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MANUAL ON MEDICAL EXAMINATION AND MEDICAL STANDARDS FOR VARIOUS ENTRIES INTO ARMY, TRG ACADEMIES AND MIL SCHOOLS

INDEX

SECTION - 1

GENERAL CONSIDERATIONS AND PRINCIPLES OF MEDICAL EXAMINATIONS

GENERAL CONSIDERATIONS AND PRINCIPLES OF MEDICAL EXAMINATIONS

General.

1. Armed Forces are one of the largest employers in the country. All Armed Forces personnel regardless of occupational specialty, unit assignment, age or gender should have a basic level of general physical and medical fitness, when inducted into the service. This basic level of fitness can then be used as a springboard to train personnel for further physically demanding occupational specialties or unit assignments and deployable combat readiness.

2 The primary responsibility of Armed Forces is to defend territorial integrity of the nation. For this purpose, Armed Forces are always prepared for war. Armed Forces also assist civil authorities in case of disasters/calamities. Therefore, Armed Forces personnel undergo rigorous physical and mental training to withstand mental and physical stresses of service conditions to perform their military duties in any terrain, climate, season including sea and air, in remote areas, in austere conditions with no medical aid. To carry out such tasks, Armed Forces require candidates with robust mental and physical health. During Military Operations, a Medically Unfit individual due to disability/disease/deformity, can jeopardize the entire operation and apart from draining out precious resources, can endanger lives of other members of the team.

3. Armed Forces Medical Services are responsible and are the competent auth for ensuring selection of medically fit individuals into the Armed Forces. Primary Medical Examination of candidates for enrolment/commissioning in Armed Forces is carried out to select, "**Only those candidates, who can withstand rigorous mental and physical stress of military service, in all types of terrains, climatic and geographical conditions and to preclude acceptance of those who are likely to breakdown on exposure to various stresses experienced in discharge of active service**".

4. It must be borne in mind by all Medical Officers and Specialists that a candidate once selected as Medically Fit, if found unfit at a later stage due to a disability that could have been discovered during initial medical examination (although many diseases/disabilities may not be detected due to limited investigations), causes considerable embarrassment to authorities and avoidable financial burden to State. **In case of any doubt about any disease/disability/injury/genetic disorder etc noticed during enrolment/commissioning, the benefit of doubt will be given to the State.**

5. Aim of this manual/literature is to provide basic reference to Medical Officers, Specialists, members and President Medical Boards involved in medical examination of candidates as regards their desired medical fitness standards based on the principles of medical fitness laid down in various AOs & AIs. The disabilities described are not exhaustive due to development of scientific knowledge and introduction of new trades/categories of entries by Armed Forces. **These guidelines will be applicable to all types of entries into Army irrespective of age and gender.**

6. To be deemed 'Medically Fit' to perform Military duties, a candidate should be:-

(a) Free of contagious diseases that might endanger the health of other personnel and himelf/herself.

(b) Free of medical conditions or physical defects that would entail excessive absence from duty for treatment and hospitalization.

(c) Capable of undergoing training and performing high demanding trg and duty of Armed Forces and free of any disabilities.

(d) Adaptable to Military environment without the necessity of geographical area limitations and capable of performing Military tasks without access to specialized medical care. He/she should be able to serve in any climate and terrain under austere conditions within the country as well as abroad.

7. The initial Medical Examination in respect of candidates will be conducted by.-

(a) Medical Officers (MOs) at a designated place.

(b) Specialist Officers at designated Military Hospitals in respect of candidates aspiring to be Cadets/Officers including women candidates.

8. The presence of a lady attendant will be ensured while examining a female candidate.

9. The guidelines enumerated in this manual are meant to be applied in conjunction with the standard methods of clinical examination.

10. **Applicability.** This manual applies to Medical Standards in respect of selection of candidates for recruitment as soldiers, admission of children to various Military/Sainik Schools/Sports Coys, selection of Cadets for various Trg Academies, MNS, Student Nurse, commissioning of Officers and any other entry into Army (including TA).

11. These guidelines are not exhaustive and any deformity/disease/disability/injury or any abnormality in function of any part of the body/body system will be a cause for rejection. The examining Medical Officer is responsible for 'Medical Fitness' and for their identification marks. Identification marks are to be noted concisely and clearly in the space allotted for the purpose in medical form in order to facilitate candidate's future identification.

12. Findings of this primary medical examination will be recorded on appropriate medical form i.e. AFMSF-2A for candidates aspiring to become soldiers and AFMSF-2 for all other categories. In case of fit candidates, the wording used will be "Fit in SHAPE-1".

13. **Principal points in Medical Examination of candidates.** In the examination of candidates, principal points to be attended to are as follows:-

(a) That the candidate is sufficiently intelligent.

(b) That his/her hearing is good and that there is no sign of disease of ear, nose and throat.

(c) That his/her vision with each eye is up to the required standard, his eyes are bright, clear and with no obvious squint or abnormality. Movements of eyeballs are full and free in all directions.

(d) That his/her speech is without impediment.

(e) That he/she possesses sufficient number of sound teeth for efficient mastication and his/her oral hygiene is satisfactory.

(f) That he/she has no glandular swelling.

(g) That his/her chest is well formed and that his heart and lungs are sound and healthy.

(h) There is no organomegaly or hernias.

(j) That his/her feet and toes are well formed.

(k) That he/she has no congenital malformation or deformities.

(l) That he/she does not bear remnants of previous acute or chronic disease pointing to an impaired constitution.

(m) That he/she has no disease of the genito-urinary tract.

(n) That he/she is free from any disease/disability and has perfect action of all the joints.

(o) That he/she has not undergone any surgery.

(p) That he/she has no abnormal growth/swelling.

(q) That scars, if present, are healthy and not causing any functional limitations and aesthetic issues.

GENERAL CONSIDERATIONS AND PRINCIPLES OF MEDICAL EXAMINATIONS

14. **Medical Examination for entry into RIMC and Military School.**

(a) All candidates after screening by DGMT will be subjected to a thorough medical examination at the nearest Service Hospital to assess whether they are mentally and physically fit to perform all types of activities.

(b) Medical examination is carried out by 'Special Medical Board' and proceedings are documented in AFMSF-2.

(c) The validity period of Medical Examination shall be 180 days from the date of completion of Med Bd proceedings (i.e. date of endorsement by the Board).

(d) The concerned Specialist on receiving the candidate along with the review certificate will examine the candidate in detail and endorse his/her findings and opinion regarding fitness on the review certificate for the said disability in his/her own handwriting. A detailed justification will be endorsed by Specialist Officer at the time of appeal irrespective of whether candidate has been made FIT or UNFIT. Specialist will enter the findings in AFMSF-2, stamp the column with his rubber stamp and endorse date of examination and opinion. In case a Specialist finds another abnormality related to his own specialty, which is not mentioned in the review certificate, then he/she will mention the same and give opinion for the same too on the review certificate. In case, while examining the candidate, Specialist finds another abnormality that is not related to his own specialty and which is not mentioned in the review certificate, then he/she will mention the same on review certificate for further action.

(e) The decision of Appeal Medical Board will be final.

15. **Medical Examination for entry into Sainik School.**

(a) All candidates after screening will be subjected to thorough Medical Examination at nearest Civil Hospital (as directed by Board of Governors of Sainik School Society), to assess whether they are mentally and physically fit to perform all types of activities.

(b) Medical examination will be carried out by Civil MOs and Spl.

(c) Civil MOs or school authorities should apprise the candidates about their medical status including disabilities. The school authorities will inform them about the provision of appeal for an Appeal Med Examination at the nearest Service Hospital within the stipulated period as per prevailing regulations notified by the Sainik School Society and amended from time to time.

(d) The validity period of Medical Examination will be 180 days from the date of completion of Med Bd Proceedings (i.e. date of endorsement by Civil MO/Specialist).

(e) The concerned Specialist on receiving the candidate along with the review certificate will examine the candidate in detail and endorse his/her findings and opinion regarding fitness on the review certificate for the said disability in his/her own handwriting. A detailed justification has to be endorsed by Specialist Officers at the time of appeal irrespective of whether candidate has been made FIT or UNFIT. Specialist Officers at the time of appeal irrespective of whether candidate has been made FIT or UNFIT will enter the findings in AFMSF-2 and will stamp the column with his rubber stamp and endorse the date of examination and opinion. In case, a Specialist finds another abnormality related to his own specialty which is not mentioned in the review certificate, then he/she will mention the same and give opinion for the same too on the review certificate. In case, while examining the candidate, the Specialist finds another abnormality that is not related to his own specialty and which is not mentioned in the review certificate, then he/she will mention the same on the review certificate for further action.

(f) There will not be any more medical review/examination and decision of Appeal Medical Board will be final.

16. **Medical Examination for enrolment as Recruit.**

(a) All candidates after screening will be subjected to thorough Medical Examination by a Board of MOs detailed by competent authority in consultation with SRMO of Rtg Zone/SRMO of Regt Centre to assess whether they are medically fit to perform all types of duties, in any geographical locality in any climate anywhere in the world. The examining Board of MOs will record their findings in the prescribed form (AFMSF 2A).

(b) The Board of MOs will only specify FIT/UNFIT after the medical examination. The Presiding MO will apprise the candidates about their medical status including disabilities and also inform them about the provision of appeal for a review med exam at the designated Service Hospitals within the stipulated period as per prevailing regulations notified by the Rtg Dte from time to time.

(c) The validity period of a Medical Examination will be 180 days from the date of completion of Med Bd Proceedings (i.e. date of endorsement by Presiding MO).

(d) The concerned Specialist on receiving the candidate along with the review certificate will examine the candidate in detail and endorse his/her findings and opinion regarding fitness on the review certificate for the said disability in his/her own handwriting. A detailed justification will be endorsed by the Specialist Officer at the time of appeal irrespective of whether the candidate has been made FIT or UNFIT. The Specialist will stamp the review certificate with his rubber stamp and will endorse the date of examination and opinion. In case a Specialist finds another abnormality related to his own specialty which is not mentioned in the review certificate, then he/she will mention the same and give opinion for the same too on the review certificate. In case, while examining the candidate, the Specialist finds another abnormality that is not related to his own specialty and which is not mentioned in the review certificate, then he/she will mention the same on the review certificate for further action.

(e) The decision of the Appeal Medical Examination will be final.

17. **Medical Examination for commissioning as Offrs, MNS and entry as Cadets (including AFMC Cadets) in various Trg Academies for Officers and Student Nurse**

(a) **Special Medical Boards (SMB).** SMBs have been established under Govt Authority to ensure uniformity in Medical Examination of selected candidates for grant of commission into Armed Forces/enrollment into Pre Commission Training Academies. SMBs will be conducted at specified Hospitals nearest to SSB Centre or as specified from time to time by Rtg Dte. Following methodology will be adopted.-

(i) **Validity of Special Medical Board.** It is to be noted that the period of validity for the Special Medical Boards will be 180 days after the date of completion of Med Bd proceedings (i.e. from the date of endorsement by the President SMB). Once the period of 180 days has lapsed, there is no provision for extension of its validity. In case a 'FIT' candidate reports for Trg/Commissioning after this period, he/she will have to be re-examined by a duly constituted Med Board at the nearest MH with its standing SMB. In case a candidate is declared FIT after having undergone Medical Examination at AMB or RMB (if granted) level, the date of completion of SMB proceedings (i.e. from the date of endorsement by the President SMB), will still be counted for the 180 days period.

(b) **Applicability of SMB for various entries.** SMB is 'Service' specific and not 'Entry' specific and the following provisions will be considered:-.

(i) SMB conducted for undergraduate entries (NDA, TES etc.) is not valid for graduate/post graduate level entries (IMA/TGC entries etc).

(ii) Med examination conducted for both entries NDA (Army) and TES (Army) are separate and indl found unfit in any of the entries will be declared unfit for both the entries.

18. Medical Examination will cover all the systems and findings will be recorded in AFMSF-2 in triplicate. The following investigations will be carried out for all cadets before Medical Examination:-

(a) Complete Haemogram

(b) Urine RE/ME

(c) X-Ray Chest PA view

(d) USG abdomen & pelvis

19. Spl will have to endorse a detailed justification in case a candidate is made unfit. SMB will classify the candidates as FIT/UNFIT. President of SMB will inform unfit candidates, the reasons for his/her unfitness and intimate to him/her the name of the Hospital where he/she can appear for Appeal Medical Board (AMB), if he/she desires, by paying the requisite fee. In service candidates are not required to pay any fees for appeal.

Appeal Medical Board (AMB).

20. AMBs are convened at one of the Comd Hosp/Base Hosp Delhi Cantt. The candidates will report for Medical Examination within the stipulated period i.e. 42 days from the date of SMB. Candidates will be subjected to a fresh Medical Examination only for the disability for which he/she has been declared unfit by the previous Medical Board. This examination will be carried out on a fresh AFMSF-2 (in triplicate). In the absence of a Senior Advisor, requisite opinion will be given by a Classified Specialist in the discipline and countersigned by a Senior Advisor in allied specialty. Spl will give a detailed justification specifying the grounds on which the candidates have been considered fit or unfit. In case, a Specialist finds another abnormality related to his own specialty, which is not mentioned in the review certificate, then he/she will mention the same and give opinion for the same too on the review certificate. In case while examining the candidate, the Specialist finds another abnormality that is not related to his/her own specialty and which is not mentioned in the review certificate, then he/she will mention the same on the review certificate for further action.

21. AMB proceedings will be approved by the Commandant of the Hospital.

Review Medical Board (RMB).

22. When a candidate is declared unfit by AMB, the result is communicated to him/her by the President of AMB. The candidate can appeal against the findings of AMB within 1 day of the same being communicated. RMB will be granted at the discretion of DGAFMS, based on the merits of the case. RMB is not a matter of right. RMB is held at AH (R&R), Delhi Cantt and at AFMC, Pune. After approval by DGAFMS, the Medical Board proceedings are forwarded to the concerned authorities via the respective DGsMS.

GUIDELINES FOR MEDICAL BOARD OF CANDIDATES FOR CADET ENTRIES INCLUDING WOMEN ENTRY SCHEME

23. Medical Examination of candidates by Special Medical Boards constitutes the first contact of civilian candidates with Army Medical Corps. It is therefore, important that candidates are treated with courtesy. Proper doctor-patient relationship should be established before the Medical Examination is conducted. The waiting rooms for candidates should be comfortable to enable the individuals to relax. There should be no unnecessary waiting. Reassurance and pleasant surroundings will help materially in preventing functional abnormalities which arise as a result of excitement and unconnected with any organic disease.

24. **Identification.**

(a) When a candidate appears before a Service Selection Board, his visible identification marks and other relevant details are recorded on a prescribed identification form. A passport size photograph of the candidate is affixed on top of the form and attested by the President of Service Selection Board. These identification forms will be forwarded to the Medical Board for verification of identity of the candidate.

(b) In case of service personnel, identity can be further checked from IAFZ-3076 (Identity Card).

(c) In case the identification form is not forwarded, the candidates (other than service candidates) will be asked to submit a self certified copy of the passport size photograph duly attested by a Gazetted Officer at the time he/she reports for medical examination. In case the identity of the candidate cannot be established, then he shall be returned back with the comments to that effect.

(d) The standards of medical fitness for candidates for admission to all academies in three services and AFMC, Pune will be assessed/followed as laid down in respective Orders/letters of the respective Dtes.

25. No hospital stoppages will be recovered from candidates admitted for investigation or observation during selection process.

26. SMBs will usually be carried out in 3-4 working days and documents will be dispatched within seven working days. Selection centres have been asked by Rtg Dte to ensure that candidates report with empty stomach and with full documentation on the first day of SMBs. This stipulation will not be applicable to cases where specialized investigations are required to be undertaken. These cases will however, also be dealt with as expeditiously as possible.

27. SMBs will ensure that medical status of a candidate, **Fit/Unfit**, is intimated to Rtg Dte of service HQs with a copy to respective DGsMS (and to AFMC in case of entry to AFMC) by fastest means. This will be strictly adhered to.

28. The following special instructions will be observed by the Medical Boards:-

(a) A Medical Board is an independent body and must form its opinion after detailed and thorough examination of the candidate in accordance with the standing instructions.

(b) Medical Boards/Spl will not discontinue examination of a candidate on detection of one or two disabilities. The Medical Examination will cover all the systems before the findings are finalized and form AFMSF-2 will be completed in all respects. This will ensure that a candidate declared unfit on account of one disability by SMB is not found unfit subsequently by Appeal Medical Board on account of another disability.

(c) When the findings of Medical Board are based on the opinion of a Specialist, a short summary of the special findings and opinions will be included in the final observations of the Medical Board.

(d) Whenever a Medical Board disagrees with the recommendation/opinion of a Specialist, full reasons for such disagreement will be stated in the Board proceedings.

(e) The respective Specialists will record their findings to support the final observation/disability in the appropriate columns of the Medical Board proceedings and put down their signatures. Rubber stamp bearing their name and status/designation will also be affixed along with date of examination.

(f) NDA candidates will be examined both for Army and Navy unless otherwise instructed and endorsement of fitness status will be made as under:-

(i) FIT FOR ARMY

(ii) FIT FOR NAVY

(g) Visual standards for direct entry naval candidates and candidates for naval wing of NDA are laid down in Navy Order. Complete eye examination will be carried out for such candidates and findings be recorded in accordance with the instructions contained in Navy Order.

(h) The standards for special categories of personnel in Navy are as laid down in Navy Order.

(j) Medical standards specific to Air Force will be as per relevant orders in Indian Air Force.

(k) President and members of the Board will sign all three copies of the Board proceedings before dispatching to Rtg Dte of Service HQs.

(l) President of SMB will not issue any certificate regarding fitness to the candidate on completion of his/her Medical Board.

(m) President of Medical Board will ensure proper guidance to the candidates for Appeal/Review Medical Board procedures.

29. Special Medical Boards will classify the candidates as 'Fit or Unfit'.

Disposal of Medical Board proceedings : Fit candidates.

30. Proceedings of the Medical Board will be recorded on AFMSF-2 (Initial Medical Board proceedings) in triplicate. These proceedings are strictly confidential and shall be treated as such. Medical Board documents of 'Fit' candidates will be sent directly to Rtg Dtes of Service HQs and to AFMC in case of AFMC/College of Nursing/School of Nursing entry. No approval for these medical documents is required as stipulated vide para 425 (b) (viii) of RMSAF 2010 except for naval candidates where the Medical Board proceedings are approved by DGMS (Navy).

31. Medical Board proceedings of NDA candidates with Navy as first choice will be forwarded to DGMS (Navy), IHQ MOD (Navy) under intimation to Rtg Dte (P&C), IHQ MOD (Army), West Block III, RK Puram, New Delhi.

Disposal of Medical Board proceedings – Unfit candidates NOT preferring request for Appeal Medical Board (AMB).

32. Medical Board documents in respect of above candidates along with a certificate from the candidate in this regard will also be sent directly to Rtg Dte of Service HQs and to AFMC in case of AFMC/College of Nursing/School of Nursing entry.

Disposal of Medical Board proceedings - Unfit candidates preferring request for Appeal Medical Board (AMB).

33. Candidates suffering from a transitory illness and disease or injury which may/may not be cured within 42 days are to be classified as 'UNFIT'. A candidate who on account of some disease or injury is unfit for immediate induction but can be rendered Fit by active surgical/medical treatment within 42 days, is also to be classified as 'Unfit'. In case of entry to AFMC, instructions in force at the time of admission as contained in the prospectus, will be followed.

(a) Names of candidates declared 'UNFIT' by SMB will be intimated by the President of SMB to Rtg Dte of Service HQs and the Selection Centre concerned.

(b) President of SMB will inform such candidates about the reasons of his/her unfitness and intimate him/her the name of Hospital where he/she can appear for Appeal Medical Board, if he/she desires. President of SMB will take a certificate from the candidate in this regard. He/she will prefer an appeal against the findings of SMB by depositing a fee of Rs. 40/- (as amended from time to time). For this purpose, the candidate will be supplied with a copy of Military Receivable Order for depositing the fee. Only printed copies of MRO will be issued to the candidates by the Medical Boards.

Note-I. Serving personnel of the regular Army, Territorial Army, Navy, Air Force and Engineer Officers offered for service under the compulsory Service Liability Scheme whose appeals are initiated by their CO/Head of the Civil Department, are not required to pay any appeal fee. The appeals in respect of candidates will be addressed to Rtg Dte, AG's Branch, Army HQ only. All instructions contained in the above paras are equally applicable to them.

Note-II. Candidates will be made to understand clearly that Medical Examination for enrolment/commissioning is a screening procedure to select the best available manpower for Services. Precise diagnosis with etio-pathogenesis need not be made by MO. 'Unfit' status is declared for particular enrolment/commissioning purposes only. If the candidate desires to obtain remedial therapy, he/she can do so entirely by his/her free will and will be based on the candidate's private medical advisor. **The state will accept no liability regarding result of therapy/surgery or any expenses incurred for 'Fitness'.**

(c) The candidate will be informed that if he/she desires to appeal against SMB proceedings, he/she must report to the President of Appeal Medical Board within a period of 42 days from the date of SMB. However, in case of entry to AFMC, instructions in force at the time of admission as contained in the prospectus will be followed.

(d) President of SMB will forward the identification form and Medical Board proceedings of the candidate by the fastest means to the hospital, where the candidate has to report for his/her appeal Medical Examination under intimation to Rtg Dtes of Service HQs.

Note-III. In case of Naval candidates excluding the candidates for NDA, SMB must keep IHQ MOD (Navy)/DMP&R informed about the particulars of candidates and the place of Appeal Medical Board.

Procedure for AMB.

34. AMBs will be held at one of the under mentioned Hospitals for candidates desirous of joining Army and Indian Navy. AMB for Air Force candidates will be held at IHQ of MoD (Air) (Medical Branch). These Medical Boards will ensure that the required opinion of concerned Specialist is taken for all candidates prior to conducting Medical Boards:-

(a) Base Hospital, Delhi Cantt.

(b) Command Hospital (SC) Pune.

(c) Command Hospital (EC) Kolkata.

(d) Command Hospital (CC) Lucknow.

(e) Command Hospital (NC), c/o 56 APO.

(f) Command Hospital (WC) Chandimandir.

(g) INHS Asvini, Mumbai.

(h) Command Hospital (AF) Bangalore.

Note-IV. AMB will not be convened at the same hospital where the candidate has undergone SMB.

35. Composition of AMBs at hospitals will be as under:-

(a) President - Deputy Comdt/Offr detailed by Comdt.

(b) Members - Advisors/Consultants in Medicine & Surgery.

(c) Approving authority- Comdt of Hospital (except for Air Force candidates where it will be approved by IHQ of MoD (Air) (Medical Branch).

36. In the absence of Advisors/Consultants in Medicine/Surgery, an Advisor in allied specialty may act as a member of Appeal Medical Board.

Instructions for AMB.

37. (a) AMB will follow the laid down standards of physical fitness and classify the candidates as Fit/Unfit.

(b) The candidate will report for Medical Examination within the stipulated period i.e. 42 days from the date last examined by SMB for re-examination along with the receipted copy of MRO. Opinion of the concerned Specialist will continue to be ratified by a full Medical Board. This provision will be applicable only to those cases where the last Medical Board is not more than 180 days old and/or where no fresh disabilities are overtly discernible. This examination will be carried out on a fresh AFMSF-2 (in triplicate) to be linked with the previous AFMSF-2 of SMB. In the absence of a Senior Advisor, requisite opinion will be given by a Classified Specialist in the discipline and countersigned by a Senior Advisor in allied specialty.

(c) As far as possible, AMB will be completed in one day. In case a candidate requires investigation and the Board cannot be completed in one day, he/she will be admitted to hospital. The candidate will not be allowed to leave without a written permission from President Medical Board.

(d) AMB proceedings duly completed along with all connected documents will be submitted to Comdt of Hosps for approval for Army and Navy candidates and after approval these will be forwarded by speed post to reach following authority within seven days under intimation to DGMS-5A by OP Immediate signal:-

(i) For Army candidates – AG/Rtg (P&C), IHQ (Army) West Block III, RK Puram, New Delhi.

(ii) For Navy candidates – DMPR, IHQ of MoD (Navy), Sena Bhavan, New Delhi.

(iii) For Air Force candidates – Medical Board papers will be forwarded to the Service HQs (Medical Branch) for holding/approval of the Medical Board.

(iv) For AFMC candidates – Instructions in force at the time of admission as contained in the prospectus will be followed.

(e) If the candidate does not report for AMB within the stipulated period i.e. within 42 days of SMB, he/she will be marked **UNFIT IN ABSENTIA.** Rtg Dtes will be informed by signal that the candidate has not reported for Appeal Medical Board and the documents received from SMB will be returned to Rtg Dtes directly. No candidate will be examined after 42 days under any circumstances.

(f) If the candidate absents himself during the course of Medical Examination and does not complete the Medical Examination, the Medical Board will endorse the following remarks.-

"Medical examination/Board not completed by the candidate – hence unfit". The medical documents of such candidates will be returned to Rtg Dtes of Service HQs directly.

(g) No TA/DA is admissible to candidates reporting for AMB.

(h) When examination by a Specialist is necessary, the senior Specialist available will examine the candidates.

(j) When a Senior Advisor/Consultant in a specialty is the President of AMB, opinion in that specialty on the case will be given by a Classified Specialist. This opinion will however, be carefully considered by the President of Board. Further, endorsement of his signature on the Board proceedings will read "President and Advisor in specialty concerned".

(k) All Hospitals/Service HQs will ensure that AMBs are finalized at the earliest but not later than seven working days.

(l) AMBs will inform "fitness status of a candidate" directly by signal to Rtg Dtes of Service HQs. Where possible, the input will be forwarded to Rtg Dte by fastest means within 3 days of finalization of AMB. The fitness status of candidate will also be informed to the concerned Special Medical Board. However, in case of entry to AFMC, instructions in force at the time of admission as contained in the prospectus will be followed.

(m) Where a Board is likely to be delayed beyond seven days due to unavoidable circumstances like need for specialized investigation/additional investigations, a delay report will be submitted by the concerned hospital by signal to Rtg Dte with a copy to Service Medical Branch and MG Med Command/equivalent. Delay report will be repeated every seven days till case is finalized. Sr Registrar of the hospital will personally monitor such cases and will be accountable for timely disposal.

(n) **Non-availability of Specialist Officers in Hospitals**. MG Med/CMO/PMO Command will be responsible for ensuring requisite Specialist cover at hospitals under their jurisdiction. Imminent/impending absence of Specialist Officers will be intimated to the immediate superior medical authority, who will ensure availability of appropriate Specialist from own resources or request the same from superior Medical Formation.

(o) **Inconsistencies in findings of Medical Boards**. Concerned Specialist will ensure that Medical Examinations are carried out diligently as per the principles and standards with absolute professional approach so that incidence of inconsistencies in clinical findings of various Boards/Examinations is reduced to the minimum.

38. The duly completed Medical Board proceedings of AMB in respect of Fit/Unfit candidates will be forwarded by hospitals to Rtg Dtes under intimation to Service Medical Dte. When the Medical Board has not completed its examination due to non-availability of the candidate within specified period of 42 days, an endorsement '**UNFIT IN ABSENTIA'** will be recorded and documents sent to the concerned section of Rtg Dte/RVC Dte/TA Dte, Service HQs/O/o DGAFMS under intimation to service Medical Branch as follows:-

(a)	IMA/SSC Non-Tech/NCC	-	CDSE Entry Section, Rtg Dte, Army HQ.
(b)	NDA	-	NDA Entry Section, Rtg Dte, Army HQ.
(c)	TGC, SSC(Tech), Women	-	TGC Section, Rtg Dte, Army HQ Entry Scheme and University Entry Scheme.
(d)	SCO Commission & PC/SL	-	Service Entry Section, Rtg Dte, Army HQ.
(e)	RVC Commission	-	RVC Dte, OMGs Branch, Army HQ.
(f)	TA Commission	-	TA-4, GS Branch, Army HQ.
(g)	AMC Commission	-	DGAFMS/DG-1A,'M' Block, Army HQ.
(h)	Air Force & Navy entry	-	respective Rtg Dtes.
(j)	APS	-	ADG/APS (APS-1A).

Note-V. In case of entry to AFMC, instructions in force at the time of admission as contained in the prospectus will be followed.

Review Medical Board (RMB).

39. RMB will be convened by Director General, Armed Forces Medical Services (DGAFMS) at AFMC Pune/Army Hospital (R&R) Delhi Cantt on the specific request of Service Headquarters or Ministry of Defence when an opinion of a previous Medical Board is challenged by an individual and Service Headquarters concerned or Ministry of Defence considers there is some weight in the challenge. The findings of RMB will be accepted as final, after approval by Director General Armed Forces Medical Services. No further appeal will be entertained by Service Headquarters or Ministry of Defence. In each case, RMB will be convened with the prior approval of Ministry of Defence. The composition of RMB will be in accordance with para 482 of RMSAF-2010.

Procedure for RMB.

40. When a candidate is declared unfit by Appeal Medical Board, the result will be communicated to him/her by President of Appeal Medical Board in the prescribed form. He/she may simultaneously be informed that if he/she desires to challenge the findings of Appeal Medical Board, he/she may do so within one working day. The candidate will also be informed by the President, Appeal Medical Board, that holding Review Medical Board will be granted at the discretion of DGAFMS, based on the merits of the case and that Review Medical Board is not a matter of right.

41. The candidate will address the request for Review Medical Board if he/she so desires, to Rtg Dtes and copy of the same will be handed over to the President of AMB.

42. Approving authority of AMB will forward the documents to the respective service Rtg Dtes (AFMC in case of entry of AFMC) along with Appx 'D' for further processing of RMB.

43. On receipt of application from the candidate, Rtg Dte will fwd the same along with all connected med docu recd from approving authority to Service HQ Medical Branch and also intimate the last date for acceptance of RMB proceedings by them.

44. Immediately on receipt of application along with connected medical documents from Rtg Dte, Service HQ Medical Branch will forward the same to DGAFMS/DG-3A along with their recommendations for holding RMB or otherwise. RMB will be held within 30 days of receipt of application.

Disposal of RMB proceedings.

45. Disposal of RMB will be done as per guidelines given below:-

(a) If a candidate after having been accorded RMB does not report to AFMC Pune/Army Hospital (R&R) within scheduled period of two weeks of date of RMB, he/she will be marked **"UNFIT IN ABSENTIA".**

(b) If a candidate reports to AFMC Pune/Army Hospital (R&R) Delhi Cantt for RMB, but does not complete the examination, then his/her documents will be marked **"Medical Examination not completed by candidate-hence UNFIT".**

(c) All candidates will have to appear before Review Medical Board to complete the proceedings. However, if any candidate (for circumstances beyond his/her control), completes the Med Examination but does not appear for Medical Board then his/her case will be disposed off as Fit/Unfit by RMB taking in to consideration the opinion of Specialist concerned. After the approved copy of RMB is received from the O/o DGAFMS, Service HQ Medical Branches will intimate the result of RMB to respective service Rtg Dte.

Note-VI. Request for delayed RMB and another Review Med Exam will not be entertained under any circumstances.

SECTION – 2

ANTHROPOMETRIC STANDARDS

General Considerations.

46. Armed Forces personnel are required to conform to minimum height requirements based on standards laid down by administrative authorities. Medical restrictions based on height apply only when forced by human engineering considerations in specified areas like aviation related duties.

47. Standards of weight for height are however, specified based on medical considerations. World Health Organization (WHO) recommends anthropometry as the most portable, universally applicable, inexpensive and non-invasive technique for assessing the size, proportions and composition of human body. Anthropometry reflects both health and nutritional status and predicts performance, health and survival. A number of anthropometric indices are used for assessing human body proportions. The most widely used such index is Body Mass Index (BMI). BMI describes relative weight for height and significantly correlates with total body fat content. Accordingly, the weight for height chart used for developing standards for entry in Armed Forces is based on BMI values.

Methods of Examination.

48. The three basic measurements which are required to be carried out for all candidates are height, weight and chest circumference. In certain instances two more measurements, namely waist circumference and hip circumference, may be required for further assessment. In order to standardize these measurements, the recruiting equipment (weighing scales, anthropometric rods and tape measures) must be procured centrally and provided to all establishments. The method of recording these measurements is given below:-

(a) **Height**. The measurement of height requires a vertical board with an attached metric rule and a horizontal headboard that can be brought into contact with the uppermost point of the head. The individual to be measured should be bare foot and wearing little clothing so that the positioning of the body can be seen. He/she should stand on a flat surface, with weight distributed evenly on both feet, knees straight, heels together and the head positioned so that the line of vision is perpendicular to the body. The arms should hang freely by the side and the head, back, buttocks and heels are in contact with the vertical board. The individual is asked to inhale deeply and maintain a fully erect position. The movable headboard is brought onto the topmost point on the head with sufficient pressure to compress the hair. The height is recorded to the nearest cm.

(b) **Weight**. The individual must stand still on the centre of the weighing scale with the body weight evenly distributed between both feet, wearing only briefs or underwear or a light smock over underwear. Weight is to be recorded to the nearest Kg. As far as possible, electronic weighing scales should be used and zeroing of the weighing scale should be checked before the measurement.

(c) **Chest Circumference**. The chest should be bare. The arms are abducted slightly to permit the passage of the tape around the chest. When the tape is snugly in place, the arms are lowered to their natural position at the sides of the trunk. Chest circumference is measured at the level of inferior end of scapulae, upper margin of tape touching the inferior end of scapulae when both arms are raised. The measurement is made in the horizontal plane at the end of normal expiration and again at full inspiration. The difference between the two measurements is to be recorded to the nearest 0.1 cm.

(d) **Waist Circumference**. The subject should stand comfortably with his/her weight evenly distributed on both feet and the feet about 25-30 cms apart. The measurement is taken midway between the inferior margin of the last rib and the highest point of crest of the ilium in a horizontal plane. Each landmark should be palpated and marked and the midpoint is determined with a tape measure and marked. The observer sits by the side of the subject and fits the tape snugly but not so tightly as to compress underlying soft tissues. The circumference is measured to the nearest 0.1 cm at the end of normal expiration.

(e) **Hip Circumference**. Wearing underwear, or a light smock over underwear, the subject stands erect with the arms at the sides and feet together. The measurer sits at the side of the subject so that the maximum level of the diameter of the buttocks can be seen and places the tape measure around the buttocks in a horizontal plane. The tape is snugly fit against the skin but not so tightly as to compress the soft tissues. The measurement is recorded to the nearest 0.1 cm.

49. For aircrew, other anthropometric measurements like leg length, thigh length and sitting height should also be recorded. These will be recorded in accordance with the instructions given by the Air Force authorities.

Chest Circumference.

50. Minimum chest circumference for cadets as well as recruits recommended is 77 cm. Chest expansion should be five cm or more for all categories of candidates.

Standards.

Height Standards. Minimum height shall not be less than the minimum height prescribed by the RPWD Act – 2016 (as amended from time to time). Requirement of minimum height is service specific and should be intimated by the administrative authorities as the case may be. In any case, it cannot be less than the height described in RPWD Act-2016 (as amended from time to time). The present guidelines are as under:-

51. **Male cadets**. The minimum height required for entry into the Armed Forces for male cadets is 157 cm or as decided by the respective recruiting agency. Gorkhas and candidates belonging to Hills of North Eastern region of India , Garhwal and Kumaon, will be accepted with a minimum height of 152 cm. An allowance for growth of 02 cm will be made for candidates below 18 yrs at the time of examination. The minimum height requirement for the Flying Branch is 163 cm. Other anthropometric standards like sitting height, leg length and thigh length are required by the Flying Branch.

52. **Female Cadets**. The minimum height required for entry into the Armed Forces for female cadets is 152 cm. Gorkhas and candidates belonging to Hills of North Eastern region of India, Garhwal and Kumaon will be accepted with a minimum height of 148 cm. An allowance for growth of 02 cm will be made for candidates below 18 yrs at the time of examination. The minimum height requirement for the Flying Branch is 163 cm. Flying Branch also requires other anthropometric standards like sitting height, leg length and thigh length.

53. **Recruits**. The minimum height for recruits is as specified by the concerned Recruiting Directorates.

54. **School children**. The height and weight for school children below 17 yrs should be followed as per the latest guidelines by 'Indian Academy of Pediatrics growth charts for height, weight and BMI for 05 yrs to 16 yrs old children'.

Weight standards.

55. Weight for height charts given in this manual will be the standard for all categories of personnel. These charts have been based on the BMI. The charts specify the minimum acceptable weight that candidates of a particular height must have. Weights below the minimum specified will not be acceptable in any case.

Age (yrs)	Minimum weight for all ages	Age: 17 to 20 yrs	Age: 20+01 day- 30 yrs	Age: 30 + 01 day - 40 yrs	Age: Above 40 yrs
Height (cm)	Weight (Kg)	Weight (Kg)	Weight (Kg)	Weight (Kg)	Weight (Kg)
140	35.3	43.1	45.1	47.0	49.0
141	35.8	43.7	45.7	47.7	49.7
142	36.3	44.4	46.4	48.4	50.4
143	36.8	45.0	47.0	49.1	51.1
144	37.3	45.6	47.7	49.8	51.8
145	37.8	46.3	48.4	50.5	52.6
146	38.4	46.9	49.0	51.2	53.3
147	38.9	47.5	49.7	51.9	54.0
148	39.4	48.2	50.4	52.6	54.8
149	40.0	48.8	51.1	53.3	55.5
150	40.5	49.5	51.8	54.0	56.3
151	41.0	50.2	52.4	54.7	57.0
152	41.6	50.8	53.1	55.4	57.8
153	42.1	51.5	53.8	56.2	58.5
154	42.7	52.2	54.5	56.9	59.3
155	43.2	52.9	55.3	57.7	60.1
156	43.8	53.5	56.0	58.4	60.8
157	44.4	54.2	56.7	59.2	61.6
158	44.9	54.9	57.4	59.9	62.4
159	45.5	55.6	58.1	60.7	63.2
160	46.1	56.3	58.9	61.4	64.0
161	46.7	57.0	59.6	62.2	64.8
162	47.2	57.7	60.4	63.0	65.6
163	47.8	58.5	61.1	63.8	66.4
164	48.4	59.2	61.9	64.6	67.2

Age (yrs)	Minimum weight for all ages	Age: 17 to 20 yrs	Age: 20+01 day- 30 yrs	Age: 30 + 01 day - 40 yrs	Age: Above 40 yrs
Height (cm)	Weight (Kg)	Weight (Kg)	Weight (Kg)	Weight (Kg)	Weight (Kg)
165	49.0	59.9	62.6	65.3	68.1
166	49.6	60.6	63.4	66.1	68.9
167	50.2	61.4	64.1	66.9	69.7
168	50.8	62.1	64.9	67.7	70.6
169	51.4	62.8	65.7	68.5	71.4
170	52.0	63.6	66.5	69.4	72.3
171	52.6	64.3	67.3	70.2	73.1
172	53.3	65.1	68.0	71.0	74.0
173	53.9	65.8	68.8	71.8	74.8
174	54.5	66.6	69.6	72.7	75.7
175	55.1	67.4	70.4	73.5	76.6
176	55.8	68.1	71.2	74.3	77.4
177	56.4	68.9	72.1	75.2	78.3
178	57.0	69.7	72.9	76.0	79.2
179	57.7	70.5	73.7	76.9	80.1
180	58.3	71.3	74.5	77.8	81.0
181	59.0	72.1	75.4	78.6	81.9
182	59.6	72.9	76.2	79.5	82.8
183	60.3	73.7	77.0	80.4	83.7
184	60.9	74.5	77.9	81.3	84.6
185	61.6	75.3	78.7	82.1	85.6
186	62.3	76.1	79.6	83.0	86.5
187	62.9	76.9	80.4	83.9	87.4
188	63.6	77.8	81.3	84.8	88.4
189	64.3	78.6	82.2	85.7	89.3
190	65.0	79.4	83.0	86.6	90.3
191	65.7	80.3	83.9	87.6	91.2
192	66.4	81.1	84.8	88.5	92.2
193	67.0	81.9	85.7	89.4	93.1
194	67.7	82.8	86.6	90.3	94.1
195	68.4	83.7	87.5	91.3	95.1
196	69.1	84.5	88.4	92.2	96.0
197	69.9	85.4	89.3	93.1	97.0
198	70.6	86.2	90.2	94.1	98.0
199	71.3	87.1	91.1	95.0	99.0
200	72.0	88.0	92.0	96.0	100.0
201	72.7	88.9	92.9	97.0	101.0
202	73.4	89.8	93.8	97.9	102.0
203	74.2	90.7	94.8	98.9	103.0
204	74.9	91.6	95.7	99.9	104.0
205	75.6	92.5	96.7	100.9	105.1
206	76.4	93.4	97.6	101.8	106.1
207	77.1	94.3	98.6	102.8	107.1
208	77.9	95.2	99.5	103.8	108.2
209	78.6	96.1	100.5	104.8	109.2
210	79.4	97.0	101.4	105.8	110.3

SECTION - 3

READY RECKONER FOR MEDICAL EXAMINATION

56. **Methodology of General Examination**. The examination should be carried out preferably after the candidate had a bath and stripped up to underwear. Natural bright light should always be preferred as compared to artificial light. Following order of examination is advisable to cover all aspects:-

(a) **General Appearance.**

(i) Intelligence and education level: Vocabulary and command of language.

(ii) Mental state: Depressed, elusive and addictions.

(iii) Emotional state: Anxiety, restlessness, sweating palms.

(iv) Body built and posture.

(v) Nutrition, underweight, Obesity, Oedema.

(vi) Skin colour: Anemia, Jaundice, pigmentation.

(vii) Body hair: Texture, distribution, alopecia, hirsutism.

(viii) Temperature, pulse, respiration, Blood Pressure.

(ix) Pallor, Cyanosis, Clubbing, Lymphadenopathy, Icterus.

(x) Nails: Healthy.

(xi) Operation scar/evidence of any surgery.

(b) **Skin.**

(i) Pigmentation, Skin rashes, Urticaria, Scars, Keloids, Growths, mole/naevus.

(ii) Fungal infections, Scabies.

(iii) Acne.

(iv) Warts, Corns, Haemangiomas, Naevus, Moles, Ulcers, Callosities.

(v) Angioedema, Urticaria, Lipomas, Cafe-au-lait spots, Neuro-fibromas.

(vi) Alopecia.

(vii) Leprosy, Vitiligo, Lichen Planus, Contact Dermatitis, Icthyosis.

(viii) Bullous disease, Eczema, Psoriasis, Pityriasis versicolour.

(ix) Fistula, Sinuses, Fissuring, Hyperhidrosis.

(x) Dryness, roughening, cracking, desquamation, elasticity.

(c) **Face.**

(i) Facies

(ii) Jaw movements

(iii) Facial symmetry, Palsies

(iv) Rash, Acne

(v) Deformities of skull

(vi) Deformities of nose, ears, teeth

(d) **Mouth and pharynx.**

(i) Breath odours.

(ii) Tongue tie, protrusion & appearance, Leukoplakia.

(iii) Teeth & gums.

(iv) Movement of soft palate, state of tonsils.

(v) Any growths.

(vi) Congenital anomalies like cleft palate, cleft lip, Bifid uvula.

(vii) Lips: ulceration, cracks, fissures, angular stomatitis, any growth.

(e) **Neck.**

(i) Movements - pain & range.

(ii) Veins distension & engorgement.

(iii) Lymph nodes (size, consistency, matting, overlying skin, fixity/confluence).

(iv) Thyroid swelling, Goitre.

(v) Trachea: central or pulled.

(vi) Sinuses, fistulas, cysts, growths.

(vii) Cervical ribs.

(f) **Ears.**

(i) Hearing.

(ii) Intact tympanic membranes, discharge from ears.

(iii) Deformity of pinna, growths.

(iv) Meatal atresia.

(v) Any surgery.

(vi) Peri auricular sinuses, skin tags.

(g) **Eyes.**

(i) Exophthalmos, endophthalmos.

(ii) Ptosis, Trachoma, Cataract, Pterygium, Glaucoma.

(iii) Lid oedema, mass, Warts, Xanthelasma.

(iv) Conjunctivae: inflammation, Bitot spots, discolouration, ulcer.

(v) Pupils: size, irregularity, reaction to light.

(vi) Eye movements: nystagmus, squint.

(vii) Acuity of vision and colour perception.

(viii) Cornea: healthy, scars, ulcers, evidence of kerato-refractive correction surgeries.

(ix) Entropion, Ectropion.

(x) Surgeries of eye.

(h) **Nose.**

(i) Nasal septum perforation.

(ii) DNS, Nasal polyps, Hypertrophic turbinate.

(iii) Evidence of Allergic Rhinitis.

(iv) Disease of nasal and para-nasal sinuses.

(v) Surgery, growth.

(j) **Upper Limbs.**

(i) Finger Nails - Clubbing, koilonychia, fungal infection, thimble pitting, splinter haemorrhages, platynychia, separation from nail bed.

(ii) Deformities of elbows, fingers & thumbs.

(iii) Axillary lymph nodes, warts, corns, callosities, abnormal growth.

(iv) Joint swelling, Cubitus varus/ valgus.

(v) Deformities of shoulder/elbow/wrist joints, abnormal/restricted movements.

(vi) Complete/partial amputation of digits/ Polydactyly/ Syndactyly.

(vii) Evidence of recurrent dislocation of shoulder.

(viii) Neuro-vascular deficit.

(ix) Muscles wasting, reflexes, coordination.

(k) **Lower Limbs.**

(i) General appearance.

(ii) Stance, gait, balance.

(iii) Oedema, varicose veins, ulcers, warts, corns, callosities, growths.

(iv) Muscle wasting, reflexes, coordination.

(v) Deformity of hip/knee/ankle joints, abnormal/restricted movements.

(vi) Knock knee, bows legs, flat feet, hammer toes.

(vii) Joint swelling, Genu varus/ valgus/recurvatum.

(viii) Flat feet, deformities of arch of foot, club foot.

(ix) Complete/ partial amputation of toes/ Polydactyly/ Syndactyly.

(x) Neurovascular deficit.

(xi) Hammer toe/Hallux valgus/varus.

(xii) DVT, Thrombophlebitis, AV malformations.

(l) **Thorax.**

(i) **Anterior and lateral aspect:-**

(aa) Type of chest, symmetry.

(ab) Amazia, Polymazia, Polythelia, Gynecomastia, discharge from nipples, lump/abscess in the breast.

(ac) Pulsations – Apex, beat, thrills.

(ad) Dilated vessels.

(ae) Respiratory movements.

(af) Heart sounds, heart rate, adventitious sounds.

(ag) Breath sounds, adventitious sounds.

(ii) **Posterior aspect.**

(aa) Deformities of rib cage, scapula, shoulder, spine.

(ab) Respiratory movements.

(ac) Breath sounds.

(ad) Congenital abnormalities.

(ae) Lipoma, Hypertrichiosis, dimpling of skin, Haemangioma, pigmented naevus, sinuses, tuft of hair over spine.

(af) Kyphosis, Scoliosis.

(m) **Abdomen.**

(i) Size, distension, symmetry.

(ii) Movements of abdominal wall, scars, dilated vessels.

(iii) Visible peristalsis.

(iv) Hernia, impulse on coughing.

(v) Tenderness, abdominal lumps/fluid, liver, gallbladder, kidneys.

(vi) Inguinal lymph nodes.

(n) **Genitalia and Perineum.**

(i) Penis, scrotum, spermatic cord, epididymus, meatus (location), urethra.

(ii) Hydrocele, varicocele, undescended testis, atrophic testis.

(iii) Haemorrhoids, prolapse of rectum/uterus, skin tags.

(iv) Fistulae, pilonidal sinus, condyloma, fissures, sinuses, excoriation of skin.

(v) External genitals in females.

57. In case of re-enrolment, great care must be taken to ascertain from the candidate's past history whether he/she has ever been rejected for medical reasons/examination.

58. **General ground for rejections.** Candidates presenting with any abnormality will be rejected. Some of the conditions, commonly found are as follows and candidates with these conditions will be rejected:-

(a) Generally impaired constitution.

(b) Mental or nervous instability.

(c) Defective intelligence.

(d) Stammering.

(e) Any degree of squint.

(f) Low standard of vision.

(g) Otitis Media.

(h) Deafness.

(j) Loss/decay of teeth to such an extent as to interfere materially with efficient mastication.

(k) Chronic skin diseases including leprosy.

(l) Hyperhydrosis.

(m) Epilepsy.

(n) Plantar warts.

(o) Valvular or other disease of the heart.

(p) Bronchial or laryngeal diseases.

(q) Evidence of Tuberculosis, Syphilis or other veneral disease, HIV infection.

(r) Permanent deformity of chest and deformity of joints, Knock Knee, Cubitus Valgus.

(s) Deformity of feet and bow legs.

(t) Abnormal curvature of spine.

(u) Hydrocele.

(v) Hernia.

(w) Fistula/sinus.

(x) Pilonidal Sinus.

(y) Anemia (Hb less than 13 g/dl for males and less than 12 g/dl for females).

(z) Any hyperbilirubinemia.

(ab) Any abnormal blood/urine investigation or any other investigation that is abnormal.

59. Despite careful examination, some candidates are still detected to have disabilities for which they are invalided out. Common causes of invalidment are defective colour vision, CSOM, tachycardia, tremors, Hypertension, Cardiac murmur, Cubitus valgus, Knock knee, Pes cavus, CVS (cardiac murmurs), Flat feet, Hammer toes, spinal deformities etc. Hence, a careful search for these disabilities is to be made.

60. **Standards for Weight.** Weight for height charts given in this manual will be the standard for all categories of personnel. These charts have been based on BMI. The charts specify the minimum acceptable weight that candidates of a particular height must have. Weights below the minimum specified will not be acceptable in any case. Weights higher than the acceptable limit will be acceptable only in exceptional circumstances in case of candidates with documented evidence of body building, wrestling, and boxing. In such cases, the following criteria will have to be met:-

(a) Body Mass Index should not be more than 25.

(b) Waist Circumference should be less than 90 cm for males and 80 cm for females.

(d) All biochemical metabolic parameters should be within normal limits.

61. **Standards for chest circumference.** Minimum chest measurement should be 77 cm. Chest expansion should be five cm or more for all categories of candidates.

62. **Standards for general physical examination.**

(a) Candidates with Blood Pressure consistently greater than 140/90 mm Hg will be rejected.

(b) Rate, rhythm, volume, regularity of pulse and condition of arterial wall are assessed. Persistent tachycardia measured twice after a rest period of five minutes (more than 100 bpm) as well as persistent bradycardia (less than 60 bpm) are grounds for rejection.

(c) Presence of pallor, cyanosis, icterus are a cause of rejection.

(d) Abnormalities of nails in form of platynychia/koilonychia, fungal infections and clubbing are unacceptable. Thimble pitting/separation of nails from nail bed and splinter haemorrhages under nails suggest systemic illness and are grounds for rejection.

(e) Lymph nodes more than one cm in size (more than 1.5 cm for inguinal group) involving more than two groups and fixed/ confluent nodes are abnormal and are grounds for rejection.

(f) Localized, congenital mole/ naevus is acceptable provided size is less than one cm.

(g) Presence of more than one CALM (Café-au-lait macules) or any other associated neuro-cutaneous syndromes is ground for rejection.

(h) More than one Neurofibromas are not acceptable.

(j) Xanthomata is associated with hyperlipidemia and their presence should be a cause of rejection.

(k) Xanthelasma are flat lipid deposits around the eyes having the same metabolic correlation as Xanthoma (i.e. hyperlipidemia) and are a cause for rejection.

(l) Lipomas causing significant disfigurement/functional impairment due to its size/ location are a cause for rejection.

(m) Plantar warts are grounds for rejection.

(n) Any enlargement/ nodularity of thyroid gland or lack of movement with swallowing of thyroid should be a cause of rejection.

(o) Presence of any growth, ulceration, cracks/fissures in the corner of mouth (angular stomatitis) are abnormal and not acceptable.

(p) Tongue tie, leukoplakia (raised whitish opalescent patches over/under tongue or buccal mucosa) are abnormal and should be a cause of rejection.

(q) Candidates with any of the following diseases like chronic skin disease, psoriasis, lichen planus, recurrent infections, vitiligo, bullous diseases, eczema, chronic lymphoedema, contact dermatitis, hyperhidrosis, ichthyosis, palmoplantar keratoderma, oncomycosis, recurrent urticaria, angioedema, dermographism, keloids, any congenital or hereditary disease, leprosy or any STD/HIV, varicose veins, hyperpigmented patches, petechiae, ecchymosis etc will be a cause for rejection.

(r) Skin infections such as Tinea cruris, Tinea corporis, Intertrigo, Impetigo, Folliculitis, Furunculosis, Scabies, Sycosis barbae, warts, Molluscum contagiosum, Herpes, Giant Congenital Melanocytic naevi or any other naevi more than ten cm in size will be a cause for rejection.

(s) Acne on the trunk or of grade II, III and IV (abscess, cysts, hypertrophic scars etc), the candidate should be rejected as UNFIT. Rosacea will also be considered UNFIT.

(t) Presence of haemangiomas, naevus, moles etc will be rejected if they are multiple and large (more than one cm in size).

(u) Hirsutism and abnormal growth of hair will be rejected.

(v) Alopecia is a cause of rejection.

(w) Any other skin disease or abnormality should be a cause of rejection.

(x) Any residual defect in the skull is to be rejected.

(y) Loose or unduly elastic skin is not acceptable.

(z) Any evidence of endocrine disorder constitutes grounds for rejection.

(aa) Any disorder of Cardiovascular System including abnormal heart sounds, visible apex beat, bruits, thrills, engorged blood vessels etc, is a cause of rejection.

(ab) Any disorder of Respiratory System including abnormal breath sounds, presence of adventitious sounds, abnormalities of trachea etc are a cause of rejection.

(ac) Any disorder of Gastrointestinal System including asymmetrical abdominal wall, visible pulsation/engorged blood vessels, operation scars, caput medusa, spider naevi, palpable liver/spleen/lump, tenderness, bruits, hernia etc, are a cause of rejection.

(ad) Any disorder of Genitourinary System including undescended or atrophic testis, abnormalities of testis, abnormalities of scrotum, Hydrocoele, Hernia, Varicocoele, Epidydimitis etc, are a cause of rejection.

(ae) Any disorder of Central Nervous System including history of migraine, phobias, convulsions, head injury, nightmares, sleep disturbance, seizures, sleep walking, loss of consciousness, syncope, psychiatric disorders, tremors, taking psychiatric drugs, history of alcoholism and drug abuse etc, are a cause of rejection. Presence of neurocutaneous markers like hypo/hyper pigmented spots on the skin, subcutaneous nodules, facial haemangiomas, dimple or tuft of hair over spine etc, is a cause of rejection. Any disorder

of motor or sensory nervous system, is a cause of rejection. Tremors of hands, tongue and eyelids are unfit. Abnormal gait, speech, intellect, lack of co-ordination etc is unfit. Deficit in hand grip will be unfit.

(af) History of tiredness, easy fatigability, lassitude, general weakness, haemorrhages, epistaxis, bleeding from gums, haemoptysis, haematemisis, malena, menorrhagia etc, is a cause of rejection.

(ag) Any other abnormality noted will be a cause of rejection.

63. **Standards for hearing**. Any free field hearing standards less than 610 cm in Conversational Voice or Forced Whisper for each ear separately is not acceptable.

64. **Standards for Appendages (Limbs).**

(a) **Lower Limbs.**

(i) **Hallux Valgus.** Hallux valgus with angle more than twenty degrees and first-second inter metatarsal angle of more than ten degrees is unfit. Hallux Valgus of any degree with bunion, corns or callosities is unfit.

(ii) **Hammer toe.** Hammer toe will be considered unfit when associated with painful corns or bursa on dorsum of toes and individual walks on tip of affected toe.

(iii) **Pes Planus (Flat foot).** Rigid or fixed flat feet, gross flat feet with plano valgus, eversion of heel, candidate cannot balance himself on toes, cannot skip on forefoot, tender painful tarsal joints, prominent head of talus is unfit.

(iv) **Genu Varum.** Genu Varum with inter-condylar distance between medical condyles of the femurs more than seven cm is unfit.

(v) **Genu Valgum.** Genu Valgum with inter-malleolar distance more than five cm in male and more than eight cm in female is unfit.

(vi) **Genu Recurvatum.** Hyperextension of knee more than ten degrees is unfit.

(vii) **Loss of toes.** Loss of any toe or part of toe is unfit.

(viii) **Amputation.** Any degree of amputation of any part of the limb is unfit.

(ix) **Talipo Equinus Varus (Club foot).** Any degree of club foot is unfit.

(x) **Disease or deformity of any joint of the limb including pelvis.** Any disease or disability of any joint of the limb is unfit. Any ligamentous laxity or instability of a joint is unfit. ACL reconstruction surgery and any other surgery (including arthroscopic surgery) of the joint or limb is unfit. Dislocation of any joint is unfit.

(xi) Any other disease or deformity of the limbs including DVT, thrombophlebitis, varicose veins, syndactyly, polydactyly, ulcers etc is unfit.

(b) **Upper Limbs.**

(i) **Cubitus Valgus.** Carrying angle more than fifteen degrees in male and more than eighteen degrees in female is unfit.

(ii) **Cubitus Varus.** Varus of more than five degree is unfit.

(iii) **Cervical rib.** Cervical rib is unfit.

(iv) **Loss of toes.** Loss of any toe or part of toe is unfit.

(v) **Amputation.** Any degree of amputation of any part of the limb is unfit.

(vi) **Disease or deformity of any joint of the limb including shoulder.** Any disease or disability of any joint of the limb is unfit. Any ligamentous laxity or instability of a joint is unfit. ACL reconstruction surgery and any other surgery (including arthroscopic surgery) of the joint or limb is unfit. Dislocation of any joint is unfit.

(vii) Any other disease or deformity of the limb, syndactyly, polydactyly, ulcers is unfit.

(c) **Healed Fractures.**

(i) Fractures of upper limbs not involving articular surfaces and without neuro/vascular deficit which have united without malunion and impairment of function will be considered for fitness after six months of injury provided there is no residual functional defect and there is no deformity. A candidate will however be declared unfit by MO.

(ii) Fractures of lower limbs not involving articular surfaces and without neuro/vascular deficit which have united with no malunion or loss of function will be considered for fitness after six months of injury provided there is no residual functional defect and there is no deformity. A candidate will however be declared unfit by the MO.

(iii) Any limb length discrepancy is not acceptable.

(iv) Malunited fractures of clavicle without loss of function and without gross deformity are acceptable.

(v) Healed fractures with metallic implants is unfit

(vi) Healed fractures with cosmetic deformity is unfit.

(vii) Fractures involving articular surfaces is unfit.

(viii) Malunited or non united fractures are unfit.

(ix) All active fractures are unfit.

65. **Standards for spine.** Cobb's angle more than ten degree for scoliosis is not acceptable. Any other abnormality of spine like kyphosis, spina bifida, tuft of hair on spine, dimpling of skin, haemangioma, pigmented naevus, dermal sinus, lipoma over spine, stigmata of spinal dysraphismetc is not acceptable.

66. **Standards for surgery.** A candidate will be considered for fitness only after the minimum laid down period after surgery for the disease/disability is over and there is no complication or residual defect. All open surgeries will be considered for fitness after one year of the surgery. Laparoscopic surgeries will be considered for fitness after twelve weeks except in cases of hernia. For any other surgery, where time period after surgery is not mentioned in this manual, a minimum of twelve weeks should have elapsed after the surgery, before consideration for fitness. Other considerations for surgical conditions are as follows:-

(a) **Deformities of head and neck.** Any deformity of the skull/face or mandible, any loss or absence of bony substance of skull, thyroglossal cyst, congenital cyst of branchial origin, cleft palate, cleft lip, any other lump/sinus/scar etc is unfit.

(b) **Chest and breast.** Deformities of chest/rib cage, rib hump/prominence of rib cage, amazia, polymazia, polythelia, gynaecomastia, presence of lumps in the breast, discharge from nipples, any other deformity of nipples/breast, visible pulsations etc is unfit.

(c) **Abdomen.** Any organomegaly, deformity of abdominal wall, visible pulsations etc is unfit.

(i) **Diseases of anorectal conditions.** Conditions like anal fissure, anal fistula, haemmorhoids, rectal polyps, pilonidal sinus, warts, skin tags, rectal prolapse, any sinus, stricture, faecal incontinence etc is unfit.

(ii) **Hernia.** After one year of open mesh hernioplasty or laparoscopic repair provided there is no recurrence or post-operative complication and general tone of abdominal muscles is good. Operation scar should be healthy.

(iii) **Diseases of Genito-urinary system.** History of enuresis, incontinence, haematuria, nephritis, urinary tract infections, Sexually transmitted diseases, urethral discharge, renal transplant etc is unfit. Conditions like Hydrocoele, Varicocoele, hernias, Spermatocoele, epididymitis, epididymal mass, ambiguous genitalia, ectopic testis, defects of testis, epispadias, hypospadias, phimosis, meatal stenosis, torsion of testis, penile amputation, any other deformities etc is unfit.

(d) **Disorders of ENT.** History of Otorrhoea, hearing loss, vertigo, motion sickness, allergic rhinitis, nasal polyps, DNS, sinusitis, ozoena, epistaxis, dysphonea, dyspnoea, dysphagia, any surgery etc is unfit. Conditions like leukoplakia, submucous fibrosis, erythroplakia, ulcerative or exophytic lesions of oral cavity, enlarged tonsils, stridor, stammering, deformities of pinna, otitis externa, otitis media, exostosis, vocal cord palsy, Tympanosclerosis of tympanic membranes, osteosclerosis, deformities of mastoid etc is unfit.

(e) **Disorders of Eyes.** Conditions like corneal ulcer, corneal opacities, lenticular opacities, proptosis, trichiasis, any other disease of eye lashes/eye lids/cornea/conjunctiva etc is unfit.

67. **VISUAL STANDARDS.**

(a) Visual standards for entry into Army as Officer, JCO/OR, cadet of academies and various military schools will be as per the standards promulgated as under. Any new category of Officers or other personnel if introduced will be adjusted in the existing groups/categories from time to time.

(b) For any type of commissioning of already serving personnel of the Armed Forces, the present visual standards in vogue for that category will apply. In such cases, it will be left to the discretion of the service Ophthalmologist to make suitable necessary adjustments for age or otherwise as these individuals are likely to be much older.

(c) Visual standards for males and females will be the same for the specific category of Officers as well as for other ranks. For all categories of Officers and other ranks, Best Corrected Visual Acuity will be 6/6 for each eye.

(d) Post-surgery, symptom free period of minimum three months is admissible after any ocular surgery except for LASIK or equivalent keratorefractive correction procedures.

(e) All candidates reporting for medical examination will give the following undertaking:-

(i) No Keratorefractive procedure has been carried out.

(ii) Neither the individual nor his parents suffer from night blindness.

(f) **LASIK or Equivalent**. Any candidate who has undergone any Keratorefractive procedure will have a certificate from the centre where he/she has undergone the procedure specifying the date and type of surgery. In order to be made Fit, the following criteria will have to be met:-

(i) Age more than 20 yrs at the time of surgery.

(ii) Minimum twelve months post LASIK.

(iii) Central corneal thickness equal to or more than 450 µ.

(iv) Axial length by IOL master equal to or less than 26 mm.

(v) Residual refraction of equal to or less than +/- 1.0 D including cylinder (if acceptable for category applied for).

(vi) Normal healthy retina.

(g) Equipment like IOL master (or equivalent) and Pachymeter are usually present at Command Hospitals or equivalent, therefore, the present policy of making such candidates unfit at smaller hospitals and referring them to Sr Advisor Ophthalmology at the Command Hospital or equivalent will continue.

(h) Procedures like Radial Keratotomy or equivalent will be permanently unfit.

SECTION – 4

DETAILED METHODOLOGY OF EXAMINATION FOR MOs AND SPECIALISTS

MEDICINE AND ALLIED

GENERAL PHYSICAL EXAMINATION

68. **General Aspects.** A detailed and diligent general physical and medical examination will be carried out for all candidates.

69. A complete service medical examination comprises of:-

(a) Personal and family history of the candidate and history of past illness (including medication/surgery/procedure/hospitalization). In case of female candidates, necessary menstrual history and history of any surgical procedure will be elicited.

(b) General medical, surgical and gynecological examination in case of female candidates.

(c) Ophthalmic examination.

(d) Examination of ear, nose and throat.

70. **Method of general medical examination.** The vital parameters i.e. temperature, pulse and blood pressure will be recorded and any abnormality noted. The general appearance including that of face, distribution of hair, condition like skin dryness, excessive moisture, elasticity and any abnormal pigmentation will be noted. Pallor, cyanosis, erythema, purpura or petechiae will be looked for. Special care will be taken to look for xanthoma / xanthelasma, naevi, lipoma, neurofibromata and warts. The neck will be examined for thyroid swelling, lymphadenopathy and for any cysts. Lips and tongue will be carefully examined for any growth, discolouration and disfigurement. The nails will be examined for any infection, pallor, haemorrhages and abnormal colour changes and other lesions/deformities.

71. **Head, Face and Hair distribution.**

(a) Deformities of skull, face or mandible of a degree that will prevent the individual from wearing a protective mask or military headgear are grounds for rejection. Any residual defect in the skull is unfit.

(b) Hair distribution should have normal pattern; mild frontal recession is acceptable. Hirsutism and abnormal hair growth are to be rejected.

72. **Mental status.** Mental status will be examined which should include cognitive, emotional and behavioural aspects.

73. **Skin.**

(a) Normal appearance and texture acceptable.

(b) Abnormal dryness/roughening/cracking/desquamation is a cause of rejection.

(c) Excessive moisture of palms and soles interfere with grip of weapon and even if not associated with features of anxiety (tachycardia, tremors) is a cause of rejection on its own account.

(d) **Skin Elasticity**. Skin should be taut. Loose or unduly elastic skin is not acceptable.

(e) **Abnormal pigmentation.** Abnormal pigmentation in the form of hypo or hyper pigmentation is not acceptable. Localized, congenital mole/naevus, however is acceptable provided size is less than one cm. Congenital multiple naevi or vascular tumours that interfere with function or are exposed to constant irritation are not acceptable.

(f) **Café-au-lait patches.** Single Café-au-lait macules (CALM) can be found in normal individuals and is acceptable. However, presence of more than one CALM or any other associated neuro-cutaneous syndromes is ground for rejection.

(g) **Neurofibromatosis.** Single neurofibroma is acceptable. However, multiple neurofibromas are not acceptable.

(h) **Xanthomata.** Xanthomata is associated with hyperlipidemia and its presence is a cause of rejection.

(j) **Xathelasmas.** Xanthelasmas are flat lipid deposits around the eyes having the same metabolic correlation as xanthoma (i.e. hyperlipidemia) and are not to be accepted.

(k) **Lipoma.** Lipomas are usually benign and acceptable unless causing significant disfigurement/functional impairment due to its size/location.

(l) **Warts.** Palmo-plantar warts are grounds for rejection.

74. **Thyroid.** Examination for thyroid enlargement (Goitre), consistency/nodularity and movement with deglutition is to be carried out from behind the patient. Any enlargement/ nodularity/ lack of movement with swallowing, is a cause of rejection.

75. **Lips.** Presence of any growth, ulceration, cracks/fissures in the corner of mouth (angular stomatitis) are abnormal and not acceptable.

76. **Tongue.** Tongue should be examined after protrusion. Enlarged size, tremors, pallor/cyanosis is not accepted. Tongue tie, leukoplakia (raised whitish opalescent patches over/under tongue or buccal mucosa) are abnormal and is a cause of rejection.

77. **Nails.** Abnormalities of nails in form of platynychia / koilonychias, fungal infections and clubbing are unacceptable. Thimble pitting/separation of nails from nail bed and splinter haemorrhages under nails suggest systemic illness and is a cause of rejection.

78. **Pallor.** Presence of pallor is associated with anemia and is a cause of rejection.

79. **Lymphadenopathy**. Examine lymph nodes in all the groups (cervical, axillary, inguinal, submandibular, occipital etc) look for size, consistency, matting and overlying skin. Lymph nodes more than one cm in size (more than 1.5 cm for inguinal group) and involving more than two groups are abnormal and are not acceptable. Fixed/confluent nodes are abnormal and are not acceptable.

80. **CARDIOVASCULAR SYSTEM.**

(a) **History**. History of chest pain, breathlessness, palpitation, fainting attacks, ankle swelling, giddiness, rheumatic fever, chorea, frequent sore throat and tonsillitis should be elicited and are grounds for rejection.

(b) **Examination**. The examination room should have ambient temperature to make the candidate comfortable.

(c) **Pulse**. Rate, rhythm, volume, regularity of the pulse and condition of the arterial wall will be assessed. Thickening and hardening of the arteries are noted by rolling the brachial artery under the examiner's fingers. The pulsation of both the radial and femoral arteries should always be compared and difference, if any, recorded. The pulse should be counted for one full minute. In addition, pulsation of carotid, popliteal, posterior tibial and dorsalis pedis arteries on both sides should be palpated and difference, if any, should be noted. Persistent tachycardia (more than 100 bpm) as well as persistent bradycardia (less than 60 bpm) are grounds for rejection. In case bradycardia is considered to be physiological, the candidate can be declared fit after evaluation by Medical Specialist/ Cardiologist. For persistent tachycardia, the candidate's pulse rate should be checked twice. Second time pulse should be checked after a rest of five minutes and both measurements should be endorsed in AFMSF-2A.

(d) **Examination of Blood Pressure (BP)**. Proper technique is necessary to obtain accurate measurement of BP. The measurement should be performed when the individual is relaxed. It is emphasized that Korotkoff phase I will be recorded as systolic BP and Korotkoff phase V will be recorded as diastolic BP. To eliminate silent gap artifact, every BP recording must start by palpation method to measure systolic BP and the cuff pressure should be raised 30 mm of Hg above that while recording by auscultatory method. The individual should be sitting or lying comfortably at the time of recording of BP. Recording should be done after allowing the individual to relax. Two readings about 5 minutes apart should be taken and the lower of the two recorded. Candidates with BP consistently greater than 140/90 mm Hg will be rejected.

(e) **Examination of Heart**. A detailed examination should be done with special emphasis on precordium, deformities and pulsations. Heart sounds should be auscultated and added sounds should be noted. Any murmur detected by a Recruiting Medical Officer is a ground for rejection.

(f) **Electrocardiogram (applicable to Air Force cadets only)**. A standard 12 lead electrocardiogram at rest will be recorded after ensuring correct standardization and application of leads. Skin resistance must be reduced to the minimum by rubbing and cleaning the skin and application of adequate amount of jelly. Once recorded, ECG tracing should be labelled clearly and then folded neatly and kept it in a plastic envelope/bag along with the medical documents. The reporting of ECG should be as detailed as possible. This is essential as the original tracings on thermographic ECG paper tend to fade with age and any comparison, if required, at a later date becomes difficult. A photocopy of ECG should also be made which will be a backup in case of loss of the image on thermographic paper. Salient findings and acceptable physiological variations should be mentioned. Full particulars of the individual, date and time of recording and location will also be endorsed on ECG.

81. **RESPIRATORY SYSTEM.**

(a) **History**. History of pulmonary tuberculosis (including indirect evidence from information of long term medication), pleurisy with effusion, frequent attacks of cough with expectoration, haemoptysis, attacks of bronchitis, asthma, spontaneous pneumothorax and injuries to the chest should be elicited.

(b) **Clinical Examination**. Before examination of the chest, the position of trachea and apex beat should be determined. The candidate will be asked to take deep breaths to determine symmetry of thoracic movements. Further clinical examination on classical lines namely, inspection, palpation, percussion and auscultation, will be carried out. A careful clinical auscultation for crackles in all regions of chest including post-tussive auscultation must be done. All candidates for PCTA/Commissioning and RIMCO must be subjected to radiograph of the chest (PA view). Pulmonary Function Test at rest and after exercise and before and after bronchodilation will be done at a Chest centre in cases suspected to have obstructive/ restrictive lung disease.

(c) **Parenchymal disease**. Any abnormality on clinical examination or Chest X-Ray will be a ground for rejection. In case of pulmonary tuberculosis, old treated cases with no significant residual abnormality (Clinical, radiological and other investigations) can be accepted if the treatment was completed more than two years earlier and there is no functional deficit.

(d) **Pleural disease**. Any evidence of significant pleural thickening or presence of effusion of any degree will be a cause for rejection.

(e) **Airway disease**. History of attacks of wheeze/ breathlessness may be manifestations of bronchial asthma or other chronic pathology of the respiratory tract. Such cases will be assessed as unfit.

82. **GASTROINTESTINAL SYSTEM.**

(a) **History**. History of pain abdomen, chronic diarrhoea, biliary colic, repeated attacks of jaundice and major operations is to be recorded. Details of nature of operation(s) should be obtained along with the diagnosis. Candidates suffering or have suffered during the previous one year from symptoms suggestive of acid-peptic disease including proven peptic ulcer, are not to be accepted.

(b) **General Examination**. Look for icterus preferably under natural daylight. Presence or absence of peripheral signs of liver cell failure (loss of hair, parotid enlargement, spider nevi, gynecomastia and testicular atrophy) and any evidence of mal-absorption (pallor, nail and skin changes, angular cheilitis, pedal edema) should be noted. Any evidence of disease in the gastrointestinal tract, abdominal viscera or peritoneum will entail rejection.

(c) **Oral Cavity**. Note the colour of mucosa, condition of gums and teeth.

(d) **Abdomen**. Careful abdominal examination should be carried out with special emphasis towards organomegaly, abnormal lumps or scar.

(e) **Hernia**. Hernial sites should be examined for presence of inguinal, epigastric, umbilical and femoral hernia including incisional hernias.

(f) **Anal Area**. The examiner should look for abnormalities like external haemorrhoids, skin tags, sentinel piles, fissures, sinuses, fistula and excoriation of skin.

(g) **USG Abdomen and Pelvis**. It will be carried out for all Cadets/ Officers entry during Medical Examination prior to commissioning. Disposal of cases with incidental ultrasonographic findings like fatty liver, small cysts, haemangiomas, septate gall bladder etc will be based on clinical significance and functional limitation. A methodically conducted USG examination should look for the following areas during examination. The findings as listed below and other incidental USG findings reported will be evaluated on clinical significance and functional capacity by the concerned Specialist.

83. **Liver.**

(a) **FIT.** Normal echo anatomy of the liver, CBD, IHBR, portal and hepatic veins.

(b) **UNFIT.**

(i) Fatty liver* - Grade 2/3 and Grade 1 with abnormal Liver Function Tests.

(ii) Space occupying lesion in the liver (SOL).*

(iii) Portal vein thrombosis.

(iv) Evidence of portal hypertension.

(v) Hepatic calcification.*

(vi) Hepatomegaly more than 15 cm, if clinically also liver is palpable.

Note. * See (c)

(c) During Appeal Medical Board/ Review Medical Board, unfit candidates will be subjected to specific investigations and detailed clinical examination. Fitness for specific conditions will be decided as given below:-

(i) SOL liver will be further evaluated with CECT abdomen, LFT and hydatid serology.

(ii) Disposal will be as follows:-

(aa) Solitary simple cyst less than 2.5 cm will be considered fit, if, LFT is normal and hydatid serology is negative. Solitary cyst more than 2.5 cm will be unfit.

(ab) Solitary cyst of any size with thick walls, septations, papillary projections, debris or calcification will be unfit.

(ac) Multiple hepatic cysts of any size will be unfit.

(ad) Any haemangioma will be unfit irrespective of size and location.

(iii) Hepatic calcifications to be considered fit if solitary and less than one cm with no evidence of active disease like tuberculosis, saracoidosis, hydatid disease or liver abscess based on relevant clinical examination and appropriate investigations. Multiple or cluster size of more than one cm will be considered as unfit.

(d) Candidates with the following conditions will entail rejection:-

(i) Candidates with any evidence of liver disease.

(ii) History of recurrent jaundice.

(iii) Clinical features suggestive of Chronic Liver Disease.

(iv) Candidates suffering from Acute Hepatitis will be rejected. Such candidates can be declared fit after a minimum period of 06 months has elapsed, provided there is full clinical recovery, HBV and HCV status are negative and liver functions are within normal limits.

(vi) Hyperbilirubinemia of any nature is unfit.

84. **Gall Bladder.**

(a) **UNFIT.**

(i) Cholelithiasis or biliary sludge.

(ii) Choledocolithiasis.

(iii) Polyp of any size and number.

(iv) Choledochal cyst.

(v) Gall bladder mass.

(vi) Gall bladder wall thickness more than five mm.

(vii) Septate gall bladder.

85. **Spleen.**

(a) **UNFIT.**

(i) Any Space Occupying Lesion.

(ii) Asplenia.

(iii) Splenomegaly more than thirteen cm

(iv) Candidates who have undergone splenectomy are unfit irrespective of the cause for operation.

86. **Pancreas.**

(a) **UNFIT.**

(i) Any structural abnormality.

(ii) Space Occupying Lesion/Mass lesion.

(iii) Features of Chronic Pancreatitis (calcification, ductal abnormality, atrophy)

87. **Peritoneal Cavity.**

(a) **UNFIT.**

(i) Ascites.

(ii) Solitary mesenteric or retroperitoneal lymph node more than one cm. (Single retroperitoneal LN less than one cm and normal in architecture to be made fit).

(iii) Two or more lymph nodes of any size.

(iv) Any mass or cyst

88. **ENDOCRINE SYSTEM.**

(a) **History**. History should be carefully elicited for any endocrine conditions particularly Diabetes Mellitus, disorders of thyroid and adrenal glands, gonads etc. History suggestive of endocrinal disorder of thyroid, pituitary and adrenal glands will require thorough clinical examination as per the suspected disease.

(b) **Examination.**

(i) A thorough clinical examination will detect florid diseases of the endocrine system and any clinical suspicion will warrant specific investigations.

(ii) Any history, examination or investigation suggestive of endocrine disorders will be a cause for rejection.

(iii) All cases of thyroid swelling will be rejected.

89. **Male Genitalia.** Entrants with following features will be unfit:-

(a) Testes: as per surgical standards of fitness.

(b) History of major abnormalities or defects of the genitalia or surgical correction of these conditions.

(c) If there are any clinical features suggestive of hypogonadism.

90. **DERMATOLOGICAL SYSTEM.**

(a) **Principle**. Any skin disorder of a degree or nature which requires frequent outpatient treatment or hospitalization, affects thermoregulatory function or interferes with the wearing of military clothing or equipment or interferes with the satisfactory performance of duty, will not meet the standard for entry.

(b) **History**. A careful history of chronic skin diseases like psoriasis, lichen planus, recurrent infections, vitiligo, bullous disease, eczema, contact dermatitis, hyperhidrosis, ichthyosis, recurrent urticaria and any congenital or hereditary disease will be elicited. Detailed history will also be taken to know about any high risk behavior to rule out any STD/HIV. Candidates with history of any high risk behavior suggestive of any STD/HIV will also be rejected.

(c) **Examination**. Skin will be carefully examined in good day light after removing all clothes to exclude any skin disease. Disposal of some of the common dermatoses will be as follows:-

(i) Any fungal infection of any part of the body will be unfit.

(ii) Pityriasis versicolor will be made unfit.

(iii) Mild Acne vulgaris is acceptable. However, candidates with severe and extensive acne will be rejected.

(iv) Keloid (even if single) will be a cause for rejection.

(v) Alopecia at a single place and small (less than two cm in diameter) lesion on scalp can be accepted. However, if there are multiple lesions involving other areas or having scarring, the candidate should be rejected.

(d) **Leprosy**. A careful examination will be carried out to detect any hypo-pigmented lesions or raised patches with reduced or absent sensation. All peripheral nerves should be examined for any thickening of nerves. Clinical evidence towards leprosy is a ground for rejection and an opinion of Dermatologist will be obtained for confirmation.

(e) **STD**. A thorough examination of external genitals i.e. penis (glans penis be examined after withdrawing prepuce completely) and scrotum, will be carried out to rule out any active or old lesion. Anal and perianal area should also be included as a part of genitalia examination.

Medical Officers should advise all referred cases to undergo treatment under their own arrangement (especially for infections) before reporting to Dermatologist.

(g) Medical Officers at the time of referral must clearly write diagnosis, site and side of body on which lesions are present.

(h) **Assessment of diseases of the skin**. Certain skin conditions are apt to become active and incapacitating under tropical conditions. Any dermatoses which interferes with the wearing of military clothing or equipment or interferes with satisfactory performance of military duty, will be rejected. An individual is unsuitable for service if he has a definite history or signs of chronic or recurrent skin disease.

(j) **Examination for Palmoplantar Hyperhidrosis**. Individual is asked to stand bare foot on blotting paper with his arms extended and palm open for 3 min to check for significant hyperhidrosis. If mild, the candidate may be considered fit. Severe cases are grounds for rejection.

(k) **Disposal of common dermatological ailments.**

(i) **Callosities, Corns and Warts.**

(aa) Single Corns/Warts/Callosities will be considered fit three months after successful treatment and no recurrence.

(ab) Corns/Warts/Callosities on palms or soles will be a cause for rejection.

(ii) **Palmo-plantar Keratoderma.** Any degree of palmoplantar keratoderma manifesting with hyperkeratotic and fissured skin over the palms, soles and heels will be considered unfit.

(iii) **Scabies.** To be considered fit only on recovery.

(iv) **Scrotal Dermatitis.** To be considered fit only on recovery.

(v) **Tinea cruris, Tinea corporis and Intertrigo** may be considered fit after treatment and complete recovery.

(vi) **Urticaria, Angioedema and symptomatic Dermographism** will be considered unfit.

(vii) **Vitiligo** will be considered unfit.

(viii) **FIT** – Candidates having small area of vitiligo limited to glans penis will be accepted.

(ix) Those having extensive degree of skin involvement will be rejected.

(x) A history of chronic or recurrent attacks of skin infection will be considered unfit. Folliculitis or sycosis barbae from which there has been complete recovery may be considered fit.

91. **CENTRAL NERVOUS SYSTEM AND PSYCHIATRIC DISORDERS.**

(a) **History of Neuro-psychological disorders.** A detailed history should be carefully obtained about migraine, convulsions, head injury, disturbances in consciousness and insomnia, phobias, nightmares, sleep walking. History of insomnia, nightmares or frequent sleep walking, when recurrent or persistent, will be a cause for rejection. A candidate with history of headache which is severe enough to seek medical advise is a cause for rejection. A candidate giving history of psychiatric disorders (Psychosis, Neurosis, emotional instability and other conditions), family history of such disorders or of taking medication in the past for the same should be rejected.

(b) **Seizures/Epilepsy/Syncope.** History of epilepsy is a cause for rejection. Solitary seizures of any type after the age of five are also a cause for rejection. History of benign febrile convulsions before the age of 5 years is NOT a cause for rejection. Candidates with family history of seizures/epilepsy must be evaluated by the concerned Specialist before acceptance. Seizures/Epilepsy must be differentiated from fainting spells (Syncope). Occasional syncope may be benign and not necessarily a cause for rejection. Candidates who give history of syncope must always be evaluated by the concerned Specialist before declaring them fit.

(c) **Head Injury.** Skull and face will be examined carefully for any bony deformities suggestive of maldevelopment and/or malunited fractures/ previous operative procedures. Any stigmata of previous injury or surgical intervention such as healed scars will be looked for and noted. A detailed neurological examination will be carried out to detect presence of residual neurological deficits. A history of severe head injury is a cause for rejection. In case of doubt, opinion of Medical Spl/Neurologist should be taken.

(d) **Neurological Examination**. Each candidate will undergo an orderly neurological examination. This should include looking for neurocutaneous markers like hypo/hyper-pigmented spots on skin, subcutaneous nodules, facial hemangiomas or dimple or tuft of hair at spine. A general evaluation of mental state, intellectual functions, emotional state, memory and gait will be done. This will be followed by examination of cranial nerves, speech (articulation, fluency, verbal comprehension, naming, repetition, reading and writing) and then by motor and sensory system examination of upper limbs, trunk and lower limbs and finally examination of spine and skull and peripheral nerves for thickening. In addition to CNS examination, the examiner will carefully test for self-balancing, tremors and mannerisms.

(e) The coordination of muscle groups depends on impulses arising from muscle and joint receptors, cerebellar function and extra-pyramidal system. Co-ordination of lower limbs can be tested by asking the candidate to tandem walk. The test is done by asking the patient to walk along a straight line placing the heel of one foot immediately in front of the toe of the one behind. Deviation to either side indicates in-coordination. Unsteadiness should be looked for particularly as the patient is asked to turn around and walk back towards the examiner.

(f) Tremors of hands, tongue and eyelids should be noted. The candidate should stand with his eyelids lightly closed and with his arms stretching out before him at shoulder level. The fingers should be separated and fully extended. If tremors are found to be significant then the candidate should be made unfit. In recording the eyelid tremors, the normal blinking movements should be ignored.

(g) Attention must be paid to the candidate's demeanor, note being made of disorders such as restless movements, tics or nail biting.

(h) **Electro-Encephalogram (EEG).** EEG is recommended only in cases where there is history of epilepsy in the family, past history of seizures, past history of head injury and/or any other neurological or psychological abnormality. EEG will be recorded for all cadets who are selected for fighter stream and for Weapon System Operators (WSOs).

(j) **For other recruits/cadets.** Non-specific EEG abnormality will be acceptable once endorsed by a Senior Advisor in Neurology. The findings of EEG will be entered in AFMSF-2.

(k) **Mental Status Examination.** For proper psychiatric examination, a good rapport must be established and a friendly approach should be adopted. All the three aspects of mental functioning should be tested e.g. cognitive, emotional and behavioral. It is always sound to begin with question about general health followed by enquiries about his work and educational records, working conditions and his attitude towards his colleagues, family members and those in authority over him.

(k) A history of mental disorder in the family or in the candidate himself/herself or signs of intellectual, emotional or character disorders or symptoms of psychosomatic disorders should prompt detailed investigations and referral to the Psychiatrist. However, such cases should be declared unfit for recruit entry.

92. **HAEMOPOEITIC SYSTEM.**

(a) **History.** History of tiredness, lassitude, easy fatigability, general weakness, hemorrhage into the skin like ecchymosis/petechiae, epistaxis, bleeding from gums and alimentary tract, persistent bleeding after minor trauma/lacerations/tooth extraction or menorrhagia in females should be elicited and carefully analyzed. Current or past history of any hereditary blood disorder will be a cause for rejection.

(b) **Examination.** In general examination, observe for pallor which may be looked for in the mucous membranes, nail beds, conjunctivae or skin. In systemic examination, special attention must be paid to ascertain any evidence of splenomegaly, hepatomegaly or lymphadenopathy which may serve as an indicator for further evaluation. Presence of any of these clinical findings at the time of examination will be assessed as unfit.

(c) **Tests.**

(i) Hemoglobin estimation, total and differential leucocyte count, platelet counts are to be routinely performed preferably on an automated hematology cell counter for all cadets and candidates for commissioning. For recruitment as JCO/OR these investigations will be carried out at the stage of appeal, if felt necessary by the examiner.

(ii) Laboratory confirmation of anemia at the time of initial examination or appeal as defined by Hemoglobin (Hb) of less than 13 g/dl in males and 12 g/dl in females will be assessed unfit. Further evaluation including Peripheral Blood Smear (PBS) examination will be carried out, if deemed necessary. Any significant abnormality detected in PBS will be a cause for rejection.

(iii) All candidates with evidence of hereditary hemolytic anaemias (due to red cell membrane defect or due to red cell enzyme deficiencies) and Haemoglobinopathies {Sickle cell disease, Beta Thalassaemia (Major, Intermedia, Minor, Trait) and Alpha Thalassaemia etc} are considered unfit for service. Current or history of bleeding disorders to include but not limited to hemophilias, von Willebrand's Disease, Idiopathic Thrombocytopenia will be considered unfit for service.

SECTION - 5

DETAILED METHODOLOGY OF EXAMINATION FOR MOs AND SPECIALISTS

SURGERY AND ALLIED

93. **METHOD OF GENERAL SURGICAL EXAMINATION.**

(a) A detailed history will be obtained from the candidate regarding all previous surgical operations, injuries, ailments and treatment obtained for the same, if any.

(b) General physical examination of the candidate will be carried out in good illumination, preferably in a well-lit room, after removal of all clothes. A quick survey of the whole body from head to toe is done from front, back and both sides looking for asymmetry of body structure, body posture and muscular development. The candidate should be asked to walk a few steps taking the opportunity to observe the gait pattern. Gait, built and nutrition will be assessed and any abnormalities will be recorded.

(c) A head to toe examination will then be carried out. Deformities of skull, face or mandible and loss or absence of bony substance of skull will be noted. Facies, hair growth and distribution will be noted. Any stigmata of previous injury or surgical intervention such a healed scars will be looked for and noted. Lips, oral cavity and dentition will be carefully examined for presence of any deformity or lesions, cleft lip and palate.

(d) Neck will be examined for evidence of sinuses, congenital cysts of bronchial origin, thyroglossal cysts or healed scars. Presence of lumps, goitre and lymphnodes will be noted.

(e) Chest and breast will be carefully examined to look for chest wall deformities, evidence of old injuries, rib fractures and healed scars suggestive of surgery on the chest, breast, heart and other thoracic organs. Rib hump or prominence of rib cage on bending is to be seen. A careful examination for evidence of amazia, polymazia, polythelia and gynaecomastia will be performed. Presence of lump in the breast, infection, absence or evidence of previous surgery will be noted.

(f) Abdomen will be examined in standing and supine positions. Presence of scars, healed incisions of previous operative procedures and any anterior abdominal wall hernia including inguinal and femoral hernia will be noted. Presence of organomegaly or lump will also be recorded. Perianal region will be examined after parting the buttocks with the candidate bending forwards and presence of anal fissure, warts, sentinel skin tags, fistula and haemorrhoids will be noted. Candidate will be asked to strain to exclude presence of rectal prolapsed.

(g) A detailed neurological examination will be carried out to detect presence of residual neurological deficit. Spine will be examined in standing, sitting and bending forward positions and presence of deformities, curvature of spine, stigmata of spinal dysraphism or visible findings on the skin overlying the spine viz, hypertrichosis with long silky hair, dimpling of skin, hemangioma, pigmented naevus or dermal sinus or lipoma present over the spine. Pilonidal sinus and post anal pit will be carefully looked for.

(h) External genitalia will be meticulously examined to rule out presence of congenital anomalies such as hypospadias, epispadias, ambiguous genitalia and undescended or ectopic testis. Other conditions such as hydrocoele, varicocoele, and epididymal cyst/mass, infection of urethra and /or testes / epididymis, phimosis, stricture urethra and meatal stenosis will be looked for and noted.

(j) Vascular system will be carefully evaluated and conditions such as varicose veins, arterio-venous malformations, fistulae, thrombophlebitis, deep vein thrombosis, leg ulcers and arterial disorders such as arteritis and occlusive arterial disease will be looked for. Presence of lymphoedema will be noted.

(k) Upper and lower limbs will be examined for deformities, limb discrepancies, loss of parts and operated scars. All movements of individual joints are to be carefully examined and noted. Hands and feet will be examined for presence of polydactyly/syndactyly and evidence of total or partial amputation of a digit and stigmata of old trauma. In addition, the movements at various small joints of the hands and hand grip will be assessed. A note will also be made of any muscle wasting or deformity as a result of trauma, infection or peripheral nerve injury. The candidate's footwear will also be inspected to look for abnormal patterns of wear.

(l) History and examination of ear, nose and throat is required. Deformity, nasal septal deviation and nasal polyps if present will be noted. Deformity, discharge from ear and tympanic membrane will be seen. Ear is to be examined after removal of wax, if present. Testing for Conversational Voice (CV) is done for each ear separately. The candidate stands in a quiet room at a distance of 610 cm from the examiner with his back turned towards the latter. Assistant will mask the non-test ear. CV test will be done using spondee words (bi-syllable words with equal phonetic emphasis on both components e.g. football). The distance at which the candidate can repeat 50% of the words correctly will be noted as the CV.

(m) **Fitness after Surgery**. A candidate will be considered for fitness only after the minimum laid down period post surgery for the disease/disability is over and there is no complication or residual defect. All open surgeries will be considered for fitness after one year of the surgery. Laparoscopic surgeries will be considered for fitness after twelve weeks. For any other surgery, where time period post surgery is not mentioned in this manual, a minimum of 12 weeks should have elapsed after the surgery before consideration for fitness.

94. **ABDOMEN.**

(a) **Gastrointestinal Tract.** Operated laparotomy scars, ostomies, swellings over abdomen, lump/s and sinus will be made unfit by the Recruiting Medical Officer. Specialist Officer after clinical examination, necessary investigations and scrutiny of relevant documents will make only those candidates fit who have right iliac fossa scar or port site scars for appendicectomy for benign pathology. All open abdominal surgeries will be considered for **fitness after one year** of the surgery. For laparoscopic appendicectomy, twelve weeks should have elapsed after surgery to consider fit. For any other surgery, a minimum of 12 weeks should have elapsed after the surgery.

(b) **Anorectal Conditions.**

(i) **UNFIT**. Those with anal fissure, anal fistula, haemorrhoids, (internal or external), anal or rectal polyp, stricture, or faecal incontinence. Rectal prolapse even after operative correction remains unfit.

(ii) **FIT**. Those with just external skin tags, after rectal surgery for polyps, haemorrhoids, fissure, fistula or ulcer provided there is no residual/recurrent disease.

(c) **Anterior Abdominal Wall Hernia including Inguinal Hernia and excluding Incisional Hernia.**

(i) **UNFIT**. Any abdominal wall hernia.

(ii) **FIT**. After one year of any hernia repair surgery (open as well as laproscopic) provided there is no recurrence or post-operative complication.

(d) **Incisional Hernia.**

UNFIT. All current or operated cases of Incisional hernia.

(e) **Gall Bladder.**

(i) **UNFIT.**

(aa) Cholecystitis.

(ab) Cholelithiasis or biliary sludge.

(ac) Choledocolithiasis.

(ad) Polyp of any size and number.

(ae) Choledochal cyst.

(af) Gall bladder mass.

(ag) Gall bladder wall thickness more than five mm.

(ah) Septate gall bladder.

(aj) Persistently contracted gall bladder on repeat USG.

(ak) Incomplete cholecystectomy.

(ii) **FIT.**

(aa) Normal echoanatomy of the gall bladder.

(ab) **Post Laproscopic Cholecystectomy.**

- Twelve weeks after lap cholecystectomy.
- Total absence of gall bladder.
- No intra abdominal collection.
- Wound healed well without incisional hernia.

(iii) **Open Cholecystectomy**

(aa) One year after surgery.
(ab) Healthy scar with no incisinal hernia.
(ac) Total absence of gall bladder.
(ad) No intra abdominal collection.

(f) **Spleen.** History of splenectomy due to any cause is unfit.

95. **UROGENITAL SYSTEM.**

(a) **History**. Detailed history of urinary disorders, enuresis, renal pain, haematuria, nephritis, cystitis, Sexually Transmitted Diseases (STD) and urethral discharge should be elicited.

(b) **Examination.** The external genitalia will be meticulously examined to rule out the presence of congenital anomalies such as:-

(i) Hypospadias.

(ii) Epispadias.

(iii) Ambiguous genitalia and undescended or ectopic testis.

(c) In addition, look for other conditions such as:-

(i) Hydrocele.

(ii) Varicocele. Grades of Varicocele are as given below:-

Grade I	-	Palpable only with Valsalva maneuver
Grade II	-	Palpable without Valsalva maneuver
Grade III	-	Visible through the scrotal skin

(iii) Epididymal cyst/mass

(iv) Infection of the urethra and / or testes / epididymis

(v) Phimosis

(vi) Stricture urethra

(vii) Meatal stenosis

(d) **Standards**. Renal Calculi / Urolithiasis:-

UNFIT. Current history of urolithiasis, recurrent calculus, bilateral renal calculi, nephrocalcinosis. Even after surgery or any procedure to treat urolithiasis, the candidate remains unfit.

(e) **Undescended Testis (UDT) and loss of Testis.**

(i) **UNFIT**. Any abnormal position of testis unilateral or bilateral. Bilateral orchidectomy due to any cause such as trauma, torsion/infection.
(ii) **FIT**. Operatively corrected UDT may be considered fit after it is normal in location and wound has healed well. Unilateral atrophic testis, unilateral orchidectomy for benign cause may be considered fit, provided other testis is normal in size, fixation and location.

(f) **Varicocele.**

(i) **UNFIT.** All grades.

(ii) **FIT.** Post-operative cases with no residual varicocele and no post op complication or testicular atrophy.

(g) **Hydrocele.**

(i) **UNFIT.** Current hydrocele on any side.

(ii) **FIT**. Operated cases if there are no post op complications and wound has healed well.

(h) **Epididymal Cyst / Mass, Spermatocele.**

(i) **UNFIT.** Current presence of cyst / mass.

(ii) **FIT.** Post operative cases after surgery in absence of recurrence and only when benign on histopathology report.

(j) **Epididymitis / Orchitis.**

(i) **UNFIT.** Presence of current orchitis or epididymitis / tuberculosis.

(ii) **FIT.** After treatment provided the condition has resolved completely.

(k) **Epispadias / Hypospadias.**

(i) **UNFIT.** Except glanular variety of hypospadias and epispadias which is acceptable.

(ii) **FIT.** Post operative cases after successful surgery provided recovery is complete and there are no complications.

(l) **Penile amputation.** Any amputation will make the candidate UNFIT.

(m) **Phimosis.**

(i) **UNFIT.** Current phimosis, if tight enough to interfere with local hygiene and voiding and/or associated with Balanitis Xerotica Obliterans.

(ii) **FIT.** Operated cases provided wound is fully healed and no post op complications are seen.

(n) **Meatal Stenosis.**

(i) **UNFIT.** Current disease, if small enough to interfere with voiding.

(ii) **FIT.** Mild disease not interfering with voiding and provided post-operative wound is fully healed and no post op complications are present.

(o) **Stricture Urethra, Urethral Fistula.**

UNFIT. History of / current disease or after surgery.

(p) **Renal Cyst**:-

(i) **UNFIT**. Complex cyst/ polycystic disease/ multiple/bilateral cysts.

(ii) **FIT.**

(aa) Solitary, unilateral, simple renal cyst less than 1.5 cm may be considered fit.

(ab) Cyst should be peripherally located, round/oval with thin, smooth wall and no loculations, with posterior enhancement, no debris, no septa and no solid component.

(q) **Sex reassignment surgery/Intersex conditions**. **UNFIT**

(r) **Congenital defects**. Solitary kidney/horse shoe kidney/hydronephrosis/ectopic/ mal-rotated kidney. **UNFIT.**

(s) **Renal Transplant recipients**. **UNFIT.**

(t) **Nephrectomy (Simple/Radical/Donor)/Partial nephrectomy/RFA/ Cryoablation**. **UNFIT.**

(u) **Mass lesion in Genitourinary system.** Any palpable mass lump or that detected on investigation is unfit.

96. **VASCULAR SYSTEM.**

(a) **Varicose Veins.**

UNFIT. Elongated, dilated, tortuous veins of the lower limbs including cases operated for varicose veins.

(b) **Arterial System.**

UNFIT. Current or history of abnormalities of the arteries and blood vessels such as aneurysms, arteritis and peripheral arterial disease.

(c) **Lymphoedema–Primary or Secondary. UNFIT** if history of past/current disease.

97. **HEAD, NECK AND CHEST.**

(a) **Deformities of Skull and Face.**

UNFIT. Cranio-facial anomalies or anomalies which prevent the individual from wearing a protective mask or military head gear or are likely to interfere in training or discharge of military duties. Unfit even after correction surgery for the above has been done.

(b) **Head Injury.**

UNFIT. Any history of head injury requiring surgical intervention or with residual medical/surgical deficit or having effects of Head injury.

(c) **CNS shunts.**

UNFIT. Past history or current presence of a shunt.

(d) **Cleft Lip and Palate.**

(i) **UNFIT**. Cleft lip in presence of current defects. Cleft palate will be unfit even after corrective surgery.

(ii) **FIT**. Cleft lip after surgical correction without any post-operative complications, gross cosmetic deformity or functional problems and absence of other congenital anomalies of middle ear, speech and orthodontic problems.

(e) **Congenital Cyst of Branchial Cleft Origin, Thyroglossal Cyst with or without Fistulous Tracts.**

(i) **UNFIT**. Current untreated disease.

(ii) **FIT**. After surgery, provided there are no post-operative complications, residual/recurrent disease and wound has healed well.

(f) **Chest wall deformities.**

(i) **UNFIT**. Any chest wall deformities like Pectus excavatum, Pectus carinatum, that are likely to interfere with physical exertion during training and performance of military duties or adversely affect military bearing or are associated with any musculoskeletal, pulmonary or cardiac anomaly.

(ii) **FIT**. In absence of above.

(g) **Any Resection of Lung Parenchyma**. UNFIT.

(h) **Cardiac Surgery/ Intervention.** UNFIT.

(j) **Amazia, Polymazia and Polythelia (Accessory Nipple)**. UNFIT.

(k) **Lump Breast (In female candidates).**

(i) **UNFIT**. Current lump and associated with galactorrhoea (USG breast may be carried out to confirm its presence, if required).

(ii) **FIT**. After surgery with no recurrence/residual lump breast and histopathology report confirmatory of benign disease.

(l) **Gynaecomastia.** UNFIT.

98. **SKIN/SUBCUATEOUS TISSUE.**

(a) **Lipoma.**

FIT. Unless causing significant disfigurement/functional impairment due to its size/location.

(b) **Neurofibromas**

(i) **FIT**. Single

(ii) **UNFIT**. Multiple neurofibromas associated with significant Café-au-lait spots (more than 1.5 cm size or more than one in number).

99. **MUSCULOSKELETAL SYSTEM.**

(a) **Examination.** Candidate should be completely exposed so that the entire spine, buttocks and shoulders are visible. In case of females, appropriate short underclothing may be worn. A quick survey of the whole body from head to toe is done from the front, back and both sides, looking for asymmetry of body structure, body posture and muscular development. The candidate should be asked to walk a few steps taking the opportunity to observe the gait pattern. The candidate may be asked to walk on tip toes in a straight line. He/she is then asked to stand erect and demonstrate the range of movement of all the joints of upper limb and lower limb. He/she is then asked to bend completely forward to demonstrate spinal movement and normal flexibility. Regional examination of individual areas like neck, shoulder, elbow, wrist and hand, hips, knees, ankle and foot should be accomplished in a methodical and meticulous manner. The traditional tenets of examination including inspection, palpation, movement and assessment of range of motion and stability of individual joints should be done. Congenital anomalies of extremities, amputations and loss of digits or its parts should be looked for. The candidate's footwear may also be inspected.

(b) **Examination of Spine**. A thorough examination of the spine of the candidate will be done while standing from front, side and behind. He will be asked to touch his toes by stooping forward. Note will be made of the curvature of the spine. Any abnormality noted in the curvature or visible findings on the skin overlying the spine viz hypertrichosis with long silky hair, dimpling of skin, hemangioma, pigmented naevus or dermal sinus or lipoma present over the spine are signs which should alert the MO to an underlying spinal pathology. Guidelines are laid down for detecting congenital and other abnormalities of the spine.

(c) **Spina Bifida/Lumbosacral Transitional Vertebrae/Vertebral Body Anomalies.**

(i) **Evaluation.**

(aa) Congenital defects of the skin overlying the spine viz hypetrichosis with long hair, dimpling of skin, hemangioma, pigmented naevus or dermal sinus.

(ab) Presence of lipoma over spine.

(ac) Palpable spina bifida.

(ad) Abnormal findings on neurological examination.

(ii) **Radiology.** X-Ray of lumbosacral spine both AP and lateral view is taken to look for the above mentioned anomalies. The condition may be an incidental diagnosis in candidates undergoing mandatory X-ray examination as per existing instructions. It may also be revealed when an X-ray of the spine is ordered for evaluation of clinically suspected scoliosis/kyphosis or any other condition. For spina bifida, the level of non fusion should be noted. It is well known that spina bifida can be an incidental finding in 5% of normal population. It is pertinent to carefully assess the neurologic status before accepting such candidates. In the face of doubt and to rule out cord tethering which can manifest later in life, MR evaluation of the spine may be required.

(iii) The morphologic classification of Castellvi is recommended to objectively assess lumbo-sacral transitional vertebrae:-

(aa) Type I includes unilateral (Ia) or bilateral (Ib) dysplastic transverse processes, measuring at least nineteen mm in width (cranio-cauda dimension).

(ab) Type II exhibits incomplete unilateral (IIa) or bilateral (IIb) lumbarization/sacralization with an enlarged transverse process that has a di-arthrodial joint (Pseudoarthrosis) between itself and the sacrum.

(ac) Type III LSTV describes unilateral (IIIa) or bilateral (IIIb) lumbarization/ sacralization with complete osseous fusion of the transverse process(es) to the sacrum.

(iv) Type IV involves a unilateral type II transition with a type III on the contralateral side.

Note. A pictographic representation of the X-Ray classification is included below for clarification.

(d) **Defects in Formation/ Segmentation/ Structure of Spine:-**

(i) **Evaluation.** These defects are usually congenital and are not usually picked up on routine clinical exams. Possible clues to their presence are:-

(aa) Alteration in spinal curvature and body posture.

(ab) Pelvic obliquity.

(ac) Limb length discrepancy.

(e) **Spondylolysis and Spondylolisthesis.**

(i) **Definition.** Spondylolysis is defined as a condition where there is a defect in the pars interarticularis of the spine. Spondylolisthesis is a condition in which a vertebra in the lower part of spine slips forward in relation to the vertebra below it.

(ii) **Evaluation.** In the age profile that usually presents for recruitment in the services, such defects are usually congenital and are not usually picked up on routine clinical exams. Clinical signs that can alert the recruiting MO to their presence are:-

(aa) A palpable step off at the lumbosacral junction.

(ab) Motion of the lumbar spine is restricted.

(ac) Hamstring tightness as evident on straight leg rising.

(ad) Alordotic posture.

(iii) **Radiology.** The initial evaluation should include AP and standing lateral views.

(iv) Spondylolysis and Spondylolithesis require Right and Left oblique view of lumbar spine.

(f) **Spinal Canal Stenosis.**

(i) **Definition.** Spinal stenosis is an abnormal narrowing (stenosis) of the spinal column that may occur in any of the regions of the spine.

(ii) **Evaluation.** In the age profile that usually presents for recruitment in the services, such defects are usually congenital and are not usually picked up on routine clinical exams. Clinical signs that can alert the recruiting MO to their presence are:-

(aa) Gait abnormalities and abnormal tone in limbs.

(ab) History of neurogenic claudication, tingling, numbness in extremities.

(iii) **Radiology.** A plain lateral X-ray of cervical spine is taken. The standard distance for lateral and oblique cervical imaging is 72 inches. Antero-posterior diameter of cervical spine is measured from the posterior surface of the vertebral body to the base of the spinolaminar line. Antero-posterior (AP) diameter of the normal adult male cervical canal has a mean value of 17-18 mm at vertebral levels C3-C5. The lower cervical canal measures 12-14 mm. Cervical stenosis is associated with an AP diameter of less than 10 mm, whereas diameter of 10-13 mm is relatively stenotic in the upper cervical region. In lumbar spine, the mid-sagittal (anteroposterior) diameter in lateral view is measured. The normal lumbar central canal has a mid-sagittal diameter (front to back) greater than 13 mm. Relative stenosis is said to exist when the anterior-posterior canal diameter is between 10 and 13 mm. Absolute stenosis of the lumbar canal exists anatomically when the anterior-posterior measurement is 10 mm or less.

(g) **Spondylosis and Disc Prolapse.**

(i) **Definition.** Spondylosis is a term referring to degenerative osteoarthritis between the centre of the spinal vertebra and/ or neural foramina.

(ii) **Evaluation.** Premature degeneration of the spine can be suspected in the following cases:-

(aa) There is history of exertional backache or sciatica.

(ab) Objective findings of paraspinuous spasm.

(ac) Reduced spinal movements.

(ad) Findings of nerve root compression (muscle wasting, weakness, loss of deep tendon jerks).

(h) **Spinal Kyphosis.** It is a condition of an abnormal curvature of the thoracic spine. Excessive kyphosis is the pathological curving of the spine where parts of the vertebral column lose some or all of their normal curvature. This causes a bowing of the back, seen as a slouching posture:-

(i) **Evaluation.** Candidate is examined from the side in erect posture with the arms by the side of the body. If there is an abnormal prominence of the upper or mid back, an exaggerated kyphosis is suspected. Angles are not clinically assessable and gross inspection is more clinically relevant at the level of a recruiting MO. Sharp angular-break in the contour of the spine should alert the examiner about an underlying pathology.

(ii) **Radiology.** The angle of deformity is measured in the same way as for scoliosis except that lateral X-ray is used.

(j) **Scheuermann's Disease.** Scheuermann's disease describes a condition where the vertebrae grow unevenly with respect to the sagittal plane. This uneven growth results in the signature wedge shape of the vertebrae causing kyphosis:-

(i) **Evaluation.** This entity is manifested as spinal structural kyphosis. Findings which can be appreciated by the MO are:-

(aa) Angular thoracic or thoracolumbar kyphosis.

(ab) Kyphosis does not correct with the prone extension.

(ac) Compensatory hyperlordosis of the lumbar spine.

(ii) **Radiological Evaluation.** A lateral X-ray should be taken with the patient standing. Degree of wedging is measured by drawing a line along the superior and inferior endplates of each vertebral body and measuring the angle of intersection. Because the upper thoracic spine (T1 to T5 cannot be always seen on a routine lateral view) abnormal kyphosis should be considered in a curve measuring more than 35 degrees from T5 to T12 and additional better quality, lateral thoracic X-rays should be obtained. The criteria for diagnosis of Scheurmann's disease are more than 5 degree of wedging of at least three adjacent vertebrae at the apex of the kyphosis and vertebral end plate irregularities with a thoracic kyphosis of more than 40 degrees. Scheuermann's disease of lumbar spine is characterized by irregularity of the vertebral end plates, presence of Schmorl nodes and narrowing of the intervertebral disc without wedging of the vertebral bodies or kyphosis.

(k) **Scoliosis.** It is a condition in which a person's spine is curved from side to side. Although it is a complex three dimensional deformity viewed from the rear, the spine of an individual with scoliosis may look more like an "S" or a "C" than a straight line:-

(i) **Evaluation.** Patient is examined from back, front and side. The level of shoulder, scapula, nipple and iliac crest is notes. Any asymmetry of the levels suggests a scoliotic spinal deformity. The tips of the spinous process can be marked to assess the entire contour of the spinal column. The candidate is asked to bend forward and excessive prominence of the rib cage on either side is noted (rib hump). This is strongly suggestive of scoliosis of the spine. The midline over back is looked for any patch of hair, lipoma, dimples, scars and swelling.

(ii) **Radiology.** Antero-posterior and lateral X-rays of the spine including the iliac crest distally and most of the cervical spine proximally should be made with the patient standing. This generally requires 14×36 inch cassettes. If the lumbo-sacral junction is not well seen on the standing lateral view, a spot lateral X-ray of the lumbo-sacral spine should be made to screen for spondylolisthesis. Degree of scoliosis is measured by the Cobb method of measurement recommended by Terminology Committee to the Scoliosis Research Society. It is consists of three steps:-

(aa) Locating the superior end vertebrae.

(ab) Locating the inferior end vertebrae.

(ac) Drawing intersecting perpendicular lines from the superior surface of superior end vertebrae and from the inferior surface of the inferior end vertebrae.

(iii) To be declared unfit if Cobb's angle is more than ten degrees

Note: Cobbs method to measure Scoliosis. The angle of deviation of these perpendicular lines from a straight line is the angle of the scoliosis curve. Cobbs method will be used to measure Scoliosis.

(m) **Standards for Musculoskeletal System.** Standards for Musculoskeletal System will be followed as under:-

(n) **Lower Limbs.**

(i) **Hallux valgus.** Hallux valgus with angle more than 20 degrees and first-second inter-metatarsal angle of more than 10 degrees is unfit. Hallux valgus of any degree with bunion, corns or callosities is unfit.

(ii) **Hammer toe.** Hammer toe will be considered unfit when associated with painful corns or bursa on dorsum of toes and individual walks on tip of the affected toe.

(iii) **Pes planus (Flat Foot).**

(aa) Rigid or fixed flat feet, gross flat feet with plano valgus, eversion of heel cannot balance on toes, cannot skip on the forefoot, tender painful tarsal joints and prominent head of talus will be considered unfit.

(ab) If the arches of the feet reappear on standing on toes and if the feet are supple, mobile and painless, the candidate may be considered fit.

(iv) **Genu varum.** Genu varum with inter-condylar distance more than seven cm will be considered unfit.

(v) **Genu valgum.** Genu valgum with intermalleolar distance more than five cm in males and more than eight cm in females will be unfit.

(vi) **Genu Recurvatum.** Hyperextension of knee more than ten degrees is unfit.

(vii) **Loss of toes.** Loss of one or both great toes will be considered unfit.

(viii) **Talipo Equinus Varus (Club Foot).** Unfit.

(ix) **Knee Joint.** Any ligamentous laxity is unfit. ACL reconstruction surgery is to be considered unfit. Any arthrocopic surgery or open surgery is unfit.

(x) **Ankle & Hip Joint.** Any true lesion of ankle or hip or early signs of arthritis will be considered unfit. Any arthrocopic surgery or an open surgery is unfit.

(xi) **Amputation of Limb.** Amputation of any part of lower limb including toes will be considered unfit irrespective of degree of amputation.

(o) **Upper Limb.**

(i) **Loss of finger.** Loss of any finger or fingers or parts there of (except terminal phalanx of little finger), part of hands and other deformities of upper limb or their parts will be unfit.

(ii) **Cubitus valgus.** Carrying angle more than fifteen degrees in male and more than eighteen degrees in female will be unfit.

(iii) **Cubitus varus.** Varus of more than five degree will be unfit.

(iv) **Recurrent dislocation of shoulder.** Any history of dislocation of shoulder with or without history of corrective surgery will be unfit.

(p) **Healed Fractures.**

(i) Fractures of upper limbs not involving articular surfaces and without neuro/ vascular deficit which have united without malunion and impairment of function are acceptable after six months of injury after assessment by orthopedic surgeon.

(ii) Similarly, fractures of lower limbs not involving articular surfaces and without neuro/vascular deficit which have united with no malunion or loss of function are acceptable after twelve months of injury and after assessment by Orthopedic Surgeon.

(iii) Any limb length discrepancy is not acceptable.

(iv) Malunited fractures of clavicle without loss of function and without gross deformity are acceptable.

(v) Healed fractures with metallic implants will be unfit.

(vi) Healed fractures with significant cosmetic deformity will be unfit.

(q) **Cervical Rib.** Unfit when associated with vascular obstruction and/or neurological involvement by clinical examination and relevant investigations.

(r) **Any Joint**. Any joint laxity, unstable joint, ligamentous injuries, any surgery of the joint for any disease/disability, malformation/deformity, cysts, arthritis etc are unfit.

(s) **Spine.**

(i) MO will make the candidate unfit if he has restriction of movements of spine, deformity, tenderness and gait abnormality.

(ii) Specialist will examine the spine and make candidate unfit for kyphosis if the deformity is gross affecting the military bearing, restriction of full range of spinal movements and restriction of expansion of chest.

(iii) Scoliosis is unfit if deformity persists on full flexion of spine with restriction of range of movements or due to organic defect causing structural deformity.

(iv) Investigations showing following conditions will be considered unfit:-

(aa) Wedge Vertebra.
(ab) Hemivertebra.
(ac) Anterior Central Defect.

(v) Spondylolysis & Spondylolisthesis.

(vi) Atlanto-axial/atlanto-occipital anomalies.

(vii) Scheuermann's disease.

(viii) Vertebral compression fracture.

(ix) Infective Spondylitis.

(x) Intervertebral Disc Prolapse

(xi) Lumbo-sacral transitional vertebra is unfit if Castellvi Type II, IIIa, IV.

(xii) Block vertebra is unfit.

(xiii) Cervical canal stenosis is not acceptable. Anterio-posterior diameter less than 11 mm is suggestive of spinal stenosis. Pavlov ratio of 0.8 is abnormal.

(xiv) Lumbar canal stenosis is unfit (anything less than eleven mm for the antero-posterior diameter and sixteen mm for the transverse diameter). Further relevant investigations to be done in borderline cases for accurate measurement.

(xv) Schmorl's node only at single level is fit.

100. **EAR NOSE AND THROAT.**

(a) Examination of ear, nose and throat is required to exclude conditions which will impede optimal performance of Armed Forces personnel in various situations in peace and war.

(b) **History.** History of otorrhoea, hearing loss, vertigo including motion sickness, tinnitus to be elicited. History suggestive of allergic rhinitis/ nasal polyps, ozoena, recurrent epistaxis, dysphonia, dyspnoea, dysphagia and history of any surgery of ear, nose, throat, neck is also required to be elicited. Family history of hearing loss is also required to be elicited.

(c) **Examination.** To avoid overlooking or missing minor functional and anatomical abnormalities, the following points should be observed when examining the ears, nose and throat:-

(i) A good illumination.

(ii) A set pattern of examination.

(iii) An adequate view of all parts under examination.

(d) **Nose and Para-Nasal Sinus.** A Thudicum nasal speculum may be used to aid nasal examination. Septum will be assessed for deviation remarkable enough to cause persistent airway obstruction. Nasal airway assessment should be done by cold spatula test. It is important to look for perforations in the nasal septum. The nasal mucosa will be assessed for signs of inflammatory diseases of the nose/ paranasal sinuses like hyperemia, mucopurulent discharge, atrophy and crusting. Plain radiographic examination of the sinuses is fraught with inconsistencies and is not indicated. Presence of nasal polyps/growth/ulceration will be assessed.

(e) **Oral Cavity and Throat.**

(i) **Mouth**. Look for submucous fibrosis, leukoplakia, erythroplakia, ulcerative or exophytic lesions in the oral cavity.

(ii) **Pharynx**. Tonsils will be assessed for signs of chronic inflammation in the form of hyperemia of anterior faucial pillars and pus/debris in the tonsillar crypts. Presence of any ulcer/mass lesion should be looked for. Presence of pooling of saliva indicating dysphagia to solids/ liquids will be noted.

(f) **Larynx**. Presence of severe change in voice, stridor/dyspnoea will be noted.

(g) **Ear.** All candidates will be instructed to get ear wax removed under their own arrangements before reporting for medical examination. However, if wax is present on examination which is impeding adequate visualization of external auditory meatus/ tympanic membrane, the candidate will be given time to get the wax removed and will be re-examined. In case, it is not possible to re-examine the candidate, he/she should be referred to an ENT centre convenient to the candidate for re-examination without declaring him/her unfit. The candidate will be specifically instructed to get the wax removed before reporting for this re-examination.

(h) **Auricle and Mastoid Region**. The pinna will be assessed for gross deformity which will hamper wearing of uniform/ personal kit/protective equipment or which adversely impacts military bearing. The pre-auricular and post-auricular region should be carefully examined for scars and deformities due to past operations. Cauliflower ear for wrestlers and boxers may be accepted provided there is no functional deficit.

(j) **External Auditory Meatus**. It is inspected by pulling the auricle upwards, backwards and outwards to straighten the external canal. Presence of wax, foreign body, exostosis, growth, otomycosis or discharge is noted.

(k) **Tympanic Membrane**. Tympanic membrane must be inspected quadrant-wise by otoscopy. The ear is examined for perforation, scars, tympano-sclerotic plaques or retraction of membrane. Mobility of the tympanic membrane will be assessed by Valsalva maneuver.

(l) **Assessment of Hearing**. Good hearing in both ears is a must. Assessment of hearing is to ensure adequate bilateral hearing acuity and freedom from any disease of the ear or upper respiratory passage. Unilateral deafness limits optimal sound perception and ability to locate the direction of sounds.

(m) Auditory acuity is assessed without the use of any hearing aid. Testing for Conversational Voice (CV) is done for each ear separately. The candidate stands in a quiet room at a distance of 600 cm from the examiner with his back turned towards the latter. This prevents lip reading. An assistant will mask the non-test ear. Masking is done by placing a stiff piece of paper over the auricle and using the pulp of the fingertip to make a gentle circular rubbing motion producing a continuous rustling sound. CV test will be done using spondee words (bi-syllable words with equal phonetic emphasis on both components e.g. football). The distance at which the candidate can repeat fifty percent of the words correctly will be noted as CV.

(n) **Instructions for ENT Specialist.** Detailed ENT examination by the Specialist is indicated in those cases where the candidate has been made unfit by a Recruiting MO.

(o) **Nose and Para-Nasal Sinus.**

(i) Nasal cavity and naso-pharynx may be assessed by nasal endoscopy.

(ii) The septum will be assessed for deviation remarkable enough to cause persistent airway obstruction.

(iii) It is important to look for perforations in the septum. The size of the perforation and presence of whistling noise on breathing will be noted.

(iv) The nasal mucosa will be assessed for signs of inflammation of nose/para-nasal sinuses like hyperemia, mucopurulent discharge, atrophy and crusting. Presence of mucopus in the middle meatus will be noted. Presence of growth, polyps, granulomatous lesion and ulcer will be assessed.

(p) **Oral Cavity and Throat.**

(i) **Mouth.** Look for submucous fibrosis, leukoplakia, erythroplakia, ulcerative or exophytic lesions in the oral cavity.

(ii) **Pharynx.** Tonsils will be assessed for signs of chronic inflammation in the form of hyperemia of anterior faucial pillars and pus / debris in the tonsillar crypts. Presence of any ulcer/ mass lesion should be looked for. Presence of pooling of saliva indicative of dysphagia to solids/ liquids will be noted.

(iii) **Larynx.** Presence of remarkable changes in voice, stridor/ dyspnoea will be noted and considered unfit.

(q) **Ear.** If wax is present on examination which is impeding adequate visualization of external auditory meatus and tympanic membrane, the Specialist may attempt to remove the wax provided it is easily removable without possibility of injury to the external auditory meatus and tympanic membrane. If wax is not easily removable, the candidate will be advised to report after getting the wax removed.

(i) **Auricle and Mastoid Region.** The pinna will be assessed for gross deformity which will hamper wearing of uniform/personal kit/protective equipment or which adversely impacts military bearing. The pre-auricular and post-auricular region should be carefully examined for scars and deformities due to past operations.

(ii) **External Auditory Meatus.** Presence of wax, foreign body, exostosis, growth, otomycosis or discharge is noted.

(iii) **Tympanic Membrane.** Tympanic membrane must be inspected quadrant-wise by otoscopy and if required by oto-endoscopy / oto-microscopy. Perforations, scars, tympanosclerotic plaques or retraction of membrane will be carefully looked for. Mobility of the tympanic membrane will be assessed by Valsalva maneuver, Sieglisation and if required by Tympanometry.

(iv) **Assessment of Hearing.** Good hearing in both the ears is a must. Assessment of hearing is to ensure adequate bilateral hearing acuity and freedom from any disease of the ear or upper respiratory passage. Unilateral deafness limits optimal sound perception and ability to locate the direction of sounds. Auditory acuity is assessed without the use of any hearing aid.

(v) **Free Field hearing Tests.** For Conversational Voice (CV) and Forced Whisper (FW) voice tests, each ear must be tested separately. It is necessary to standardize the technique, so as to make findings reproducible and comparable. The candidate should stand in a quiet room at a distance of 610 cm from the examiner with his back turned towards the latter. This prevents lip reading. An assistant will mask the ear not under test. Masking is done by placing a stiff piece of paper over the auricle and using the pulp of finger tip to make a gentle circular rubbing motion producing a continuous rustling sound. CV will be done using spondee words (bi-syllable words with equal phonetic emphasis on both components). The distance at which the candidate can repeat 50% of the words correctly will be noted as CV. FW is carried out by whispering with the residual air at the end of an ordinary expiration. The candidate is asked to repeat the spondee words spoken by the examiner. The distance at which the candidate repeats 50% of the words correctly is recorded as FW.

(vi) **Turning Fork Tests.** Rinne test and Weber test may be employed to ascertain the type of hearing loss present.

(vii) **Pure Tone Audiometry (PTA).** PTA will be performed for detailed assessment of hearing acuity wherever indicated. It will mandatorily be done for all aircrew, Air traffic Controller/Fighter Controller and all ranks of ASW Branch (Navy). Audiometry will be done in a sound proof room and the audiometer will be calibrated as per standard guidelines. Thresholds will be noted for each octave interval from 0.5, 1, 2, 3, 4, 6, and 8 kHz for AC and from 0.5 to 4 kHz for BC, where indicated.

(viii) **Impedence Audiometry (Tympanometry).** Tympanometry will be done to assess middle ear function and Eustachian tube function, where indicated. All aircrew, ATC/FC, submariners/divers will be subjected to tympanometry.

(ix) **Special Tests.** Whenever indicated, Speech Audiometry may be carried out.

(r) **Grounds of Rejection/ Acceptable standards.** Candidates who suffer from any of the defects mentioned below will be declared unfit. However, any other condition in the ear, nose, throat and neck which is likely to hamper the individual in carrying out his military training/duties or adversely affects his military bearing will also be a cause for rejection.

(s) **Ear.** The following defects of the ear will be declared Unfit:-

(i) Gross deformity of pinna which hampers wearing of uniform/personal kit/protective equipment or which adversely impacts military bearing.

(ii) Exostosis, atresia/ narrowing of EAM or neoplasm preventing a proper examination of the ear drum.

(iii) Chronic Otitis Externa

(iv) **Otitis Media.**

(aa) Current Otitis Media of any type will entail rejection.

(ab) Evidence of healed Chronic Otitis Media in the form of Tympanosclerosis or scarring affecting less than 50% of the Pars Tensa of tympanic membrane (TM) will be assessed by ENT Spl and will be acceptable if PTA and Tympanometry are normal.

(ac) Healed healthy scars of the neo-tympanic membrane involving less than 50% of pars tensa due to Tympanoplasty-type 1 (with or without Cortical Mastoidectomy) for Chronic Otitis Media (Mucosal type) and Myringotomy (for Otitis Media with Effusion) may be accepted if PTA, Tympanometry are normal. Assessment of operated cases will be done only after a minimum of 12 weeks.

(ad) There should be no residual perforation.

(ae) Tympanic membrane is mobile on pneumatic otoscopy.

(af) There should be no hearing impairment on Forced Whisper Test.

(ag) Pure Tone Audiometric thresholds are within normal limits.

(ah) Tympanometry shows Type 'A' Tympanogram.

(aj) Other middle ear surgery (including ossiculoplasty, stapedectomy or any type of canal – wall down mastoidectomy) is not acceptable.

(ak) Any implanted hearing devices such as cochlear implants, bone anchored hearing aids etc, are not acceptable.

(v) **Deafness due to any cause.** Any reduction less than 600 cm in CV/FW is not acceptable. Wherever PTA is indicated and thresholds are obtained, the hearing thresholds by air conduction at 500 Hz to 8000 Hz should be 20 dB or better. Isolated lower thresholds up to 30 dB may be accepted provided the ear is otherwise normal.

(vi) **Peripheral vestibular dysfunction.** History of motion sickness or any evidence or peripheral vestibular dysfunction due to any cause will entail rejection.

(t) **Nose and Paranasal Sinuses**. The following defects of nose and para nasal sinuses will be declared unfit:-

(i) Gross external deformity of nose causing cosmetic deformity may be rejected if it adversely impacts military bearing. Minor deformities of dorsum and nasal tip should not be a cause for rejection.

(ii) Obstruction to free breathing as a result of a marked septal deviation is a cause for rejection. Correction by septoplasty is acceptable if reviewed four weeks after surgery and provided there is an adequate airway. Post op intranasal adhesions not compromising airway is acceptable. Nasal polyposis noted during examination or after any surgery for polyposis is unfit.

(iii) Asymptomatic anterior (cartilaginous) septal perforation may be accepted by ENT Spl provided chronic granulomatous diseases have been ruled out and nasal mucosa is healthy.

(iv) Atrophic rhinitis entails rejection.

(v) **Allergic Rhinitis/ Vasomotor rhinitis.** The potential hazards of allergic rhinitis include airway compromise; discomfort and distraction; reduced sense of smell; ear and sinus barotraumas with potential incapacitation and possible use of easily accessible, unauthorized over the counter medication. Symptomatic allergies with sneezing could be a particular hazard in high speed and low level flight. Barotraumas as well as infectious complications can lead to prolonged periods of acitivity restriction, reducing readiness and operational effectiveness. Allergic rhinitis often occurs seasonally in direct response to elevated pollens but it can also occur perennially. Therefore, it is not acceptable and history/ clinical features of allergic rhinitis entail rejection. Vasomotor rhinitis is not acceptable for the same reasons.

(vi) Any infection of nose/paranasal sinuses will be a cause for rejection. Such cases may be accepted following successful treatment, if there is no evidence of chronic rhino-sinusitis.

(vii) Current nasal polyposis is a cause for rejection. However, such candidates may be accepted after Endoscopic Sinus Surgery provided there is no residual disease, mucosa is healthy and histopathology is benign and non fungal. Such evaluation will be done minimum four weeks post-surgery.

(u) **Throat .** The following defects of throat are causes for rejection:-

(i) **Oral Cavity.**

(aa) **UNFIT.** All current and operated cases of leukoplakia, erythroplakia, submucus fibrosis, ankyloglossia, oral carcinoma, current oral ulcers/growth, mucus retention cysts and trismus due to any cause is unfit. Cleft palate is not acceptable even after surgery.

(ab) **FIT**. Completely healed oral ulcers and operated cases of mucus retention cyst only after surgery, with no recurrence and benign histology. Such evaluation will be done after minimum four weeks post-surgery.

(ii) **Pharynx.**

(ab) Any ulcerative / mass lesion of the pharynx will entail rejection.

(ab) Evidence of chronic tonsillitis is a cause for rejection. They may be accepted after tonsillectomy provided histology is benign. Such evaluation will be done minimum four weeks post-surgery.

(iii) **Larynx.**

(ab) Persistent hoarseness, dysphonia, chronic laryngitis, vocal cord palsy, laryngeal polyps, growths are not acceptable.

(ac) Speech defects including stammering are a cause for rejection.

101. **VISUAL STANDARDS.**

(a) Visual standards for entry into Army as Officers, JCO/ORs, cadet of academies and various Military Schools will be as per the standards promulgated as under. The standards have been simplified after exhaustive deliberations and grouped accordingly. Any new category of Officers or other personnel if introduced, will be adjusted in the existing groups/categories from time to time.

(b) For any type of commissioning of already serving personnel of Armed Forces, the existing visual standards for that category will apply.

(c) Visual standards for males and females will be the same for specific category of Officers as well as for other ranks.

(d) Unaided vision for all categories has been included so that MOs at recruitment rallies (AROs/IRO/Regimental Centres) are able to conduct the Medical Examination in eye. For Medical Examination being conducted by Ophthalmologists, uncorrected vision will only serve as a general guidelines and fitness of the candidate will be entirely dependent on BCVA (Best Corrected Visual Acuity) and the refractive error. For all categories of Officers and Other Ranks, BCVA will be 6/6 each eye.

(e) Post-surgery, symptom free period of minimum three months is admissible after any ocular surgery except for LASIK or equivalent kerato-refractive correction surgeries.

(f) Specialist should ensure that the Medical Examination forms are filled in entirety with remarks in all columns after examining each part as mentioned in the form (even in Appeal Board). A comprehensive and holistic ocular examination should be conducted observing the standard protocols and norms. Following are to be ensured while assessing the refractive errors:-

(i) Visual acuity should be assessed by all Opto types of Snellen's chart and randomly so as to minimize errors in recording vision.

(ii) Any case of substandard vision/suspected refractive error should be subjected to a cycloplegic refraction and post mydriatic test, so that any latent or manifest myopia or hypermetropia can be assessed.

(iii) It is also stated that complete dependence on auto refractometer be discouraged. Manual retinoscopy is mandatory for all cases where refractive status is to be assessed.

(g) Care should be taken while examining for colour vision. The candidates should be dark adapted and colour vision should be documented correctly (Ishihara). Endorsement as regards cases of ocular motility disorder or strabismus should be done, so that they are not missed. Appropriate remarks as regards fitness for which trade/branch, fit/unfit based on the current existing regulations should all be mentioned in the remarks column.

(h) All candidates reporting for Medical Examination will give the following undertaking:-

(i) No kerato-refractive corrective procedure has been carried out.

(ii) Neither the individual nor his parents suffer from night blindness.

(j) **LASIK or Equivalent.**

(i) Any candidate who has undergone any kerato-refractive corrective procedure will have a certificate from the centre where he has undergone the procedure specifying the date and type of surgery. In order to be made Fit, the following criteria will have to be met:-

(aa) Age more than 20 yrs at the time of surgery.

(ab) Minimum 12 months post LASIK.

(ac) Central corneal thickness more than or equal to 450 µ.

(ad) Axial length IOL master less than or equal to 26 mm.

(ae) Residual refraction of less than or equal to +/- 1.0 D including cylinder (provided acceptable in the category applied for).

(af) Normal healthy retina.

(ag) Equipment like IOL master (or equivalent) and Pachymeter are usually present at Command Hospitals or equivalent. Therefore, the present policy of making such candidates unfit at smaller hospitals and referring them to Sr Advisor Ophthalmology at the Command Hospital or equivalent, will continue. In addition, in times to come with procedures like Smile, Relax and others, it is likely to become more and more difficult to detect such procedures.

(ah) LASIK and equivalent procedures will be permitted for all categories of Officers. However, earlier procedures like Radial Keratotomy or equivalent will be permanently unfit.

(k) **Visual standards for candidates for various entries into Army, Training Academies, Training Centres and RIMC/Military Schools/Sainik School.**

(l) **Aviation Standards**. Army Aviation has two visual standards, one for the initial direct entry and the other subsequent lateral entry. Colour vision permitted will be CP I.

S.No.	Entry	Standards
(i)	Officers Army Aviation	**Direct Entry** Uncorrected Vision 6/6 & 6/9 BCVA 6/6 & 6/6 Myopia ≤ -0.5 D Sph including max astigmatism ≤ +/- 0.5 D Cyl Hypermetropia ≤ +1.5 D Sph, including max astigmatism ≤ +/- 0.5 D Cyl LASIK & equivalent permitted Colour vision - CP I **Lateral Entry** Uncorrected Vision 6/12 & 6/12, BCVA 6/6 & 6/6. Myopia ≤ -1.0 D Sph, including max astigmatism ≤ +/- 1.0 D Cyl Hypermetropia ≤ +2.0 D Sph, including max astigmatism ≤ +/- 1.0 D Cyl LASIK & equivalent permitted Colour vision - CP I

(m) **NDA, 10+2 TES & equivalent undergraduate 10+2 entries**. Visual standards will be as follows:-

S.No.	Entry	Standards
(i)	Officers. NDA Army/10+2 TES & all 10 + 2 equivalent	Uncorrected VA 6/36 & 6/36 BCVA 6/6 & 6/6 Myopia ≤ -2.5 D Sph including max astigmatism ≤ +/- 2.0 D Cyl Hypermetropia ≤ +2.5 D Sph, including max astigmatism ≤ +/- 2.0 D Cyl LASIK & equivalent Not Permitted Colour vision - CP II

(n) **IMA and equivalent graduate entries**. Visual standards for IMA and other graduate entry (except AMC/ADC/JAG/EDN/TA/RVC/MNS equivalent) including women will be as follows:-

S.No.	Entry	Standards
(i)	Officers. IMA / Graduate TECH / OTA / UES / Women / Combined Defence Services	Uncorrected VA 6/60 & 6/60 BCVA 6/6 & 6/6 Myopia ≤ -3.50 D Sph, including max astigmatism ≤ +/- 2.0 D Cyl Hypermetropia ≤ +3.50 D Sph including max astigmatism ≤ +/- 2.0 D Cyl LASIK & equivalent permitted* Colour vision - CP II.

(o) **Visual standards for AMC/JAG / EDN/ RVC/ MNS/ /ADC / TA/ SL entry.**
Visual standards will be as under:-

S.No.	Entry	Standards
(i)	Officers. JAG / EDN/ RVC/ MNS/ AMC/ ADC/ TA	Uncorrected VA 3/60 & 3/60 BCVA 6/6 & 6/6 Myopia ≤ -5.50 D Sph, including max astigmatism ≤ +/- 2.0 D Cyl Hypermetropia ≤ +3.50 D Sph, including max astigmatism ≤ +/- 2.0 D Cyl LASIK & equivalent permitted * Colour vision - CP II.

* **LASIK or equivalent**. Any candidate who has undergone any Kerato-refractive procedure will have a certificate from the centre where he has undergone the procedure specifying the date and type of surgery. In order to be made Fit, the following criteria will have to be met:-

(i) Age more than 20 yrs at the time of surgery.

(ii) Minimum twelve months post LASIK.

(iii) Central corneal thickness equal to or more than 450 µ.

(iv) Axial length by IOL Master equal to or less than 26 mm.

(v) Residual refraction of equal to or less than +/- 1.0 D including cylinder provided acceptable to category applied for.

(vi) Normal healthy retina.

(p) **AFMC Cadet, Student Nurse & equivalent.** Colour vision permitted will be CP II. LASIK is not permitted. Visual standards will be as follows:-

S.No.	Entry	Standards
(i)	AFMC Cadet/ Student Nurse/Equivalent	Uncorrected VA 6/36 & 6/36 BCVA 6/6 & 6/6 Myopia ≤ -3.50 D Sph, including max astigmatism ≤ +/- 2.0 D Cyl Hypermetropia ≤ +3.50 DSph, including max astigmatism ≤ +/- 2.0 D Cyl LASIK & equivalent not permitted Colour vision - CP II.

(q) **RIMC / Sainik / Military School**. A number of students from these schools join the Armed Forces. Therefore, the visual standards have been streamlined in order that a student has a fair chance of meeting at least the Army standards when he passes out. Colour vision permitted will be CP II. Visual standards will be as per the Medical Standard I or II as applicable to the child.

S.No.	Entry	Standards
(i)	RIMC / Sainik / Military School	Standard –I 6/6 & 6/6 Standard –II Uncorrected VA 6/18 & 6/18 BCVA. 6/6 & 6/6 Myopia ≤ -1.25 D Sph, including max astigmatism ≤ +/- 0.5 D Cyl Hypermetropia ≤ +1.25 D Sph, including max astigmatism ≤ +/- 0.5 D Cyl LASIK & equivalent not permitted Colour vision - CP II

(r) **Visual standards for recruitment as soldiers**. Only two visual standards for recruitment of other ranks/soldiers will apply. Soldier GD, GNR, DVR and equivalent will continue to require unaided vision of 6/6 in each eye. Any other category of recruit who is directly/primarily involved in combat can be included in this group. All other categories of recruits have been grouped into a second group and visual standards of NDA will be applicable to them. In all categories, both unaided vision and BCVA along with the limits of refractive error have been given to bring transparency in the standards. It will be of great assistance when the unfit candidates report to the Ophthalmologist for appeal. Visual standards on entry will be as under:-

(i) Colour vision standards will be as under. Colour vision shall be CP-II for all categories for enrolment.

(ii) LASIK is not permitted for any category for enrolment as soldiers.

S.No.	Grade	Standards
(aa)	SOL GD/ GNR/ DVR & EQUIVALENT	Uncorrected VA 6/6 & 6/6 BCVA 6/6 & 6/6 Myopia - Nil Hypermetropia ≤ +1.0 DS, including max astigmatism ≤ +/- 0.5 D Cyl LASIK and equivalent not permitted. Colour vision. CP II

S.No.	Grade	Standards
(ab)	SOL TECH/ CLK/ SKT/ NA/ AEC/ DSC/ TDN/ RT/ APS & EQUIVALENT	Uncorrected VA 6/36 & 6/36 BCVA 6/6 & 6/6 Myopia ≤ -2.5 D Sph, including max astigmatism ≤ +/- 2.0 D Cyl Hypermetropia ≤ +2.5 D Sph including max astigmatism ≤ +/- 2.0 D Cyl LASIK and equivalent not permitted Colour vision. CP II

(s) **Colour Vision** .Colour vision will be examined by Standard Ishihara Chart.

S.No.	Grade	Standards
(i)	Army AVN /NDA (Navy) /Naval Academy	I
(ii)	NDA Army/10+2 TES	II
(iii)	IMA/Graduate TECH/OTA/UES	II
(iv)	JAG/EDN/RVC/MNS/AMC/ADC/ (Direct Graduate Entry)	II
(v)	AFMC/ Student Nurse	II
(vi)	RIMC/Sainik/Military School	II
(vii)	SOL GD/GNR/DVR	II
(viii)	SOL TECH/ CLK/ SKT/ NA/ AEC / DSC/ TDN /RT /APS	II
(ix)	Any other entry	II

(t) **Standards for Ocular disease.** The following ocular diseases will be dealt as under:-

(i) **Ptosis.** All types of ptosis will be made UNFIT by Recruiting MO. Mild ptosis may be considered FIT by Specialist provided it is not affecting vision/ visual field in day or night.

(ii) **Corneal Opacity.** All grades of corneal opacities will be made UNFIT by Recruiting MO. Small nebular corneal opacity in the periphery not affecting the vision or visual field may be considered FIT by Specialist.

(iii) **Pterygium.** All cases of pterygium will be made unfit by MO and Specialist.

(iv) **Lenticular opacity.** All types/ grades of lenticular opacities will be made UNFIT by Recruiting MO. Small stationary lenticular opacities in the periphery like congenital Blue Dot cataract not affecting the visual axis/visual field may be considered FIT by Specialist. (Should be less than ten in number and central area of four mm to be clear).

(v) **Nystagmus.** Cases of nystagmus will be made UNFIT except for physiologic nystagmus.

(vi) **Entropion/ Ectropion.** Cases of ectropion and entropion will be made Unfit. Mild ectropion and entropion which in the opinion of ophthalmologist will not hamper day to day functioning in anyway, may be made FIT.

(vii) **Squint.** All cases of squint will be made UNFIT by Recruiting MO and by Specialist. However, small horizontal latent squint/ phoria i.e. Exophoria/Esophoria may be considered FIT by the Specialist along with Grade III BSV. Hyperphoria / Hypophoria or Cyclophoria are to be made UNFIT.

(viii) **Night blindness.** UNFIT. Certificate to be signed by the candidate.

(ix) **Retinal lesions.** A small healed chorioretinal scar in the retinal periphery not affecting the vision and not associated with any other complication will be made FIT by Specialist. Similarly, a small lattice in periphery with no other complications can be made FIT. Any lesion in the central fundus will be made UNFIT by the Specialist.

(x) **Naso-Lacrimal occlusion.** If the individual has Epiphora/ Mucocele despite being operated will be made UNFIT. Candidate with symptom free period of at least twelve weeks after surgery, may be made FIT by Specialist.

(xi) **Uveitis.** Any type of uveitis (iritis/iridocyclitis/choroiditis) active or healed will be made UNFIT.

(xii) **Objective Convergence.** It should be less than or equal to ten cm. During appeal stage the Ophthalmologist while examining the candidate for convergence insufficiency, will do convergence test as laid down:-

(aa) **Convergence Test**. One of the two eyes is to be patched for 30 min and the RAF rule test is to be done after 30 min of patching. If after patching, the individual has convergence more than 10 cm, the candidate will be considered unfit.

(ab) The above procedure need not be done during initial Medical Examination.

(xiii) **Accommodation.** It should be less than or equal to 12 cm for young individual (less than 40 yrs of age at time of entry).

(xiv) **Binocular Single Vision (BSV).** It should be good grade-III.

(xv) **Visual Fields.** To be tested by confrontation method. Only in suspicious cases to be tested on an Automated Field Analyser along with IOP, RNFL and other equipment.

SECTION – 6

MEDICAL EXAMINATION OF WOMEN CANDIDATES

102. **MEDICAL EXAMINATION OF WOMEN CANDIDATES.**

(a) General methods and principles of medical examination of women candidates will be the same as for male candidates. However, special points pertaining to Medical Examination of women candidates are given in succeeding paragraphs.

(b) A detailed menstrual and gynecological history in the form of a questionnaire is to be obtained from the candidate.

(c) A detailed physical and systemic examination will be carried out of the candidate and she should be examined by a Lady Medical Officer or a Lady Gynecologist only.

(d) The examination must include the following inspections:-

(i) External genitalia.

(ii) Hernial orifices and the perineum.

(iii) Any evidence of stress urinary incontinence or genital prolapsed outside introitus.

(e) All married candidates will be subjected to speculum examination for any prolapsed or growth on cervix or vagina. In all unmarried women candidates, speculum or per vaginal examination will not be carried out.

(f) Ultrasound scan of the abdomen and pelvis is mandatory in all women candidates during the initial Medical Examination.

(g) Any abnormality of external genitalia will be considered on merits of each case. Significant hirsutism especially with male pattern of hair growth along with radiological evidence of PCOS, will be a cause for rejection.

(h) Following conditions will entail women candidates being declared unfit:-

(i) Primary or secondary amenorrhoea

(ii) Severe Menorrhagia or/ and severe dysmenorrhea.

(iii) Stress urinary incontinence

(iv) Congenital elongation of cervix or prolapsed which comes outside the introitus even after corrective surgery.

(v) **Pregnancy.** Pregnancy will be a cause of rejection. The female will be considered for fitness 24 weeks after an uncomplicated vaginal delivery, 12 weeks after an MTP/abortion and after a period of 52 weeks in case of Caesarean Section.

(vi) Complex ovarian cyst of any size.

(vii) Simple ovarian cyst more than six cm.

(viii) Endometriosis and Adenomyosis.

(ix) Submucous fibroid of any size.

(x) Broad ligament or cervical fibroid of any size causing pressure over ureter.

(xi) Single fibroid uterus more than three cm in diameter; fibroids more than two in number (each fibroid not more than fifteen mm in diameter) or fibroids causing distortion of endometrial cavity.

(xii) Congenital uterine anomalies except arcuate uterus.

(xiii) Acute or chronic pelvic infection.

(xiv) Disorders of sexual differentiation.

(xv) Any other condition will be considered on merits of each case by the Gynaecologist.

(j) Following conditions will be declared as **FIT**:-

(i) Unilocular clear ovarian cyst up to six cm.

(ii) Minimal fluid in pouch of Douglas.

(k) **Medical fitness after laparoscopic surgery or laparotomy.** Candidates reporting after undergoing cystectomy or myomectomy will be accepted as fit if she is asymptomatic, ultrasound pelvis is normal, histopathology of tissues removed is benign and per operative findings are not suggestive of endometriosis. Fitness will be considered twelve weeks after laparoscopic surgery and when the wound has healed fully. Candidate will be considered FIT after Caesarean Section and laprotomy after one year of the surgical procedure.

SECTION – 7

DENTAL FITNESS STANDARDS FOR RECRUITS AND CADETS

103 **General instructions for Recruiting Medical Officer and Dental Officer.**

(a) **Examination protocol.**

(i) Responsibility of completing recruitment medical examination rests with the Recruiting Medical Officer (Rtg MO). It is therefore, vital that the Rtg MO is well versed with the basic dental anatomy, normal occlusion and departures from it.

(ii) All 'FIT' candidates will be disposed by the Rtg MO. All UNFIT cases on appeal will be referred to the nearest Dental Centre. Dental Officer (DO) will carry out the requisite examination as per guidelines laid down in these instructions.

(iii) Care will be taken to reduce service liability by limiting the entry of candidate with conditions that are progressive, recurrent, potentially malignant or those that will be sought to be corrected for other than functional reasons.

(iv) Examination will be done in a well lit room as per the sequence elucidated in the succeeding paras. The following instruments are advised to be used for intra oral examination:-

(aa) Intra-oral mouth mirror with handle.

(ab) Dental explorer.

(ac) A good quality hand torch.

(b) **Award of dental points.** A total of minimum 14 points will be required for fitness provided the following teeth are present in the upper jaw in good functional apposition to the corresponding teeth in the lower jaw:-

(i) Any 4 of the 6 anterior.

(ii) Any 6 of the 10 posterior.

(c) **General explanatory notes:-**

(i) Anterior teeth - Incisors and canines.

(ii) Posterior teeth - Pre molars and molars

(iii) Each incisor, canine 1st and 2nd premolar will have a value of one point provided their corresponding opposite teeth are present.

(iv) Each 1st and 2nd molar and well developed 3rd molar will have the value of two points provided in good opposition to corresponding teeth in the opposing jaw.

(v) In case 3rd molar is not well developed, it will have a value of one point only.

(vi) When all the 16 teeth are present in the upper jaw and in good functional apposition to corresponding teeth in the lower jaw, the total value will be 20 or 22 point according to whether the 3rd molar are well developed or not.

(vii) All removable dental prostheses will be removed during intra-oral examination and will not be awarded any dental points. In the case of ex-servicemen applying for re-enrolment, dental points will be awarded for re-enrolment.

(d) **Candidates reporting post maxillofacial surgery/maxillofacial trauma.** Candidates who undergo cosmetic or post-traumatic maxillofacial surgery/trauma will be UNFIT for at least 24 weeks from the date of surgery/injury, whichever is later. After this period, if there is no residual deformity or functional deficit, they will be assessed as per criteria laid down.

(e) Sequence of examination for reference by Recruiting Medical Officers.

(f) **Extra oral examination.**

(i) Gross facial examination. Presence of any gross asymmetry or soft/hard tissue defects/scars or if any incipient pathological condition of the jaws is suspected will also be a cause of rejection.

(ii) Functional examination.

(aa) Temporo-mandibular joint (TMJ). TMJs will be bilaterally palpated for tenderness and/or clicking. Candidates with symptomatic clicking and/or tenderness of dislocation of the TMJ on wide opening will be rejected.

(ab) Mouth Opening. A mouth opening of less than 30 mm measured at the incisal edges will be rejected.

(g) **Intra oral examination**:-

(i) **Teeth.** Number of teeth present is to be counted for award of points as mentioned above. Points will not be awarded in the case of following:-

(aa) Dental Caries. Teeth with caries that have not been restored or teeth associated with abscesses and/or sinuses will not be counted for award of dental points.

(ab) Restorations. Teeth having restorations that appear to be improper/broken/discolored will not be awarded dental points.

(ac) Loose teeth. Loose/mobile teeth will not be awarded dental points.

(ad) Retained deciduous teeth. Retained deciduous teeth will not be awarded dental points.

(ae) Morphological Defects. Teeth with structural defects which compromise efficient mastication will not be awarded dental points.

(ii) **Periodontium.**

(aa) The condition of the gums and teeth included for counting dental points, should be healthy i.e. pink in colour, firm in consistency and firmly resting against the necks of the teeth. Visible calculus should not be present.

(ab) Individual teeth with swollen, red or infected gums or those with visible calculus will not be awarded dental points.

(ac) Candidates with generalized calculus, extensive swollen and red gums with or without exudates will be rejected.

(iii) **Malocclusion.** Candidates with malocclusion affecting masticatory efficiency and phonetics will be rejected. Teeth in open bite will not be awarded dental points as they are not considered to be in functional apposition. Candidates having an open bite, reverse overjet or any visible malocclusion, will be rejected.

(iv) **Hard & Soft tissues.** Soft tissues of cheek, lips, palate, tongue and sublingual region and maxilla/mandibular bony apparatus must be examined for any swelling, discoloration, ulcers, scars, white patches, sub mucous fibrosis etc. Any hard or soft tissue lesion will be a cause of rejection.

(v) **Orthodontic appliances.** Candidates wearing fixed or removable orthodontic appliances will be declared UNFIT.

(h) **Implants.** When an implant-supported crown replaces a single missing tooth, no dental points will be awarded.

(j) **Fixed Partial Dentures (FPD) / Implant supported FPDs.** Points will not be awarded for teeth (abutment & pontics) that are a part of an FPD or implant supported FPD. In such a case, if the candidate does not have enough dental points, he/she will be declared UNFIT.

(k) **Sequence of examination for reference by Dental Officers.** DO will assess all cases referred by the Rtg MO as per the guidelines elucidated in the succeeding paras:-

(i) Cases will be assessed using clinical examination and diagnostic aids, as deemed necessary, for providing a thorough professional opinion on the case. DOs must familiarize themselves thoroughly with the existing recruiting standards and exercise due caution before declaring a candidate unfit to avoid rejections being overturned during RMB, as far as possible.

(ii) If any additional condition that renders the candidate dentally unfit other than that for which the candidate has been declared unfit by the MO is observed during the course of examination by the DO, it will be endorsed in the Medical Examination Form.

(l) **Extra Oral Examination.**

(i) **Gross facial examination.** Candidates must be seated upright in a chair. Any gross asymmetry, soft or hard tissue defects/scars must be noted. If present, relevant history must be elicited. Congenital malformations must be clearly identified and any progressive co-morbidity is to be noted. Candidates with incipient pathological conditions of the jaws which are known to be progressive or recurrent, will be rejected. Significant jaw discrepancies between upper and lower jaw which may hamper efficient mastication and/or speech will be a cause for rejection.

(ii) **Functional examination.** Candidates will be asked to open the mouth fully. TMJs will be bilaterally palpated for tenderness and/or clicking. Candidates with symptomatic clicking and tenderness will be rejected. A mouth opening of less than 30 mm measured at the incisal edges will be reason for rejection. Dislocation of the TMJ on wide opening will be a case for rejection.

(m) **Intra oral examination.**

(i) **Teeth.**

(aa) **Dental Caries.** Carious teeth with broken down crowns, pulp exposure, residual root stumps, teeth with contiguous abscesses, sinuses will not be counted for award of dental points.

(ab) **Restorations.** DO will judge the soundness of restorations and award points accordingly. Teeth restored by use of inappropriate materials, temporary or fractured restorations and restorations with doubtful marginal integrity or peri-apical pathology will not be counted for award of dental points.

(ac) **Loose teeth.** Teeth with clinically demonstrable mobility will not be counted for award of dental points.

(ad) **Retained deciduous teeth.** Retained deciduous teeth will not awarded dental points.

(ae) **Morphological Defects.** Teeth with developmental defects or any pathological condition of teeth which compromise efficient mastication will not be awarded dental points.

(ii) Periodontium.

(aa) The periodontal health of the teeth included for counting dental points should be satisfactory. Clinical parameters such as colour, contour, consistency, texture etc should be examined. Visible calculus should not be present.

(ab) Individual teeth with visible calculus and/or localized periodontitis will not be awarded dental points.

(ac) Candidates with severe periodontal disease will be rejected. If periodontal disease is not severe and the teeth are otherwise sound, the candidates may be accepted if in the opinion of DO he/she can be cured by simple periodontal therapy excluding extraction.

(n) **Malocclusion.** Any malocclusion of teeth like excessive overjet, reverse overjet will be assessed with respect to masticatory efficiency, phonetics and performance of duties. If malocclusion of teeth is in the opinion of the DO not hampering efficient mastication, phonetics, maintenance of oral hygiene or general nutrition or performance of duties efficiently then candidates will be declared FIT. Otherwise, reasons for rejection for malocclusion will be specified. The following criteria will be considered in assessing malocclusion:-

(i) Edge to edge bite. Edge to edge bite will be considered as functional apposition.

(ii) Anterior open bite. Anterior open bite is to be taken as lack of functional apposition of involved teeth.

(iii) Cross Bite. Teeth in cross bite may still be in functional occlusion and may be awarded points, if so.

(iv) Traumatic bite. Anterior teeth involved in a deep impinging bit which is causing traumatic indentations on the palate will not be counted for award of points.

(o) **Hard & Soft tissues.** Soft tissues of cheek, lips, palate, tongue and sublingual region must be examined for any swelling, discoloration, white patches, sub mucous fibrosis, ulcers, scars etc. All potentially malignant lesions will be a cause for rejection. Clinical diagnosis for sub mucous fibrosis with or without restriction of mouth opening will be a cause of rejection. Bony lesion(s) will be assessed for their pathological/physiological nature and commented upon accordingly.

(p) **Orthodontic appliances.** Fixed orthodontics lingual retainers will not be considered as periodontal splints and teeth included in these retainers will be awarded points for dental fitness. Candidates wearing active fixed or removable orthodontic appliances will be declared UNFIT.

(q) **Implants.** When an implant supported crown replaces a single missing tooth, the prosthesis will be awarded dental points as for natural teeth, provided the prosthesis is in functional apposition and the integrity of the implant is confirmed.

(r) **Fixed Partial Dentures (FPD) / Implant supported FPDs.** FPDs will be assessed clinically and radiologically for firmness, functional apposition to opposing teeth and periodontal health of the abutments. If all parameters are found satisfactory, dental points will be awarded as follows:-

(i) Tooth supported FPDs.

(aa) Prosthesis, 3 units. Dental points will be awarded for the abutments and the pontic.

(ab) Prosthesis, more than 3 units. Dental points will be awarded only to the abutments. No points will be awarded for pontic.

(ac) Cantilever FPDs. Dental points will be awarded only to the abutments.

(ii) Implant supported FPDs.

(aa) Prosthesis, 3 units. Dental points will be awarded for the natural teeth, implant and the pontic.

(ab) Prosthesis, more than 3 units. Dental points will be awarded only to the natural teeth. No points are to be awarded for pontics and implant(s).

(ac) Two unit cantilever FPDs. Dental points will be awarded only to the implant.

Note. A maximum of two implants will be permitted in a candidate. No points will be given for implants/implant supported prosthesis in excess of two permissible implants. In case of a candidate having three or more implants/implant supported prosthesis which are to be awarded marks, will be based on the clinical judgment of DO.