. Percussion Hammer
k. Pen torch and paper roll
l. BP Apparatus (Mercury)
m. Marking Pencil/ink
n. Weighing Machine (ISI Mark)
o. Goniometer (to measure carrying angle)
p. Screen
q. Magnifying glass
r. Proctoscope/Gloves/Lignocaine jelly/ Gauge pieces.

5. GENERAL EXAMINATION

While examining the candidates (he/she) principal points which need careful attention are as under

a) The candidate should be sufficiently intelligent and of sound mental health.
b) Hearing should be good and that there is no obvious sign of ear, nose and throat disease.
c) His/her vision with either eye should be up to required standard. His/her eyes should be bright, clear with no obvious squint or abnormality/disease. Movements of eye balls should be full & free in all directions.
d) Speech should be without impediment i.e. no stammering.
e) Should not have perceptible & visible glandular swelling anywhere in the body.
f) Chest should be well formed, devoid of any abnormality like flat chest, pigeon chest, with rickety rosary defects. Chest should expand for at least 05 cms with ease & that heart & lungs are sound.
g) Limbs, hands & feet should be well formed & fully developed and there shall be perfect motion of all the joints.
h) Should not have any obvious old/ mal united fracture of bones.
i) There should be free & perfect movements of all the joints.
J) Feet & toes should be well formed.
k) Should not have any congenital malformation or defects.

l) Should not bear traces of previous acute or chronic disease pointing to an impaired constitution.

m) He/she should possess sufficient no. of sound natural teeth for efficient mastication, should have minimum 14 dental points.

n) He/she should have no obvious disease of genito urinary tract.

o) He/she should have no inguinal, scrotal swelling.

p) Both the testes are in the scrotum and of normal size.

In the case of re-enrolment, greater care must be taken to ascertain from the individual past history about whether he/she has ever been wounded or suffered from any disease which might be impediment for fitness in future. A note to this effect should be made in the health certificate at the time of enrolment.

6. GENERAL GROUNDS FOR REJECTION

1) Indication of any chronic disease like tuberculosis, syphilis, or other venereal disease, rheumatoid/ any type of arthritis, hypertension etc.
2) Bronchial or laryngeal disease like Asthma, chronic Tonsillitis & Adenoids etc.
3) Indication of Valvular or other disease of heart.
4) Generally impaired constitution, so as to impede efficient discharge of training/duties.
5) Low standard vision.
6) Any degree of squint.
7) Otitis media.
8) Deafness, any degree of impaired hearing
9) Stammering, as specified later
10) Loss of/ decay of teeth resulting in reduction of dental points below 14.
11) Wearing of half or complete artificial denture.
12) Contraction or deformity of chest and deformity of joints.
13) Abnormal curvature of spine (exact nature, e.g., kyphosis, scoliosis, lordosis etc. to be specified).
14) Abnormal Gait.
15) Endocrinal disorders.
16) Mental or nervous instability- evidence of nervous instability
17) Defective intelligence
18) Any type of hernia.
19) Chronic skin disease like vitiligo, Leprosy, SLE, Eczema, Chronic extensive Fungal dermatitis.
20) Any congenital abnormality, so as to impede efficient discharge of training/duties.
21) Anal fistula, haemorrhoids and other anorectal diseases as specified later.
22) Deformity of feet like Flat foot, Club foot, Plantar warts etc.
23) Epilepsy (history or evidence; history as per Annexure-II).
24) Nystagmus/ Progressive Pterygium.

25) Large hydrocele, even if curable by operation. Small hydrocele (if operated upon & no bad scar is left after operation, may be accepted).
26) Cubitus varus/ Valgus.
27) Polydactyl of hands/feet.
28) Undescended testis, atrophic testis, marked varicocele, testicular swellings.
29) Varicose veins. The diagnosis of varicose vein should be made on the basis of dilatation and tortuosity of veins and after confirmation of incompetency of Sapheno-femoral junction/ Sapheno-popliteal junction or perforators by relevant clinical tests. Only prominence of veins should not be criteria for rejection. Cases of Varicose veins, even if operated, are not to be accepted because basic defect remains unchanged.

NOTE :- In case of rejection recruitment medical officer will fully justify in writing below cause of rejection in recruitment form, otherwise he will be held responsible.

7.MINOR ACCEPTABLE DEFECTS

Acceptance of candidates suffering from trifling defects: - candidates presenting with **mild** degree of the following defects may be accepted, as specified in the relevant paras:-

(a) Mild Flat Feet- If the joints of tarsus are flexible and the arch reappears on standing on tip toes.
(b) Mild Knock-knee- With Inter-malleoli distance 5 Cms or less.
(c) Mild Bow legs- With inter-condylar distance 7 cms or less.
(d) Mild Hammer toes- If there are no painful corns or bursae on the dorsum of the toes.
(e) Mild Varicocele- If veins are palpable after valsalvamanoeveour, otherwise invisible.
(f) Slight stammering- If stammering appears after 4-5 sentences.
(g) Healed tympanic membrane perforation.
(h) Presence of wax in ears without hearing defect
(i) Mild and moderate DNS with both nasal airways patent may not be rejected.
(j) Bilateral Hypertrophy of inferior turbinate with patent airway.
(k) Only prominence of veins in the lower limbs to be accepted.
(l) Loss of only soft tissue of terminal phalanx of little finger of one or both hands is to be accepted.
(m) Candidates with carrying angle upto 20^0 may be accepted if the same is not associated with abnormality of elbow joint.
(n) Only because of tilting of pelvis or drooping of shoulder may not be rejected unless it is associated with some specific disease / disability
(o) Cervical rib without any functional disability.
(p) Only tremors without any organic cause.
(q) Healed trachoma without residual gross deformity and no impaired vision.
(r) Report of the radiologist must have clinical co-relation before rejection.
(s) Any other slight defects which in the opinion of the Recruiting Medical Officer will not interfere with efficiency of candidate as a soldier in future.

NOTE : -

(a) In all cases where a candidate suffering from trifling defects is accepted the Recruiting Medical Officer should fully satisfy himself that the defect will not in any way affect the efficiency of candidate and the defects should invariably be mentioned in recruitment form.

(b) Candidates suffering from minor defects of ordinary nature such as simple sores, shoe bite, common cold and similar other minor ailments which usually last only a few days, may be accepted. Recruiting Medical Officer before accepting such a candidate must fully satisfy himself that the disease is likely to be cured in a few days with outdoor treatment.

(c) In doubtful cases candidates may be referred to a specialist for examination and opinion which may include X-Ray examination or any other special investigation/ test/ examination.

8. DIRECTIONS FOR GENERAL EXAMINATION AND OBJECTIVES

The Medical Officer can examine the candidates in any sequence as he desires. However, a stepwise sequence of examination as given is advised to be followed by all Recruiting Medical Officers so that any disease/disability is not overlooked. Physical examination of candidate is carried out from head to toe.

Steps of Medical Examination:-

On the first encounter with the candidates in the morning the recruiting MO should brief the anxious applicants about the importance of medical examination and reassure them that this is one of the routine requirements in between their dreams, to allay their fear regarding medical examination.

Before proceeding for detailed examination, the identity of the applicant is invaluable. The attached recent photograph, asking his roll no. etc verifies the correct candidate. Identification marks should be noted concisely and clearly, giving importance to the visible marks and preferably at the different parts of the body.

Step I.

1. **Firstly examine the following body parts** :-
   a. Eyes and vision
   b. Ears & hearing
   c. Nose, sinuses and larynx
   d. Oral cavity
   e. Dental conditions.

Step II.

(a) This is advisable that each candidate is examined turn by turn by following head to toe examination approach for easy remembrance. He/she should be made to stand, upright, with foot apart & arms abducted above his/her head, while the Medical examiner walks slowly round him/ her and carefully the whole surface of his/ her body should be inspected.

(b) The points to be observed and noted in part of the examination are the following

i. General physical development
ii. Formation & development of limbs
iii. Power & ROM in joints including gait
iv. Flatness of feet
v. Any abnormality of toes
vi. Skin disease
vii. Cicatrized marks or keloids *not causing functional disability*

(c) Now look for any obvious abnormality (defined in later paragraphs), as though scanning whole of the body.
Standing- General Survey

i. Head
ii. Neck
iii. Chest wall
iv. Abdomen wall
v. Upper limbs
vi. Lower limbs
vii. Miscellaneous conditions of the extremities
viii. Skin
ix. Spine and sacroiliac joints
x. General and miscellaneous conditions and defects
xi. Genitalia including inguinal regions
xii. Ano-rectal region

d) **Sitting**

i) CVS
ii) Respiratory system

e) **Lying**

i. Abdominal organs & gastrointestinal system
ii. Tests for joints integrity of lower limbs for ligamentous injuries.
iii. Tests for Varicose veins.

9. DETAILED MEDICAL EXAMINATION

I. EXAMINATION OF EYES AND VISUAL STANDARDS

Examination of eyes and visual standards will be strictly followed as per Govt of India order No. I-45024/1/2008-Pers.II dated 18th May 2012 and further restore vide order No.I-45024/1/2008-Pers.II dated 20th Oct 2014 which is annexed as Annexure VIA and Annexure VIB.

II. EXAMINATION OF EARS AND HEARING STANDARDS:

a) Deafness- Deafness of any degree should be unfit.
b) Persistent ear discharge- candidate should be declared unfit.
c) Perforation of Tympanic Membrane-healed perforation without any hearing deficit should be accepted.
d) Any other condition (congenital or acquired) like Atresia of the meatus, exostosis, neoplasm which is causing obstruction of ear passage and history of recurrent earache, tinnitus and vertigo should be rejected.

1. Examination of Ear Drums:-

This is carried out in a dark room or shaded cover. Good illumination and magnification is obtained by use of auroscope. Trauma to ear canals avoided by straightening the contours of the meatus by gently pulling the pinna upwards and backwards towards the occiput. The auroscope is held like a pen between thumb and index finger with the ulnar border of hand resting gently against the side of the candidate's head. Using the auroscope this way cannot dig into the meatal skin and will not cause pain. Now the ear drum can be visualized through auroscope with one eye, keeping the other eye closed.

2. Hearing Tests:-

Normally a candidate should be able to hear forced whisper at distance of 06 meters behind his back with each ear separately. It should be carried out preferably in a quiet room individually with the help of an assistant. Candidate is asked to stand near a wall facing him/her. The examiner will stand at a distance of 06 meters. The test will be done for each ear separately after plugging of the other ear. Simple and effective way is to ask an assistant to rub a piece of paper gently and continuously with a pencil or finger on the ear not under test. The force whisper is made with the residual air at the end of normal expiration. If the candidate can hear with both the ears separately, then his hearing is normal. If he/she is unable to hear this, the distance will be reduced till he is able to hear. Thus, if the distance is less than 06 meters, the candidate is rejected.

3. **Candidate should be declared unfit having following diseases:-**

i) External ear.

Atresia or severe microtia, congenital or acquired stenosis, or any oth severe external ear deformity.

ii) Mastoids.

Mastoiditis as well as its complications like residual mastoiditis with fistul chronic drainage or conditions requiring frequent cleaning of the masto bone.

iii) Middle and inner ears

Chronic otitis media, cholesteatoma, or history of any inner or middle e surgery (including cochlear implantation).

iv)Tympanic membrane.

Existing perforation of the tympanic membrane or history of surgery correct perforation during the preceding 120 days.

C) Nose, sinuses & larynx:

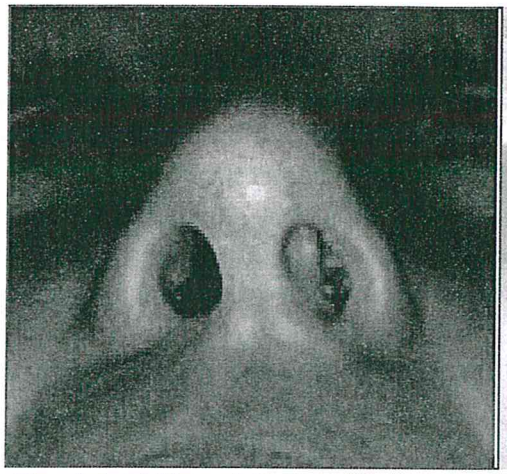
Nose should be carefully examined and ensured that airways are free. Complete examination of nose with the help of nasal speculum is to be dor to rule out polypus of nose, Deviated Nasal Septum or Atrophic Rhinitis. T test the nasal obstruction the candidate is asked to exhale forcefully throug one nostril while other is kept closed with the tip of thumb. Same procedu is repeated for another nostril. Right thumb may be used for right nostril ar left thumb for the left nostril.

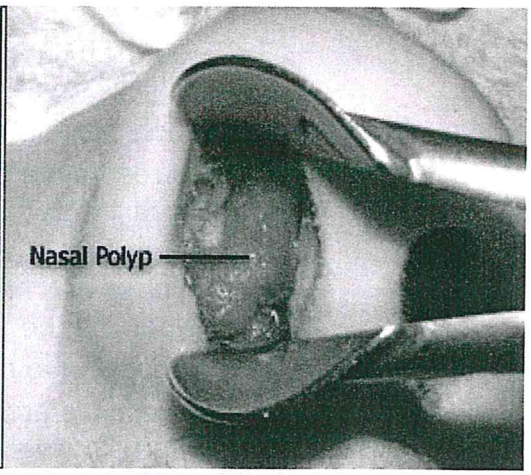
i) DNS, atrophic rhinitis, tubercular ulceration, chronic sinusitis a required to be excluded; however minor DNS, minor hypertrophie turbinates can be accepted if there is no marked airway obstruction.

ii) Candidates with polyps should be declared unfit and if after 30 days surgery there is no complication, these candidates can be accepte during review medical examination.

iii) The candidate should also be declared unfit having followir diseases:-

(a) Atrophic rhinitis
(b) Nasal polyps.
(c) Perforation of nasal septum.
(d) Marked DNS with nasal air way obstruction
(e) Deformities, or conditions or anomalies of the upper alimenta tract, viz., mouth, tongue, palate, throat, pharynx, laryn mandible and, nose that interfere with chewing, swallowin speech, or breathing.





Deviated Nasal Septum **Nasal Polyp**

Note: Only marked DNS, obstructing the airway will entail rejection.

III. DENTAL EXAMINATION:

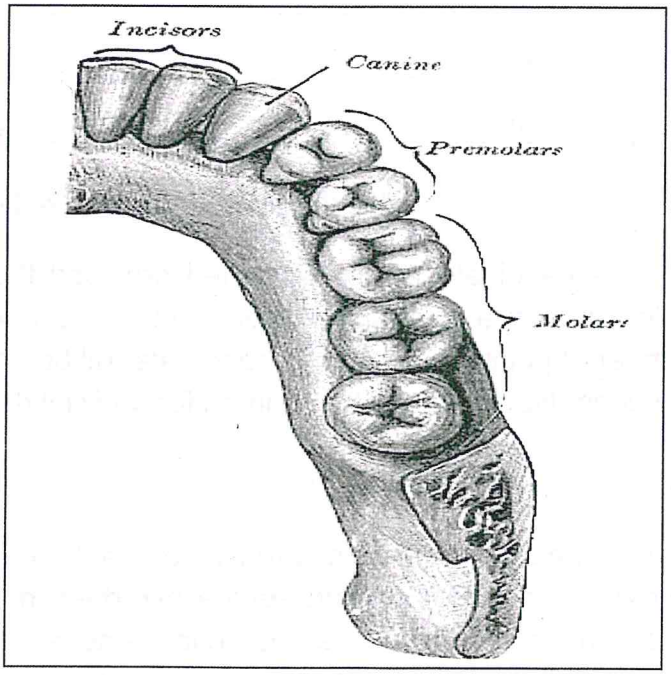
1. General Consideration:

a) The acceptance or rejection of a candidate on account of loss or decay of teeth will depend on the relative positions of the sound teeth.

b) A candidate must have sufficient number of natural teeth to enable him to masticate efficiently and on no account will be accepted, if he/she requires artificial dentures for efficient mastication (i.e., artificial fixed denture replacing any molar).

c) In order to assess whether a candidate has a sufficient number of teeth to masticate efficiently, the following guidelines will be taken into consideration for calculation of Dental points :-

2. Calculation of Dental Points:



i. Teeth which are not considered necessary for efficient mastication are allotte **ONE POINT** each and those essential **TWO POINTS** each.
ii. Each Incisor, Canine, Ist and 2nd Premolar will have one point provided tha corresponding lower teeth are present.
iii. Each 1st and 2nd Molar and well developed 3rd Molar will have the value of tw points provided in good opposition to corresponding teeth in the lower jaw.
iv. In case of 3rd molar not well developed it will have a value of one point only.
v. When all the 16 teeth are present in the upper Jaw and in good functiona apposition to corresponding teeth in the lower jaw, the total value will be 20 c 22 points according to whether the 3rd molar are well developed or not.
vi. The following natural teeth will be present in the upper jaw in good functiona apposition to the corresponding teeth in the lower jaw:-
    (a) Any 4 of the 6 anterior
    (b) Any 6 of the 10 posterior

Thus, the dental points will be counted as under:-

SL. No.	Name of teeth	Teeth in either jaw	Number allotted for each tooth, ifin good functional apposition to the corresponding teeth in the other jaw	Dental points
1	Incisors	4	1	4
2	Canine	2	1	2
3	Premolars	4	1	4
4	Molars	6	2	12

Maximum total points = 4+2+4+12=22

A candidate will be accepted provided there are at least 14 Dental points i his/her mouth and all these teeth must be sound or repairable. Thus, the minimun number of points required in a candidate will be 14. Well filled teeth will be considere as sound. No points will be counted for artificial denture.

3.Gums

i) Pyorrhea: Normal gums are pink and adhere closely to the teeth and have a shar border. Candidates having severe pyorrhea in which the gums are retracted, ma bleed easily and sometimes pus can be squeezed from them, should be rejected. I Pyorrhea is slight and teeth are otherwise sound, the candidate may be accepted.

STEP II: Examination on standing-

IV. HEAD:

Candidate should be declared unfit having following diseases:-

1) Uncorrected deformities of the skull, face, or mandible of a degree that would prevent the individual from wearing a protective mask or combatised headgear.

2) Loss or absence of the bony substance of the skull, not successfully corrected by reconstructive materials and leaving residual defect.

3) **Head injury.**

A. Severe head injury: History of head injury will be disqualifying if associated with any of the following:

(a) Post-traumatic seizure(s) occurring more than 30 minutes after injury.
(b) Persistent motor or sensory deficits.
(c) Impairment of intellectual function.
(d) Alteration of personality.
(e) Unconsciousness, amnesia, or disorientation of person, place, or time of 24-hours duration or longer post-injury.
(f) Multiple fractures involving skull or face.
(g) Cerebral laceration or contusion.
(h) History of epidural, subdural, subarachnoid, or intercerebral hematoma.
(i) Associated abscess or meningitis.
(j) Cerebrospinal fluid rhinorrhea or otorrhea persisting more than 7 days.
(k) Focal neurologic signs.
(l) Radiographic evidence of retained foreign body or bony fragments secondary to the trauma and/or operative procedure in the brain.

B. History of moderate head injury is disqualifying after 2 years post-injury. Applicants may be qualified if neurological consultation shows no residual dysfunction or complications. Moderate head injuries are defined as unconsciousness, amnesia, or disorientation of person, place, or time alone or in combination, of more than 1 and less than 24-hours duration post-injury, or linear skull fracture.

C. History of mild head injury is disqualifying after 1 month post-injury.Applicants may be qualified if neurological evaluation shows no residual dysfunction or complications. Mild head injuries are defined as a period of unconsciousness, amnesia, or disorientation of person, place, or time, alone or in combination of 1 hour or less post injury.

D. History of persistent post-traumatic symptoms that interfere with norr activities or have duration of greater than 1 month is disqualifying. Such symptoı include, but are not limited to headache, vomiting, disorientation, spa disequilibrium, impaired memory, poor mental concentration, shortened attenti span, dizziness, or altered sleep patterns.

V. NECK:

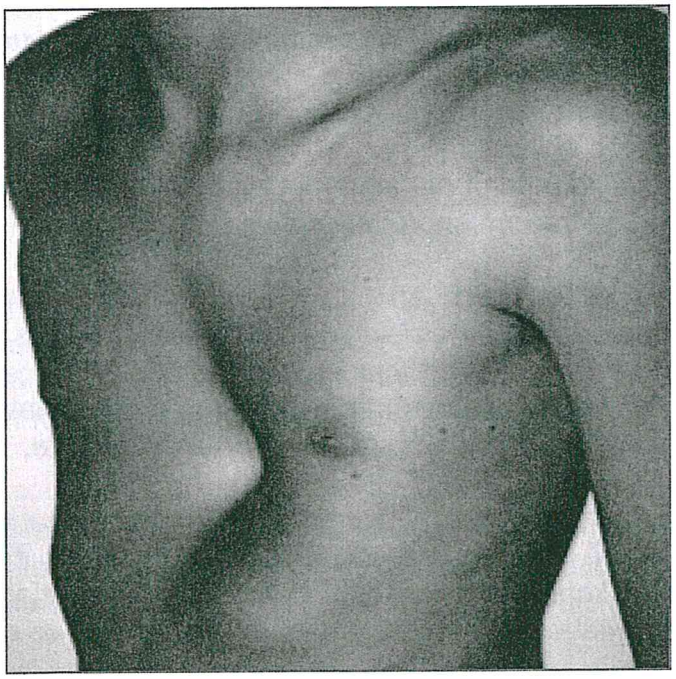
Candidate should also be declared unfit having following diseases:-

1. ***Symptomatic*** cervical ribs.
2. Congenital cysts of branchial cleft origin or those developing from remnants of thyroglossal duct, with or without fistulous tracts.
3. Contraction of the muscles of the neck, spastic or non-spastic, or cicatri contracture of the neck, to the extent that it interferes with the proper wearing c uniform or combatised equipment or is so disfiguring as to interfere with or prev satisfactory performance of combatised duty.
4. Goiter
5. Cervical lymphdenopathy
6. Any spinal deformity including restricted movements
7. Any cystic swelling or sinuses

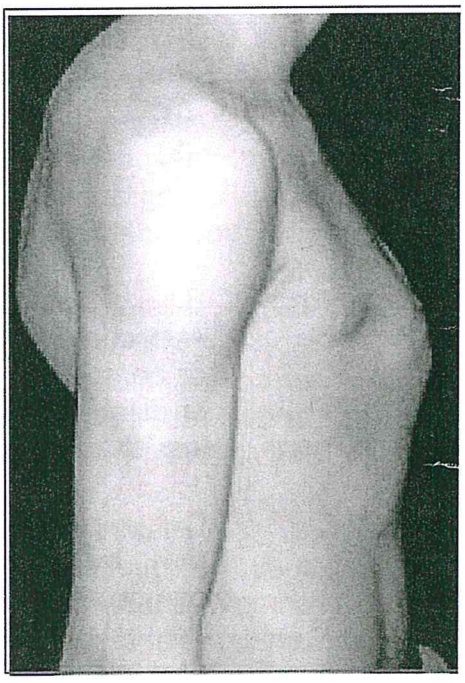
VI.CHEST WALL:

Examination is done with candidate standing with his/her arms extended above his/ head, the hands being in contact.

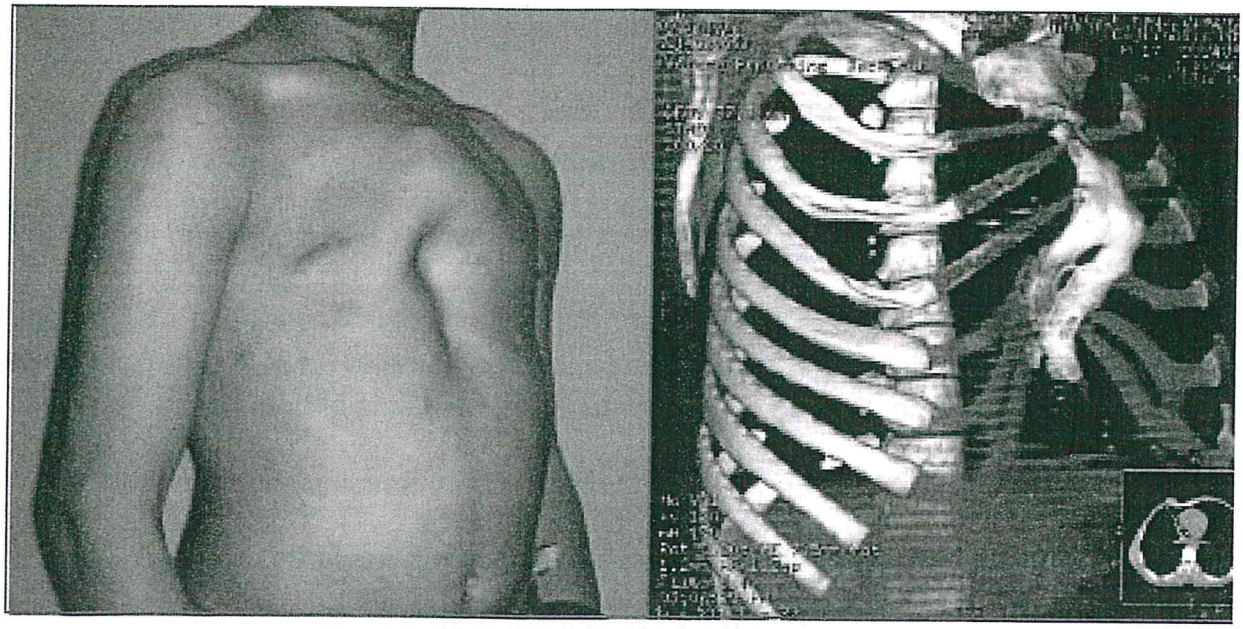
Chest wall is looked for deformities/malformations, including, but not limited Pectusexcavatum ,Pectuscarinatum, Pectusarcuatum, Poland syndrome etc.



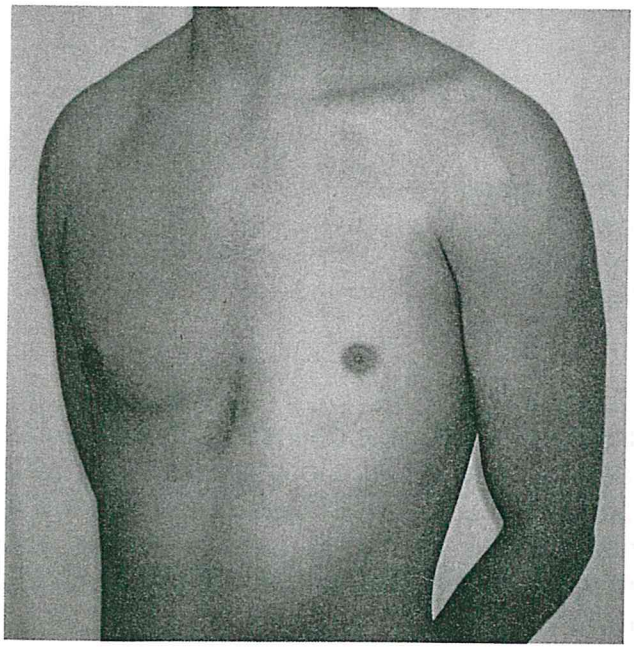
Pectusexcavatum



Pectusarinatum

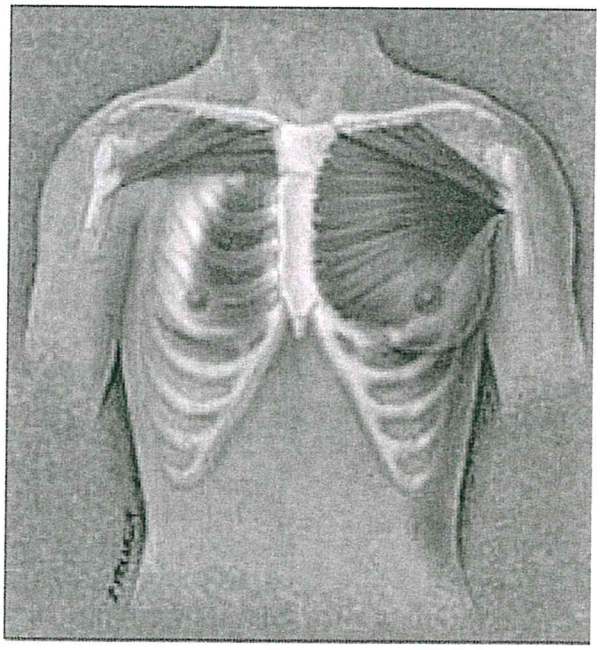


Pectusarcuatum



POLAND SYNDROME

Under developed left chest wall



Absent right Pectoris Major Muscle

VII. UPPER EXTREMITIES:

1. General Consideration:

The upper extremities will be examined from fingers to shoulder joints. Time saved by the medical examiner himself demonstrating as well as instructing th candidate to carry out the movements as desired to be made. The following are th directions to be given to the candidate to know the muscle power, range of moveme etc:-Stretch out your arms with the palms of both hands upwards.

a) Bend your thumbs across the palms of your hands.
b) Bend the fingers over thumb.
c) Bend your wrist backwards & forwards.
d) Bend the elbows.
e) Turn the back of the hands upwards.
f) Swing your arms around your head.

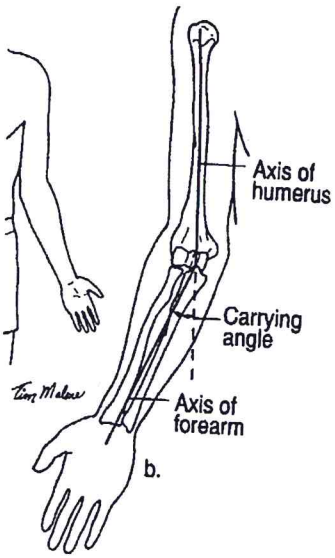
Specific note is made for any following conditions-

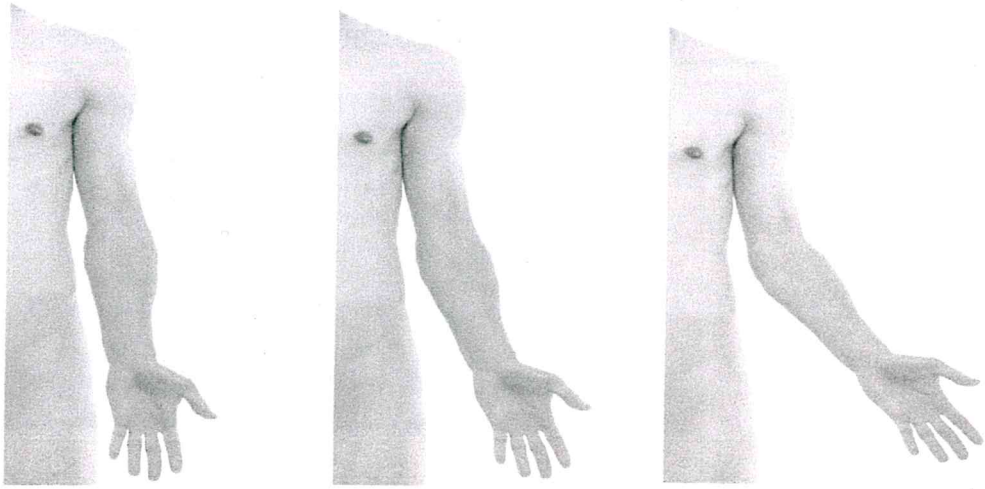
i. Operative scar mark
ii. Tremors
iii. Contractures
iv. Muscle wasting
v. Any Limitation of joint movements.
vi. Bony deformities Elbow
    a) Fixed flexion deformities
    b) Cubitus Valgus/ Varus.

2. Carrying angle-

a) Normal angle-The carrying angle of the elbow is defined as the angle between the lor axis of the extended forearm as it lies lateral to the long axis of the arm. Thus, this ang is the normal outward deviation of the extended and supinated forearm from the axis the arm. This angle is normally 10^0-15^0 in males, and in female 15^0-20^0. Howev candidates with carrying angle upto 20^0 may be accepted if the same is not associate with abnormality of elbow joint.

b) Cubitus valgus- The carrying angle apparently develops in response to pronatic of the forearm and keeps the swinging upper extremity away from the side of the pelv during walking. Increasing the carrying angle may lead to elbow instability and pa during exercise or in throwing activities of sports, may reduce function of elbow flexio predisposing to risk of elbow dislocation and increase evidence of elbow fracture whe falling on outstretched hand and fracture of the distal humeral epiphysis.

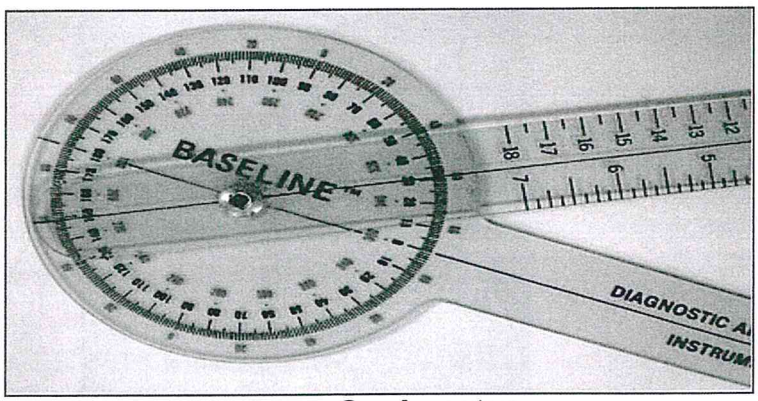




Cubitus varus Normal Cubitus valgus

Measurement of carrying angles-

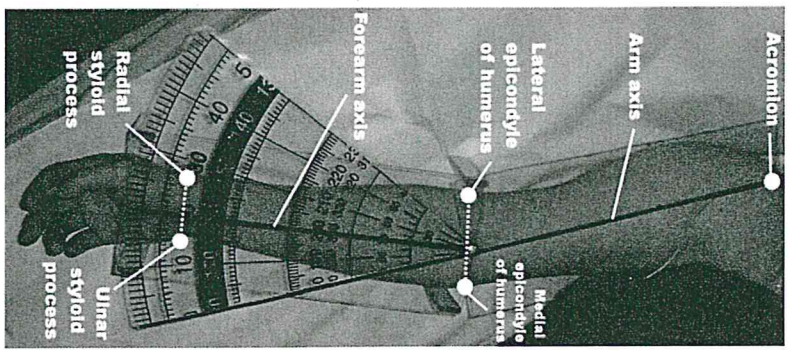
To measure the carrying angle the candidate is asked to be in the supine position, with the shoulder in 0° flexion and 0° extension, the elbow in full extension and in the supinated position. The axis of the arm is defined distally at the midpoint between the medial and lateral epicondyles of the humerus and proximally at the lateral border of the cranial surface of the acromion. The axis of the forearm is defined distally at the midpoint between the distal radial and ulnar styloid processes and proximally at the midpoint between the medial and lateral epicondyles of the humerus. The carrying angle is measured with a manual goniometer with two drawing axes of the arm and the forearm. This angle should be measured on both the sides. This angle disappears on pronation or on full flexion of the forearm.



Goniometer

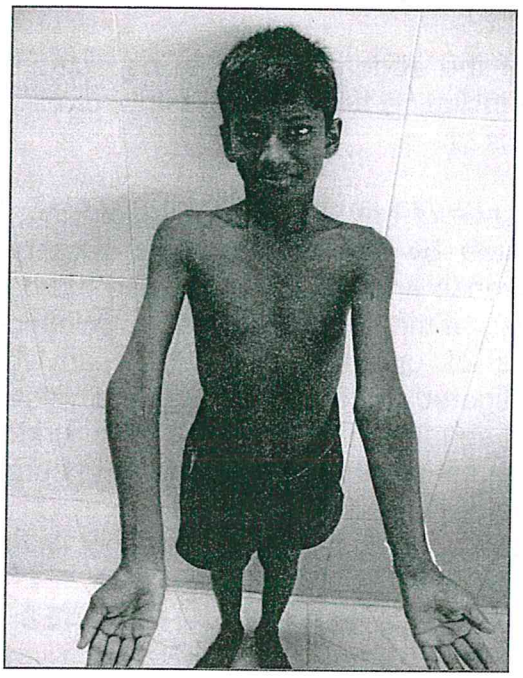
Procedure:

1. Ask the patient to stand up straight, roll his shoulders back and gently rotat palms to face forward.
2. Straighten the goniometer. Move the two arms into a straight line so that the readout on the plate shows 0 or 180 degrees.



3. *M*ark the mid point of medial and lateral epicondyles of humerus as mid poir elbow. Draw the lines along the axis of the arm and forearm as defined earli Now place the goniometer at the mid point of elbow and one arm at the axis the arm. Goniometer's other arm is rotated to match the axis of forearm.
4. Record the angle from the readout on the measurement plate. Subtract the measurement from 180^0 if your initial readout was 180^0 degrees. For examp the straight goniometer read 180^0 and it read 170^0fitted to the patient's elbov then the patient's carrying angle is 180^0 -- 170^0 = 10 degrees.
5. Repeat the process with the other elbow. Record the carrying angles for botl elbows, recording from which arm each measurement was taken.

C) Cubitus varus



is

If the angle is decreased so that the extended forearm is deviated towards midline of the body, it is called cubitus varus. It is often referred to as 'Gunstock deformity', due to the crooked nature of the healing. **Cubitus varus is a cause for rejection.**

3.Hand and fingers.

(a) Loss of only soft tissue of terminal phalanx of little finger of one or both hands is to be accepted.

(b) Polydactyly/syndactly is disqualifying.

(c) Scars and deformities of the fingers or hand that impair normal functioning/free movement of the fingers/hand to such a degree as to interfere with the satisfactory performance of combatised duties, are disqualifying.

(d) Presence of paralysis or weakness of upper limbs, including nerve paralysis, carpal tunnel and cubital syndromes, lesion of ulnar and radial nerve, sufficient to produce physical findings in the hand, such as muscle atrophy and weakness is disqualifying.

(e) Presence of disease, injury, or congenital condition with residual weakness or symptoms such as to prevent satisfactory performance of duty, including, but not limited to chronic joint pain: shoulder, upper arm, forearm, and hand, late

effect of fracture of the upper extremities, late effect of sprains w mention of injury and late effects of tendon injury are disqualifying.

VIII. ABDOMINAL WALL:

Whole of the abdomen wall is inspected for any operative scar mark o swelling including hernia (epigastric, umbilical or incisional etc) and appro decision is taken.

1. Presence of any hernia is disqualifying; however the cases of well rep operated by open/laparoscopic surgery with well-healed scar withou recurrence and having completed the duration of more than six months surgery at the time of medical examination are acceptable.
2. Cases of operative scar mark anywhere at abdominal wall are t investigated with appropriate and relevant investigation like ultrasour scan abdomen to rule out any underlying pathology/loss of any abdominal organ and opinion of the surgical specialist a government ho before arriving at final decision.
3. Artificial openings, including, but not limited to ostomy, are disqualifying.

XI.EXAMINATION OF LOWER EXTREMITIES:

1. General Consideration-

i) Both the lower limbs are inspected, preferably from toes to upwards for remembrance, for-
   a) Knock-knee
   b) Bow leg
   c) Flat foot
   d) Deformities of feet including brachymetatarsia.
   e) Mal-developed or absent toes
   f) Bony deformities
   g) Varicose vein
   h) Varicose Ulcer
   i) Sinuses
   j) Muscle wasting

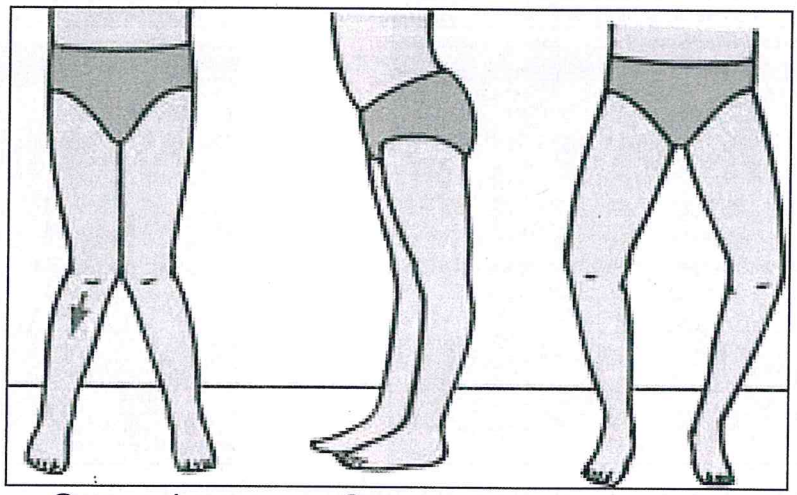
ii) The following are the directions to be given to the candidate to knov muscle power, range of movement etc:-
   a) Stand on your Rt foot, pull the Lt upwards.
   b) Bend the ankle joint & toes alternatively backwards & forwards.
   c) Repeat with the other foot.
   d) Up again.
   e) Kneel down on one knee.
   f) Up again.
   g) Down on both knees & up from position with simultaneous spring on legs.

The examination of lower extremities should preferably be done outdoor.

2. Deformities and their assessment-

i) <u>Knock Knee</u> :

A separation of internal malleoli of over 5 cms will be a disqualification.



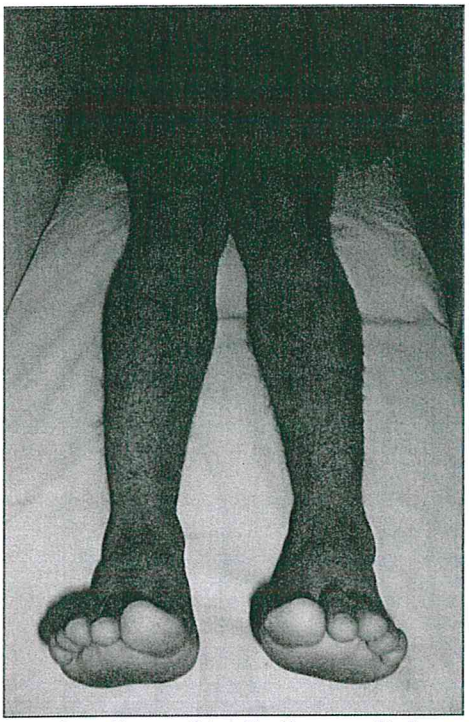
Genu valgus Genu recurvatum Genu varus

Deformities of knee joint

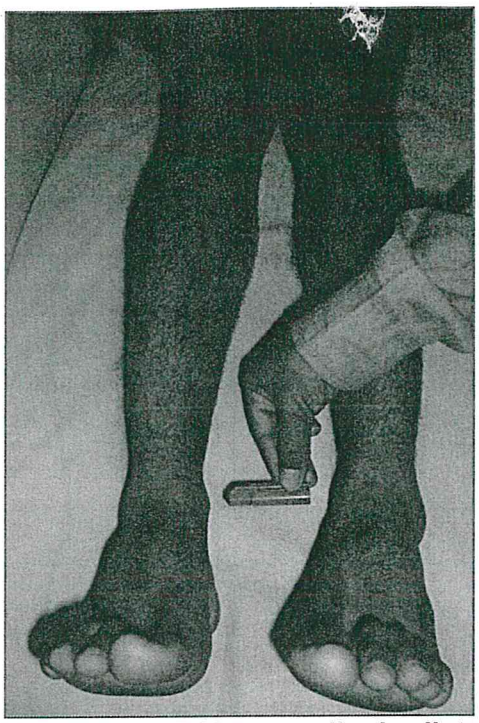
How to examine knock knee-

The Candidate is made to stand with the Internal malleoli approximated and look for any over-riding of both the knees. To confirm, the candidate is asked to lie down on examination table with patellae facing towards ceiling, vertically up and straight. One of the lower limbs is lifted up to approximate with the medical condyle of opposite side. The distance between the internal malleoli is then measured with the help of a 05 cm long wooden block. The reading more than 05 cm is a cause of rejection as Knock Knee. In case of female candidates, the maximum permissible inter-malleolar distance is 08 cms.

The same test can be done with the body sitting upright on a chair, the legs fully extended in front & knees just touching (passively, with the help of the assistant).



Approximation of both themedial condyles

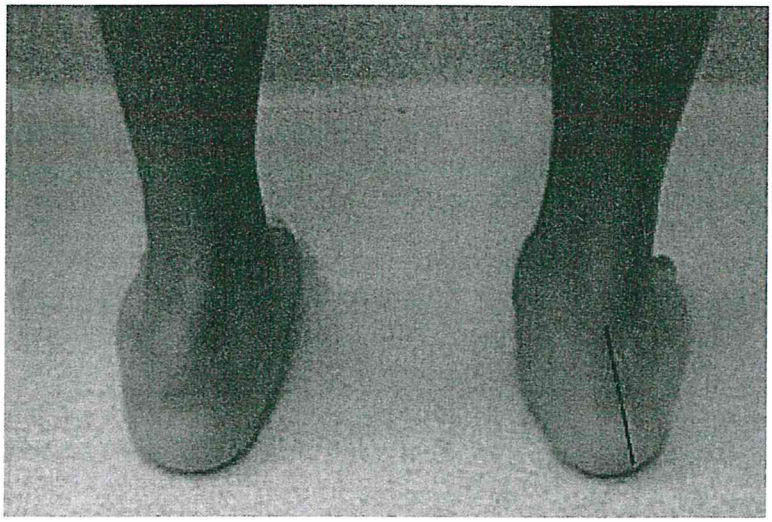


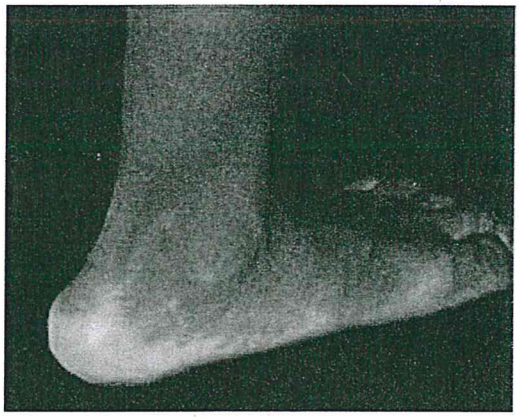
Measurement of inter-malleolardistanc

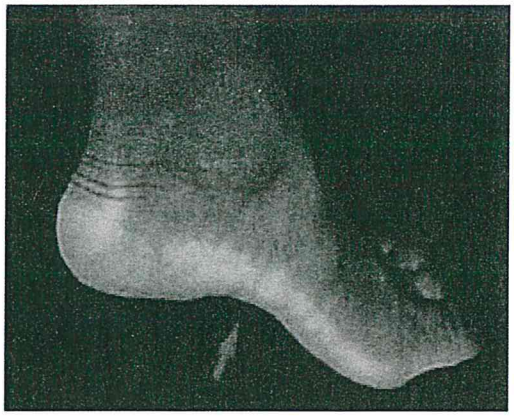
ii) **Bow Legs**: The candidate is asked to stand with the internal malleoli approximate and the distance between both the medial condyles is noted. To confirm, th candidate is asked to lie down on examination with patellae facing towards ceilir and both the medial malleoli are in approximation. Now, the distance between both th medial condyles is measured with a piece of wooden block, measuring 07 cm. reading more than 7 cm is a cause of rejection as Bow Legs.

iii) **Flat feet.** : The candidate is made to stand with his back towards the Recruitir Medical Officer. He is then asked to bend one leg from the knee and hold the foot ju above the ankle with his corresponding hand. This would enable the Medical Offic to examine the sole of the foot. Subsequently the other foot is also examined. Durir the examination of the sole the shape of the foot including the formation of th longitudinal and transverse arches is noted. The candidate may be asked to ful wet his both feet and walk on the dry floor so as to leave his foot prints. The foot pri is to be checked whether it is with or without any arch formation. However, th following also be observed while declaring a candidate unfit for Flat Feet:-

a) Prominent tuberosity of navicular bone
b) Flattening of the arch
c) Valgus heel
d) Faulty shoe wear

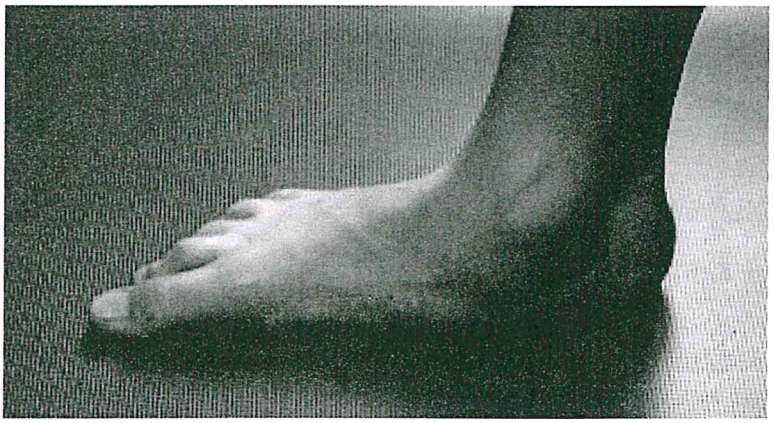






If the joints of tarsus are flexible & the arch reappears on standing on tip toe- **ACCEPTED**

(The re-apperance of arch also be checked by asking the candidate to dorsi-flex his great toe with his hand while sitting on a stool and keeping the testing leg over the other thigh).



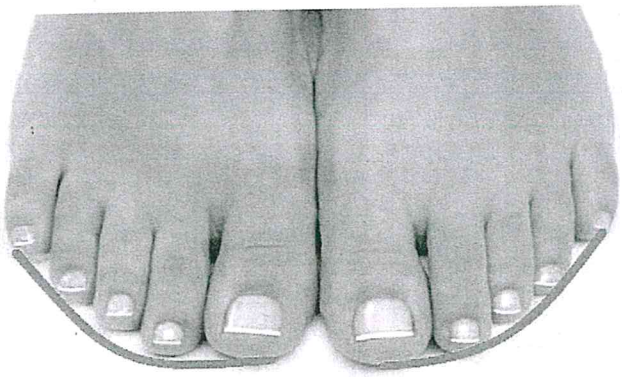
If the feet everted, tarsal joints are stiff or tender points are detected- **REJECTED**

iii) **Hammer Toe** : It is a fixed flexion deformity of an interphalangeal joint of the toe. T candidate with hammer toes should be rejected if there are painful corns or bursae the dorsum of toes.

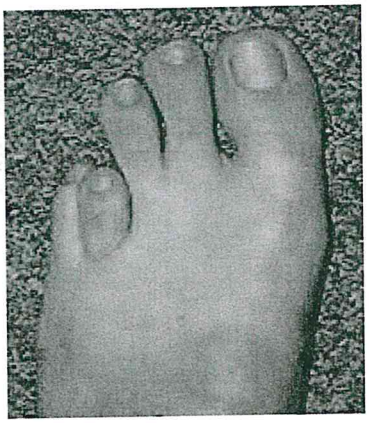
v) **Hallux Valgus** :it is the outer deviation of the great toe at the metatarso-phalang joint. Usually it is a bilateral condition. Candidates are to be disqualified, if one o following features are present:-

i. The proximal Phalanx of the Great Toe in addition to being valgus is rotated that its planter aspect is visible.

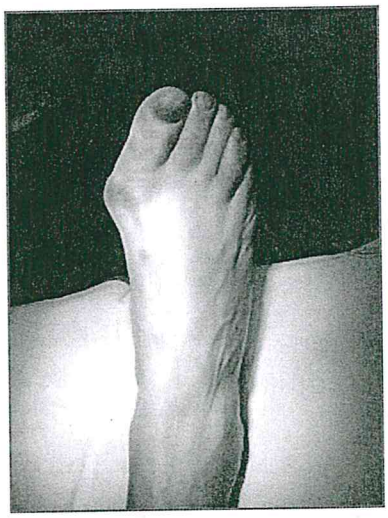
ii. There is a callosity on the inner aspect of the Great Toe.



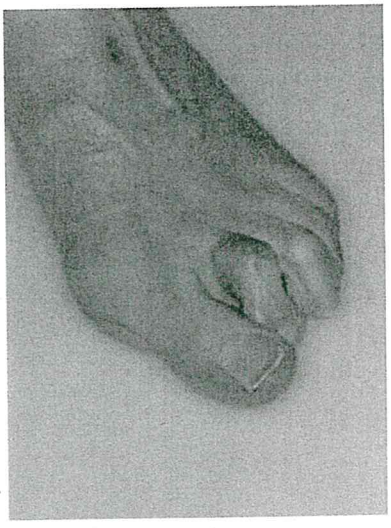
Normal toes



Brachymetatarsia



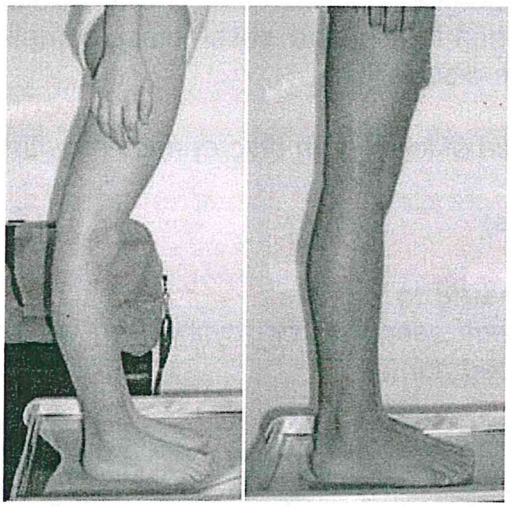
Hallux valgus



Hammer toes

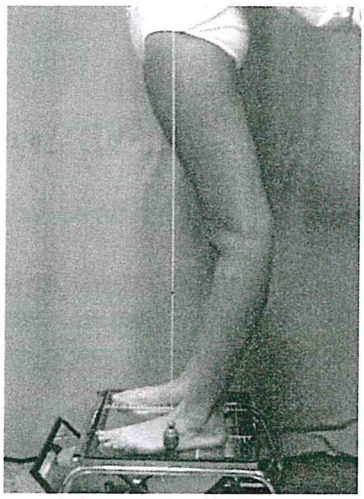
vi) **Hallux Rigidus** : It is the condition in which there is no movement at metatarso-phalangeal joint of great toe, and these candidates are to be rejected.

vii) **Genu Recurvatum**: It is a congenital condition of in which the knee joint is hyper extended, and these candidates are to be rejected. However, only in cases where hyperextension goes beyond 10^0 should a diagnosis of genu recurvatum be made.



Genu Recurvatum

Normal knee



Measurement of G. recurvatum

viii) **Also look for-**

A. **Any limitation of joint motion:**
The limitation of joint motion is disqualifying.

B. **Foot and ankle.**
(a) Absence of a foot or any portion thereof is disqualifying.
(b) Presence of deformities of the toes (acquired or congenital, including, but not limited to conditions such as hallux valgus, hallux varus, hallux rigidus, claw toe(s), overriding toe(s), (that prevents the proper wearing of combatised footwear or impairs walking, marching, running, or jumping, are disqualifying.
(c) Clubfoot (talipes) or high-arched foot (pescavus) that prevents the proper wearing of combatised footwear or impairs walking, marching, running, or jumping is disqualifying.
(d) Presence of flat foot (pesplanus) as mentioned before.
(e) Presence of ingrown toenails, if infected, are disqualifying.

C. **Leg, knee, thigh, and hip-**Following candidate are to be disqualified.
(a) Evidence of uncorrected anterior or posterior cruciate ligament injury.
(b) Evidence of surgical correction of knee ligaments.
(c) Evidence off medial and lateral collateral ligament injury.

(d) Evidence of symptomatic medial and lateral meniscal injury.
(e) Evidence of unspecified internal derangement of the knee.
(f) Evidence of hip dislocation is disqualifying.

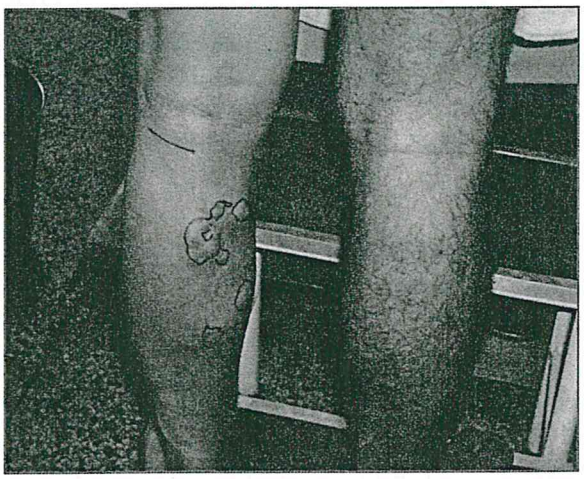
D. **General.**

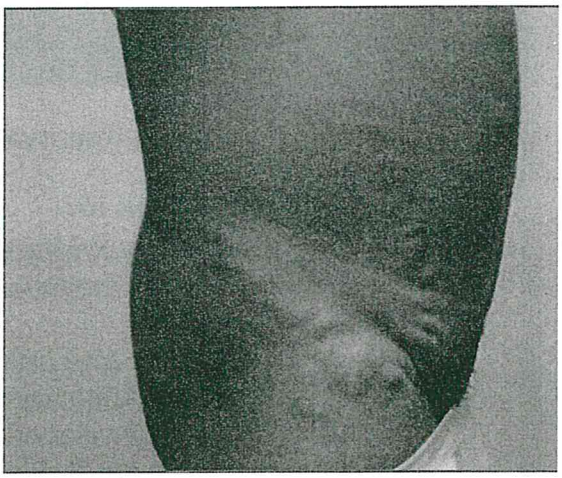
(a) Presence of deformities, disease, or chronic joint pain of pelvic reg thigh, lower leg, ankle and/ or foot that have interfered with functic such a degree as to prevent the individual from following a physi active vocation in civilian life, or that would interfere with walking, runi weight bearing, or the satisfactory completion of training or comba duty, are disqualifying.

(b) Presence of leg-length discrepancy resulting in a limp is disqualifying.

ix) **Varicose veins:**

Definition: According to WHO-
Abnormally dilated saccular or cylindrical superficial veins, which can circumscribed or segmental.

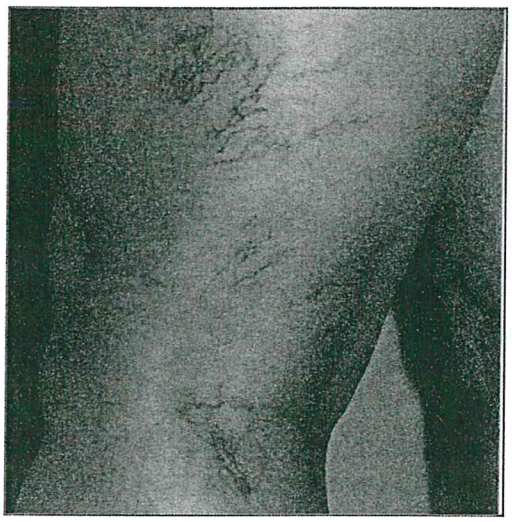




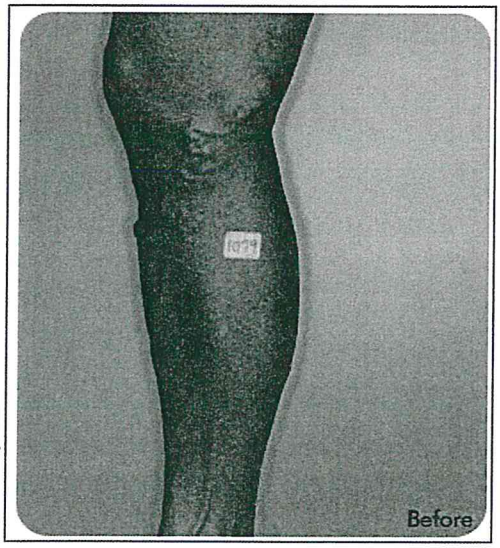
Varicose veins Lt Lower limb with normal Rt sidevaricose veins

a) Classification:
International Consensus Committee on chronic venous disease (Porter)1995-

1. Varicose veins-Dilated, palpable, subcutaneous veins usually >04 mr diameter
2. Reticular veins- Dilated, non-palpable, sub-dermal vein usually < 04 mm.
3. Telangiectasia- Dilated, intra-dermal venules usually < 01 mm.



Spider Veins & Reticular Veins



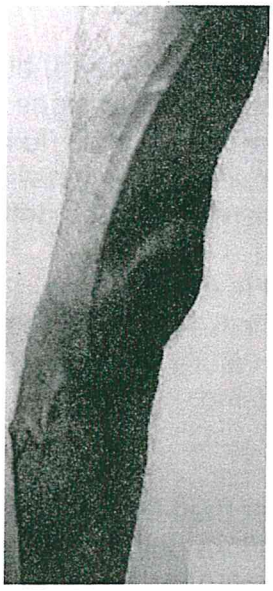
Varicose Veins due to SFJ incompetence

b) Apparent straight veins-

i. Extremely prominent superficial veins, found in young muscular individual.

ii. Unlike trunk varicose veins, they are usually uniformly dilated & exhibit no tortuosity or elongation.

iii. These veins are physiological, not pathological.



APPARENT STRAIGHT VEINS
These are normal veins unless accompanied with venous reflux.

TORTUOUS VARICOSE VEINS

X. MISCELLANEOUS CONDITIONS OF THE EXTREMITIES:

a. Presence or history of chondromalacia, including, but not limited to chronic patello-femoral pain syndrome and retro-patellar pain syndrome, chronic osteoarthritis or traumatic arthritis is disqualifying.

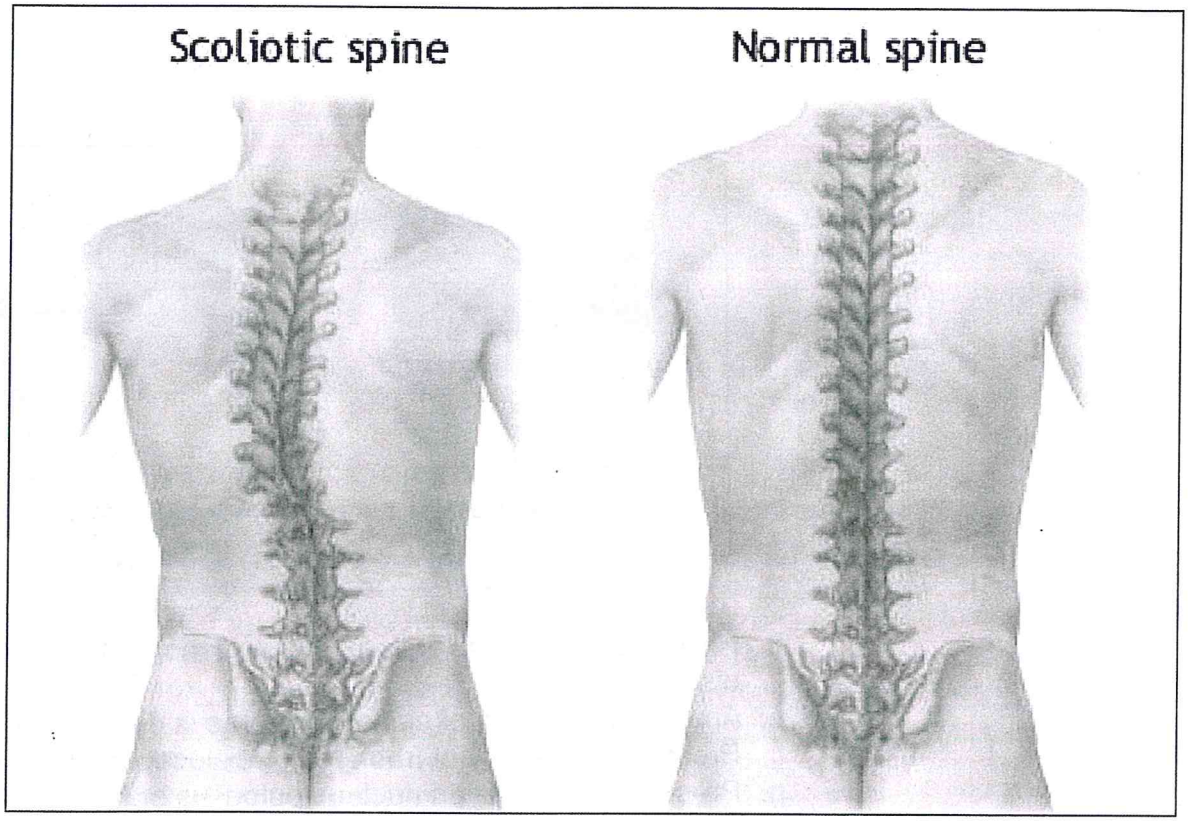
b. Presence of joint dislocation if unreduced or history of recurrent dislocatic of any major joint such as shoulder, hip, elbow, knee, ankle, or instability any major joint (shoulder, elbow, hip, ankle and foot or multiple sites) disqualifying.
c. History of recurrent instability of the knee or shoulder is disqualifying.
d. Presence or history of chronic osteoarthritis or traumatic arthritis of isolate joints of more than a minimal degree that has interfered with the following a physically active vocation, or that prevents the satisfactory performance combatised duty is disqualifying.
e. **Fractures-**
Presence or history of any fracture associated with mal-union or non-union disqualifying. However, a well healed and consolidated fracture on X-r without any in-situ implant, non-union, mal-union, joint involvement and a consequent loss of mobility & functional disability resulting from fracture or management, may be accepted.
f. History of joint replacement of any site is disqualifying.
g. Presence or history of muscular paralysis, contracture, or atrophy, progressive or of sufficient degree to interfere with or prevent satisfactc performance of combatised duty or if it will require frequent or prolong treatment, is disqualifying.
h. Presence of osteomyelitis or history of recurrent osteomyelitis disqualifying.

XI. SPINE AND SACROILIAC JOINTS:

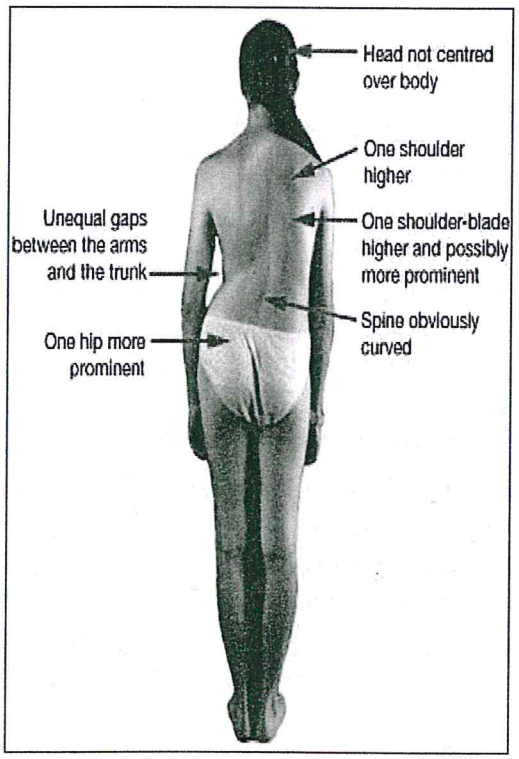
a. Presence or history of ankylosing spondylitis or other inflammatc spondylopathiesis disqualifying.
b. Presence or history of any condition, including, but not limited to the spi or sacroiliac joints, with or without objective signs that:
(i) Prevents the individual from successfully following a physically acti vocation or that is associated with local or referred pain to t extremities, muscular spasm, postural deformities, or limitation motion is disqualifying.
(ii) Requires external support is disqualifying.
(iii) Requires limitation of physical activity or frequent treatment.
c. Presence of deviation or curvature of spine from normal alignme structure, or function is disqualifying.

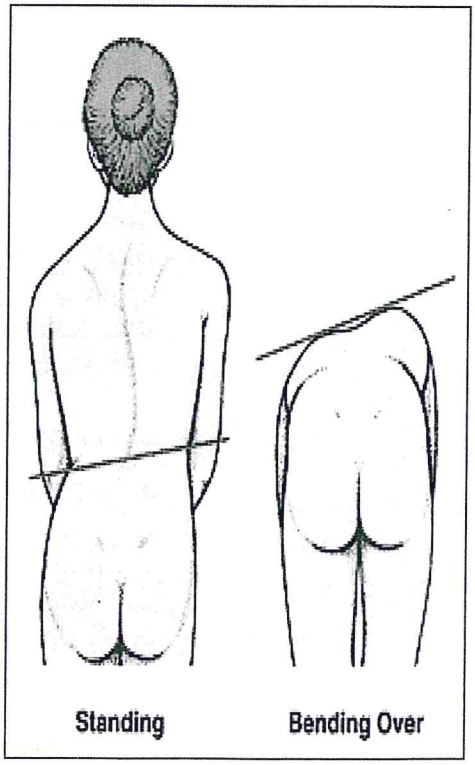
Scoliosis- Look for following signs

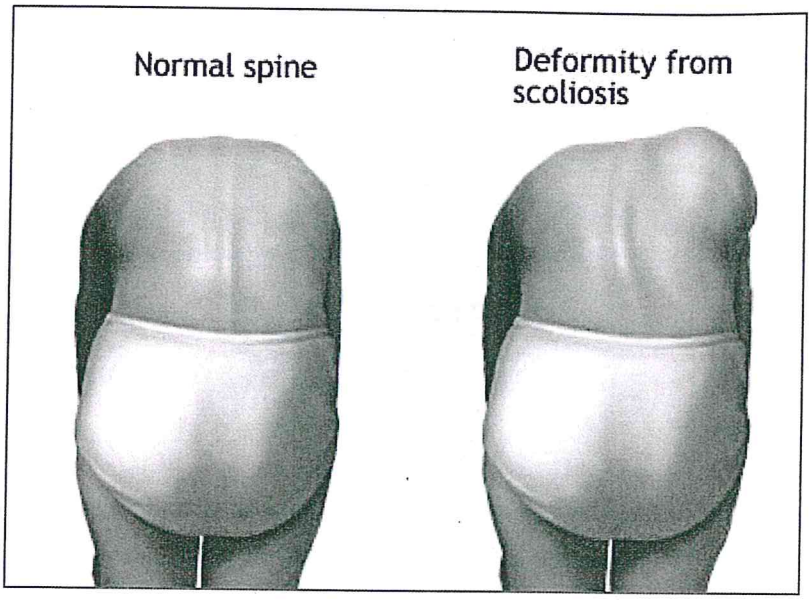
a) One shoulder is higher than the other
b) One shoulder blade sticks out more than the other
c) One side of the rib cage appears higher than the other
d) One hip appears higher or more prominent than the other
e) The waist appears uneven
f) The body tilts to one side
g) One leg may appear shorter than the other



One of the most common tests for detecting scoliosis is called the Adam's Forward Bend Test, in which the individual bends from the waist as if touching the toes.







d. History of congenital fusion, involving more than two vertebral bodies is disqualifying.
e. Any surgical fusion of spinal vertebrae is disqualifying.
f. Presence or history of fractures or dislocation of the vertebrae is disqualifyi
g. Presence of herniated nucleus pulposus or history of surgery to correct this condition is disqualifying.
h. Presence or history of spina bifida, if there is more than one vertebra le involved or withdimpling of the overlying skin, is disqualifying.
i. History of surgical repair of spina bifida is disqualifying.
j. Presence or history of spondylolysis (congenital or acquired) a spondylolisthesis (congenital or acquired) are disqualifying.

XII.EXAMINATION FOR SKIN DISEASES AND LEPROSY

A. Leprosy: Examination for any Hypo-pigmented area which is usua anesthetic, thickened and enlarged peripheral nerves especially ulnar ne over ulnar groove, ulceration on mucous membranes of the nose or mouth must be done carefully. If ulnar nerve is found palpable and thickened th the superficial auricular nerve and posterior tibial nerve should also palpated. All such cases are to be rejected.

B. Other conditions which are to be considered for rejection-

1. Severe acne, if extensive involvement of the neck, shoulders, chest, back is present or would be aggravated by or interfere with the prop wearing of combatised equipment, are disqualifying.
2. Atopic dermatitis or infected extensive eczema
3. Contact dermatitis, especially involving materials are used in any type required protective equipment, is disqualifying.
4. **Cysts.**

(a) Cysts (other than pilonidal cysts) of such a size or location as to interfere with the proper wearing of combatised equipment is disqualifying.

(b) Pilonidal cysts, if evidenced by the presence of a tumor mass or a discharging sinus is disqualifying. Surgically resected pilonidal cyst that is symptomatic, unhealed, or less than 6 months post-operative is disqualifying.

5. Bullous dermatoses, including, but not limited to dermatitis herpetiformis, pemphigus, and epidermolysisbullosa, is disqualifying.
6. Chronic lymphedema is disqualifying.
7. Localized types of fungus infections which is extensive, interfering with the proper wearing of combatised equipment or the performance of combatised duties, are disqualifying.
8. Congenital or acquired anomalies of the skin such as nevi or vascular tumors that interfere with function, or are exposed to constant irritation are disqualifying. History of Dysplastic Nevus Syndrome is disqualifying.
9. Keloid formation, if the tendency is marked or interferes with the proper wearing of combatisedequipment, is disqualifying.
10. Lichen planus is disqualifying.
11. Neurofibromatosis (von Recklinghausen's disease) is disqualifying.
12. Psoriasis is disqualifying.
13. Scars, or any other chronic skin disorder of a degree or nature that requires frequent outpatient treatment or hospitalization, which in the opinion of the certifying authority affects thermoregulatory function, or will interfere with the wearing of combatised clothing or equipment, or which exhibits a tendency to ulcerate, or interferes with the satisfactory performance of duty, are disqualifying. Includes scars at skin graft donor or recipient sites.
14. Scars at skin graft donor or recipient sites will include an evaluation of not only the relative total size of the burn wound, but also the measurable effects of the wound, the location of the wound and the risk of subsequent injury related to the wound itself.
15. Prior burn injury (to include donor sites) involving a total body surface area of 40 percent or more is disqualifying.
16. Prior burn injury involving less than 40 percent total body surface area, which results in a loss or degradation of thermoregulatory function is disqualifying. Examination will focus on the depth of the burn, anatomic location (extensive burns on the torso will most significantly impair heat dissipation), and destruction of sweat glands.
17. Prior burn injury susceptible to trauma or resulting in functional impairment to such a degree as to interfere with the satisfactory performance of combatised duty, due to decreased range of motion, strength, or agility due to burn wound/ scarring is disqualifying.
18. Extensive scleroderma is disqualifying.

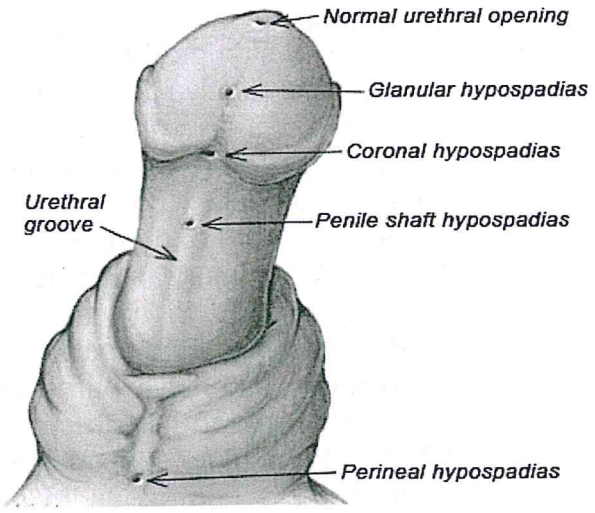
XIII. EXAMINATION OF INGUINAL REGION AND GENITALS:

1. This examination should be carried out in well lighted room considering t privacy of individual. The candidate should be examined after removi undergarment.
2. The examination for hernia and Varicocele is always done with the candidate standing posture.
3. Look for-

(a) **Skin Diseases**: like Eczema, Scabies, Boils and fungal infection etc. The diseases are common in scrotal skin and groin and may extend to hips al are to be disqualified if extensive.

(b) **Scar Marks**: Old scar marks indicating previous operation for hern Hydrocele and Undescended/ Ectopic testis are to be noted and appropri decision is to be taken.

(c) **Penis**: Penis should be examined for any wart, ulcer, discoloration dischar or tumour and these cases are to be rejected. The cases of hypospadias a epispadias or meatal stenosis should also be rejected. The individual is ask to retract the prepural skin and if failed, such cases of phimosis should rejected.



(d) **Inguinal Region**: Inguinal hernia is the possibility at the young age. T candidate should be asked to turn his head away from the examiner a cough. A swelling will appear on coughing. It can also to be confirmed ***VALSALVA MANEUVER***. Operated cases (with documentary proof) of ingui hernia may be accepted if the scar is well healed, supple and non-tender; t tone of abdominal muscles is good and there is no tendency for recurrenc

months after operation. An operated case will not be accepted within 6 months of surgery.

(e) **Scrotum**: Look if both the testes are in the scrotal sac and of normal size. The scrotum should be examined for Hydrocele, Varicocele and abnormality of the testis like undescended testis, ectopic testis, atrophic testis or neoplasia of testis. Grade I Varicocele is acceptable. Undescended testis/ ectopic testis and atrophic/ hypotrophic testis are considered as disqualification.

Varicocele

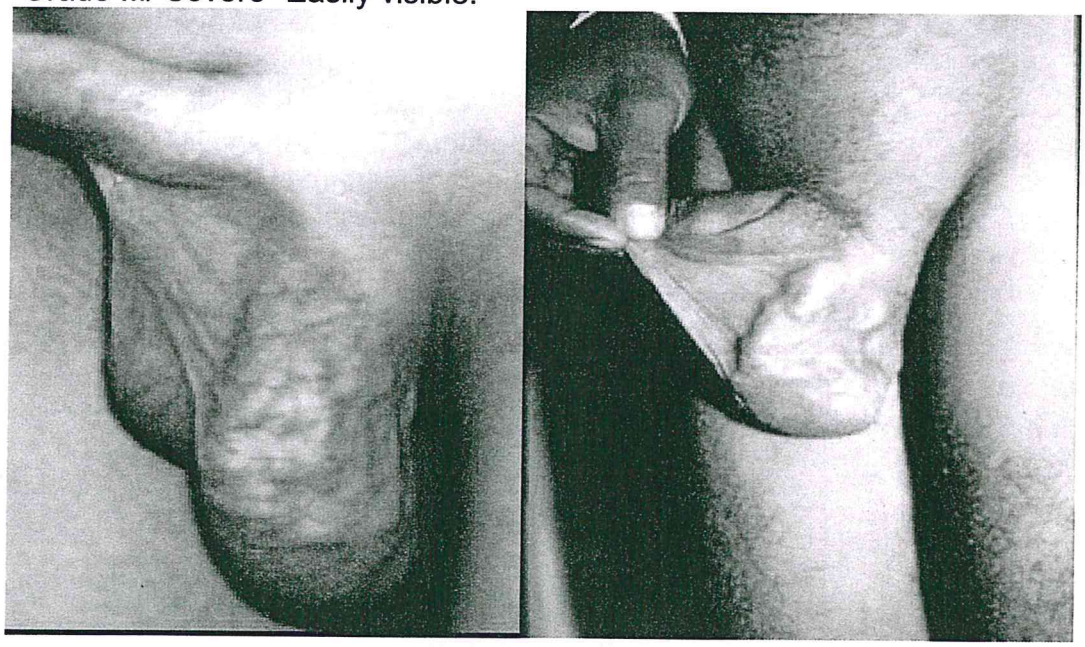
(i) Mild degree of varicocele on the left side, uncomplicated and symptomsless should not be a bar to acceptance. However mild degree of varicocele on the left side associated with the atrophy will be rejected.

(ii) Moderate to severe degree of varicocele on the left side even without any testicular atrophy will be rejected.

(iii) Right sided varicocele of any degree will be declared unfit

Grading of the Varicocele-

1. Grade I/ Mild- Palpable with valsalva maneuver.
2. Grade II/ Moderate- Palpable at rest (without valsalva maneuver) but invisible.
3. Grade III/ Severe- Easily visible.



Varicocele Lt(Look for visible spermatic veins)

(f) **Perineum and Ano-rectal region**:

(i) The candidate should be instructed to turn his back, stoop down and separate the buttocks with his hands. One can then examine for anal warts (Condylomata), Fistula-in-ano, Pilonidal sinus, Prolapse Rectum, Fissure and External Piles. The candidate should be asked to strain, as to defecate, so that Fissure-in-ano, Internal and External piles or prolapse

of rectum become more evident. If candidate gives a history of STD shows clinical signs of old healed STD lesions, he should be rejected.

(ii) **Sexually Transmitted Disease** : Candidates presenting any condition STD are not eligible for enrolment. They should be carefully examined Recruiting Medical Officer for chancre or ulcer on penis, enlarg regional lymph nodes, condylomata, urethral discharge etc, and the candidates with or without history of exposure are to be rejected.

(iii) **Ano-rectal**

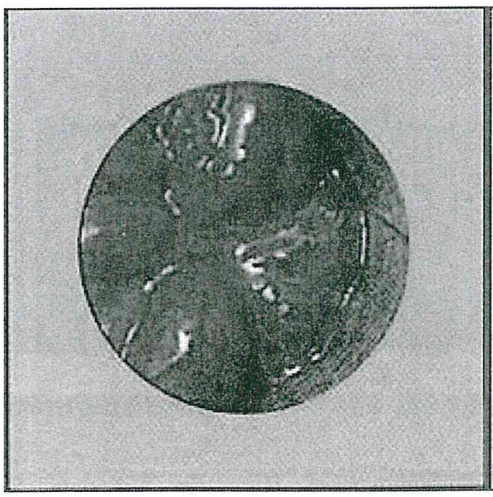
1. Evidence of anal fistula is disqualifying.
2. Evidence of anal or rectal polyp, prolapse, stricture, or fe incontinence is disqualifying.
3. Hemorrhoid (internal or external), with evidence of bleeding, disqualifying.

Examination of ano-rectal region-

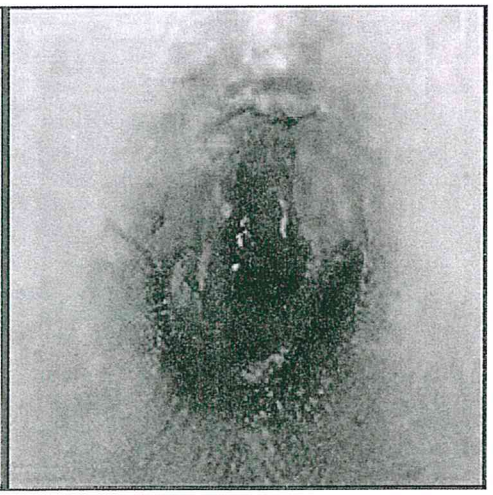
(i) The candidate should be instructed to turn his back, stoop do and separate the buttocks with his hands. . The candid should be asked to strain, as to defecate, so that Fissure-in-a Internal and External piles or prolapsed of rectum become m evident. The cases of anal warts (Condylomata), Fistula in a Prolapse Rectum and hemorrhoids should be rejected.

(ii) If candidate gives a history of sexually transmitt infection(STIs) or shows clinical signs of old healed S lesions, he should be rejected.

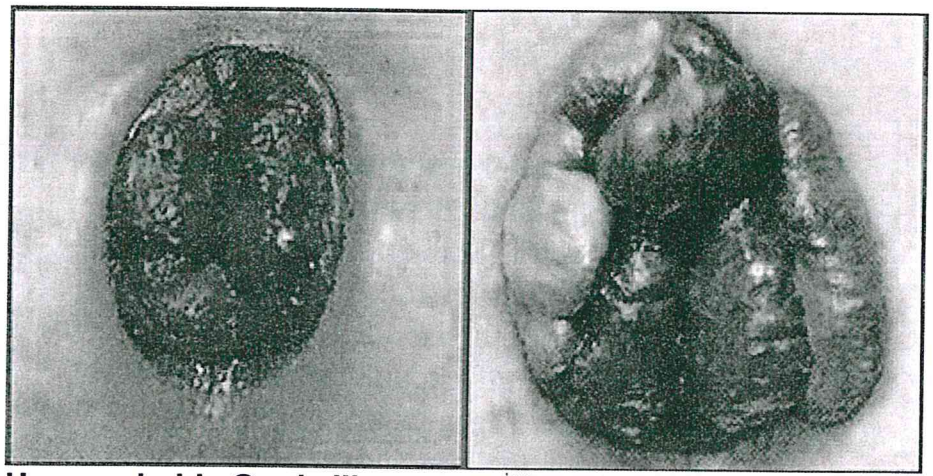
(iii) Mere presence of anal tag and sentinel pile is not a criterion rejection.



Haemorrhoids Grade I



Haemorrhoids Grade II



Haemorrhoids Grade III **Haemorrhoids Grade IV**

4. **Male genitalia.**
   i. Amputation ofpenis is disqualifying.
   ii. Operated cases of hydrocele is disqualifying, if more than 90 days may be accepted, provided there is no post-op complication.
   iii. operated case of Varicocele can be accepted if surgery has been done 180 days back.
   iv. History of major abnormalities or defects of the genitalia, such as a change of sex, hermaphroditism, pseudo-hermaphroditism, or pure gonadal dysgenesis or dysfunctional residuals from surgical correction of these conditions is disqualifying.

XIV.EXAMINATION OF HEART & VASCULAR SYSTEM

1. **Examination of Pulse** : The pulse should be examined at rest. He/she is made to hop 25 times and pulse rate is again recorded immediately after hopping and 02 minutes after hopping. In normal conditions his/her pulse rate will increase after hopping and normalize after 02 minutes. Failure of pulse rate, not rising with exercise will indicate disease of conduction system like sick sinus syndrome. Similarly, resting pulse persistently over 100 should be kept under observation for some time and re-examined subsequently next morning. Candidate with persistent tachycardia (more than 100 pulse rate perminute) or bradycardia (less than 50 per minute) will be declared disqualified. In case of irregular pulse the heart should be auscultated for extra systoles and if found, the candidate is to be rejected.

60 - 100
90 - 140

1. **Examination of Blood Pressure. (Normal Range Systolic 100-140 mm of Hg, Diastolic 60 to 90 mm of Hg)**
Candidate should not be rejected on the basis of single high reading. In case the blood pressure is recorded to be higher than 140 mm systolic and/or 90 mm Hg diastolic, at least 2 more recordings should be taken in lying position at an interval of 2-3 hours before declaring him unfit. BP should be recorded in both arms. The candidate should be asked to relax and should not be subjected to strenuous/stressful activity immediately prior to the recording. (Elevated blood pressure defined as the average of three consecutive sitting blood pressure measurements separated by at least 10 minutes, diastolic greater than 90 mmHg or systolic pressure measurements greater than 140 mmHg, is disqualifying).

2. **Examination of Heart**
Candidate should be examined for cardiac murmurs initially at rest. All the four areas i.e. Mitral, Aortic, Pulmonary and Tricuspid areas should be auscultated. The candidate is then made to undergo exercise by hopping for 25 times and again the heart is auscultated for cardiac murmur or any other adventitious sounds and if found to be pathological, are to be rejected,

XV. EXAMINATION OF LUNGS, PLEURA & MEDIASTINUM

Following are the cause of rejection

1. Evidence of Asthma, including reactive airway disease, exercise-induced bronchospasm or asthmatic bronchitis, reliably diagnosed (Reliable diagnostic criteria may include any of the following elements: substantiated history of cough, wheeze etc.
2. Evidence of bronchitis, acute or chronic.
3. Evidence of bronchiectasis.
4. Evidence of pleurisy with effusion within last 2 years.
5. **Tuberculosis**
   (a) Evidence of active tuberculosis in any form or location is unfit.
   (b) Cases of treated tuberculosis along with normal pulmonary function will be accepted as fit.

XVI. EXAMINATION OF ABDOMEN

Conditions which require rejection-

a. Meckel's diverticulum, if surgically corrected within 6 months.
b. Cholecystectomy is not disqualifying if performed more than 6 months back
c. Enlargement of the liver from any cause.
d. Evidence of splenomegaly.
e. Evidence of splenectomy.

10. INVESTIGATIONS:

Following investigations are to be carried out:-

a. Hemoglobin
b. Urine Examination –Routine & Microscopic
c. Chest X-ray

a) Hemoglobin: (Normal Range - 12 – 16 gm% for male, 10 - 14 gm% for female). However candidates with more than 18 gm% will be considered unfit. Hemoglobin below 12 gm% for male and below 10 gm% for female will be considered as disqualified.

b) Urine Routine/Microscopic

i) Presence of sugar
ii) Presence of protein above trace limit
iii) Presence of blood: Any presence of RBC will lead to rejection in male; physiological cause to be ruled in case of female
iv) Specific gravity: Any variation from the range 1.000 - 1.030 will lead to rejection

c) Chest X-ray PA

i) Evidence of chronic inflammation, e.g., fibrotic/nodular opacity, cavities, dilated bronchi, puckering/blunting of diaphragm
ii) Any non-homogeneous lung opacity
iii) Evidence of damage or shifting of mediastinal organs
iv) Evidence of foreign body or medical device
v) Collapse of any mediastinal organ
vi) Blunting of cardio- and/or costophrenic angle
vii) Cervical rib, if symptomatic
viii) Damage/degeneration of cervico-dorsal spine
ix) Evidence of fracture, with features of mal-union, non-union or functional disability
x) Presence of any space occupying lesion
xi) Evidence of pericardial effusion
xii) Any opacity in the lung field more than 1 cm in diameter
xiii) Signs of eventration of diaphragm
xiv) Bilateral 13th rib
xv) Evidence of cardiomegaly with cardio-thoracic ratio more than 50%
xvi) Dilated right descending pulmonary artery more than 15 mm dia in female and more than 16 mm dia in male
xvii) Any tumour of the bone

11. MISCELLANEOUS CONDITIONS-

1) Any evidence of implants in situ anywhere in body will lead to rejection.
2) Gynaecomastia: Will lead to rejection in the initial medical examination, if the diameter of the mass is more than 4 cm. During review medical examination,

ultrasound examination is to be done to rule out whether it is due to fatty tiss or breast tissue. Candidates are to be rejected if found to have breast tissue.

3) **Tattoo :**The practice of engraving / tattooing in India is prevalent since tir immemorial, but has been limited to depict the name or a religious figu invariably on inner aspect of forearm and usually on left side. On the other ha the present young generation is considerably under the influence of weste culture and thus the number of potential recruits bearing ***skin art*** had gro enormously over the years, which is not only distasteful but distract from go order and discipline in the force.

Following criteria are to be used to determine permissibility of tattoo:

a) **Content-**being a secular country, the religious sentiments of c countrymen are to be respected and thus tattoos depicting religious syml or figure and the name, as followed in Indian army, are to be permitted.

b) **Location-**tattoos marked on traditional sites of the body like inner aspect forearm, but only **LEFT** forearm, being non saluting limb or dorsum of t hands are to be allowed.

c) **Size-** size must be less than ¼ of the particular part (Elbow or Hand) of t body.

4) Post-operative cases (Duration for fitness)-

a) Body surface swelling, DNS ,tonsillectomy and nasal polypectomy-01 mo
b) Hydrocele-03 months.
c) Tympanoplasty-04 months.
d) Abdominal/pelvic surgeries involving opening of peritoneum, repairs ofHerniae,varicocele surgeries, surgery for fistula-in-ano etc-06 months.

5) Evidence of nervous instability**:-**

Attention should bepaid to manifestation of nervous instability such Restlessness, Tachycardia, Tremors, Rombergism, Hyperhidrosis, Prominer of eyes or enlargement of the thyroid etc.

In case the nervous instability seems to be due to anxiety, the candidate is to kept under observation for some time and then re-examined. If the signs per the candidate is to be rejected.

12. GENERAL INSTRUCTIONS FOR THE EXAMINATION OF FEMALE CANDIDATES

1. Female candidates should be examined by female Medical Officers o However, if 2 or more doctors are there in the medical board, LMO will b member, in whose presence; medical examination will be carried out female candidates. In cases of a medical board consisting of three speciali a lady medical officer will be detailed as a co-opted member, even if one the specialists is lady medical officer.

2. Female candidates should be properly examined for any lump or diseases of breast and Genitourinary system after taking proper consent and in presence of female attendants. In case any disease/ condition is diagnosed which would interfere in the performance of duties she is recruited for, the candidate will be declared unfit.
3. Chest measurement of female candidates should not be taken. However, It should be ascertained that the chest is well developed.
4. In females, the carrying angle of more than 20^0 will lead to rejection on the ground of cubitus valgus.
5. **Genitalia**

(Note- Per speculum and Per Vaginal examination are not to be performed in an unmarried candidate; however inspection of genitalia is to be done to rule out any obvious pathology).

i. Evidence of major abnormalities or defects of the genitalia such as change of sex, hermaphroditism, pseudohermaphroditism, or gonadal dysgenesis or dysfunctional residuals even after surgical correction of these conditions is disqualifying.

ii. If candidate reports with bleeding P/V, she may be called after 5 days or after cessation of menstruation, whichever is earlier, provided the candidate is not willing for genital examination at the time of medical examination.

iii. If urine test for pregnancy is positive the candidate will be declared temporary unfit and will be re-examined 6 weeks after the pregnancy is over, either naturally or artificially, subject to the production of a medical certificate of fitness from a registered medical practitioner.

iv. Genital infection or ulceration, including but not limited to herpes genitalis or condylomaacuminatum, is disqualifying.

v. Any operated case (Open/ Laparoscopic) of ovarian cyst, fibroid, ectopic pregnancy, caesarean section etc are to be rejected until 06 months have elapsed after surgery, provided that operative scar mark is well healed and there is no evidence of incisional hernia.

vi. Evidence of ovarian cyst or fibroid uterus or any other lump is disqualifying.

vii. Evidence of pelvic inflammatory disease, is disqualifying.

viii. Congenital absence of uterus, or enlargement due to any cause is disqualifying.

13. DISPOSAL OF MEDICAL DOCUMENTS AFTER COMPLETION OF MEDICAL EXAMINATION-

a) Officers and Sub-ordinate officers - The medical booklets completed in all respects are to be collected by a ministerial staff detailed with medical board for necessary assistance and to hand over the same to the concerned authority.

b) Under officers/ other ranks - At the end of medical examination, all candidates along with the medical documents will be directed to report to Presiding Officer for

further needful. The collection of the documents through a ministerial staff will be the responsibility of the Presiding Officer of the recruitment board.

c) Medical documents are to be deposited to the administrative authority preferably daily at the end of work, except pending cases, wherein documents are to be submitted after carrying out relevant investigations/ specialist opinion.

14. VALIDITY OF RECRUITMENT MEDICAL

The findings/ opinion of the recruitment medical board will be valid for one year from the date of fitness to joining the service. If, the candidate joins the service after validity period of recruitment medical, he/she will be examined by unit medical officer for any disease/ deformity that might have arisen after the recruitment medical.

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GUIDELINES FOR REVIEW MEDICAL EXAMINATION

Candidates declared unfit during initial medical examination will be subjected to Review Medical Examination if they prefer to appeal against initial medical examination. The appeal should be submitted in prescribed performa as given in Annexure IV of these guidelines so as to reach the appellate authority within a period of 15 days from the date of medical examination.

As per laid down guidelines optimum care should be taken in selection of candidates as large number of candidates are available for selection. Every candidate must be medically fit to carry out very sensitive and tough duties of the Force. The discharge of the candidate on Medical Grounds within a few Months of his/her enlistment is not only a disgrace on the Medical Examination but a loss to the government exchequer. However this does not imply that during Review Medical Examination, selected candidates are rejected on medical/physical grounds only on clinical findings which are not substantiated by valid expert opinion/ investigation report. Inconclusive rejection of candidates only on clinical findings which may differ from one doctor to another usually leads to embarrassing situation particularly before Hon'ble Courts because judiciary for the sake of protecting natural justice heavily rely on investigation reports/specialist's/super specialist's opinion.

Broad conditions for Review Medical Examination

After completion of Review Medical Board proceedings, the final outcome in consolidated form will be displayed for information to the candidates on daily basis.

Ordinarily there is no right of appeal against the findings of the Recruiting Medical Officer or Initial Medical Board but, if Government are satisfied on the evidence placed before them by the candidate concerned of the possibility of an error of judgment in the decision of the Recruiting Medical Officer or Initial Medical Board, it will be open to them to allow re-examination by the Review Medical Board.

If any Medical certificate is produced by a candidate as a piece of evidence about the possibility of an error of judgment in the decision of Initial Medical Board/Recruiting Medical Officer, who had examined him in the first instance, the certificate will not be taken into consideration unless it contains a note by the medical practitioner concerned, who should be a medical officer of concerned speciality from District Hospital and above along with registration no. given by MCI/State Medical Council, to the effect that it has been given in full knowledge of the fact that the candidate has already been rejected as unfit for service by a Medical Board, or the recruiting medical officer.

The appeal should be examined thoroughly and a decision as to the appeal is to be admitted or not, is taken at the level of Joint Secretary or equivalent of the Administrative Ministry/Department concerned.

Once appeal is accepted the competent authority details a Medical Board and the Medical Board which examines such appeals should be as far as possible the one other than the Medical Board which initially examined the candidate as a basis on which he/she was declared unfit.

Guidelines for Review Medical Boards:-

1. Review Medical Board should examine the candidate specifically for the deficiency for which the candidate has been declared unfit. However for obvious defects/infirmities contracted after Initial Medical Examination, Review Medical Board may give its opinion. Also, the medical term used as cause of unfitness during the Initial Medical Examination may differ from that arrived at by the Review Medical Board after due investigations and specialist consultation.

2. For the defect for which candidate has been declared unfit should be examined thoroughly and the findings must be got supported by proper investigation reports if applicable.

Review Medical Board may get opinion of concerned specialists or super specialists of Govt. Medical College and Hospital in case of any controversy. It must be kept in mind that a specialist medical officer of concerned field has certified that the candidate is not suffering from the disease for which he has been rejected, making the decision of the earlier Medical Board controversial. Therefore, in cases of rejection in review medical examination, clinical findings should be corroborated with confirmatory tests/investigations/opinion of specialists/ super specialists of Govt. Hospitals/Medical Colleges/Govt. approved private medical centers, whichever and wherever applicable.

3. Few examples are being cited for the guidance of Review Medical Board

a) In any cardiac case like valvular defects ECG/Echocardiogram must be carried out
b) In cases of suspected lesions of chest like Hilar lymphadenitis, calcified spots, Koch's infiltrations, any mass detected in X-Ray chest etc CT Chest should be carried out.
c) For vascular defects like Varicose vein, vascular malformations etc Colour Doppler should be carried out
d) To rule out any eye surgery like Lasik/LASEK/PRK/PK/Glaucoma/Squint/ Pterygium Surgery etc. investigations may be carried out accordingly, viz. slit lamp examination/ophthalmoscopy/Corneal Topography/OCT/HVF/Tonometry/ VEP/ERG/Synoptophore etc. should be carried out.
e) For candidates who have been rejected on the ground of hypertension/tachycardia should be admitted/hospitalized by the Board before giving their final opinion regarding the candidate's fitness or otherwise. The hospitalization report should indicate whether the rise in blood pressure is of

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 examinations like cholesterol/lipid profile, S.creatinineetc, tests should also be carried out.

f) For any suspected case of CAD,TMT test should be conducted
g) Any tremor in hands or other parts of body thyrotoxicosis should be ruled out and neurologist's opinion should be taken.
h) For suspected Diabetes Mellitus cases GGT and Glycosylated Hb. test should be carried out.
i) For Knock knee, bow leg, cubitus valgus and varus deformities, X-Ray plate with findings should be attached.
j) For any type of deafness, audiometry should be carried out.
k) For a case of dental points less than 14, OPG should be carried out.

These are a few examples just to reiterate and bring home the point that in review medical examination candidates are subjected to require concerned investigations wherever and whenever is applicable or on the basis of scientific evidence but rejection merely on clinical findings is to be avoided. Any decision on rejection must be taken with valid clinical findings fully justified and supported by corroboratory investigation reports and if needed opinion of specialists/ super specialists of Govt. Hospitals/Medical Colleges/Govt. approved private medical centers should be taken. Obviously when such confirmatory tests are required to be carried out routinely, time constrain should not be there and for not making review medical examination time bound, all concerned may be informed otherwise proper decision cannot be taken in such cases.

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ANNEXURE – I

Male Average Body Weights In Kilograms For Different Age Groups And Heights

HEIGHT IN CMS	AGE IN YEARS			
	18-22	23-27	28-32	33-37
156	44-54	46-56	47-58	48-59
158	45-55	47-57	48.5-59.5	49.5-65
160	46-56	47.5-58.5	49.5-60.5	50.5-61.5
162	47-58	49-60	50.5-61.5	52-63
164	48-59	50-61	52-63.5	53-65
166	49.5-60.5	51.5-62.5	53-65	54.5-66.5
168	51-62	52.5-64.5	54.5-66.5	56-68
170	52-64	54-66	56-68	57.5-70.5
172	54-66	55.5-67.5	57-70	59-72
174	55-67	57-70	59-72	61-74.5
176	56.5-69	58.5-71.5	60.5-73.5	62-76
178	57.5-70.5	60-73	61.5-75.5	63.5-77.5
180	59-72	61-75	63.5-77.5	65.5-80
182	61-74.5	62.5-76.5	65-79	66.5-81.5
184	63-77	64.5-78.5	66.5-81.5	68.5-83.5
186	63.5-77.5	65.5-80.5	68-83	70-86
188	65-79	67.5-82.5	70-85.5	71.5-87.5
190	66-81	68.5-83.5	70.5-86.5	72.5-88.5

Female Average Body Weights In Kilograms For Different Age Groups And Heights

HEIGHT IN CMS	AGE IN YEARS			
	18-22	23-27	28-32	33-37
148	34.5-42.5	37-45	38.5-47	39.5-48.5
150	36.5-44.5	37.5-45.5	39-48	40.5-49.5
153	38-46	39-48	41-50	42-51
155	38.5-47.5	40-49	41.5-50.5	43-52.5
158	40.5-49.5	42-51	43-53	44.5-54.5
160	41.5-50.5	43-52.5	44-54	45.5-54.5
163	43-52.5	44-54	46-56	47-57
165	44-54	45.5-55.5	47-58	48.5-59.5
168	45-55	47-57	48.5-59.5	49.5-60.5

- The body weights are given in this chart corresponding to only certain height (in cms) on even numbers only. In respect of heights in between, the principle of 'Average' will be utilized for calculating body weights.
- In doubtful cases of overweight, the assessment is to be made on the basis of BMI.
- Where Age for Govt employees is relaxed above the age of 37 (for eg 40 or more) the average weight be arrived by using BMI.

ANNEXURE –

DECLARATION FORM

The candidate must make the statement required below prior to his/her medica examination and must sign the declaration appended thereto. His/her attention is special drawn to the warning contained in the note below:

Roll number- **Name-**

HAVE YOU EVER HAD OR DO YOU NOW HAVE:

क्या आप निम्नलिखित बीमारीयों से कभी ग्रसित थे या है:

S. NO.	CONDITIONS	YES	NO
1.	दमा की शिकायत Asthma, wheezing or inhaler use		
2.	मिर्गी के दौरे Epilepsy, fits, seizures or convuisions		
3.	गर्दन तथा कमर का बार बार दर्द या इन की सर्जरी Recurrent neck or back pain or ruptured or bulging disc in your back or surgery for a ruptured or bulging disc.		
4.	मादक पदार्थो के सेवन के लिए इलाज या अस्पताल मे भर्ती Evaluation, treatment or hospitalization for substance use, abuse, addiction or dependence.		
5.	पैरों मे दर्द Foot pain		
6.	जोड़ो मे सूजन ,दर्द या जोड़ का निकल जाना या पानी भर जाना अथवा अन्य कोई शिकायत या किसी जोड़ की सर्जरी A swollen, painful, or dislocated joint or fluid in a joint or any problem or surgery of any joint		
7.	किसी भी हड्डी या जोड़ घुटना ,कंधा ,कोहनी ,कलाई इत्यादि (कीसर्जरी ,दूरबीन द्वारा सम्मलित) Surgery on a bone or joint (knee, shoulder, elbow, wrist etc including arthroscopy)		
8.	घुटने या अन्य जोड़ का नहीं खुलना या निकल जाने का आभास होना Locking or giving way of knee or other joint		
9.	बेहोशी या गश खाकर गिर जाना Episode of unconsciousness or Fainting spells		
10.	कांटेक्ट लेन्स का पहनना या लेसिक सर्जरी अथवा आँख की अन्य किसी भी प्रकार की सर्जरी Wear contact lenses or undergone LASIK or any kind of other eye surgery		

11.	रतोंधि Night blindness		
12.	सिर की चोट ,खोपड़ी की हड्डी की टूट फूट ,तथा इनके कारण बेहोशी या सिर मे दर्द इत्यादि Head injury, including skull fracture, resulting in concussion, loss of consciousness, headache etc.		
13.	डिप्रेशन ,मदिरा या मादक पदार्थो के सेवन अथवा अन्य दिक्कतों के ईलाज तथा काउन्सेल्लिंग के लिए मनोरोग विशेषज्ञ तथा अन्य जानकारों से मिलना Seen a psychiatrist, psychologist, social worker, counselor or other professional for any reason (*inpatient or outpatient*) including counseling or treatment for any problem including depression or treatment for alcohol, drug or substance abuse.		
14.	अनियमित दिल की धडकन Irregular heartbeat, including abnormally rapid or slow heart rates.		
15.	क्या कभी निम्न चिकित्सा श्रेणी मे रखा गया (सेवारत कर्मियों के लिए½) या पहले किसी चिकित्सा जांच मे अयोग्य रहे है . Been placed in LMC ever (for departmental candidates only) or rejected earlier in any medical examination		
16.	हेपेटाइटिस Hepatitis (liver infection or inflammation)		
17.	पीलिया Jaundice		
18.	आपको या आपके परिवार में किसी को कुष्ट रोग Leprosy in you or your family.		
19.	आंतों मे रुकावट या अन्य कोई पुरानी बार-बार होने वाली आंतों की बिमारी Intestinal obstruction (locked bowels), or any other chronic or recurrent intestinal problem, including small intestine or colon problems, such as crohn's disease or colitis.		
20.	आंत के हिस्से को निकालने वाली सर्जरी Surgery to remove a portion of the intestine		
21.	पित्ताशय की दिक्कत या पथरी Gall bladder trouble or gall stones		
22.	एक किडनी की कमीया किडनी की कोई अन्य दिक्कत ,मूत्रवाहिनी या मूत्राशय की कोई सर्जेरी या कोई पथरी या अन्य कोई दिक्कत Missing a kidney or any problem of Kidney, urinary tract or bladder or any Surgery or any stone or other urinary tract problems.		
23.	कोई भी फ्रक्चेर-अपने आप या सर्जरी से जुड़ने वाला Broken bone (Fracture(s))- united without any surgery or required surgery to repair		

24.	थायरॉयड की दिक्कत तथा इसके लिए लिया जा रहा ईलाज Thyroid condition or taking medication for your thyroid		
25.	पेशाब मे शक्कर ,प्रोटीन या रक्त Sugar, protein or blood in urine		
26.	कान के पर्दे मे छेद या बाहरी बहाव Perforated ear drumsor discharge from ears		
27.	कान की सर्जरी जैसे मास्टॉयडेक्टमी या कान के पर्दे मे छेद की रिपेयर , कम सुनने की शक्ति या हियेरिंग एड की आवश्यकता Ear surgery to include mastoidectomy or repair of perforated ear drum, hearing loss or need/ use a hearing aid		
28.	Any history of taking treatment under alternative medicine systems like homoeopathy, ayurveda, unani, siddha, naturopathy etc. and for what fdlh vU; izdkj dh oSdfYid nokbZ tSls gksE;ksiSFkh] vk;qosZfnd] ;wukuh] fl)k] uSpkjksiSFkh ysus dk bfrgkl vkSj fdl dkj.k ls		
29.	किसी भी दवाई का सेवन ,यदि हाँ तो किस बीमारी के लिए Taking any medication, if so for what		
30.	कोई भी अन्य बिमारी ,सर्जरी या अस्पताल मे भर्ती ,जो उपर वर्णित नहीं है . Any illness, surgery or hospitalization not listed above		
	For Female Candidates only		
31.	क्या आप गर्भवती है Whether pregnant or not?		
32.	अनियमित महीना History of irregular menstrual period?		
33.	सफ़ेद पानी का आना History of any abnormal vaginal discharge		
34.	क्या जाँच में कुछ अनियमित पाया गया? History of any abnormal gynecological investigations		
35.	क्या आपका कोई आपरेशन हुआ है History of any gynecological surgery		
36.	क्या आपके स्तन में कोई गांठ या कोई बहाव है History of breast pain/lump or discharge from the nipple		

Signature of individ

Furnish the following particulars concerning your family:-

Father' age, if living, and state of health	Father's age at death, if dead, and cause of death	No. of brothers living, their ages and State of Health.	No. of brothers dead, if any, their ages at death and cause of death.

Mother's age, if living, and state of health	Mother's age at death, if dead, and cause of death	No. of sisters living, their ages and State of Health.	No. of sisters dead, if any, their ages at death and cause of death.

After having fully understood all above medical terminologies, I declare that all the above answers to the best of my belief and knowledge, are true and correct. I also solemnly affirm that I have not received disability certificate/pension on account of any disease or other condition. I shall be liable for action under law for any material infirmity in the information furnished by me or suppression of relevant material information. The furnishing of false information or suppression of any factual information would be a disqualification and is likely to render me unfit for employment under the Government. If the fact that false information has been furnished or that there has been suppression of any factual information comes to notice at any time during the service, my service would be liable to be terminated.

Place----------

Date----------

(Candidate's Signature)

Signed in my presence

(Signature of Presiding Officer with stamp)

Note : The candidate shall be held responsible for the accuracy of the above statement. By willfully suppressing any information, he may incur the risk of losing the appointment, and, if appointed, of forfeiting all claim to superannuation allowance or gratuity.

(GOI: MH O.M. No. F 5 (II)-55-M-II dated the 27th September 1957)

ANNEXURE – III (

CAPFs RANK (CADRE) EXAMINATION .... (YEAR)
FORM NO. CAPFs /RANK(CADRE)/1
MEMORANDUM
UNFIT

Subject: Medical examination of candidates for Rank/Cadre in Central Arm Police Forces (CAPFs)- Review Medical Examination of unfit candidates.

Mr./Ms.....Roll No.....
is hereby informed that he/she has been medically examined for recruitment (Rank/Cadre) in CAPFs on ..... at..... and found him / h UNFIT due to the reasons mentioned below:-

---

---

2. In case he/she prefers to file an appeal against the findings of medical examinatic he/she is advised to apply for review medical examination in the enclosed Form N CAPFs-2 (to be provided by P.O.) along with demand draft for Rs. 25/-in favou ..... (address to be filled up Medical Board who conducted medical examination of candidate) after obtaining necessa medical certificate from the Medical Practitioner as per Form No. CAPFs-3, so as to rea to the addressee within a period of 15 days from the date of Medical Examination i positively by ..... failing which his/her candidature for recruitment (Rank/Cadre) in CAPFs for the year 20---to 20--- shall be treated as cancelled without a further notice. If the appeal is not signed by the candidate and / or if the Medical Fitne Certificate is not signed by the Doctor, appeal will be summarily rejected.

3. All documents as per check list mentioned in the enclosed Form No. CAPFs -2 mu be attached along with the appeal failing which the appeal will not be considered.

4. Photograph, Thumb impression and candidate signature on the fitne certificate shall be attested by concerned Medical Practitioner. If fitness certifica received without attestation, the same will be rejected summarily.

Signature of Medical Officers
Name
Stamp

Date
Centre
Counter-signature of the Presiding Officer with Seal

Result of Medical Examination received
Name & Signature of the Candidate

ANNEXURE – III (B)
CANDIDATE'S COPY

CAPFs (RANK/CADRE) EXAMINATION ... (YEAR)
FORM NO. ..... CAPFs (RANK/CADRE)/
MEMORANDUM
UNFIT

Subject: **Medical examination of candidates for Rank/Cadre in Central Armed Police Forces (CAPFs)- Review Medical Examination of unfit candidates.**

Mr./Ms.....Roll No.....
is hereby informed that he/she has been medically examined for recruitment of (Rank/Cadre) in CAPFs on ..... at..... and found him / her **UNFIT** due to the reasons mentioned below:-

---

---

2. In case he/she prefers to file an appeal against the findings of medical examination, he/she is advised to apply for review medical examination in the enclosed Form No. CAPFs-2 (to be provided by P.O.) along with demand draft for Rs. 25/-in favourof ..... (address to be filled up by Medical Board who conducted medical examination of candidate) after obtaining necessary medical certificate from the Medical Practitioner as per Form No. CAPFs-3, so as to reach to the addressee within a period of 15 days from the date of Medical Examination i.e. positively by ..... failing which his/her candidature for recruitment of (Rank/Cadre) in CAPFs for the year 20---to 20--- shall be treated as cancelled without any further notice. If the appeal is not signed by the candidate and / or if the Medical Fitness Certificate is not signed by the Doctor, appeal will be summarily rejected.

3. All documents as per check list mentioned in the enclosed Form No. CAPFs -2 must be attached along with the appeal failing which the appeal will not be considered.

4. **Photograph, Thumb impression and candidate signature on the fitness certificate shall be attested by concerned Medical Practitioner. If fitness certificate received without attestation, the same will be rejected summarily.**

Signature of Medical Officers
Name
Stamp

Date
Centre

Counter-signature of the Presiding Officer with Seal

Result of Medical Examination received

Name & Signature of the Candidate

ANNEXURE
FOR CANDID

FORM NO. CAPFs /RANK(CADRE)/2

From,

Name.....

Roll No. .....

To

SUBJECT- APPEAL AGAINST MEDICAL UNFITNESS FOR POST OF (RANK/CADR IN CENTRAL ARMED POLICE FORCES EXAMINATION 20-------

SIR,

I was medically examined on----------at---------- the post of Rank/Cadre in CAPFs Examination 20---, where I have been declared medi unfit on account of :

2. I have got medically examined from specialist medical officer of concerned field (Dr)- ---------- a specialist in the field of ---------- who has found me medically fit for the above post. I enclose the prescribed certificate fr the aforesaid doctor who has declared me medically fit. I also enclose a demand draft o Rs. 25/- as fee for my review medical examination by the medical board.

3. Certified that all the documents as per check list have been attached.

4. I, therefore, request for my review medical examination by a review medical board of CPAFs for the (Rank/Cadre) in CPAFs.

Check List

1. Medical fitness certificate in form no. CPAFs/Rank(Cadre)/3
2. Demand draft of Rs 100/- in favour of---------- payable at ------- ----------
3. Self addressed stamped envelope Rs 26/-

Yours faithfully

Signature----------

Name----------
Roll No.----------

ANNEXURE –V

CAPFs RANK (CADRE) EXAMINATION ... (YEAR)
FORM NO. CAPFs /RANK(CADRE)/3
FOR CANDIDATE

MEDICAL FITNESS CERTIFICATE

Medical Practitioner to attest Photograph & Thumb impression of candidate	Space for Photograph of candidate Thumb impression of candidate

Certified that Mr/Ms_____S/o Shri_____age_____years, a candidate of _____examination-20---whose photo and thumb impression are appended above duly attested by me was examined by me at Hospital_____on date_____.

2. I the undersigned, have the knowledge that Mr/Ms_____ S/o Shri_____has been declared medically unfit by the medical officer for the post of_____ for CAPF examination-20--- due to----------
---.

In my opinion this is an error of judgment due to following reasons :

After due examination I declare him/ her medically fit for the said post.

Date:

Signature and name with seal
of specialist medical officer of concerned field
Registration No.----------
(MCI/ State Medical Council)
Designation .....
Name &Address of Govt. Hospital
(District Hospital and above)

Signature and name of the candidate
(in presence of Medical practitioner)
Attested by

Specialist medical officer of concerned field
Signature & Seal

Note : 1) The findings of the Medical should be supported by Medical reports/documents wherever applicable.
2) The Photograph thumb impression and signature of the candidates should be attested by Medical practitioner giving this Medical fitness Certificate. Un-attested forms shall be summarily rejected.
3) CAPFs shall not be responsible for postal delay.

Annexure –
CONFIDENTI

F.No. I-45024/1/2008-Pers.II
Government of India/Bharat Sarkar
Ministry of Home Affairs/GrihMantralaya
[Police-II Division]

North Block, New De
May 18th, 2C

Sub: Policy Guidelines on Visual Standards for recruitment/retention in respect Central Armed Police Force (CAPF) and Assam Rifles (ARs) personnel.

The issue regarding the visual standards to be set for the CAPF and Assam Rif personnel had been under consideration in this Ministry particularly with regard to cases of Colour Blindness. The Hon'ble High Court of Delhi in WP No. 686/2011 and V No. 1142/2011 had also directed the Government to notify the revised visual standards.

2. The said matter has been examined in this Ministry and it has been felt that th cannot be one standard for all the Force personnel who are recruited in various cadr Furthermore, with the recent techniques and the advancement in the filed of eye surge there are many methods now available for correction of distant vision like LAS Additionally, there has been a significant transformation in the job profile of the CA personnel and the methods of border guarding as well as the way warfare is conduct The armamentarium of sophisticated detection and combat gadget has made redund certain stringent visual standards hitherto considered essential. Furthermore, due to th stringent standards, the CAPFs and ARs are losing out on recruiting candidates. T coupled with the lack of attraction towards the Forces as a career option among the yo has led to a situation where there is a shortfall in the induction of officers, non-gazet officers and personnel in other ranks.

3. Keeping the above in view, a board was constituted under the guidance ADG(Medial), CAPFs to examine the scientific reforms required in the existing instructi on Colour Blindness for the purpose of Medial Examination during recruitment and medial categorization policy guidelines in CAPFs "SHAPE" system and also to prep updated standard of visual acuity required for the various groups of personnel recruitec CAPFs and ARs, including age specific physiological changes at the various levels serving age.

4. The said board had submitted its recommendations wherein while stating that thei is necessity to review the visual standards in CAPFs & ARs to avoid litigations, they have also observed that :

a. The visual standards vary amongst the CAPFs and the same have never be comprehensively reviewed. The existing standards have been taken mostly fr Army & CGHS in various organizations. Furthermore, due to various loopholes in

existing visual standards, there had been various litigations in the courts against the visual standards and in many cases, the CAPFs have failed to counter the charges against visual standards in the Hon'ble Courts.

b. The capability of Direct Appointed Gazetted Officers to carry out their tasks is also enhanced in the current scenario since optical, range-finding and target acquisition devices have made the unaided visual acuity concept redundant. Even if the officer does not have his spectacles on the battlefield, the range of assisting devices will help him carry out his tasks efficiently provided he has good spectacle assisted acuity. Hence, it is proposed that the unaided visual acuity criteria be relaxed and best corrected visual acuity now be made the real determinant of a candidate's fitness to serve in the CAPFs & ARs.

c. The CAPFs and Staff Selection Commission (SSC), while doing their recruitments are silent on near vision. It has also not been defined in recruitment rules. Furthermore, CAPFs are facing litigations especially in respect of ex-servicemen. To have uniformity and avoid future litigations, near vision needs to be specified and recommended in respect of all ranks.

d. There are three grades of binocular vision, Grade-I being Simultaneous macular perception, Grade-2 being Fusion and Grade-3 being Stereopsis or 3-D vision (depth perception). There are certain branches like Law and logistics where a Binocular vision of Grade-2 would suffice. These branches are losing out on a lot of deserving candidates due to the above stringent criteria. Some branches like aviation have stringent prism bar based guidelines for acceptance. These standards are now felt to be unnecessarily stringent in view of ILS and other precision navigational systems. Such stringent standards for posts where they are not required, also result in a large number of referrals for this condition thereby increasing the work load of senior advisers/experts unnecessarily, as many of such cases are found fit upon review. Hence a simpler and more liberal standard is proposed so as to make it easier to implement.

e. There are certain branches like law, pioneer, education, animal transport, barber, washermen, water carrier, cook, safai karamchari, gardner, cobbler, carpenter, electrician, etc. which can do with a colour perception standard of CP-IV as their job profile does not involve any activity that requires acute identification of colours from great distances. In rarest of rare cases they may be called upon to perform such duties, but the criteria for the whole induction cannot be made stringent in anticipation of a rarer eventuality which may never occur.

f. Colour vision test should be done once at the time of recruitment and later on at the time of basic training. Thereafter, there is not necessity to examine it during Annual Medical Examinations, since it is mostly a congenital problem.

g. Ex-servicemen are appearing for the recruitment of officers and SOs in CAPFs &ARs. Since they are appearing in the age group 35-50 years for the re-employment

in CAPFs & ARs, they cannot be treated at par with direct entry candidates with th age related refractive errors. It is presumed that they have developed refractiv errors by this stage and accordingly visual standards for them should be relaxed.

h. All the Direct Appointed Gazetted Officers (DAGOs) in CAPFs and ARs ar graduate. LASIK is proposed as an acceptable method for vision correction for a DAGOs for selection in CAPFs/ARs. The acceptance standards for these surgerie are to be made uniform across the CAPFs as under :

i) Uncomplicated surgery
ii) Surgery at least 6 months before examination
iii) Axial length ≤ 26 or > 21l mm by IOL Master or A Scan
iv) Residual corneal thickness 425 micron
v) Residual refraction ≤ +/-0.75 D sph or cyl
vi) Normal retinal examination. No evidence of laser, retinal detachment c peripheral retinal lesions requiring treatment. No suspicion of myopi maculopathy, optic disc assessment to be unambiguously noted in terms c disc size, CD ratio, adherence to ISNT rule (inferior neuroretinal rim to b thicker than superior, followed by nasal and temporal rim being the thinnest presence of Nerve fibre layer defects and perpapillary atrophy or nerve fibr layer hemorrhages. Family history of glaucoma must be mentioned. Thes standards are proposed based on the evidence that flap and refractive stabilit and quality of vision stabilization usually occur within six months in most case Studies in the US military have reported increased reports of glare, haze an haloes at night during the first month after treatment when compared wit experiences with either glasses or contact lenses before LASIK. Thes complaints were higher in the treated compared with the untreated eyes at month, but complaints were reduced by 3 months after treatment an indistinguishable from preoperative levels by 6 months.

i. Since sufficient data are unavailable about other refractive surgeries such as Phaki IOLs and INTACS, candidates having undergone these procedures will b considered UNFIT. Similar guidelines will be followed for any new refractiv procedures other than expressly outlines above. Radial Keratotomy performed i any candidate will render him/her UNFIT for service.

j. Where there is suspicion that individual has been using hard contact lenses t modify corneal curvature by orthokeratology, it is suggest that the candidate is to b kept under close observation without contact lens wear for 72 hours and seria corneal topography and refraction be done during this period to unmask the tru refractive status and corneal curvature.

5. The Board so constituted recommended that with the newer research & developments, a more scientific system to define colour vision needs to be adopte which is defined in terms of CP (Colour Perception)as CP I, CP II, CP III, CP IV & CP V

Except in rare cases of specific injury and disease, the CP (Colour Perception) of a person does not alter during life time. Colour blindness is usually congenital which is affecting both the eyes and functions of the eyes are otherwise normal. Acquired colour blindness is often found in the diseases of retina and optic nerve, and the commonest cause is toxic retinoneuropathy. CP standards are based on Martin Lantern (ML) Test and Ishihara Book Test or Tokyo Medical College Book test is only for ground duties. It has been further detailed that :

a. There are two important tests which are being practiced in Indian context for the standardization of Colour Perception (CP) or Color Vision.

b. The commonest is Ishihara Book Test which is sufficient to confirm CP II, CP III, CP IV and CP V. This book has total 38 plates having single and double digit formats with both qualitative and quantitative tests. Plates from 1-25 are sufficient to confirm above mentioned CP gradings in literate persons. For children and illiterates, different Ishihara test books/charts/plates are available.

c. Another similar test with the name Tokyo Medical College Book test is also available in the international scenario which is equally confirmatory for CP II to CP V. This book test has only 13 plates in double digit format with both qualitative and quantitative test plates. But this test is not in practice in Indian context.

d. These plates from both the test books, are to be held at a distance of 75 cms (66 to 75 cms) or one arm length. The test should be carried out in ordinary day light and not directly in the sun. Preferably the day light should come through a window at 45 degree angle on the plate. Each plate should be shown for 2-3 seconds for quantitative test and not more than 8 seconds in exceptional cases. But no time limit is set for qualitative test. The answers given are go be noted. Due to unavoidable reasons, if color vision or colour perception test is done at night or when there is no day light, than a day light fluorescent lamp or table light with daylight filter must be used.

e. In the interest of uniformity in CAPFs & ARs, it is recommended to use the original Ishihara Test Book only. Furthermore, once the plates starts fading, the new book is to be used.

f. Martin Lantern Test : This is the most sensitive test required mainly to confirm CP I grading for the assessment of flying duties e.g. in the case of Pilots. There are other lanterns also available for the test in international scenario. But in the Indian context this Martin Lantern test is in practice. This test is performed in perfectly darkened room and all colors are shown through small apertures of Martin's Lantern at a distance of 6 mtrs for CP I provided the person is dark adopted for 20 minutes before the test is carried out.

g. Persons who fail to be placed in CP I are to be graded in CP III or CP IV by making them sit at 1.5 meter distance from Martin Lantern and will be asked to name colors, presented singly with the large aperture. When the person

recognizes signal red, signal green and white perfectly and passes the test; th person will be assessed CP III, if fails than CP IV

h. It is recommended that in Indian scenario Martin Lantern test should b conducted throughout CAPFs & ARs in the best interest of uniformly in th system.

6. The Board has further described the Colour perception (CP) standards as under :

a. **CPi :CP I is Colour Perception Normal High.**
Correct answering by the candidate, without hesitation, including the series colours shown with the pair of small apertures during Martin Lantern Test, w be interpreted as CP I. In addition, the person, candidate must also pa: Ishihara/TMC Book Test by correctly reading the numbers on plates from plat 1-17 and 22-25. No number should be read on plates 18-21 as they do n have any numbers. CP I standard is required for flying duties e.g. Pilots.

b. **CPII :CP II is Colour Perception Normal.**
This is the highest CP standard for ground duty jobs.
The person/candidate should read correctly the numbers on all the plates fro plates 1-17 and 22-25 of Ishihara Test Book. No numbers should read plates 18-21 as these plates do not have any numbers. In Tokyo Medic College Test Book, the person/candidate in CP II will be able to read correc the screening plates I (1-5) and II (1 and 2) and qualitative plates.
This standard is permissible for all the jobs in CAPFs, NSG & ARs except tl jobs like Pilots/flyers.

c. **CP III: CP III is Colour Perception Defective Safe.**
Person/candidate may misread plates/some of the plates from Ishihara Te Book plates 1-17 and 18-21. But plates 22- 25 of the same book are re correctly (one figure is clearer than the other). In Tokyo Medical College Te Book, the person/candidate may misread screening plates/some of the plat from I (1-5) and II(1-2), but qualitative plates (1-3) are read correctly. Th standard is permissible for all the jobs for ORs, SOs and GOs except for tl drivers, Pilots and flyers jobs in CAPFs & ARs.

d. **CP IV: CP IV is Colour Perception Defective unsafe.**
In Ishihara Test Book, the person/candidate is unable to read even plates 2 and 22-25. In Tokyo Medical College Test Book, the person/candidate is unab to read screening plates I and II as well as qualitative plates (1 - Person/candidate will be able to recognize red and green colours. Appropria trade testing will discriminate between CP IV and CP V. This standard permissible for various tradesman categories of jobs in CAPFs & ARs.

e. **CP V: CP V is Colour Perception Defective Absolute or Colour Blind.**
Candidate/personnel who fail to reach the minimum standard of Colo Perception by any method of prescribed tests, are to be graded as CP V. Th one who can only recognize grey and white colour is in true sense Colour Blir Appropriate trade testing (normally using a wire board and stationary tabs different colours) will discriminate between CP IV and CP V.
There is no job of any kind available in CAPFs & ARs for CP V standa personnel.

7. In view of the above recommendations of the board, the complete report of the board was got vetted by the MoH&FW and now it is proposed that the visual standards for the various levels of personnel in the CAPFs & Assam Rifles shall be as detailed in **Annexure-I** as New Standards separately for :

a. Direct Appointed Gazetted Officers (DAGOs) {Table-1}
b. Other Gazetted Officers {Table-2}
c. Direct Entry SOs & ORs {Table-3}
d. Direct Entry Tradesmen/Followers {Table-4}
e. Ex-Servicemen/Ex-CAPFs Ministerial/Technical personnel/LDCE in Groups of SOs/ORs/Followers {Table-5}

The LASIK standards for Gazetted Officers shall be as per Table-L of **Annexure-I**. The existing standards for each of the above category have also been shown in the said table alongwith the New Standards.

8. For conducting the ophthalmic examination by the doctors during the medical examination while recruitment as well as during the Annual Medical Examination of Force personnel for deciding the medical category as per the medical categorization policy guidelines in CAPFs "SHAPE" system, detailed guidelines have been given in **Annexure-II** for determining the visual standards as per the New Standards.

9. For the existing Force personnel, the medical 'SHAPE' category determined for the visual standards, particularly with regard to Colour Blindness, as per the New Standards shall be applicable in future and no retrospective benefit shall accrue to the Force personnel in case their visual standards are declared upto the mark (as per the New Standard) while determining their 'SHAPE' category in the Annual Medical Examination.

Sdxxxx
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To,

The DGs
BSF/CRPF/CISF/ITBP/SSB/NSG& Assam Rifles

The ADG(Medical), CAPFs

The Director (Medical),
BSF/CRPF/CISF/ITBP/SSB/NSG& Assam Rifles

Annexure-I

TABLE -1 :VISUAL STANDARDS FOR DIRECT ENTRY GAZETTED OFFICERS IN CAPFs, NSG & ARs

S. No.	Category	Visual Acuity corrected (NEAR VISION)		Corrected visual acuity (DISTANT VISION)		Refraction	Color Vision	Remarks
		Better eye	Worse eye	Better eye	Worse eye			
01	Direct Entry Gazetted Officers Age at entry 20-30 years	N6	N9	6/6 Or 6/9	6/12 Or 6/9	Hypermetropia : + 4.00 D (including cylinder) Myopia : - 4.00D (including cylinder)	CP III ISHARA PLATES	- In right handed person, the Right eye is better eye and vice versa. - Binocular vision is required. **LASIK SURGERY: CORRECTION IS PERMITTED SUBJECT TO PRESCRIBED CRITERIA MENTIONED IN TABLE-L** **HOWEVER NO RADIAL KERATOTOMY (RK) OR ANY OTHER REFRACTIVE SURGERY IS PERMITTED EXCEPT LASIK**

TABLE -2 :VISUAL STANDARDS FOR OTHER GAZETTED OFFICERS IN CAPFs, NSG & ARs (AS SPECIFIED BELOW)

S. No.	Category	Visual Acuity corrected (NEAR VISION)		Corrected visual acuity (DISTANT VISION)		Refraction	Color Vision	Remarks
		Better eye	Worse eye	Better eye	Worse eye			
01	OTHER GAZETTED OFFICERS like Medical Officer's/ Specialists/ Super Specialists/ Dentists/ Veterinary Officers/ Engineers/ LDCE/ Ex-Service Officer etc (Age at entry 35-55 Years)	N6	N9	6/6 Or 6/6	6/12 Or 6/12	Hypermetropia : + 3.50 DS Myopia : - 4.5 DS (including Astigmatism +/ 1.50) Note : Age related physiological presbyopic changes are likely to occur above 35 years so age wise presbyopic changes relaxations is permitted as mentioned below for near vision (this is in addition to that above relaxation already provided for distant.). 1.+1DS upto 40 yrs 2.+2DS upto 50 yrs 3.+3DS51- 60years & above	CP III ISHARA PLATES	- In right handed person, the Right eye is better eye and vice versa. - Binocular vision is required. **LASIK SURGERY: CORRECTION IS PERMITTED SUBJECT TO PRESCRIBED CRITERIA MENTIONED TABLE-L** **HOWEVER NO RADIAL KERATOTOMY (RK) OR ANY OTHER REFRACTIVE SURGERY IS PERMITTED EXCEPT LASIK**

LASIK STANDARDS

TABLE-L : Uniform standard for Gazetted officers in CAPFs, NSG & AR

S. No		Interval	Axial length	Corneal thickness	Pre lasik Error	Vision	Retina status	Remarks	Justification
01.	Uniform standard for Gazetted officers in CAPFs, NSG& AR Age at entry20-35 Years	06 Months	Less than26 mm and more than 21 mm	425 microns	6D	To satisfy the relevant branch/ trade criteria	Normal	Duration to be 06 months refractive flap stability and night vision problem resolve in 06 months six months.	26 mm axial length as pathological myopia 425 microns as residual bed must be 250 to 300 microns as a globally accepted guideline, with flap of approx. 80-120 microns-400 microns.

NOTE:-
Lasik is authorized for GOs only.
They should not be below 18 years (for cadet officers, if any) and not above 35 years of age group.

TABLE -3:VISUAL STANDARDS FOR DIRECT ENTRY SOs & ORs IN CAPFs ,NSG & ARs

Sl. No	Category	Visual Acuity unaided (NEAR VISION)		Uncorrected visual acuity (DISTANT VISION)		Refraction	Color Vision	Remarks
		Better eye	Worse eye	Better eye	Worse eye			
01	Ors & SOs Age at the entry: 18 – 35 Years	N6	N9	6/6	6/9	Visual correction of any kind is not permitted even by glasses	CP III BY ISIHARA	- In right handed person, the Right eye is better eye and vice versa. -Binocular vision is required
02	CT(Drivers) & DCPO Age at entry: 18-35 Years	N6	N9	6/6	6/6	Visual correction of any kind is not permitted even by glasses	CP II BY ISIHARA	Binocular vision is required

Table-4 : VISUAL STANDARDS FOR DIRECT ENTRY TRADESMEN/FOLLOWERS IN IN CAPFS, NSG & ARs

SL No	Category	Visual Acuity unaided (NEAR VISION)		Uncorrected visual acuity (DISTANT VISION)		Refraction	Color Vision	Remarks
		Better eye	Worse eye	Better eye	Worse eye			
01	Cook, Washer men, Barber, Tailor, Boot maker, Carpenter, Mali, Electrician/ Switch-Board Attendant, Charge Mechanic, Plumber, Mason, Painter, Motor Pump Attendant, Welder, Water Carrier, Sweeper, Safai Karamchari, Bugler, Kahar, Masalchi etc. Age at entry 18 – 35 Years	N6	N9	6/6	6/9	Visual correction of any kind is not permitted for distant. Should be able to read with glasses for near vision ONLY.	CP IV BY ISIHARA	- In right handed person, the Right eye is better eye and vice versa. -Binocular vision is required. -Minimum colour perception required is to recognize RED & GREEN colours.

Table-5 : VISUAL STANDARDS FOR EX-SERVICEMEN/EX-CAPFs / MINISTERIAL/ TECHNICAL PERSONNEL LDCE IN THE GROUPS OF SOs/ORs/FOLLOWERs IN CAPFS, NSG & ARs

Sl. No	Category	Visual Acuity unaided (NEAR VISION)		Uncorrected visual acuity (DISTANT VISION)		Refraction	Color Vision	Remarks
		Better eye	Worse eye	Better eye	Worse eye			
01	SOs/Ors /followers Age at entry 35-55 Years	N6	N9	6/9 Or 6/6	6/9 Or 6/12	Hypermetropia : + 2 Ds, Mypia : 2.5 DS (including cylinder) Note : Age related physiological presbyopic changes are likely to occur above 35 years so age wise presbyopic changes relaxations is permitted as mentioned below for near vision (this is in addition to that above relaxation already provided for distant. 1.+1DS upto 40 yrs 2.+2DS upto 50 yrs 3.+3DS51- 60years & above	CP III BY ISIHARA	- In right handed person, the Right eye is better eye and vice versa. -Binocular vision is required. - PRESBYOPIC changes and refractive errors are common after the age of 35 years.

OPHTHALMIC SYSTEMIC EXAMINATION

Introduction.

Visual defects and systemic ophthalmic conditions are among the major causes of rejection and hence a thorough and accurate eye examination is of great importance in selecting personnel.

To reduce observer error and ensure maximum reliability, certain examination techniques are recommended. The examination is to be conducted in the following five stages:-

(a) History.

(b) General external examination of the eyes and their adnexae.

(c) Determination of visual acuity for distance and near vision and proper examination to assess colour vision.

(d) Ocular adjustment by doing muscle balance tests.

(e) Fundi, field, slit lamp examination and other examinations, as required.

I. Scope

This document lay down methods of examination to be followed for selection of recruits and direct entry officers. Some parts of the examination are applicable only to direct entry officers and not to recruits. As a general rule, recruiting medical officers are required to examine the ophthalmic system only to the extent possible with the instruments that will always be available to them. This will include a vision testing box and a torch without facilities for magnification.

Examination of direct entry officers is hospital based and will include all the aspects of a general ophthalmic examination that can be carried out by an ophthalmologist with access to a slit lamp and other investigative tools as a routine.

II. Personal and Family History

While examining direct entry officers, specific questions should be asked for, to elicit family history of myopia or night blindness, and any other relevant disease. Personal history should include the history of wearing spectacles, contact lenses, duration for which he has been wearing this correction and the number of times the power was changed and history of operation as Photo Refractive Keratotomy (PRK) or LASER in situ keratomileusis (LASIK). Enquiry should also be made regarding the presence of eyestrain, diplopia, frequent attacks of redness of the eyes, of having undergone surgical/non-surgical correction of refractive errors or having difficulty in seeing in the dark. Due to the numbers

involved, this kind of history is not possible during recruiting and is not likely to yield any results as the medical officer on the scene would not have the means to confirm or refute the history obtained.

III. General External Examination of the Eyes and their Adnexae

2. External Examination :In external examination for direct entry officers, where magnification is required, the examiner should use Corneal loupe or an Ophthalmoscope with a plus 20-dioptre lens in the aperture or a Slit-lamp. Recruiting medical officers will use a torch without magnification.

i) **Lids, lashes and lacrimal apparatus**. Any ptosis, blepharitis, or abnormal condition of the lachrymal apparatus should benoted. **Ptosis** interfering with vision or visual field is a cause for rejection till surgical correction remains successful for a period of six months. Mild ptosis of less than 2 mm if not associated with any signs aberrant regeneration or head tilt and not interfering with vision should not be a cause for rejection. Candidates with uncontrollable **blepharitis,** particularly with loss of eyelashes, are generally unsuitable and should be rejected. **Naso-lacrimal occlusion** producing epiphora or a mucocele entails rejection, unless surgery produces relief lasting for a minimum of six months. This is to be confirmed with syringing prior to endorsing fitness.

ii) **Conjuctiva.**The bulbar and palpebral conjunctiva, including the fornices, should be examined for signs of hyperaemia, infection or growth.

iii) **Pterygium** :Pterygium may be of a progressive nature and it is often difficult to decide the nature of a pterygium on one examination. The criteria for labeling a pterygium as progressive will be as follows
   a. > 2 mm extent into cornea
   b. Causing Irregular astigmatism
   c. Vascular leading edge

Conjunctival pathology such as papillae, limbal follicles and embroyotoxon suggestive of vernal keratoconjunctivitis will be a cause of rejection since this is a chronic and recurrent condition. **Bitotsspots:**Bitots spots are not a cause for rejection except when they are accompanied by clinically significant dry eye in the form of reduced schirmers test or reduced tear film break up time, punctuate fluorescein staining of the cornea, obvious symblempharon formation or keratomalacia and corneal epithelial defects.

i. **Cornea and Anterior Chamber:** The presence of corneal opacities, vascularization, radial scars or scars of operations should be carefully noted. Depth and contents of anterior chamber should also be noted. Also look if the individual is wearing contact lenses.

ii. **Corneal opacities:** The existence of isolated peripheral corneal opacities, considered in the opinion of the ophthalmologist to be stationary and unlikely to recur, should not be a cause for rejection , except in cases that are of a borderline nature. For example, a partial thickness post traumatic peripheral corneal opacity is unlikely to recur and trouble the individual in his service career and should not be a cause for rejection. As a guideline, opacities of any size or grade not encroaching upon the central 6mm of the cornea (pupillary size in a darkened room approx 5 to 6 mm) should not be a cause of rejection provided they are not indicators of diseases of a recurrent or progressive nature. Diseases of a chronic or progressive nature could include keratoconus, corneal dystrophies, herpetic corneal disease and other such disorders.

IV. Cataract:

Lenticular opacities that are compromising vision in the opinion of the ophthalmologist or are likely to progress or need treatment early in the individual's career, will be a cause for rejection

3. Iris and Pupils : Any abnormality of colour or configuration of the iris, or signs of past iritis should be noted. Any inequality of the pupils should be noted e.g. mydriasis, miosis, or irregularity due to posterior synechiae. Any abnormal reaction to light or accommodation/convergence should also be noted. Pupils should be equal, circular, and moderate in size and reach to light promptly. RAPD (Relative afferent papillary defect) is a cause for rejection since it implies optic nerve injury. Pupillary reactions are to be tested with the individual looking into the distance with the room lights off and with the brightest available light source. Light should be projected into one eye and kept on the eye for the three seconds and the reaction of the pupil noted. The same is repeated with the other eye. The swinging flashlight is done next with light swinging from eye to eye with the same three second duration of exposure. Interpretation:

a. Direct reaction – both eyes react equally and briskly. Swinging flashlight test – both pupils react equally, no dilation when light is reapplied to any eye – this is a normal reaction.

b. Direct reaction - both eyes react (may or may not be equally). Swinging flashlight test – one pupil reacts briskly, the other pupil dilates upon application of light – this is an unequivocal RAPD – reject.

c. Direct reaction – both eyes react (may or may not be equally). Swinging flashlight test – one pupil reacts briskly, the other pupil constricts initially and then dilates but does not return to the same size as the constricted pupil of the contralateral eye. – This is a lower grade of RAPD. Retest till you are convinced that the pupil in the involved eye does not attain the same size of the constricted pupil of the other eye.

d. Direct reaction – both eyes react but the pupil shows alternating dilating and constricting movements. Swinging flashlight test – both pupils show the same alternating constriction and dilation and the smallest size pupil size attained is the same in both eyes. This is hippus – It is a physiological condition. to be considered Fit.

Any signs to suggest uveitis will entail rejection.

4. **Ocular Movements.** The eyes should move fully and normally in all directions and no diplopia should be elicited in anyquadrant. Particular attention should be paid to candidates with torticollis, because to abolish diplopia and maintain binocular single vision, individual may adopt a head tilt.

5. **Nystagmus**: Special care should be taken particularly to keep the fixation object inside the normal binocular field of vision. Physiological nystagmus can almost invariably be demonstrated in extreme positions of gaze, or if the fixation object passes from the view of one eye behind the nose. Latent nystagmus is demonstrated by covering one eye. Differentiation of the type of nystagmus is given below.

Type of pointing	**Vision**	**Slow and quick component**	**Any Position**	**Occurrence accompanied by Vertigo**	**Past Extreme Position**
1. Physiological	Not Diagnostic	No	Yes	No	No
2. Ocular	Bad	No	No	When Attempting fix	No
3. Extra-ocularparesis	Not diagnostic	Usually	In direction of action of the paralysed muscle	No	No
4. Central	-do-	-do-	-do-	No	Yes
5. Labyrinthine	-do	Yes	No	Yes	Yes

6. **Distant Vision.** Distant visual acuity is judged by standard test types, read by each eye separately first, and then together without glasses at 6 meters. Digital, Auto projector charts should be used, if possible. The test type should be illuminated to the minimum of 10 foot candles (9-18 W standard company Tube light fitted). If the illumination is less, the visual acuity cannot be assessed correctly. Distance between the candidate and the test type should be exactly 6 meters. The lettering in the test should not be faded and must be against clear white background. While checking the vision in either eye, the trial frame can be employed, which should be light and readily adjustable. It should be corrected and adjusted to ensure that it is accurately fitted to a symmetrical fact. The eye that is not being tested should be occluded with opaque card without pressure. In the Snellen's test type of charts, the distance at which a particular letter should be read by a person with standard vision is given that letter. For example, if a person at 6 meters can read only the letter that is to be read from 60 meters (marked 60 against that letter on the chart), his vision is recorded as 6/60. Similarly 6/36, 6/24, 6/24, 6/18, 6/12, 6/9 or 6/6 is recorded according to the number on the smallest line read. If he cannot even read the largest at 6 meters, the distance is reduced by a meter each time till he can read the top letter. If he reads it at a distance of 1 meter, his vision is recorded as 1/60. If his vision is less than 1/60 finger counting close to the face is checked. If even finger counting is not possible, then his ability to recognize hand movement (HM) is recorded. If even hand movements are not appreciated then his perception of light (PL) projected from four quadrants is tested and recorded. The chart should be changed frequently to obviate the possibility of candidate having memorized the chart. Alternatively, Landolt's broken ring chart may be used. To prevent memorizing, the candidate can be asked to read any line in the reverse direction (right to left). The individual can also be asked to read alternate letters in reverse to ensure that letters are not memorized. Special attention is to be paid to ensure that candidates not be allowed to squeeze their eyes during the examination.

7. Astigmatic individuals may be able to read letters indistinctly or may misidentify them because of indistinct image on the retina. There may be desire to tilt the head to one side for better focus. Such individuals may be tested with cylindrical lens or stenopic slit.

8. **Method of Recording when Lines are Read Partially:** If a person reads 5 letters out of 7 correctly, say in 6/6 line, his vision will be recorded as 6/6. In case he reads less than 5 letters, the vision should be recorded as I he has read the larger letters in the line

above. Where the individual has read only 4 letters and cannot see the 5th letter distinctly, he should be given the benefit of trial of another chart, where he may be able to read 5 letters. Recording of vision as – Partial (P) is not permitted. The recording then should be the reset when full reading is correct, say 6/9.

9. **Common Errors :** Following are the common sources of error:-

(a) The chart is not at 6 meters from the candidate. This completely invalidates the test unless the distance is recorded, e.g. if the 6/6 line is read at 7 meters the visual acuity is recorded as 7/6, if at 5 meters, 5/6 and so on.

(b) Too much light reduces visual acuity particularly if glare is reflected from the surface of the test type, or if extraneous light enters the candidate's eye.

(c) The candidate views the chart with both eyes open, or memorizes letters before testing starts.

(d) The candidate is allowed to read the chart with glasses on, before the unaided acuity is determined.

(e) The candidate or examiner presses on the occluded eye.

(f) The candidate is allowed to cover his own eye, and peeps from behind the occluder or between his fingers.

(g) The candidate is allowed to screw up his eye or adopt an unusual head posture.

(h) Candidate may be wearing fine contact lenses or may have undergone corneal refractive surgeries which are not detected.

(i) Insufficient time for the candidate to relax his accommodation prior to making him read the charts.

(j) The examiner's inability to recognize guessing or memorizing on the part of the candidate.

V. Refraction:

Refraction must be done with a streak retinoscope with adequate illumination and a fully open aperture. The candidate must be under cycloplegia with cyclopentolate or hamatropine and minimum of 1 hour is to elapse from the time of instillation of drops to the time of refraction. Auto refraction readings are NOT ACCEPTABLE for purposes of medical examination. Findings of refraction are to be recorded on the medical examination form in the conventional manner. This test is not to be done for recruits at the initial stage and can only be done by an ophthalmologist at the time of appeal, if deemed necessary.

10. Near Vision: For recording near visual acuity, Snellen's or Jaegers test types are used. The candidate is seated in a chair with good light coming from behind the left shoulder and is asked to hold the card at approximately 30 cm distance and asked to read the words and sentences. The number of the smallest type printed on the card that he can read comfortably is the near vision. It is recorded as NV=N5, if he reads the smallest print marked 5.

11. Manifest Hypermetropia : In cases of hypermetropia, the total hypermetropia can be divided into two parts; latent hypermetropiathat is overcome physiologically by the tone of the ciliary muscle and manifest hypermetropia. Manifest hypermetropia is again divided into facultative hypermetropia that is overcome by an effort of accommodation and absolute hypermetropia that cannot be so overcome. Manifest hypermetropia exceeding +2.00 D is not permitted for flying duties, even if the visual acuity is normal.

12. Procedure for testing Manifest Hypermetropia : The candidate is seated at 6 metres from the test types, and wears a trialframe with a plus 2.00 D Sph lens in each eyepiece. He is asked to read 6/6 line with both eyes. If he is able to read without seeing the letters blurred or distorted, manifest hypermetropia of 2.00 D Sph is present. To assess the amount of manifest hypermetropia, the strongest convex lens in front of the eyes with which clear vision is still maintained (6/6 clearly), is recorded. Wherever possible and necessary, refraction is done under cycloplegia and reading for manifest hypermetropia is taken.

13. Common Errors : The following are the common sources of error:-

(a) The test is carried out immediately after the testing of distance visual acuity, giving the candidate an opportunity to remember the 6/6 line.

(b) Insufficient time is given for the candidate to relax his accommodation; hence a low level of manifest hypermetropia is recorded. To avoid this, the time taken to read the whole of the test type is usually considered sufficient to permit this relaxation.

(c) Lack of appreciation that the candidate is guessing or memorizing the letters. If the test type cannot be changed, the letters should be read backwards, occasionally.

14. Colour Vision :Colour perception of an individual does not alter during life except in rare cases of injury and disease. Colourblindness is usually congenital, affecting both eyes and the functions of the eye are otherwise normal. Acquire colour blindness is often found in diseases of retina and optic nerve, toxic retinoneuropathy being the commonest causes. Colour perception is based on Martin Lantern Tests and Ishihara/Tokyo Medical College Book charts for assessment for flying duties and Ishihara Charts only for ground duties.

15. Colour perception standards are **CP I, CP II, CP III and CP IV**.

16. CP I. Candidate capable of identifying without hesitation all colours shown through the small apertures of the Martin's Lanternat 6 meters in a perfectly darkened examination room. In addition, the candidate must pass Ishihara/Tokyo Medical Book Test.

17. CP II. Candidate passes Ishihara Book Test or the Tokyo Medical College Book Test, as specified in paras 25 & 29respectively.

18. CP III (Colour Defective Safe). Candidate who recognizes white, signal red and signal green colours by large apertures shown by Martin's Lantern at 1.5 meters correctly or reads the requisite plates on Ishihara Book/Tokyo Medical College Book as given in paras 25 and 29 respectively.

19. CP IV (Colour Defective Unsafe). Unable to recognize white, signal red and signal green colours shown by Martin's Lantern by large apertures at 1.5 metres correctly or unable to read plates 2-9 and 22-25 on the Ishihara Book or read the screening plates I and II, qualitative plates 1-3 in the Tokyo Medical College Book.

20. CP V (Colour Perception Defective Absolute or Colour Blind): Candidates unable to read any colour plate either in Ishihara Book or Tokyo Medical college Book and will recognize only grey and white colours. In true sense such person will be declared as totally Colour blind in the true sense. It is further mentioned at paras 30 and 31 respectively.

VI Methods of Examination and assessment of Colour Vision

21. During assessment for flying duties the Martin Lantern Test with small in hole at 6 metre is first to be presented to the candidate and then he/she will be assessed by Ishihara charts/ Tokoyo Medical College Book also.

22. Martin Lantern Test : This test is very sensitive when properly carried out and it detects anomalous trichromates who are likely to pass even on Ishihara at times. Such cases appear normal at most times and are rarely aware of their deficiency, the defect becoming manifest under favorable conditions.

23. The room is to be completely darkened. The candidate will be placed at a distance of 6 m from the lantern. It is not necessary to dark adapt the individual at this stage, but should it become apparent in the preliminary stages that there is a defect of colour perception; he is to be dark adapted for 20 (reference of article) minutes. The candidate should wear his glasses if his form or basic vision 'is defective. Care should be taken that the correcting glasses are not coloured because red coloured glasses are known to give a decided advantage to the individual in the test. He will be told to name the colour from left to right when they are shown in pairs. Using the large aperture, a single white light will be shown to the candidate who will be asked to name the colour. If he replies correctly the examiner need not speak to the candidate throughout the remainder of the examination. Should the candidate's answer be incorrect, he will be told that the light is white (or clear). Thereafter, the examiner need not speak to the candidate until the examination is completed. Pairs of colours are now shown to the candidate, using the pair of large apertures. Further pairs of colours will be shown using the pairs of medium and later on small apertures. The pairs of colours should not be shown in any fixed sequence, as the candidates are likely to learn from one another. Dimming filters will not be used. It is extremely important for assessment of CP I to show pairs of colours, as this heightens the simultaneous contrast. Thus, if red and white are shown simultaneously (side by side) white may be seen as green although white by itself might be correctly identified. The use of small apertures is not a fair test unless the examination room is perfectly dark.

The assessment must be done over a minimum of twelve pairs being shown to the candidates, with a maximum of one wrong response allowed. This is being done to allow a certain degree of latitude to the individual to account for unfamiliarity with the

test and a heightened level of anxiety seen in most candidates. The individuals responses should be recorded as correct or incorrect and this report should be attached to the med examination record.

24. Assessment. Correct answering by the candidate, without hesitation, including the series of colours shown with the pair of small apertures, will be interpreted as Colour Perception Standard 1 (CP I).

25. Candidates who fail to be placed in CP I are to be graded CP III or CP IV as follows:

The candidate will be seated at a distance of 1.5 meters from the Martin Lantern and will be asked to name colours, presented singly with the large aperture, to satisfy the examiner that he can recognize correctly, without guessing, signal red, signal green and white. A candidate who passes the test will be assessed CP III and, if he fails, CP IV. The right hand aperture of the Lantern is to be occluded by the examiner during the test, leaving only the left aperture exposed. NO ERRORS are allowed in this part of the test.

26. Ishihara Book : The book should be held at a distance of 75 cm from the candidate. The test should be carried out in ordinary day light, but not directly in the sun. Artificial illumination, if used, will be a tube light with day light filter. No candidate should be rejected unless tested in daylight. Each plate should be shown for 2 to 3 seconds only. **Answer given should be noted.** Next plate should be shown thereafter. Care should be taken that the charts are not unduly faded or otherwise marked. Candidate should not be allowed to touch the charts. No fixed sequence should be followed to guard against candidate memorizing the book.

a) These plates are used for screening of all candidates.

b) The candidates who pass Ishihara Book Test are graded as CP II (Colour Perception Normal) and require no further testing except those whose critical visual assessment requires as categorization of CP I (Colour Perception Normal High).

c) The candidates who fail Ishihara Test are further tested for CP III or CP IV according to requirement.

d) Any person in CP V (Colour Perception Defective Absolute or Colour Blind) is unable to pass any of the tests for CP I to CP IV standard.

27. **Assessment.** Colour vision assessment by Ishihara book is contained in the succeeding paras.

28. **Colour Perception Normal (CP II):**The numbers on all plates from pate no. 1-17 and 22-25 should be read correctly. No number should be read on plates 18-21 as they do not have any number.

29. **Colour Perception Defective safe (CP III):**May misread some of the plates as under :

Plate No.	Actual No.	Read As
2	8	3
3	6	5
4	29	70
5	57	35
6	5	2
7	3	5
8	15	17
9	74	21
18	No Number	5
19	--	2
20	--	45
21	--	73

Plates 22-25 are read correctly (One figure is clearer than the other).

30. **Colour Perception Defective Unsafe (CP IV) :**The individual is unable to read even plates 2-9 and 22-25. Appropriate trade testing will further discriminate between CP IV and CP V.

31. **Colour Perception Defective absolute or Colour Blind (CP V) :**Candidates/personnel who fail to reach the minimum standard of Colour Perception are to be graded as CP V. The one who can only recognize grey and white colour is in true sense Colour Blind and to be put in CP V standard. Appropriate trade testing (normally using a wire board and stationary tabs of different colours) will discriminate between CP IV and CP V.

32. **Tokyo Medical College Book :**The book should be read at a distance of 45 cm from the candidate. The tests should be carried out in ordinary daylight. Direct sunlight must be strictly avoided. If for unavoidable reasons the tests are to be made at night, a day light fluorescent lamp must be used. Two seconds exposure is allowed for the screening and quantitative plate, no time limits are set for the qualitative plates.

Assessment :Colour Vision Normal (CP II) individual reads correctly the screening plates I (1-5) and II (1 and 2) Colour Defective Safe (CP III) individual reads Qualitative Plates (1-3) correctly. Colour Defective Unsafe (CP IV) individual is unable to read screening plates I and II qualitative plates 1-3.

33. Night Vision :Night Vision test is not done as a routine. In case the candidate gives family history of night blindness or givessymptoms of night blindness or shows signs suggestive of defective night vision, test is done to assess the night vision capacity at the nearest Eye Centre to rule out organic pathology leading to night blindness. Night vision test is normally done with apparatus Della Cassa and electrortinogram if required clinically.

34. Ocular Muscle Balance: This examination is conducted to detect Heterophoria or Latent Squint. The detection of Heterophoriain a candidate for aviation is of even greater importance than the discovery of moderate error of refraction. The ability of a pilot to land aircraft successfully and consistently depends to an extent on normal ocular muscle balance. Heterophoria is the group name for the several types of latent or hidden squints, which are revealed by certain tests described below. A simple classification of Heterophoria is as follows:-

(a) Exophoria or divergent latent squint – the common type.

(b) Esophoria or convergent latent squint, often associated with a tendency to manifest esotropia and high hypermetropia.

(c) Hyperphoria and Hypophoria, latent upward or downward deviation, uncommon and associated at times with such conditions as ocular torticollis.

(d) Cycolphoria, a rare condition in which the image in the two eyes are tilted at an angle to one another, resulting in a tendency to monocular vision from suppression of one image owing to the impossibility of true fusion.

35. Two types of tests for Heterophoria are carried out. In the first group, the two eyes fix on dissimilar object, and in the second group, they fix on a common object. Heterophoria for dissimilar objects is tested by the following tests:-

a) The Cover Test – for recruits, only this test will be carried out to assess ocular muscle balance.
b) Maddox Rod Test.
c) The Red Green Test.
d) Hand-held Steroscope.

36. The Cover Test : A suitable cover such as an envelope or card only are required. Both eyes must be tested separately. Prerequisites for cover test are:

- Bilateral macular perception.
- Candidate should be fixing on a distant vision chart
- Should be wearing his prescription glasses
- Should be done both for distance and near.

VII. Cover test for distance

The individual to be tested is placed 6 meters from a vision chart and told to look at the smallest letter that he can see. Now cover one eye. Watch what happens to the eye that is not covered. If it does not move, then it means that it was already fixating on the object. If it moves to take up fixation, then it means that it was deviated before we applied a cover. Now it is possible that the eye that was covered is normal and remains central behind the cover or it is deviated behind the cover. To find out what the condition is, now remove the cover. Now watch the freshly uncovered eye. If it does not move, then there is no tropia. If it moves to take up fixation, then it means that it was deviated behind the cover we placed and at the same time we will notice that the other eye moved out of fixation. If there is tropia, there will be a visible or suspected deviation before we place a cover. When we place a cover, both eyes will move, one to take up fixation and the other will move out of fixation and when we remove the cover the deviation will persist and both eyes may move again. In case of phorias, there will be no visible deviation before we start the test. No movement when we cover one eye and only one eye (the other where we remove the cover) will move when we uncover the eye. After the test, the eyes will again aligned.

37. Technique of Cover test for near : Cover one eye completely. Hold the pencil vertically with the point 45 cm from the candidate's face, between his eyes and level with the root of his nose. As the candidate to follow its movement with the eye and move the pencil 3 or 4 times across his face, from side to side in a level plane. Range of movement should be approximately 30 cm. Now bring the pencil to rest level with the root of his nose and evenly between his eyes, still at a distance of 45 cm from his face. Quickly remove the cover, and observe any movement of previously covered eye.

38. The covered eye may not show any movement or it may move either inwards or outwards. Now the eye, which was open, is covered and the movement of the previously covered eye is once again noted. This part of the test may be termed stage 2. The previously covered eye may once again show no movement or may move either inwards or outwards.

39. Interpretation of Results. If there is no movement of eyeball either in stage 1 or stage 2 of the test, it indicates that the muscle balance is normal and fusion is achieved with effort. Such a stage is called orthophoria. However, if there was no movement in stage 1 but some movement in stage 2 after covering the other eye, the individual is suffering from heterotropias or manifest squint. If the movement is inwards or outwards in stage 2, the case is diagnosed to suffer from divergent or convergent squint, respectively. If in stage 1 the eye moved inwards and there was no further movement in stage 2, the individual suffers from latent divergence with complete recovery. However, if there was further inward movement in stage 2, he suffers latent divergence with incomplete recovery. In the same way, if the movement in stage 1 was outwards but no further movement occurred in stage 2, the candidate suffers from latent convergence deficiency with complete recovery. In case further outward movement occurred in stage 2, the individual will be deemed to be suffering from latent convergence with in complete recovery.

40. Whenever the recovery is complete, whether divergent or convergent, the individual suffers from heterophoria. If the recovery was incomplete, he is considered to be suffering from heterotropia. If the recovery was incomplete, he is considered to be suffering from heterotropia.

41. Not only the movement but the rate of recovery is also noted. The recovery can be rapid or slow, immediate or delayed. Now the second eye is tested in similar fashion. The cover test is to be done for distant and near vision separately and mentioned accordingly.

42 Recording of Results. The degree of movement is recorded by letters _ S' if slight and _M' if moderate. Second and third letters indicate lateral or medial deviation. Fourth and fifth letters show rate of recovery and the last two letters indicate whether left or

right or both eyes. Slight latent divergence with rapid recovery in both eyes will be recorded as _ SLDRRBE'

Recruits with tropia or manifest squint are unfit. Latent squint is acceptable provided recovery is complete and rapid.

43. Maddox Rod Test. The candidate, wearing a trial frame is made to sit 6 meters from spotlight in a dark room, (other sources of light in the room being excluded as far as possible). The Maddox rod is placed in one eyepiece of the frame, the other eye being left uncovered. With the rod placed horizontally, a vertical beam of light is seen by one eye while the uncovered eye sees the spotlight. The position of the beam relative to be spotlight is noted, preferably on a scale graduated in prism dioptres and mounted on the spotlight apparatus. If, for example, the Maddox rod is in front of the right eye and the beam of light is seen to the left of the spotlight, exophoria is present. By placing the rod vertically in the trial frame if a horizontal beam is seen by the candidate, an estimate of hyperphoria is made.

44. Interpretation of Result : In order to measure the horizontal deviation, the rod is placed with grooves horizontally in front of the right eyes so as to produce a vertical red line. The left eye fixes a spotlight at 6 meter distance. If the line is seen to the left of the spotlight it indicates exophoria and if to the right of the light, esophoria. The amount of deviation can be measured by placing prism of increasing strength in front of right eye with bases in for exophoria and bases out for esphoria until the red line coincides with the spotlight.

45. To determine vertical deviation the rod is then placed vertically in front of right eye, so as to produce horizontal red line, which will pass through the spotlight if there is no vertical imbalance. If the red line is below the spotlight there is right hyperphoria, and if the red line is passing above there is left hyperphoria. The amount of deviation is measured by placing prism of increasing strength in front f the right eye with bases down for right hyperphoria or up for left hyperphoria until the red light traverses the spot. Instead of using prisms, the test may be used in conjunction with the Maddox tangent scale where the deviation is determined by asking the candidate to observe which number on the scale the red line traverses.

46. The test should also be done with the spotlight at 33 cms. If the Maddox rod is placed in front of the left eye the interpretation will change accordingly.

47. To differentiate the two tests, results of Madox Rod test at 6 meters and at 33 cm are recorded separately. Maddox Rod Test6 m – Exo 2 D, 33 cm – Exo 10 D

48. If cyclophoria is present, when the Maddox rod is vertical, the line instead of running horizontally will run obliquely. Degrees through, which the rod has to be tilted, in order to make the line of light appear vertical, will indicate the amount of torsion. The obliquity is more easily recognized if two Maddox rods are used, one before each etc. Two lines seen are parallel to each other in the absence of cyclophoria. Great care must, of course, be taken that the rods are set absolutely vertically or horizontally in the trial frame.

49. Common Errors.

(a) The candidate shuts one eye.

(b) The candidate does not relax to focus on the distant spotlight. Too high a degree of esophoria is indicated, which does not match the deviation detected by the cover test.

(c) Multiple red lines seen. Aberrant light sources are present if the examination room cannot be blacked out, the proper red line should be indicated by flashing the spotlight on and off a few times. White Maddox Rods are available for use with a red spotlight, aberrant light leaks producing white lines and the spotlight, a red line.

(d) Falsification by the candidate. Heterophoria candidates who are familiar with the test may declare immediately that the lines passes through the light. If following the cover test, this appears unlikely, a prism should be placed in an appropriate direction before the Maddox Rod. If orthophoria is still claimed, a closer check of the candidate's responses is indicated.

50. Red Green Test .The most commonly used test is Worth's – four dot . It consists of an illuminated box with four apertures for coloured glasses. One red, two green and one white. The candidate at 6 meters distance wears a red glass before right eye and green before left eye, so that he sees the red with one eye, green with the other and white with both. If he/she sees four dots (one red, two green and one pinkish green) he/she has binocularity. If he/she sees five dots (two red and three green) he/she uses both the eyes but has diplopia. If he/she sees two reds or three greens only, he is using one eye only, in the first case right eye and in the second case left eye.

51. Hand-held Stereoscope. The presence of binocular vision can be tested by integration of suitable figures in a stereoscopy. Different type of pictures (two in a single slide) are used. Many types of stereoscopes are available but method of examination is essentially the same.

52 Simultaneous perception is elicited by showing two dissimilar but not mutually antagonistic pictures at the same e.g. Bird and Cage, Soldier and Sentry Box. The candidate must superimpose the pictures. The capacity for fusion is proved by the power of combing two mutually incomplete pictures with common constituents. Stereoscopic vision is best tested by using circular perspective pictures such as concentric rigs where the inner ring is seen in the middle at a different place then the outer ring.

53. Convergence Tests : Convergence is the ability of two eyes to move inwards to focus properly at an object placed near the eye, mainly between the eye and a distance up to one metre. It is a measure of the strength of the two medial rectii one in each eye. Strong medial rectii are necessary for doing any near work and if they are weak the symptoms of eyestrain, headache etc. develop when we do near work for some period of time. Moreover, if the near work is carried out inspite of eyestrain or headache, the person may suddenly develop diplopia due to relaxation of one of the medial rectii leading to the movement of the weaker eye outward. Hence, good convergence is necessary for comfortable viewing and working at near distance. Convergence insufficiency is not a rare condition and is met with frequently in people having eyestrain.

54. Convergence is divided into two – Objective convergence and Subjective convergence.

(a) **Objective Convergence.** The assessment of convergence is made without taking the help of the individual under examination. It is more reliable and more quickly done.

(b) **Subjective Convergence:** In assessment of subjective convergence, the assistance of the candidate is taken and it is a good corroborative finding to objective convergence. The test requires special instrument called Livingston Binocular Gauge.

55. Measurement : Both objective and subjective convergence can be measured by Livingston Binocular Gauge/RAF Near Point Rule.

56. Objective Convergence: On the binocular gauge, there is an attachment, a small stick with a pointer. The stick is painted alternately black and white. The stick is placed in the slit of the scale with the pointer running over the centimeter marks. The instrument is placed over the infra orbital margin and the candidate is asked to keep looking at the black and white stick. The stick is then moved towards his nose and the examiner watches the ocular movements of the candidate. The point where one of the two eyes stops moving inwards or suddenly shoots out is taken as the point of convergence. The pointer reading on the scale is noted and is expressed as – convergence: 7 cm. If the reading is very high e.g. beyond 11 to 12 cm, the test should be repeated after explaining to the individual what is required of him/her.

57. The test can also be done with the help of a pencil and scale. The scale is placed below the nose of the candidate and the pencil tips is brought at the level of bridge of the nose. The pencil is then moved towards the nose in contact with marking on the scale and the result noted as explained earlier.

58. Subjective Convergence: This can be done with the help of Livingston Binocular Gauge/RAF near point rule only. The gauge has a box like attachment with the front portion having a cut in the form of a cross. The back will has an ivory card with a black vertical line and the letters_ ALT' written on either side of it. The card is so placed that the line lies in the middle of the vertical arm of the cross and is seen in the centre of the vertical cut when viewed binocularly. The candidate is instructed to look at the line and inform the examiner when the line shifts either to right or left. The box from the far end is then gradually moved towards the candidate's eye and he informs the examiner as soon as the deflection takes place. The reading is read off from the scale and is noted as SC 18 cm (Rt). Deflection to the right or left denotes the dominant eye for the near. The test becomes unreliable in case of presbyopia.

59. Accommodation: Accommodation is the ability of the eye to bring to focus clearly an object lying between eye and a distance of one meter.Beyond one meter very little accommodation is required. Accommodation is achieved by contraction of ciliary muscle, which in turn relaxes the zonules of the lens and the lens become more spherical and hence more powerful. A child has accommodation up to 7 cm. There is a gradual decrease in the power of accommodation with age, which becomes very marked after 30 years of age. This due to hypertrophy of the ciliary muscles and loss of elasticity of lens, which prevents it from taking a new shape. Around the age of 40 years, in an emmetrope, the near point of vision recedes beyond 25 cm and the candidate finds it difficult to read. This condition is called presbyopia and the person requires convex glasses for near vision. The necessity and ability of accommodation is also affected by refractory errors. A myope has

much less need for accommodation and a hypermetrope suffers from weak accommodation where he has to be assisted with glasses for reading. One may also suffer from spasm of accommodation, which is associated with variable acuity for distant vision and sever headache.

60. Measurement : Accommodation should be measured independently in each eye. The Ivory card of the binocular gauge and the scale are used. The scale is kept at the infraorbital margin and one eye is closed or covered. The card is kept at about 20 cm from the candidate on the scale. He/She is instructed to read letter – ALT ⌈ on the card, to keep looking at the letters and inform the examiner when the letters start blurring. The card is then gradually brought towards the eye and the point where the letters start blurring is noted.

It is denoted as - Accommodation Rt Eye : 14 cm, Lt Eye : 14 cm ⌊. To confirm the above, the card is then moved from the nearestposition to the eye to the far end with instruction to the candidate to inform the examiner when he can read letter – ALT

61. Visual Fields: Visual fields must be normal when examined by hand movements, i.e. confrontation method, each eye being tested separately, as it fixes the eye of the examiner. In case of doubt, perimetry and scotometry or any other test, as felt appropriate, by the examining authority will be carried out. Recruits and candidates will be examined only with confrontation. If a doubt exists about the presence of a scotoma, then automated perimetry will be done. **Intraocular pressure :** To be recorded by Non Contact tonometry, at least five readings being taken and the lowest and highest reading being discarded, any value above 22 mm Hg is to be viewed with suspicion and must be reviewed by an ophthalmologist Who may or may not choose to investigate further with Applanation, visual field charting by automated perimetry and optic disc assessment. Ophthalmologists will invariably carry out these examinations in case candidates have a positive family history with raised intraocular pressure. This is only for direct entry officers and not for recruits.

62. Ophthalmoscopic Examination : Ophthalmoscopic examination is carried out to exclude any abnormality in the fundi andmedia. Examination must be carried out in a systematic manner starting from the cornea, anterior chamber, pupil, iris, lens, posterior chamber and retina. Note will be taken of reaction of the pupil to the light, abnormality of the papillary edge, any evidence of inflammation of the iris and lenticular opacity. Vitreous floaters are usually of no significance. Any abnormal vascular pattern, muscular scarring, hemorrhages or exudates in the fundi will be noted. The normality of the disc and the vascular pattern in the disc and its edges, AV ratio, papillary oedema or color change in and around the disc and pigmentary changes elsewhere provide valuable clues to various systemic diseases and must be carefully noted. Indirect ophthalmoscopy is indicated at the discretion of the ophthalmologist and must be carried out when there is a concern about the health of the peripheral retina. Recruits will not be examined by ophthalmoscopy at the initial examination. They will undergo this procedure only upon appeal and if the ophthalmologist feels it is necessary.

63. Visual defects and medical ophthalmic conditions are amongst the major causes of rejection for flying duties. Therefore, a thorough and accurate eye examination is of great importance in selecting flying personnel.

64. Personal and Family History and External Examination : Squint and the need for spectacles for other reasons are frequently hereditary and a family history may give valuable information on the degree of deterioration to be anticipated. Candidates, who are wearing spectacles or found to have defective vision, should be properly assessed.

65 Visual Acuity/Colour Vision : The visual acuity and colour vision requirements are detailed in **Appendix B** to his chapter. Those who do not meet these requirements are to be rejected.

66. Myopia. If there is a strong family history of Myopia, particularly if it is established that the visual defect is recent, if physical growth is still expected, or if the funds appearance is suggestive or progressive myopia, even if the visual acuity is within the limit prescribed, the candidate should be declared unfit.

67. Refractive Surgeries : Candidates who have undergone LASIK (LASER In Situ Keratomileusis) may be considered fit for recruitment for the post of Direct Entry Gazetted Officers.

68. Post LASIK candidates must meet the visual requirements required for the branch as laid down in para 66.

69. The following criteria must be satisfied prior to selecting post – LASIK candidates:-

(a) LASIK surgery should not have been carried out before the age of 20 years.

(b) The axial length of the eye should not be more than 26 mm as measured by IOL master.

(c) At least 6 months should have elapsed post uncomplicated stable LASIK with no history or evidence of any complication.

(d) The post LASIK corneal thickness as measured by a corneal pachymeter should not be less than 425 microns.

(e) Individuals with high refractive errors (>6D) prior to LASIK are to be excluded. There should be rigorous documentation to satisfy the examining ophthalmologist about the authenticity of the preoperative refractive error. (25% chance of myopic maculopathy, 6 times the risk of retinal detachment compared to less than 3 D, glaucoma OR of 3.3 for >3D)

70. Radial Keratotomy (RK) and Photo Refractive Keratotomy (PRK) surgery for correction of refractive errors are not permitted for Direct Entry Gazetted Officers. Candidates having undergone cataract surgery with or without IOL implants will also be declared unfit.

VII. Ocular Muscle Balance :

71. Individuals with manifest squint are not acceptable for recruitment.

72. The assessment of latent squint or heterophoria in the case of aircrew will be mainly based on the assessment of the fusion capacity. A strong fusion sense ensures the maintenance of binocular vision in the face of stress and fatigue. Hence, it is the main criterion for acceptability.

(a) **Convergence :**

(i) **Objective Convergence.** Average is from 6.5 to 8 cm. It is poor at 10 cm and above.

(ii) **Subjective Convergence (SC).** This indicates the end point of binocular vision under the stress of convergence. If the subjective convergence is more than 10 cm beyond the limit of objective convergence, the fusion capacity is poor. This is specially so when the objective convergence is 10 cm and above.

Table 1. Accommodation Values – Age Wise Age in Yrs.	**17-20**	**21-25**	**26-30**	**31-35**	**36-40**	**41-45**
Accommodation (in cm)	10-11	11-12	12.5-13.5	14-16	16-18.5	18.5-27

(b) **Accommodation.** In the case of myopes, accommodation should be assessed with corrective glasses in position. The acceptable values for accommodation in various age groups are given in Table 1.

73. Ocular muscle balance is dynamic and varies with concentration, anxiety, fatigue, hypoxia, drugs and alcohol. The above tests should be considered together for the final assessment. For example, cases just beyond the maximum limits of the Maddox Rod test, but who show a good binocular response, a good objective convergence with little difference from subjective convergence, and full and rapid recovery on the cover tests may be accepted. On the other hand, cases well within Maddox Rod test limits, but who show little or no fusion capacity, incomplete or no recovery on the cover tests, and poor subjective convergence should be rejected.

74. Any clinical findings in the media (cornea, lens, vitreous) or fundus, which is of pathological nature and likely to progress will be a cause for rejection. This examination will be done by slit lamp and ophthalmoscopy under mydriasis.

VIII. Specific conditions :

- **Night Vision:** As tests for night blindness are not routinely performed, a certificate to the effect that the individual does not suffer from night blindness will be obtained in every case. Certificate should be as per Appendix "Q" to this chapter.

- **Ptosis:** interfering with vision or visual field is a cause for rejection till surgical correction remains successful for a period of six months. Mild ptosis of less than 2 mm if not associated with any signs of aberrant regeneration or head tilt and not interfering with vision should not be a cause for rejection. Candidates with uncontrollable blepharitis, particularly with loss of eyelashes, are generally unsuitable and should be rejected.

- **Pterygium:** Pterygium may be of a progressive nature and it is often difficult to decide the nature of a pterygium on one examination. The criteria for labeling a pterygium as progressive will be as follows –
  a. > 2 mm extent into cornea
  b. Causing Irregular astigmatism
  c. Vascular leading edge.

- **Bitots spots:** Bitots spots are not a cause for rejection except when they are accompanied by clinically significant dry eye in the form of reduced schirmers test or reduced tear film break up time, punctuate fluorescein staining of the cornea, obvious symblempharon formation or keratomalacia and corneal epithelial defects.

- **Naso-lachrymal occlusion**: producing epiphora or a mucocele entails rejection, unless surgery produces relief lasting fora minimum of six months. This is to be confirmed with syringing prior to endorsing fitness.

- **Corneal opacities:** The existence of isolated peripheral corneal opacities, considered in the opinion of the ophthalmologist to be stationary and unlikely to recur, should not be a cause for rejection or referral to Sr. Adviser, except in cases that are of a borderline nature. For example, a partial thickness post traumatic peripheral corneal opacity is unlikely to recur and trouble the individual in his service career and should not be a cause for rejection. As a guideline, opacities of any size or grade not encroaching upon the central 6 mm of the cornea (pupillary size in a darkened room approx 5 to 6 mm) should not be a cause of rejection provided they are not indicators of diseases of a recurrent or progressive nature. Disease of a chronic or progressive nature could include keratoconus, corneal dystrophies, herpetic corneal disease and other such disorders.

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- **Cataract:** Individuals with congenital cataracts such as blue dot cataracts and other lenticular opacities that do not decrease visual acuity and are known to be non progressive should be deemed fit by local ophthalmologists upon first examination. These cases should invariably not be sent for Sr. Adv opinion except in cases that are of a borderline or controversial nature. Those lenticular opacities that are compromising vision in the opinion of the ophthalmologist or are likely to progress or need treatment early in the individual's career, will be a cause for rejection. In general, opacities outside the central 7 mm zone are not to be considered a cause for rejection if visual acuity is unaffected.

- **Uveitis (iriitis, cyclitis, and choroiditis)**is frequently recurrent, and candidates giving a history of or exhibiting this condition should be carefully assessed. When there is evidence of permanent lesions such candidates should be rejected. Stigmata such as raised Intraocular pressure, visible keratic precipitates, posterior synechiae, goniosynechiae, lenticular opacities, vitreous opacities or cystoid macular edema will be a cause for rejection.

- **Glaucoma:** Since this disease is progressive throughout life, individuals with glaucoma will be deemed unfit. The criteria for diagnosis of glaucoma will be IOP< 24 mm Hg after correction for corneal thickness, glaucomatous disc configuration and a corresponding field defect satisfying Andersens criteria on a 30-2 or 24-2 visual field.

- **Cataract Surgery:** The advance of technology in ophthalmology results in excellent visual outcomes after cataract surgery and has returned a large number of servicemen to active duty. The disposal of these cases needs to be reviewed. This surgery is capable of excellent refractive and structural outcomes with stabilization of ocular status in one month after surgery in the uncomplicated case. However, individuals that have undergone these surgeries are at long term risk for lens opacification, retinal detachment and glaucoma since, at this age, most of these surgeries would be done in eyes with trauma or other diseases.

Retinal diseases:

a. Any retinal degenerations such as typical Lattice degeneration even with retinal holes, white without pressure, micro cystoid degeneration or Paving-stone degeneration will require referral to a senior adviser or a retinal surgeon for fitness. Reasons for rejection for lattice degeneration will include
   i) Family history of retinal detachment.
   ii) Axial length more than 26 mm.
   iii) Refractive error more than 6 Diopters.
   iv) Lattice with horseshoe tears.

b. History of retinal detachment, vitrectomy for any reason, and scleral buckling or laser therapy for any reason (except lattic degeneration without horseshoe tears) will be a cause for rejection.

c. Retinal scars or chorioretinal atrophy in a non macular area with normal vision and no evidence of inflammation or vitreoretinal traction will not be a cause for rejection. Amsler charting and visual fields will invariable be done in these cases to demonstrate integrity of the central visual field and impact of the scotoma resulting from the scar.

d. Evidence of any retinal dystrophy will be a cause for rejection.

Coloboma: Colobomas of the eye are grounds for rejection since they greatly increase the chance of retinal detachment upto 40%. Hence individuals with Colobomas will invariably be declared unfit. Colobomas restricted to the iris may be considered fit provided the individual does not have microphthalmos, squint and satisfies the visual acuity criteria.

MOST IMMEDIATE

F.No.I-45024/1/2008-Pers.II
Government of India/Bharat Sarkar
Ministry of Home Affairs/GrihMantralaya
(Police-II Division)

North block, New Delhi-01
Dated the 20th Oct, 2014

ORDER

Subject: New Policy Guidelines on recruitment/retention in respect of Central Armed Police Forces (CAPFs) and Assam Rifles (ARs) personnel having defective vision including colour blindness- regarding

The instructions regarding eligibility and entry of the candidates suffering from colour blindness into the Forces issued from time to time and also paras relating to colour blindness especially paras 5 & 6 of the New Policy Guidelines on Visual Standards dated 18.05.2012 were withdrawn vide this Ministry's order No.I-45024/1/2008-Pers.II dated 27.02.2013. However, this order also provided that no in-service colour blind Force personnel will not be eligible for promotion.

2. Apropos the said Order of MHA, the Hon'ble High Court of Delhi vide Order dated 28.02.2013 in 24 WPs clubbed together directing the MHA/CAPFs that a Force person suffering from colour blindness should also be given promotion if otherwise found fit.MHA has filed an SLP No.CC-21152-21175/2013 against the Hon'ble High Court's order dated 28.02.2013. The matter is subjudice at present.

3. Subsequently, on the basis of recommendation of all CAPFs & AR and ADG(Med), CAPFs, NSG& AR, the matter regarding re-introduction of paras 5 & 6 and the paras relevant to colour blindness of the New Policy Guidelines on visual Standards has been reviewed in this Ministry. It has been decided to re-introduce paras 5 & 6 and other paras relevant to colour blindness of the New Policy guidelines on Visual Standards dated 18.05.2012, which were withdrawn vide above said order dated 27.02.2013, with immediate effect.

4. All CAPFs & AR may please ensure that these guidelines are implemented with prospective effect for the purpose of future recruitment only. In respect of already inducted colour-blind personnel, the instructions issued vide this Ministry's order of even number dated 27.02.2013 will continue to apply until further orders.

5. This issues with the approval of Union Home Secretary.

Sdxxx
(R.P.Sati)
Under Secretary to the Government of India
Tel/Fax 011-23092889

To
The Directors General,
BSF/CRPF/ITBP/SSB/CISF/
Assam Rifles

Copy to:-

1. ADG (Med), CAPFs, NSG& AR
2. Director (Pers.I), MHA
3. US (Pers.III), MHA
4. Guard File

Sdxxxx
(R.P.Sati)
Under Secretary to the Government of India

A.VI.I/14-Rectt (SSB)
Government of India
Ministry of Home Affairs
(Pers-II Desk)

North Block, New Delhi
Dated the 24th Aug 2015.

OFFICE MEMORANDUM

Subject:-Revised uniform guidelines for Recruitment Medical Examination of GOs and NGOs in the CAPFs & AR: clarification/amendment reg

The undersigned is directed to refer to this Ministry's OM No.A.VI-1/2014-Rectt(SSB) dated20.05.2015, vide which revised Uniform Guidelines for Medical Examination Test (MET) for Recruitment in CAPFs & AR was issued and to say that consequent upon the clarifications sought by the CISF on certain clause of the guidelines and taking into consideration of the Govt. instructions on fee and the practical difficulty and consequential fall-out of the same, the following clarifications/amendments on the revised Uniform Guidelines for Medical Examination Test for Recruitments in CAPFs &AR dated 20.05.2015 are issued:-

(i) **Date of effect of instructions**:-

The medical examination guidelines have been issued on 20.05.2015 vide MHA OM No.A.IV-I/2014-Rectt(SSB) dated 20.05.2015 and are effective from the same date. However, in respect of the recruitments where process is already on and have already been notified, in case of any conflict the provisions of recruitment notification will prevail.

(ii) **Applicability of instructions for previous year recruitments**:-

Recruitment medical examination or appeal medical examination required to be done in respect of previous year recruitments will be done as per the instructions issued in the notification for that year recruitment.

(iii) **Fee for appeal**:-

As mentioned in Swamy's Establishment and Administration Manual (Edition 2014 page 277) "the appeal will not be taken into consideration unless it contain medical re-examination fees i.e. Rs.100/- for Gazetted post and Rs.25/- for Non-Gazetted post". The same may be applied and the MHA Medical Examination guidelines issued on 20.05.2015 may be treated as amended in respect of fee for appeal medical examination for Gazetted posts.

Contd/-2

(iv) **"(d) Rejection of candidature due to weight factor:-** Measuremer physical standards viz. Height, weight and chest will continue tc measured and recorded by Physical Standard Test Board (PST Bo for all categories of candidates i.e. GOs, SOs and Ors. Medical of will not be part of PST Board. However, PST board will categori mention the actual weight of the candidate and deviation f normal permissible limits in the body weight of the candidate either side will also be recorded as 'underweight/overweight'. S overweight/underweight candidates will be allowed to participat the next stage of recruitment and shall not be debarred at PST st The final decision on fitness/unfitness may be decided by the me authority at the time of MET based on the weight and age on the of MET and the height as measured by the PST Board.

3. This issues with the approval of Union Home Minister.

(A K S
Under Secretary to the Govt of I
Tel-2309

DG, CRPF
DG, BSF
DG, SSB
DG, ITBP
DG, CISF
DG, Assam Rifles
ADG(Medical) CAPFs &AR

OFFICE OF THE ADDL. DIRECTOR GENERAL (MEDICAL)
CENTRAL ARMED POLICE FORCES, NSG & ASSAM RIFLES, MHA,
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SUB: CORRIGENDUM : UNIFORM GUIDELINES FOR MEDICAL EXAMINATION TEST (MET) FOR RECRUITMENT IN CAPFs & AR

Kindly refer to MHA OM No.A.VI-1/2014-Rectt(SSB) dated 20th May 2015 and this office letter No.V-18011/ADG(Med)/CAPFs/WP-AB/2015-1196 dated 04.06.2015 on the above subject is enclosed.

02. The following amendment is made in Annexure IV (Page 54) of booklet of uniform guidelines for Medical Examination Test (MET) for recruitment in CAPFs& AR as approved vide MHA OM under reference and forwarded vide this office UO ibid :-

FOR :-

4. I, therefore, request for my review medical examination by a review medical board of **CPAFs** for the (Rank/Cadre) in **CPAFs**.

Check List

1. Medical fitness certificate in form no.**CPAFs**/Rank(Cadre)/3
2. Demand draft of **Rs.100/-** in favour of ----------payable at ------
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READ :-

4. I, therefore, request for my review medical examination by a review medical board of **CAPFs** for the (Rank/Cadre) in **CAPFs**.

Check List

1. Medical fitness certificate in form no.**CAPFs**/Rank(Cadre)/3
2. Demand draft of **Rs.25/-** in favour of ----------payable at ------
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(Dr V.K.Singh)
DIG(Medical) & Staff Officer

DIG(Recruitment) BSF/CISF/CRPF/ITBP/SSB New Delhi
DIG(Recruitment) AR : {through LOAR New Delhi)
Group Commander (Estt) NSG HQRs, New Delhi

UO.No.V-18011/24/ADG(Med)/WP-RKV/2015-1834 Dated : 25 / 06/2015

Copy to:-

01. Director (Med) AR/BSF/CISF/CRPF/ITBP/NSG/SSB : For information alongwith one copy of booklet for Med Dte and one for each CH.
02. All Composite Hospital of CAPFs : -do-
03. PS to DG AR/BSF/CISF/CRPF/ITBP/NSG/SSB : For kind information.