

APPENDIX-IV

GUIDELINES WITH REGARD TO PHYSICAL STANDARDS FOR CANDIDATES FOR COMBINED DEFENCE SERVICES EXAMINATION.

ARMY

MEDICAL STANDARDS AND PROCEDURE OF MEDICAL EXAMINATION FOR OFFICER ENTRIES INTO ARMY

1. Aim:

Aim of this literature is to familiarize the general population on medical standards for enrolment of candidates into Army through various types of entries. This literature also serves the purpose of placing information in public domain as per the policy of Information Commission under RTI Act -2005

2. Introduction:

(a) The primary responsibility of the Armed Forces is defending territorial integrity of the nation. For this purpose Armed Forces should always be prepared for war. Armed Forces personnel undergo rigorous training in preparation for war. Armed Forces also assist civil authorities if required whenever the need arises like in the case of disasters. To carry out such tasks Armed Forces requires candidates with robust mental and physical health. Such candidates should also be capable of withstanding rigorous stress and strain of service conditions to perform their military duties in adverse terrain and uncongenial climate incl sea and air, in remote areas, in austere conditions with no medical facilities. A medically unfit individual due to disease/disability can not only drain precious resources but can also jeopardize lives of other members of the team during operations. Therefore only medically fit candidates are selected who emerge fit to be trained for war.

(b) The Armed Forces Medical Services are responsible for ensuring selection of '**Medically Fit**' individuals into the Armed Forces.

(c) All Armed Forces personnel regardless of occupational specialty, unit assignment, age or gender should have a basic level of general '**Medical fitness**' when inducted into service. This basic level of fitness can then be used as a benchmark to train personnel for further physically demanding occupational specialties or unit assignments. This will enhance deployable combat readiness.

(d) Medical examinations are carried out meticulously by Armed Forces Medical Services Medical Officers. These Medical Officers are well oriented to specific working conditions of Armed Forces after undergoing basic military training. Medical examinations are finalized by the Board of Medical Officers. **The decision of the Medical Board is final. 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 State.**

Medical Standards.

3. Medical standards described in the following paragraphs are general guidelines. They are not exhaustive in view of the vast knowledge of disease. These standards are subject to

change with advancement in the scientific knowledge and change in working conditions of Armed Forces due to introduction of new eqpt/trades. Such changes will be promulgated from time to time by policy letters by competent authorities. Medical Officers, Spl Medical Officers and Medical Boards will take appropriate decisions based on following guidelines and principles.

4. To be deemed 'Medically fit', a candidate must be in good physical and mental health and free from any disease/syndrome/disability likely to interfere with the efficient performance of military duties in any terrain, climate, season incl sea and air, in remote areas, in austere conditions with no medical aid. Candidate also should be free of medical conditions which require frequent visit to medical facilities and use of any aid / drugs.

- (a) It will, however, be ensured that candidate is in good health. There should be no evidence of weak constitution, imperfect development of any system, any congenital deformities/ diseases/syndrome or malformation.
- (b) No swelling/s including tumours/cyst/swollen lymph node/s anywhere on the body. No sinus/es or fistula/e anywhere on the body.
- (c) No hyper or hypo pigmentation or any other disease/syndrome/disability of the skin.
- (d) No hernia anywhere on the body.
- (e) No scars which can impair the functioning and cause significant disfigurement.
- (f) No arterio-venous malformation anywhere in/on the body.
- (g) No malformation of the head and face including asymmetry, deformity from fracture or depression of the bones of the skull; or scars indicating old operative interference and malformation like sinuses and fistulae etc.
- (h) No impairment of vision including colour perception and field of vision.
- (j) No hearing impairment, deformities/disabilities in ears vestibule-cochlear system.
- (k) No impediment of speech due to any aetiology.
- (l) No disease/disability/ congenital anomaly/syndrome of the bones or cartilages of the nose, or palate, nasal polyps or disease of the naso-Pharynx, uvula and accessory sinuses. There should be no nasal deformity and no features of chronic tonsillitis.
- (m) No disease /syndrome/disability of the throat, palate tonsils or gums or any disease or injury affecting the normal function of either mandibular joint.
- (n) No disease /syndrome/disability of the heart and blood vessels incl congenital, genetic, organic incl hypertension, and conduction disorders.
- (o) No evidence of pulmonary tuberculosis or previous history of this disease or any other disease /syndrome/disability chronic disease of the lungs and chest including allergies /immunological conditions, connective tissue disorders, musculoskeletal deformities of chest.
- (p) No disease of the digestive system including any abnormality of the liver, pancreas incl endocrinal, congenital, hereditary or genetic diseases /syndromes and disabilities.
- (q) No diseases/syndrome/disability of any endocrinal system, reticuloendothelial system.
- (r) No diseases/syndrome/disability of genito-urinary system including malformations, atrophy/hypertrophy of any organ or gland.
- (s) No active, latent or congenital venereal disease.
- (t) No history or evidence of mental disease, epilepsy, incontinence of urine or enuresis.
- (u) No disease/deformity/syndrome of musculo-skeletal system and joints incl skull, spine and limbs.

(v) There is no congenital or hereditary disease/ syndrome/disability.

5. Psychological examinations will be carried out during SSB selection procedure. However, any abnormal traits noticed during medical examination will be a cause for rejection.

6. Based on the above mentioned guidelines usual medical conditions which lead to rejection are:-

(a) Musculo-skeletal deformities of spine, chest and pelvis, limbs e.g. scoliosis, torticollis, kyphosis, deformities of vertebrae, ribs, sternum, clavicle, other bones of skeleton, mal-united fractures, deformed limbs, fingers, toes and congenital deformities of spine.

(b) Deformities of Limbs: Deformed limbs, toes and fingers, deformed joints like cubitus valgus, cubitus varus, knock knees, bow legs, hyper mobile joints, amputated toes or fingers and shortened limbs.

(c) Vision and eye: Myopia, hypermetropia, astigmatism, lesions of cornea, lens, retina, squint and ptosis.

(d) Hearing, ears, nose and throat: Sub standard hearing capability, lesions of pinna, tympanic membranes, middle ear, deviated nasal septum, and congenital abnormalities of lips, palate, peri-auricular sinuses and lymphadenitis/adenopathy of neck. Hearing capacity should be 610 cm for Conversational Voice and Forced Whispering for each ear.

(e) Dental conditions:-

(i) Incipient pathological conditions of the jaws, which are known to be progressive or recurrent.

(ii) Significant jaw discrepancies between upper and lower jaw which may hamper efficient mastication and/or speech will be a cause for rejection.

(iii) Symptomatic Temporomandibular Joint clicking and tenderness. A mouth opening of less than 30 mm measured at the incisal edges, Dislocation of the TMJ on wide opening.

(iv) All potentially cancerous conditions.

(v) Clinical diagnosis for sub mucous fibrosis with or without restriction of mouth opening.

(vi) Poor oral health status in the form of gross visible calculus, periodontal pockets and/or bleeding from gums.

(vii) Loose teeth: More than two mobile teeth will render the candidate unfit.

(viii) Cosmetic or post-traumatic maxillofacial surgery/trauma will be UNFIT for at least 24 weeks from the date of surgery/injury whichever is later.

(ix) If malocclusion of teeth is hampering efficient mastication, maintenance of oral hygiene or general nutrition or performance of duties efficiently.

(f) Chest: Tuberculosis, or evidence of tuberculosis, lesions of lungs, heart, musculo skeletal lesions of chest wall.

(g) Abdomen and genitor-urinary system: Hernia, un-descended testis, varicocele, organomegaly, solitary kidney, horseshoe kidney & cysts in the kidney/liver, Gall bladder stones, renal and ureteric stones, lesions/deformities of urogenital organs, piles, sinuses and lymphadenitis/pathy.

(h) Nervous system: Tremors, speech impediment and imbalance.

(j) Skin: Vitiligo, haemangiomas, warts, corns, dermatitis, skin infections growths and hyperhydrosis.

7. **Height and Weight:** Height requirement varies as per the stream of entry. Weight should be proportionate to height as per the chart given below:-

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

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)
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
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

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)
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

(a) Weight for height charts given above is for all categories of personnel. This chart is prepared based on the BMI. The chart specifies the minimum acceptable weight that candidates of a particular height must have. Weights below the minimum specified will not be acceptable in any case. The maximum acceptable weight of height has been specified in age wise categories. Weights higher than the acceptable limit will be acceptable only in the case of candidates with documented evidence of body building, wrestling, and boxing at the National level. In such cases the following criteria will have to be met.

- (i) Body Mass Index should be below 25.
- (ii) Waist Circumference should be less than 90 cm for males and 80 cm for females.
- (iii) All biochemical metabolic parameters should be within normal limits.

(b) The minimum height required for male candidates for entry into the Armed Forces 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.

(c) The minimum height required for female candidates for entry into the Armed Forces 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.

8. Following investigations will be carried out for all officer entries and for pre-commission training academies. However examining medical officer/ medical board may ask for any other investigation deemed fit.

- (a) Complete haemogram
- (b) Urine RE
- (c) Chest X-ray
- (d) USG abdomen and Pelvis.

9. Certain standards vary depending on age and type entry viz stds for vision as follows:-

Parameter	Standards : 10+2 entries, NDA(Army), TES and equivalent	Graduate & equivalent entries: CDSE, IMA, OTA, UES, NCC,TGC & equivalent	Post graduate & equivalent entries: JAG, AEC , APS, RVC,TA, AMC, ADC, SL & equivalent
Uncorrected vision(max allowed)	6/36 & 6/36	6/60 & 6/60	3/60 & 3/60
BCVA	Rt 6/6 & Lt 6/6	Rt 6/6 & Lt 6/6	Rt 6/6 & Lt 6/6
Myopia	≤ -2.5 D Sph (including max astigmatism $\leq \pm 2.0$ D Cyl)	≤ -3.50 D Sph (including max astigmatism $\leq \pm 2.0$ D Cyl)	≤ -5.50 D Sph (including max astigmatism $\leq \pm 2.0$ D Cyl)
Hypermetropia	$\leq +2.5$ D Sph, (including max astigmatism $\leq \pm 2.0$ D Cyl)	$\leq +3.50$ DSph (including max astigmatism $\leq \pm 2.0$ D Cyl)	$\leq +3.50$ D Sph (including max astigmatism $\leq \pm 2.0$ D Cyl)
Lasik/equivalent surgery	Not permitted	Permitted *	Permitted*
Colour perception	CP-II	CP-II	CP-II

***LASIK or Equivalent kerato-refractive procedure**

(a) Any candidate who has undergone any kerato-refractive procedure will have a certificate from the -centre where he/she has undergone the procedure, specifying the date and type of surgery.

Note: Absence of such a certificate will necessitate the Ophthalmologist to make a decision to reject the candidate with specific endorsement of “Unfit due to undocumented Visual Acuity corrective procedure”.

(b) 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 12 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 less than or equal to ± 1.0 D incl cylinder, (provided acceptable in the category applied for).
- (vi) Normal healthy retina.

(vii) Corneal topography and ectasia markers can also be included as addl criteria.

Candidates who have undergone radial keratotomy are permanently unfit

10. Form to be used for med board proceedings is AFMSF-2A.

11. Procedure of Medical Examination Board: Medical Examination Board for selection for officers and pre-commissioning training academies are convened at designated Armed Forces Medical Services Hospitals near Service Selection Boards (SSB). These Medical Boards are termed as ‘Special Medical Board’ (SMB). Candidates who clear SSB interview

are referred to Armed Forces Medical Services Hospital with identification documents. Staff Surgeon of Hospital will identify the candidate, guide the candidate to fill the relevant portions of the AFMSF-2, organize investigations and examination by Medical, Surgical, Eye, ENT, Dental specialists. Female candidates are examined by Gynaecology Specialist also. After examination by Specialists, the candidate is brought before Medical Board. Medical Board once satisfied with findings of Specialists will declare fitness of candidate. If any candidate is declared 'Unfit' by SMB, such candidates can request for 'Appeal Medical Board' (AMB). Detailed procedure for AMB will be provided by President SMB.

12. Miscellaneous aspects:

- (a) Clinical methods of examinations are laid down by O/O DGAFMS.
- (b) Female candidates will be examined by female medical officers and specialists. In case of non-availability they will be examined by Medical Officer in the presence of female attendant.
- (c) Fitness following surgery: Candidates may be declared fit after surgery. However, there should not be any complication; scar should be healthy, well healed and attained required tensile strength. The candidate shall be considered fit after 01 year of open/laparoscopic surgeries for hernia and twelve weeks of laparoscopic abdominal surgery for cholecystectomy. For any other surgery, fitness shall be considered only after 12 weeks of the laparoscopic surgery and 12 months after an open surgery. Candidate shall be unfit for any surgeries for injuries, ligament tear, and meniscus tear of any joint, irrespective of duration of surgery.

NAVY

MEDICAL STANDARD AND PROCEDURE OF MEDICAL EXAMINATION

FOR OFFICER ENTRIES INTO NAVY

PROCEDURE ON CONDUCT OF MEDICAL BOARDS

1. A candidate recommended by the Services Selection Board (SSB) will undergo a medical examination (Special Medical Board) by a Board of Service Medical Officers. Only those candidates, who are declared fit by the Medical Board, will be admitted to the Academy. However, the President of the Medical Board will intimate the candidates declared unfit of their results and the procedure for an Appeal Medical Board (AMB) to be completed in a Command Hospital or equivalent within 42 days of Special Medical Board.

2. Candidates who are declared unfit by the Appeal Medical Board (AMB) may request for Review Medical Board (RMB) within one day of completion of Appeal Medical Board. The President AMB will intimate about the procedure of challenging the findings of AMB. The candidates will also be intimated that sanction for holding of Review Medical Board (RMB) will be granted at the discretion of DGAFMS based on the merit of the case and that RMB is not a matter of right. The candidate should address the request for RMB if he/ she so desires to DMPR, Integrated Headquarters Ministry of Defence (Navy), Sena Bhawan, Rajaji Marg, New Delhi – 110011 and a copy of the same is handed over to the President of AMB. O/o DGAFMS will inform the date and place (Delhi and Pune only) where the candidate will appear for a RMB.

3. The following investigations will be carried out mandatorily during Special Medical Board. However, Medical Officer / Medical Board examining a candidate may ask for any other investigation as required or indicated :-

- (a) Complete Haemogram
- (b) Urine RE/ME
- (c) X Ray chest PA view
- (d) USG abdomen & pelvis
- (e) Liver Function Tests
- (f) Renal Function Tests
- (g) X Ray Lumbosacral spine, Anterior-Posterior and Lateral views
- (h) Electrocardiogram (ECG)

PHYSICAL STANDARDS FOR OFFICERS (MALE/ FEMALE) ON ENTRY

4. The candidate must be physically fit according to the prescribed physical standards.
- (a) The candidate must be in good physical and mental health and free from any disease/ disability which is likely to interfere with the efficient performance of duties both ashore and afloat, under peace as well as war conditions in any part of the world.
- (b) There should be no evidence of weak constitution, bodily defects or underweight. The candidate should not be overweight or obese.
5. **Weight**

Height-Weight Chart : Navy

Height in Mtrs	Up to 17 yrs		17 yrs + 1 day to 18 yrs		18 yrs + 1 day to 20 yrs		20 yrs + 1 day to 30 yrs		Above 30 yrs	
	Minimum Weight in Kg	Maximum Weight in Kg	Minimum Weight in Kg	Maximum Weight in Kg	Minimum Weight in Kg	Maximum Weight in Kg	Minimum Weight in Kg	Maximum Weight in Kg	Minimum Weight in Kg	Maximum Weight in Kg
1.47	37	45	40	45	40	48	40	50	40	52
1.48	37	46	41	46	41	48	41	50	41	53
1.49	38	47	41	47	41	49	41	51	41	53
1.5	38	47	42	47	42	50	42	52	42	54
1.51	39	48	42	48	42	50	42	52	42	55
1.52	39	49	43	49	43	51	43	53	43	55
1.53	40	49	43	49	43	51	43	54	43	56
1.54	40	50	44	50	44	52	44	55	44	57
1.55	41	50	44	50	44	53	44	55	44	58
1.56	41	51	45	51	45	54	45	56	45	58
1.57	42	52	46	52	46	54	46	57	46	59
1.58	42	52	46	52	46	55	46	57	46	60
1.59	43	53	47	53	47	56	47	58	47	61
1.6	44	54	47	54	47	56	47	59	47	61
1.61	44	54	48	54	48	57	48	60	48	62
1.62	45	55	49	55	49	58	49	60	49	63
1.63	45	56	49	56	49	58	49	61	49	64
1.64	46	56	50	56	50	59	50	62	50	65
1.65	46	57	50	57	50	60	50	63	50	65
1.66	47	58	51	58	51	61	51	63	51	66
1.67	47	59	52	59	52	61	52	64	52	67
1.68	48	59	52	59	52	62	52	65	52	68
1.69	49	60	53	60	53	63	53	66	53	69
1.7	49	61	53	61	53	64	53	66	53	69
1.71	50	61	54	61	54	64	54	67	54	70
1.72	50	62	55	62	55	65	55	68	55	71
1.73	51	63	55	63	55	66	55	69	55	72
1.74	51	64	56	64	56	67	56	70	56	73

1.75	52	64	57	64	57	67	57	70	57	74
1.76	53	65	57	65	57	68	57	71	57	74
1.77	53	66	58	66	58	69	58	72	58	75
1.78	54	67	59	67	59	70	59	73	59	76
1.79	54	67	59	67	59	70	59	74	59	77
1.8	55	68	60	68	60	71	60	75	60	78
1.81	56	69	61	69	61	72	61	75	61	79
1.82	56	70	61	70	61	73	61	76	61	79
1.83	57	70	62	70	62	74	62	77	62	80
1.84	58	71	63	71	63	74	63	78	63	81
1.85	58	72	63	72	63	75	63	79	63	82
1.86	59	73	64	73	64	76	64	80	64	83
1.87	59	73	65	73	65	77	65	80	65	84
1.88	60	74	65	74	65	78	65	81	65	85
1.89	61	75	66	75	66	79	66	82	66	86
1.9	61	76	67	76	67	79	67	83	67	87
1.91	62	77	67	77	67	80	67	84	67	88
1.92	63	77	68	77	68	81	68	85	68	88
1.93	63	78	69	78	69	82	69	86	69	89
1.94	64	79	70	79	70	83	70	87	70	90
1.95	65	80	70	80	70	84	70	87	70	91

Notes:-

- (a) The minimum and maximum weight for height will be standard for all categories of personnel. Candidates with weight below the minimum specified will not be accepted.
- (b) Male candidates with weight higher than specified will be acceptable only in exceptional circumstances in case of candidates with documented evidence of body building, wrestling, boxing or muscular build. In such cases, the following criteria are to be met :-
- (i) Body Mass Index should not be more than 25.
 - (ii) Waist : Hip Ratio less than 0.9.
 - (iii) All biochemical parameters such as blood sugar Fasting and PP, blood urea, creatinine, cholesterol, HbA1C%, etc are within normal limits.
- (c) The fitness can only be given by a Medical Specialist.
6. During the medical examination of candidates, the following principal points will be ensured:-
- (a) The candidate is sufficiently intelligent.
 - (b) The hearing is good and that there is no sign of any disease of ear, nose or throat.
 - (c) Vision in either eye is up to the required standard. His/ her eyes are bright, clear and with no obvious squint or abnormality. Movements of eye balls should be full and free in all directions.
 - (d) Speech is without impediment.
 - (e) There is no glandular swelling.
 - (f) Chest is well formed and that his/her heart and lungs are sound.
 - (g) Limbs of the candidates are well formed and fully developed.
 - (h) There is no evidence of hernia of any degree or form.
 - (j) There is free and perfect action of all the joints.

- (k) Feet and toes are well formed.
 - (l) Absence of any congenital malformation or defects.
 - (m) He/she does not bear traces of previous acute or chronic disease pointing to an impaired constitution.
 - (n) Presence of sufficient number of sound teeth for efficient mastication.
 - (p) Absence of any disease of the Genito-Urinary tract.
7. Major defects for rejection are as under:-
- (a) Weak constitution, imperfect development, congenital malformation, muscular wasting.
 - (b) Malformation of the head including deformity from fracture or depression of the bones of the skull.
 - (c) Assessment of Scoliosis. Cobb's angle of 15 degrees at Lumbar Spine and 20 degrees at Dorsal Spine will be the cut-off limits for scoliosis. Scoliosis will be declared Unfit if deformity exists on full flexion of the spine with restriction of range of movements or due to organic defect causing structural abnormality.
 - (d) Skeletal deformity either hereditary or acquired and disease or impairment of function of bones or joints.
- Note:-** Rudimentary cervical rib causing no signs or symptoms is acceptable.
- (e) Asymmetry of torso or limbs, abnormality of locomotion including amputation.
 - (f) Deformity of feet and toes.

(i) **Hyperextensible Finger Joints**. All candidates shall be thoroughly examined for hyper-extensible finger joints. Any extension of fingers bending backwards beyond 90 degrees shall be considered hyper-extensible and considered unfit. Other joints like Knee, Elbow, Spine and Thumb shall also be examined carefully for features of hyper laxity/ hypermobility. Although the individual may not show features of hyper laxity in other joints, isolated presentation of hyper extensibility of finger joints shall be considered unfit because of the various ailments that may manifest later if such candidates are subjected to strenuous physical training as mentioned above.

(ii) **Mallet Finger**. Loss of extensor mechanism at the distal inter-phalangeal joint leads to Mallet finger. Chronic mallet deformity can lead to secondary changes in the PIP and MCP joint which can result in compromised hand function. Normal range of movement at DIP joints is 0-80 degree and PIP joint is 0-90 degrees in both flexion and extension. In Mallet finger, candidate unable to extend/ straighten distal phalanx of fingers completely.

(aa) Candidates with mild condition i.e., less than 10 degrees of extension lag without any evidence of trauma, pressure symptoms and any functional deficit should be declared Fit.

(ab) Candidates with fixed deformity of fingers will be declared Unfit.

(iii) **Polydactyly**. Can be assessed for fitness 12 weeks post-op. Can be declared fit if there is no bony abnormality (X-Ray), wound is well healed and scar is supple.

(iv) **Simple Syndactyly**. Can be assessed for fitness 12 weeks post op. Can be declared fit if there is no bony abnormality (X-Ray), wound is well healed and scar is supple.

(v) **Complex Syndactyly**. Unfit

(vi) **Polymazia**. Can be assessed for fitness 12 weeks post-op.

- (vii) **Hyperostosis Frontalis Interna**. Will be considered fit in the absence of any other metabolic abnormality.
- (viii) **Healed Fractures**.
- (aa) All intra-articular fractures especially of major joints (Shoulder, elbow, wrist, hip, knee and ankle) with or without surgery, with or without implant shall be considered unfit.
- (ab) All extra-articular injuries with post-operative status with or without implant shall be considered unfit.
- (ac) All extra-articular injuries of long bones which have been managed conservatively shall be thoroughly evaluated clinically for soft tissue involvement, crush component, alignment, mal-union/ non-union or any miscellaneous causes which can later on present with a disability on being subjected to physical stress shall be considered unfit if found so. However, the fitness of a candidate in whom the fracture has consolidated well and remodelled after conservative treatment with no evidence of mal-alignment, shortening, soft tissue involvement etc. shall be at the discretion of Surgical Specialist or Medical Board.
- (viii) **Cubitus Recurvatum**. >10 degrees is Unfit
- (ix) **Cubitus Valgus**.
- (aa) **Measurement of Carrying Angle**. The carrying angle at the elbow is assessed conventionally with the elbow in full extension using a protractor goniometer to measure the axes from the surface margin of the arm and forearm. However, variations in the development of the soft tissues in the arm and forearm generally lead to inconsistencies in the measured results. So far, there is no uniform method to measure the carrying angle of the elbow. However, measuring the carrying angle of the elbow through identification of bony landmarks on the acromion, medial and lateral epicondyles of the humerus, and the distal radial and ulnar styloid processes is recommended. Carrying angle is measured by a manual goniometer with two drawing axes of the arm and forearm. The axis of the arm is defined by the lateral border of the cranial surface of the acromion to the midpoint of the lateral and medial epicondyles of the humerus. The axis of the forearm is defined by the midpoint of the lateral and medial epicondyles of the humerus to the midpoint of the distal radial and ulnar styloid processes.
- (ab) Cubitus valgus should be primarily a clinical diagnosis. The suggested indications to perform a radiographic evaluation include:-
- (i) History of trauma
 - (ii) Scar around elbow
 - (iii) Asymmetry of angles
 - (iv) Distal neurovascular deficit
 - (v) Restricted range of motion

(vi) If deemed necessary by Orthopaedic Surgeon

(x) **Hyperextension at Elbow Joint.** Individuals can have naturally hyperextended elbow. This condition is not a medical problem, but can be a cause of fracture or chronic pain especially considering the stress and strains military population is involved in. Also, the inability to return the elbow to within 10 degrees of the neutral position is impairment in the activities of daily living.

(aa) Measurement modality. Measured using a Goniometer

(ab) Normal elbow extension is 0 degrees. Up to 10 degrees of hyperextension is within normal limits if the patient has no history of trauma to the joint. Anyone with hyperextension more than 10 degree should be unfit.

8. Eye.

- (a) Deformity or morbid condition of the eye or eyelids that is liable for aggravation or recurrence.
- (b) Manifest squint of any degree.
- (c) Active trachoma or its complication or sequelae.
- (d) Visual acuity below prescribed standards.

Notes:-

1. Visual standards for CDSE entry are as follows :-

Criteria	CDSE
Uncorrected Vision	-6/12 6/12
Corrected Vision	6/6 6/6
Limits of Myopia	- 1.5 D Sph
Limits of Hypermetropia	+ 1.5 D Cyl
Astigmatism (within limits of myopia and hypermetropia)	+0.75 D Sph / Cyl
Binocular Vision	III
Colour Perception	I

2. **Kerato Refractive Surgery.** Candidates who have undergone any Refractory Surgery (PRK/LASIK/SMILE) can be considered fit in all branches (except submarine, diving and MARCO cadre) subject to the following conditions :-

- (a) Surgery should not have been carried out before 20 yrs of age.
- (b) Uncomplicated surgery at least 12 months before examination (Certificate mentioning the type of refractive surgery, date of surgery and pre-operative refractive error from concerned eye centre is to be produced by the candidate at the time of recruitment medical examination).

Post LASIK Standards. Candidate will be considered Fit if Axial Length by IOL Master is equal to or less than 26 mm and Central Corneal Thickness is equal to or more than 450 microns

- (c) Residual refraction less than or equal to ± 1.0 D Sph or Cyl, provided within the permissible limit for the category applied for. However, for Pilot and Observer entries, the residual refraction should be nil.
- (d) Pre-operative refractive error not more than ± 6.0 D

(e) Normal retinal examination.

3. Kerato-Refractory Surgery (PRK, LASIK, SMILE) is not acceptable for special cadres such as submarine, diving and MARCO. ***Candidates who have undergone Radial Keratotomy are permanently unfit for all branches.***

(i) **Ptosis**. Candidate will be considered fit post-operative provided there is no recurrence one year after surgery, visual axis is clear with normal visual fields and upper eyelid is 02 mm below the superior limbus. Candidates, who have not undergone surgery for the condition, would be considered fit if they meet any of the following criteria:-

(aa) Mild ptosis

(ab) Clear visual axis

(ac) Normal visual field

(ad) No sign of aberrant degeneration/ head tilt

(ii) **Exotropia**. Unfit

(iii) **Anisocoria**. If size difference between the pupils is >01mm, candidate will be considered unfit.

(iv) **Heterochromia Iridum**. Unfit

(v) **Sphincter Tears**. Can be considered fit if size difference between pupils is <01mm, pupillary reflexes are brisk with no observed pathology in cornea, lens or retina.

(vi) **Pseudophakia**. Unfit

(vii) **Lenticular Opacities**. Any lenticular opacity causing visual deterioration, or is in the visual axis or is present in an area of 07 mm around the pupils, which may cause glare phenomenon, should be considered Unfit. The propensity of the opacities not to increase in size or number should also be a consideration when deciding fitness. Small stationary lenticular opacities in the periphery like congenital blue dot cataract, not affecting the visual axis/ visual field may be considered by specialist (Should be less than 10 in number and central area of 04 mm to be clear).

(viii) **Optic Nerve Drusen**. Unfit

(ix) **High Cup Disc Ratio**. Candidate will be declared unfit if any of the following conditions exist:-

(aa) Inter-eye asymmetry in cup Disc ratio >0.2

(ab) Retinal Nerve Fiber Layer (RNFL) defect seen by RNFL analysis on OCT

(ac) Visual field Defect detected by Visual field Analyser

(ix) **Keratoconus**. Unfit

(x) **Lattice**.

(aa) The following lattice degenerations will render a candidate Unfit:-

- (i) Single circumferential lattice extending more than two clock hours in either or both eyes.
- (ii) Two circumferential lattices each more than one clock hour in extent in either or both eyes.
- (iii) Radial lattices.
 - (iv) Any lattice with atrophic hole/ flap tears (Unlasered).
 - (v) Lattice degenerations posterior to equator.
- (ab) Candidates with lattice degeneration will be considered Fit under the following conditions:-
 - (i) Single circumferential lattice without holes of less than two clock hours in either or both eyes.
 - (ii) Two circumferential lattices without holes each being less than one clock hour in extent in either or both eyes.
 - (iii) Post Laser delimitation single circumferential lattice, without holes/ flap tear, less than two clock hours extent in either or both eyes.
 - (iv) Post Laser delimitation two circumferential lattices, without holes/ flap tear, each being less than one clock hour extent in either or both eyes.

9. ***Ear, Nose and Throat.***

- (a) ***Ear.*** History or recurrent ear ache, tinnitus or vertigo, impairment of hearing, disease of the external meatus including atresia, exostosis or neoplasm which prevent a thorough examination of the drum, unhealed perforation of the tympanic membrane, aural discharge or sign of acute or chronic suppurative otitis media, evidence of radical or modified radical mastoid operation.

Notes:-

1. A candidate should be able to hear forced whisper at a distance of 610 cms with each ear separately with back to the examiner.
2. Otitis Media. Current Otitis Media of any type will entail rejection. Evidence of healed chronic otitis media in the form of tympanosclerosis/ scarred tympanic membrane affecting less than 50% of Pars Tensa of tympanic membrane will be assessed by ENT Specialist and will be acceptable if Pure Tone Audiometry (PTA) and Tympanometry are normal. Healed healthy scar (Dimeric Tympanic Membrane or cartilage) of the Neo-Tympanic Membrane involving less than 50% of Pars Tensa due to Type I Tympanoplasty (tympanic membrane repair with or without cartilage)/ Myringoplasty (with or without intact cortical mastoidectomy) for Chronic Otitis Media (mucosal type) and Myringotomy (for Otitis Media with Effusion) may be accepted after minimum period of 1 year post surgery if PTA and tympanometry are normal.
 - (i) The fwg conditions would render a candidate Unfit:-
 - (aa) Residual perforation
 - (ab) Residual hearing loss on Free Field Hearing and/or PTA

- (ac) Any other type of tympanoplasty (other than Type 1 Tympanoplasty) or middle ear surgery (including ossiculoplasty, stapedotomy, canal wall down mastoidectomy, atticotomy, attico-antroostomy etc)
- (ad) Any implanted hearing device (eg. cochlear implant, bone conduction implant, middle ear implants etc).

(b) **Bony Growth of External Auditory Canal.** Any candidate with clinically evident bony growth of external auditory canal like exostosis, osteoma, fibrous dysplasia etc. will be declared Unfit. Assessment of operated cases will be done after minimum period of 4 weeks. Post-surgery histopathology report and HRCT temporal bone will be mandatory. If the histopathological report is suggestive of a neoplasia or HRCT temporal bone is suggestive of partial removal or deep extension it would entail rejection.

(c) ***Nose.*** Disease of the bones or cartilages of the nose, marked nasal allergy, nasal polyps, atrophic rhinitis, disease of the accessory sinuses and nasopharynx.
Note:- Septal Deformity. Nasal septal perforation can be anterior cartilaginous or posterior bony perforation. Simple nasal deformity not causing disfigurement, minor septal deviation not interfering with nasal airway and small traumatic septal perforation which are asymptomatic are acceptable. Any septal perforation greater than 01 cm in the greatest dimension is a ground for rejection. A septal perforation which is associated with nasal deformity, nasal crusting, epistaxis and granulation irrespective of the size is a ground for rejection.

Nasal Polyposis. It is also known as Chronic Rhinosinusitis with polyposis (CRSwNP). Nasal polyposis is mostly associated with allergy, asthma, sensitivity to NSAIDs and infection i.e. bacterial and fungal. Most of these patients have high chances of recurrence and require long term management with nasal/ oral steroids and are unfit for extremes of climate and temperature conditions. Any individual detected to have nasal polyposis on examination or with history of having undergone surgery for nasal polyposis will be rejected.

(d) ***Throat.*** Disease of throat palate, tongue, tonsils, gums and disease or injury affecting the normal function of either mandibular joints.

Note:- Simple hypertrophy of the tonsils without associated history of attacks of tonsillitis is acceptable.

(d) ***Disease of the larynx and impediment of speech.*** Voice should be normal. Candidates with pronounced stammer will not be accepted.

10. ***Dental Condition.*** It should be ensured that a sufficient number of natural and sound teeth are present for efficient mastication.

(a) A candidate must have a minimum of 14 dental points to be acceptable in order to assess the dental condition of an individual. Dental points less than 14 are a cause of rejection. The dental points are allotted as under for teeth in good opposition with corresponding teeth in the other jaw:-

- (i) Central incisor, lateral incisor, canine, 1st Premolar, 2nd Premolar and under developed third molar with 1 point each.
- (ii) 1st molar and 2nd molar and fully developed 3rd molar with 2 points each.
- (iii) When all 32 teeth are present, there will be a total count of 22 or 20 pints according to whether the third molars are well developed or not.

(b) The following teeth in good functional apposition must be present in each jaw:-

- (i) Any 4 of the 6 anteriors.
- (ii) Any 6 of the 10 posteriors.

All these teeth must be sound/ repairable.

(c) Candidates suffering from severe pyorrhea will be rejected. Where the state of pyorrhea is such that in the opinion of the Dental Officer, it can be cured without extraction of teeth, the candidates may be accepted. A note about the affected teeth is to be inserted by the Medical/ Dental Officer in the medical documents.

(d) Artificial dentures are not to be included while counting the dental points.

11. **Neck.**

(a) Enlarged glands, tubercular or due to other diseases in the neck or other parts of the body.

Note:- Scars of operations for the removal of tubercular glands are not a cause for rejection provided there has been no active disease within the preceding five years and the chest is clinically and radiologically clear.

(b) Disease of the thyroid gland.

(c) **Chest.** The following are criteria for rejection:-

(aa) Deformity of chest, congenital or acquired.

(ab) Expansion less than 5 cms.

(ac) Significant bilateral/ unilateral Gynaecomastia in males can be evaluated for fitness 12 weeks post-op.

12. **Skin and Sexually Transmitted Infection (STI).**

(a) Skin disease unless temporary or trivial.

(b) Scars which by their extent or position cause or are likely to cause disability/ or marked disfigurement.

(c) Hyperhidrosis - Palmar, plantar or axillary.

(d) Congenital, active or latent sexually transmitted diseases.

Note:- In cases with old healed scar over the groin or penis/ vagina suggestive of past STI, blood will be tested for STI (Including HIV) to exclude latent Sexually Transmitted Disease.

13. **Respiratory System.**

(a) History of chronic cough or Bronchial Asthma.

(b) Evidence of pulmonary Tuberculosis.

(c) Evidence of diseases of bronchi, lungs or pleurae detected on radiological examination of the chest will disqualify the candidate.

Note:- An X-Ray examination of the chest will be carried out under following circumstances:-

(i) On entry into the service as a cadet or direct entry.

(ii) At the time of grant of permanent commission in case of short service commissioned officer.

14. **Cardio-Vascular System.**

(a) Functional or organic disease of the heart or blood vessels, presence of murmurs or clicks on auscultation.

(b) Tachycardia (Pulse Rate persistently over 96/min at rest), bradycardia (Pulse Rate persistently below 40/ min at rest), any abnormality of peripheral pulse.

(c) **Blood Pressure.** Candidate with Blood Pressure consistently greater than 140/90mm Hg will be rejected. All such candidates shall undergo a 24 hour Ambulatory Blood Pressure Monitoring (24 h ABPM) to differentiate between white coat hypertension and persistent hypertension. Wherever feasible, candidates will be evaluated by a Cardiologist at AMB. Those with normal 24 h ABPM and without any target organ damage can be considered fit after evaluation by a cardiologist

(d) **Electrocardiogram (ECG).** Any ECG abnormality detected at SMB will be a ground for rejection. Such candidates will be evaluated by a cardiologist during

AMB with echocardiography for structural abnormality and stress test if deemed necessary. Benign ECG abnormalities like incomplete RBBB, T wave inversion in inferior leads, T inversion in V1-V3 (persistent juvenile pattern), LVH by voltage criteria (due to thin chest wall) may exist without any structural heart disease. Echocardiography should be performed in all such cases to rule out an underlying structural heart disease and opinion of Senior Adviser (Medicine)/ Cardiologist should be obtained. If echocardiography and stress tests (if indicated) are normal, the individual can be considered fit.

15. **Abdomen.**

(a) Evidence of any disease of the gastro-intestinal tract, enlargement of liver, gall bladder or spleen, tenderness on abdominal palpation, evidence/ history of peptic ulcer or previous history of extensive abdominal surgery. All officer entry candidates are to be subjected to the Ultra Sound Examination of the abdominal and pelvic

(b) **Post-op Assessment.** Post-op duration for assessment of fitness in common conditions:-

(i) **Hernia.** Those who have been operated for hernia may be declared fit provided:-

(aa) 24 weeks have elapsed since the operation for Anterior Abdominal Wall hernia.

Documentary proof to this effect is to be produced by the candidate.

(ab) General tone of the abdominal musculature is good.

(ac) There has been no recurrence of hernia or any complication connected with the operation.

(ii) **Other Conditions.** Those who have been operated for below mentioned conditions may be declared fit provided:-

(aa) Open Cholecystectomy. 24 weeks (In the absence of Incisional Hernia)

(ab) Laparoscopic Cholecystectomy. 08 weeks (Normal LFT, Normal histopathology).

(ac) Appendicectomy. 04 weeks (with normal histo-pathological findings)

(ad) Pilonidal Sinus. 12 weeks

(ae) Fistula-in-Ano, Anal Fissure and Grade IV Hemorrhoids. 12 weeks post-op with satisfactory treatment and recovery.

(af) Hydrocele and Varicocele. 08 weeks post-op with satisfactory treatment and recovery.

(d) **Agenesis of Gall Bladder.** Will be considered fit in the absence of any other abnormality of the biliary tract. MRCP will be done for all such cases.

16. **Genito-Urinary System.**

(a) Any evidence of disease of genital organs.

(b) Bilateral undescended testis, unilateral undescended testis retained in the inguinal canal or at the external abdominal ring unless corrected by operation.

Note:- Absence of one testis is not a cause for rejection unless the testis has been removed on account of disease or its absence has affected the physical or mental health of the candidate.

(c) Disease or malformation of the kidneys or urethra.

(d) Incontinence of urine and nocturnal enuresis.

(e) Any abnormality on examination of urine including albuminuria or glycosuria.

(f) The following are criteria for rejection:-

- (aa) Renal Calculi. Irrespective of size, numbers, obstructive or non-obstructive. History of renal calculi (History or radiological evidence) will render a candidate Unfit.
- (ab) Calycecdasis
- (ac) Bladder Diverticulum
- (ad) Simple Renal Cyst. > 1.5Cm

17. **Central Nervous System.**

- (a) Organic disease of Central Nervous System.
- (b) Tremors.
- (c) Candidates with history of fits and recurrent attacks of headache/ migraine will not be accepted.

18. **Psychiatric Disorders.** History or evidence of mental disease or nervous instability in the candidate or his family.

(i) **Lab Investigation (Hematology).**

- (aa) **Polycythemia.** Hemoglobin more than 16.5g/dL in males and more than 16g/dL in females will be considered as Polycythemia and deemed Unfit.
- (ab) **Monocytosis.** Absolute monocyte counts greater than 1000/cu mm or more than or equal to 10% of total WBC counts is to be deemed Unfit.
- (ac) **Eosinophilia.** Absolute eosinophil counts greater than or equal to 500/ cu mm is deemed Unfit.

19. **Women Candidates.** They should not be pregnant and should also be free from gynaecological disorders such as primary or secondary Amenorrhea/ Dysmenorrhoea/ Menorrhagia etc. All women candidates are to be subjected to Ultra Sound Examination of the abdominal and pelvic organs for detecting any abnormalities of the internal organs.

AIR FORCE

MEDICAL STANDARD AND PROCEDURE OF MEDICAL EXAMINATION FOR OFFICER ENTRIES INTO AIRFORCEGENERAL INSTRUCTIONS

1. In this section, standardized guidelines for the physical assessment of candidates for commissioning through CDSE into flying branch in the IAF are elaborated. The purpose of these guidelines is to lay down uniform physical standards and to ensure that the candidates are free of health conditions that may hamper or limit their performance in the respective branch. The guidelines enumerated in this section are meant to be applied in conjunction with the standard methods of clinical examination.
2. All candidates during their induction should meet the basic physical fitness standards which will enable them to proficiently undergo the training and the subsequent service in varied climatic and work environments. A candidate will not be assessed physically fit unless the complete examination shows that he/ she is physically and mentally capable of withstanding the severe physical and mental strain for prolonged periods. The requirements of medical fitness are essentially the same for all branches, except for aircrew in whom the parameters for visual acuity, anthropometry and certain other physical standards are more stringent.
3. The results of initial examination are recorded on AFMSF – 2. The complete medical examination consists of:-
 - (a) A questionnaire, which is to be carefully and truthfully completed by the candidate and countersigned by the examining medical officer. The importance of all aspects of the questionnaire, including the legal aspect, should be emphasised to all the candidates. Any

subsequent detection of disability or revelation of a significant past history, not declared earlier, may lead to disqualification at any stage prior to commissioning. USG abdomen would be conducted for all candidates and cadets during medical examination prior to commissioning.

(b) A complete medical and surgical examination including dental examination

(c) An ophthalmic examination.

(d) An examination of the ear, nose and throat.

4. The medical standards spelt out pertain to initial entry medical standards. Continuation of medical fitness during training will be assessed during the periodic medical examinations held at AFA prior to commissioning.

GENERAL PHYSICAL ASSESSMENT

1. Every candidate, to be fit for the Air Force, must conform to the minimum standards laid down in the succeeding paragraphs. The physical parameters should fall within the acceptable ranges and should be proportionate.

2. The residual effects of old fractures/ injuries are to be assessed for any functional limitation. If there is no effect on function, the candidate can be assessed fit. Following categories should be meticulously assessed:

(a) **Spine injuries.** Cases of old fractures of spine are unfit. Any residual deformity of spine or compression of a vertebra will be cause for rejection.

(b) **Nerve injuries.** Injuries involving the trunks of the larger nerves, resulting in loss of function, or neuroma formation, which causes pain significant tingling, indicate unsuitability for employment in flying duties.

(c) **Keloids.** The presence of large or multiple keloids will be a cause for rejection.

3. (a) **Surgical Scars.** Minor well-healed scars for e.g. as resulting from any superficial surgery do not, per se, indicate unsuitability for employment. Extensive scarring of a limb or torso that may cause functional limitation or unsightly appearance should be considered unfit.

(b) **Birth Marks.** Abnormal pigmentation in the form of hypo or hyperpigmentation is not acceptable. Localized, congenital mole/ naevus, however, is acceptable provided its size is <10 cm. Congenital multiple naevi or vascular tumours that interfere with function or are exposed to constant irritation are not acceptable.

(c) **Subcutaneous Swellings.** Lipoma will be considered fit unless the lipoma is causing significant disfigurement/ functional impairment due to the size/ location. Neurofibroma, if single will be considered fit. Multiple neurofibromas associated with significant Café-au-lait spots (more than 1.5 cm size or more than one in number) will be considered unfit.

4. **Cervical Rib.** Cervical rib without any neuro-vascular compromise will be accepted. Meticulous clinical examination to rule out neuro-vascular compromise should be performed in such cases. This should be documented in the Medical Board proceedings.

5. **Cranio-facial Deformities.** Asymmetry of the face and head or uncorrected deformities of skull, face or mandible which will interfere with proper fitting of oxygen mask, helmet or military headgear will be considered unfit. Major deformities even after corrective surgery will be considered unfit.

6. **History relating to Operations.** A candidate who has undergone an abdominal operation involving extensive surgical intervention or partial/ total excision of any organ is, as a rule, unfit for service. Operation involving the cranial vault with any residual bony defect will be unfit. Major thoracic operations will make the candidate unfit.

MEASUREMENTS AND PHYSIQUE

7. **Chest Shape and Circumference.** The shape of the chest is as important as its actual measurement. The chest should be well proportioned and well developed. Any chest deformity likely to interfere with physical exertion during training and performance of military duties or adversely impact military bearing or are associated with any cardiopulmonary or musculoskeletal anomaly are to be considered unfit. Minimum recommended chest circumference for cadets is 77 cm. The chest expansion should be at least 05 cm for all candidates. For the purpose of documentation, any decimal fraction lower than 0.5 cm will be ignored, 0.5 cm will be recorded as such and 0.6 cm and above will be recorded as 1 cm.

Height, Sitting Height, Leg Length and Thigh Length.

8. Minimum height for Flying Branch will be 162.5 cm. Acceptable measurements of leg length, thigh length and sitting height for such aircrew will be as under: -

(a) *Sitting height* Minimum - 81.5 cm

- Maximum* - 96.0 cm
- (b) *Leg Length* *Minimum* - 99.0 cm
- Maximum* - 120.0 cm
- (c) *Thigh Length* *Maximum* - 64.0 cm

The minimum height for entry into ground duty branches will be 157.5 cm. For Gorkhas and individual belonging to North-Eastern regions of India and hilly regions of Uttarakhand, the minimum acceptable height will be 5 cm less (152.5 cm). In case of candidates from Lakshwadweep the minimum acceptable height can be reduced by 2 cm (155.5 cm).

9. Body Weight Parameters

(a) Male Candidates (except NDA candidates). Ideal weight relative to age and height is given in Appendix 'A' to this notification. The weight will be rounded off to the nearest 0.5 kg. The maximum permissible variation from the ideal body weight is ± 1 SD.

(b) For in-service candidates the criteria of body weight applicable to serving personnel will be used.

10. Weights higher than the prescribed limit will be acceptable only in exceptional circumstances in case of those candidates where there is documented evidence of bodybuilding, wrestling and boxing. However, in such cases, the following criteria will have to be met:

(a) BMI should be below 27.

(b) Waist Hip ratio should be below 0.9 for males and 0.8 for females.

(c) Waist circumference should be less than 94 cm for males and 89 cm for females.

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

Appendix-A Height and Weight Standards for Male

Height in cm	Age Range (Years)				
	15-17	18-22	23-27	28-32	33-37
152	46	47	50	54	54
153	47	47	51	55	55
154	47	48	51	56	56
155	48	49	52	56	56
156	48	49	53	57	57
157	49	50	54	58	58
158	49	50	54	58	58
159	50	51	55	59	59
160	51	52	56	59	60
161	51	52	56	60	60
162	52	53	57	61	61
163	52	54	58	61	62
164	53	54	59	62	63
165	53	55	59	63	63
166	54	56	60	63	64
167	54	56	61	64	65
168	55	57	61	65	65
169	55	57	62	65	66
170	56	58	63	66	67
171	56	59	64	66	68
172	57	59	64	67	68
173	58	60	65	68	69
174	58	61	66	68	70

175	59	61	66	69	71
176	59	62	67	70	71
177	60	62	68	70	72
178	60	63	69	71	73
179	61	64	69	72	73
180	61	64	70	72	74
181	62	65	71	73	75
182	62	66	72	74	76
183	63	66	72	74	76
184	64	67	73	75	77
185	64	68	74	75	78
186	65	68	74	76	78
187	65	69	75	77	79
188	66	69	76	77	80
189	66	70	77	78	81
190	67	71	77	79	81
191	67	71	78	79	82
192	68	72	79	80	82
193	68	73	79	81	83
<i>SD</i>	6.0	6.3	7.1	6.6	6.9

CARDIOVASCULAR SYSTEM

1. History of chest pain, breathlessness, palpitation, fainting attacks, giddiness, rheumatic fever, ankle swelling, chorea, frequent sore throats and tonsillitis should be given due consideration in assessment of the cardiovascular system.

2. **Pulse.** Rate, rhythm, volume, tension, regularity of the pulse and conditions of the arterial wall are assessed. The normal pulse rate varies from 60-100 bpm. The pulse should be counted for one full minute. The pulsations for the radial and femoral arteries should always be compared and any difference, if any, should be recorded. Other peripheral pulsations viz. carotid, popliteal, posterior tibial artery and dorsalis pedis artery on both sides should also be palpated and any difference, if noted should be documented. Persistent sinus tachycardia (> 100 bpm) as well as persistent sinus bradycardia (< 60 bpm) are unfit. In case bradycardia is considered to be physiological, the candidate can be declared fit after evaluation by Medical Specialist/ Cardiologist.

3. **Blood Pressure.** Candidates are quite prone to develop White Coat Hypertension, which is a transient rise of BP, due to stress of medical examination. Every effort must be made to eliminate the White Coat effect by repeated recordings under basal conditions with the candidate in a relaxed state. An individual with BP consistently greater than or equal to 140/90 mm of Hg shall be rejected.

4. **Cardiac Murmurs.** Evidence of organic cardiovascular disease will be cause for rejection. Diastolic murmurs are invariably organic. Short systolic murmurs of ejection systolic nature and not associated with thrill and which diminish on standing, especially if associated with a normal ECG and chest radiograph, are most often functional. In case of any doubt the case should be referred to cardiologist for opinion.

5. **ECG.** Assessment of a properly recorded ECG (resting – 12 lead) should be carried out by a medical specialist. Note will be taken of wave patterns, the amplitude, duration and time relationship. All ECG abnormalities are unfit except incomplete RBBB which may exist without any structural heart disease. 2D ECHO should be performed in cases with incomplete RBBB to rule out an underlying structural heart disease and opinion of Senior Adviser (Medicine) or Cardiologist should be obtained.

6. **Cardiac surgery and interventions.** Candidates with history of cardiac surgery/ intervention in the past will be considered unfit.

RESPIRATORY SYSTEM

1. History of pulmonary tuberculosis, pleurisy with effusion, frequent episodes of expectorant cough, haemoptysis, frequent episodes of bronchitis, asthma, spontaneous pneumothorax and injuries

to the chest should be elicited. Spirometry/ Peak Expiratory Flow Rate may be done in cases suspected to have obstructive airway disease. In case there is any suspicion of lung pathology, relevant investigations, including X Ray/ CT chest/ Immunological tests etc may be carried out to decide fitness. Final fitness in doubtful cases will be decided only at appeal level after opinion of Sr Adv (Med)/ Pulmonologist.

2. **Pulmonary Tuberculosis.** Any residual scarring in pulmonary parenchyma or pleura, as evidenced by a demonstrable opacity on chest radiogram will be a ground for rejection. Old treated cases with no significant residual abnormality can be accepted if the diagnosis and treatment was completed more than two years earlier. In these cases, a CT scan chest and fiberoptic bronchoscopy with bronchial lavage can be done along with USG, ESR, PCR, Immunological tests and Mantoux test as decided by the Physician. If all the tests are normal the candidate may be considered fit. However, in such cases fitness will only be decided at Appeal/ Review Medical Board.

3. **Pleurisy with Effusion.** Any evidence of significant residual pleural thickening will be a cause for rejection.

4. **Bronchitis.** History of repeated attacks of cough/ wheezing/ bronchitis may be manifestations of chronic bronchitis or other chronic pathology of the respiratory tract. Such cases will be assessed unfit. Pulmonary Function Tests may be carried out, if available. In such cases, opinion of the Medical Specialist/ Chest Physician may be obtained.

5. **Bronchial Asthma.** History of repeated attacks of bronchial asthma/ wheezing/ allergic rhinitis will be a cause for rejection.

6. **Radiographs of the Chest.** Definite radiological evidence of disease of the lungs, mediastinum and pleurae are criteria for declaring the candidate unfit. If required, investigations as outlined in para 2 above can be carried out under the advice of a pulmonologist.

7. **Thoracic surgery.** Candidate with history of any resection of the lung parenchyma will be considered unfit. Any other major surgery of the thorax will be considered on a case to case basis.

GASTROINTESTINAL SYSTEM

1. The examiner should enquire whether the candidate has any past history of ulceration or infection of the mouth, tongue, gums or throat. Record should be made of any major dental alteration. When discussing a candidate's medical history the examiner must ask direct questions about any history of heartburn, history of recurrent dyspepsia, peptic ulcer-type pain, chronic diarrhoea, jaundice or biliary colic, indigestion, constipation, bleeding PR and any abdominal surgery.

2. **Head to toe examination.** Presence of any sign of liver cell failure (e.g. loss of hair, parotidomegaly, spider naevi, gynaecomastia, testicular atrophy, flapping tremors etc) and any evidence of malabsorption (pallor, nail and skin changes, angular cheilitis, pedal edema) will entail rejection. The condition of oral mucosa, gums and any restriction of mouth opening should be noted.

3. **Gastro-Duodenal Disabilities.** Candidates who are suffering or have suffered, during the previous one year, from symptoms suggestive of acid-peptic disease including proven peptic ulcers, are not to be accepted. Any past surgical procedure involving partial or total loss of an organ (other than vestigial organs/ gall bladder) will entail rejection.

4. **Diseases of the Liver.** If past history of jaundice is noted or any abnormality of the liver function is suspected, full investigation is required for assessment. Candidates suffering from viral hepatitis or any other form of jaundice will be rejected. Such candidates can be declared fit after a minimum period of 6 months has elapsed provided there is full clinical recovery; HBV and HCV status are both negative and liver functions are within normal limits. History of recurrent jaundice and hyperbilirubinemia of any nature is unfit.

5. **Disease of the Spleen.** Candidates who have undergone partial/ total splenectomy are unfit, irrespective of the cause for operation.

6. **Hernia.** Hernial sites are to be examined for presence of inguinal, epigastric, umbilical and femoral hernia. Any abdominal wall hernia is unfit. A candidate with a wellhealed surgical scar, after 06 months of either open or laparoscopic repair, is considered fit provided there is no evidence of recurrence and the abdominal wall musculature is good.

7. Abdominal Surgery

(a) A candidate with well-healed scar after conventional abdominal surgery will be considered fit after one year of successful surgery provided there is no potential for any recurrence of the underlying pathology, no evidence of incisional hernia and the condition of the abdominal wall musculature is good.

(b) A candidate after laparoscopic cholecystectomy will be considered fit if 08 weeks have passed since surgery provided they are free from signs and symptoms and their

evaluation including LFT and USG abdomen are normal and there is total absence of gall bladder with no intra-abdominal collection. Other abdominal laparoscopic procedures can also be considered fit after 08 weeks of surgery provided the individual is asymptomatic, recovery is complete and there is no residual complication or evidence of recurrence.

8. **Anorectal Conditions.** The examiner should do a digital rectal examination and rule out haemorrhoids, sentinel piles, anal skin tags, fissures, sinuses, fistulae, prolapsed, rectal mass or polyps.

(a) **Fit**

- (i) Only external skin tags.
- (ii) After rectal surgery for polyps, haemorrhoids, fissure, fistula or ulcer, provided there is no residual/ recurrent disease.

(b) **Unfit**

- (i) Rectal prolapse even after surgical correction
- (ii) Active anal fissure
- (iii) Haemorrhoids (external or internal)
- (iv) Anal Fistula
- (v) Anal or rectal polyp
- (vi) Anal stricture
- (vii) Faecal incontinence

Ultrasonography of Abdomen

9. **Liver**

(a) **Fit**

- (i) Normal echo-anatomy of the liver, CBD, IHBR, portal and hepatic veins with liver span not exceeding 15 cm in the mid- clavicular line.
- (ii) Solitary simple cyst (thin wall, anechoic) upto 2.5 cm diameter provided that the LFT is normal and hydatid serology is negative.
- (iii) Hepatic calcifications to be considered fit if solitary and less than 1 cm with no evidence of active disease like tuberculosis, sarcoidosis, hydatid disease or liver abscess based on relevant clinical examinations and appropriate investigations.

(b) **Unfit**

- (i) Hepatomegaly more than 15 cm in mid-clavicular line.
- (ii) Fatty liver – Grade 2 and 3, grade 1 in presence of abnormal LFT.
- (iii) Solitary cyst > 2.5 cm.
- (iv) Solitary cyst of any size with thick walls, septations, papillary projections, calcifications and debris.
- (v) Multiple hepatic calcifications or cluster > 1 cm.
- (vi) Multiple hepatic cysts of any size.
- (vii) Any haemangioma irrespective of the size and location.
- (viii) Portal vein thrombosis.
- (ix) Evidence of portal hypertension (PV >13 mm, collaterals, ascites).

10. **Gall Bladder**

(a) **Fit**

- (i) Normal echo-anatomy of the gall bladder.
- (ii) Post laparoscopic Cholecystectomy. Candidates having undergone laparoscopic cholecystectomy may be considered fit if 08 weeks have passed since surgery and there is total absence of gall bladder with no intra-abdominal collection. Wound should have healed well without incisional hernia.
- (iii) Post Open Cholecystectomy. Candidates having undergone Open Cholecystectomy may be considered fit if one year has passed since surgery, the scar is healthy with no incisional hernia and there is total absence of gall bladder with no intra-abdominal collection.

(b) **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 > 05 mm.

- (vii) Septate gall bladder.
- (viii) Persistently contracted gall bladder on repeat USG.
- (ix) Incomplete Cholecystectomy.

11. Spleen

(a) Unfit

- (i) Spleen more than 13 cm in longitudinal axis (or if clinically palpable).
- (ii) Any Space Occupying Lesion in the spleen.
- (iii) Asplenia.
- (iv) Candidates who have undergone partial/ total splenectomy are unfit, irrespective of the cause of operation.

12. Pancreas

(a) Unfit

- (i) Any structural abnormality.
- (ii) Space Occupying Lesion/ Mass lesion.
- (iii) Features of chronic pancreatitis (calcification, ductal abnormality, atrophy).

13. Peritoneal Cavity

(a) Unfit

- (i) Ascites.
- (ii) Solitary mesenteric or retroperitoneal lymph node >1 cm. (Single retroperitoneal LN <1 cm and normal in architecture may be considered fit).
- (iii) Two or more lymph nodes of any size
- (iv) Any mass or cyst.

14. Major Abdominal Vasculature (Aorta/ IVC). Any structural abnormality, focal ectasia, aneurysm and calcification will be considered as unfit.

UROGENITAL SYSTEM

1. Enquiry should be made about any alteration in micturition or urinary stream e.g. dysuria, frequency, poor stream etc. Recurrent attacks of cystitis; pyelonephritis and haematuria must be excluded from history. Detailed enquiry must be made about any history of renal colic, attacks of acute nephritis, any operation on the renal tract including loss of a kidney, passing of stones or urethral discharges. If there is any history of enuresis, past or present, full details must be obtained. History of urethral discharge and Sexually Transmitted Disease (STD) should be elicited.

2. The external genitalia should be meticulously examined to rule out the presence of congenital anomalies e.g. hypospadias, epispadias, ambiguous genitalia, undescended testis (UDT) or ectopic testis etc. Conditions like hydrocele, varicocele, epididymal cyst, phimosis, urethral stricture, meatal stenosis etc should also be ruled out. The criteria to be followed are as follows:

(a) Undescended testis (UDT)

- (i) Unfit – Any abnormal position of testis (unilateral or bilateral) is unfit. Bilateral orchidectomy due to any cause such as trauma, torsion or infection is unfit.
- (ii) Fit - Operatively corrected UDT may be considered fit at least 04 weeks after surgery, provided after surgical correction, the testis is normal in location and the 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.

(b) Varicocele

Unfit – All grades of current varicocele.

Fit - Post-operative cases of varicocele with no residual varicocele and no post op complication or testicular atrophy may be made fit after 04 weeks of surgery, for sub-inguinal varicocelectomy.

(c) Hydrocele

- (i) Unfit – Current hydrocele on any side.
- (ii) Fit - Operated cases of hydrocele may be made fit after 04 weeks of surgery, if there are no post-op complications and wound has healed well.

(d) Epididymal Cyst/ Mass, Spermatocele

- (i) Unfit – Current presence of cyst / mass.
- (ii) Fit – Post operative cases, where wound has healed well, there is no recurrence and only when benign on histopathology report.

(e) Epididymitis/ Orchitis

- (i) Unfit – Presence of current orchitis or epididymitis/ tuberculosis.

- (ii) Fit – After treatment, provided the condition has resolved completely.
- (f) **Epispadias/ Hypospadias**
- (i) Unfit – All are unfit, except glanular variety of hypospadias and epispadias, which is acceptable.
- (ii) Fit – Post-operative cases at least 08 weeks after successful surgery, provided recovery is complete and there are no complications.
- (g) **Penile Amputation**. Any amputation will make the candidate unfit.
- (h) **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 will be considered fit after 04 weeks of surgery, provided wound is fully healed and no post-op complications are seen.
- (j) **Meatal Stenosis**
- (i) Unfit – Current disease, if small enough to interfere with voiding.
- (ii) Fit – Mild disease not interfering with voiding and post-operative cases after a period of 04 weeks of surgery with adequately healed wound and no post op complications.
- (k) **Stricture Urethra, Urethral Fistula**. Any history of / current cases or post-op cases are unfit.
- (l) Sex reassignment surgery/ Intersex condition. Unfit
- (m) **Nephrectomy**. All cases, irrespective of the type of surgery (Simple/ radical/ donor/ partial/ RFA/ cryo-ablation) are unfit. (n) **Renal Transplant Recipients**. Unfit

3. **Urine Examination**

Proteinuria. Proteinuria will be a cause for rejection, unless it proves to be orthostatic.

Glycosuria. When glycosuria is detected, a blood sugar examination (fasting and after 75 g glucose) and glycosylated Hb is to be carried out, and fitness decided as per results. Renal glycosuria is not a cause for rejection.

Urinary Infections. When the candidate has history or evidence of urinary infection it will entail full renal investigation. Persistent evidence of urinary infection will entail rejection.

Haematuria. Candidates with history of haematuria will be subjected to full renal investigation.

4. **Glomerulonephritis**

(a) Acute. In this condition there is a high rate of recovery in the acute phase, particularly in childhood. A candidate who has made a complete recovery and has no proteinuria may be assessed fit, after a minimum period of one year after full recovery.

(b) Chronic. Candidate with chronic glomerulonephritis will be rejected.

5. **Renal Colic and Renal Calculi**. Complete renal and metabolic evaluation is required. Current or history of urolithiasis, recurrent calculus, bilateral renal calculi, nephrocalcinosis are unfit. Even after surgery or any procedure to treat urolithiasis the candidate remains unfit.

6. **Sexual Transmitted Diseases and Human Immuno Deficiency Virus (HIV)**.

Seropositive HIV status and/ or evidence of STD will entail rejection.

Ultrasonography of the Abdomen - Urogenital System

7. Kidneys, ureters and urinary bladder

(a) Unfit

(i) Congenital structural abnormalities of kidneys or urinary tract (aa) Unilateral renal agenesis.

(ab) Unilateral or bilateral hypoplastic/ contracted kidney of size less than 08 cm.

(ac) Malrotation of kidney.

(ad) Horseshoe kidney.

(ae) Ptosed kidney.

(af) Crossed fused/ ectopic kidney.

(ii) Simple single renal cyst of more than 1.5 cm size in one kidney.

(iii) Complex cyst/ polycystic disease/ multiple or bilateral cysts.

(iv) Renal/ ureteric/ vesical mass.

(v) Hydronephrosis or Hydroureteronephrosis.

(vi) Calculi - Renal/ Ureteric/ Vesical.

(b) Fit - Solitary, unilateral, simple renal cyst <1.5 cm provided the cyst is peripherally located, round/ oval, with thin smooth wall and no loculations, with posterior enhancement, no debris, no septa and no solid component.

(c) During Appeal Medical Board/ Review Medical Board unfit candidates will be subjected to specific investigations and detailed clinical examination. Candidates having isolated

abnormality of echo texture of Kidney may be considered fit if Renal Function, DTPA scan and CECT kidney is normal.

8. Scrotum and Testis. The following cases will be made unfit:
 - (a) Bilateral atrophied testis.
 - (b) Varicocele (Unilateral or bilateral).
 - (c) Any abnormal location of testis (Unilateral or Bilateral).
 - (d) Hydrocele
 - (e) Epididymal lesions e.g. cyst.

ENDOCRINE SYSTEM

1. History should be carefully elicited for any endocrine conditions particularly Diabetes Mellitus, disorders of thyroid and adrenal glands, gonads etc. Any history suggestive of endocrine disorders will be a cause for rejection. In case of any doubt, Medical Spl/ Endocrinologist opinion should be taken.
2. A thorough clinical examination to detect any obvious disease of the endocrine system should be carried out. Any clinical evidence of endocrine disease will be unfit.
3. All cases of thyroid swelling having abnormal iodine uptake and abnormal thyroid hormone levels will be rejected. All cases of thyroid swelling are unfit.
4. Candidates detected to have diabetes mellitus will be rejected. A candidate with a family history of Diabetes Mellitus will be subjected to blood sugar (Fasting and after Glucose load) and HbA1c evaluation, which will be recorded.

DERMATOLOGICAL SYSTEM

1. Careful interrogation followed by examination of the candidate's skin is necessary to obtain a clear picture of the nature and severity of any dermatological condition claimed or found. Borderline skin conditions should be referred to a dermatologist. Candidates who give history of sexual exposure to a Commercial Sex Worker (CSW), or have evidence of healed penile sore in the form of a scar should be declared permanently unfit, even in absence of an overt STD, as these candidates are likely 'repeaters' with similar indulgent promiscuous behavior.
2. Assessment of Diseases of the Skin. Acute non-exanthematous and noncommunicable diseases, which ordinarily run a temporary course, need not be a cause of rejection. Diseases of a trivial nature, and those, which do not interfere with general health or cause incapacity, do not entail rejection.
3. Certain skin conditions are apt to become active and incapacitating under tropical conditions. An individual is unsuitable for service if he has a definite history or signs of chronic or recurrent skin disease. Some of such conditions are described below:-
 - (a) Some amount of Palmoplantar Hyperhidrosis is physiological, considering the situation that recruits face during medical examination. However, candidates with significant Palmoplantar Hyperhidrosis should be considered unfit.
 - (b) Mild (Grade I) acne consisting of few comedones or papules, localized only to the face may be acceptable. However, moderate to severe degree of acne (nodulocystic type with or without keloidal scarring) or involving the back should be considered unfit.
 - (c) Any degree of palmoplantar keratoderma manifesting with hyperkeratotic and fissured skin over the palms, soles and heels should be considered unfit.
 - (d) Ichthyosis involving the upper and lower limbs, with evident dry, scaly, fissured skin should be considered unfit. Mild xerosis (dry skin) could be considered fit.
 - (e) Candidates having any keloid should be considered unfit.
 - (f) Clinically evident onychomycosis of finger and toe-nails should be declared unfit, especially if associated with nail dystrophy. Mild degree of distal discoloration involving single nail without any dystrophy may be acceptable.
 - (g) Giant congenital melanocytic naevi, greater than 10 cm should be considered unfit, as there is a malignant potential in such large sized naevi.
 - (h) Single corns/ Warts/ Callosities will be considered fit, three months after successful treatment and no recurrence. However, candidates with multiple warts/ corns/ callosities on palms and soles or diffuse palmoplantar mosaic warts, large callosities on pressure areas of palms and soles should be rejected.
 - (j) Psoriasis is a chronic skin condition known to relapse and/or recur and hence should be considered unfit.
 - (k) Candidates suffering from minor degree of Leukoderma affecting the covered parts may be accepted. Vitiligo limited only to glans penis and prepuce may be considered fit. Those having

extensive degree of skin involvement and especially, when the exposed parts are affected, even to a minor degree, should be made unfit.

1. A history of chronic or recurrent episodes of skin infections will be cause for rejection. Folliculitis or sycosis barbae from which there has been complete recovery may be considered fit.
2. Individuals who have chronic or frequently recurring episodes of a skin disease of a serious or incapacitating nature e.g. eczema are to be assessed as permanently unfit and rejected.
3. Any sign of Leprosy will be a cause for rejection. All peripheral nerves should be examined for any thickness of the nerves and any clinical evidence suggestive of leprosy is a ground for rejection.
4. Naevus depigmentosus and Beckers naevus may be considered fit. Intradermal naevus, vascular naevi are to be made unfit.
5. Pityriasis Versicolor is to be made unfit.
6. Any fungal infection (like Tinea Cruris and Tinea Corporis) of any part of the body will be unfit.
7. Scrotal Eczema may be considered fit on recovery.
8. Canities (premature graying of hair) may be considered fit if mild in nature and no systemic association is seen.
9. Intertrigo may be considered fit on recovery.
10. Genital Ulcers should be considered unfit. Anal and perianal area should also be included as a part of genital examination to rule out STD.
11. Scabies may be considered fit only on recovery.
12. Alopecia areata single and small (<2 cm in diameter) lesion on scalp can be accepted. However if multiple, involving other areas or having scarring, the candidate should be rejected.

MUSCULOSKELETAL SYSTEM AND PHYSICAL CAPACITY

1. Assessment of the candidate's physique is to be based upon careful observation of such general parameters as apparent muscular development, age, height, weight and the correlation of this i.e. potential ability to acquire physical stamina with training. The candidate's physical capacity is affected by general physical development or by any constitutional or pathological condition.

SPINAL CONDITIONS

2. Past medical history of disease or injury of the spine or sacroiliac joints, either with or without objective signs, which has prevented the candidate from successfully following a physically active life, is a cause for rejection for commissioning. History of recurrent lumbago/ spinal fracture/ prolapsed intervertebral disc and surgical treatment for these conditions will entail rejection.

Evaluation of Spine

3. **Clinical Examination.** Normal thoracic kyphosis and cervical/ lumbar lordosis are barely noticeable and not associated with pain or restriction of movement.
 - (a) If clinical examination reveals restriction of spine movements, deformities, tenderness of the spine or any gait abnormalities, it will be considered unfit.
 - (b) Gross kyphosis, affecting military bearing/ restricts full range of spinal movements and/or expansion of chest is unfit.
 - (c) Scoliosis is unfit, if deformity persists on full flexion of the spine, when associated with restricted range of spine movements or when due to an underlying pathological cause. When scoliosis is noticeable or any pathological condition of the spine is suspected, radiographic examination of the appropriate part of the spine needs to be carried out.
 - (d) **Spina Bifida.** The following markers should be looked for, on clinical examination and corroborated with radiological evaluation:
 - (i) Congenital defects overlying the spine e.g. hypertrichosis, skin dimpling, haemangioma, pigmented naevus or dermal sinus.
 - (ii) Presence of lipoma over spine.
 - (iii) Palpable spina bifida.
 - (iv) Abnormal findings on neurological examination.

Radiograph Spine. For flying duties, radiograph (AP and lateral views) of cervical, thoracic and lumbosacral spine is to be carried out. For ground duties, radiographic examination of spine may be carried out, if deemed necessary by Medical Officer/ Specialist.

Spinal Conditions Unfit for Air Force Duties (Both Flying and GroundDuties)

- (a) **Congenital/ Developmental Anomalies**
 - (ii) Wedge Vertebra
 - (iii) Hemivertebra

- (iv) Anterior Central Defect
- (v) Cervical Ribs (Unilateral/ Bilateral) with demonstrable neurological or circulatory deficit
- (vi) Spinabifida:- All types are unfit except in sacrum and LV5 (if completely sacralised)
- (vii) Loss of Cervical Lordosis when assessed with clinically restricted movement of cervical spine.
- (viii) Scoliosis-
 - (aa) Lumbar Scoliosis greater than 15 degrees
 - (ab) Thoracic scoliosis greater than 20 degrees
 - (ac) Thoraco-lumbar scoliosis greater than 20 degrees
- (ix) Atlanto-occipital and Atlanto-axial anomalies
- (x) Incomplete Block (fused) vertebra at any level in cervical, dorsal or lumbar spine.\
- (xi) Complete Block (fused) vertebra at more than one level in cervical or dorsal spine. (Single level is acceptable. Annotation is to be made in AFMSF-2)
- (xii) Unilateral sacralisation or lumbarisation (complete or incomplete) and Bilateral incomplete sacralisation or lumbarisation (LSTV- Castellvi Type II a & b, III a & IV) (Bilateral Complete Sacralisation of LV5 and Bilateral Complete Lumbarisation of SV1 i.e LSTV Castellvi Type III b and Type I a & b are acceptable (Annotation is to be made in AFMSF-2)
- (b) **Traumatic Conditions**
 - (ii) Spondylolysis/ Spondylolisthesis
 - (iii) Compression fracture of vertebra
 - (iv) Intervertebral Disc Prolapse
 - (v) Schmorl's Nodes at more than one level
- (c) **Infective**
 - (i) Tuberculosis and other Granulomatous disease of spine (old or active)
 - (ii) Infective Spondylitis
- (d) **Autoimmune**
 - (i) Rheumatoid Arthritis and allied disorders
 - (ii) Ankylosing spondylitis
 - (iii) Other rheumatological disorders of spine e.g Polymyositis, SLE and Vasculitis
- (e) **Degenerative**
 - (i) Spondylosis
 - (ii) Degenerative Joint Disorders
 - (iii) Degenerative Disc Disease
 - (iv) Osteoarthritis/ osteoarthritis
 - (v) Scheuerman's Disease (Adolescent Kyphosis)
- (f) **Any other spinal abnormality, if so considered by the specialist.**

CONDITIONS AFFECTING THE ASSESSMENT OF UPPER LIMBS

7. Deformities of the upper limbs or their parts will be cause for rejection. Candidate with an amputation of a limb will not be accepted for entry. Amputation of terminal phalanx of little finger on both sides is, however, acceptable.

8. Healed Fractures

- (a) In the following conditions, healed fractures of upper limb are not acceptable:-
 - (i) Fractures involving articular surfaces
 - (ii) Fractures associated with neuro-vascular deficit
 - (iii) Malunited fractures
 - (iv) Fracture causing impairment of function
 - (v) Fractures with implant in-situ
- (b) Fracture of the upper limb, presenting 06 months after the injury with none of the sequelae as mentioned above are acceptable after assessment by orthopaedic surgeon.

9. **Fingers and Hands.** Syndactyly and polydactyly will be assessed as unfit except when polydactyly is excised. Deformities and limitations to movements will be considered unfit.
10. **Wrist.** Painless limitation of movement of the wrist will be assessed according to the degree of stiffness. Loss of dorsiflexion is more serious than loss of palmar flexion.
11. **Elbow.** Slight limitation of movement does not bar acceptance provided functional capacity is adequate. Ankylosis will entail rejection. Cubitus Valgus is said to be present when the carrying angle (angle between arm and forearm in anatomical posture) is exaggerated. In absence of functional disability and obvious cause like a fracture mal-union, fibrosis or the like, a carrying angle of upto 15° in male and 18° in female candidates would be made fit.
12. Cubitus Varus of > 5 degree will be unfit.
13. **Shoulder Girdle.** History of recurrent dislocation of shoulder with or without corrective surgery will be unfit.
14. **Clavicle.** Non-union of an old fracture clavicle will entail rejection. Mal-united clavicle fracture without loss of function and without obvious deformity are acceptable.
- CONDITIONS AFFECTING THE ASSESSMENT OF LOWER LIMBS**
15. Hallux valgus with angle >20 degrees and first-second metatarsal angle of >10 degrees is unfit. Hallux valgus of any degree with bunion, corns or callosities is unfit.
16. Hallux rigidus is unfit for service.
17. Isolated single flexible mild hammer toe without symptoms may be accepted. Fixed (rigid) deformity or hammer toe associated with corns, callosities, mallet toes or hyperextension at metatarso-phalangeal joint (claw toe deformity) are to be rejected.
18. Loss of any digits/ toes entails rejection.
19. Extra digits will entail rejection if there is bony continuity with adjacent digits. Cases of syndactyly will be rejected.
20. **Pes Planus (Flat feet)**
- (a) If the arches of the feet reappear on standing on toes, if the candidate can skip and run well on the toes and if the feet are supple, mobile and painless, the candidate is acceptable.
- (b) Rigid or fixed flat feet, gross flat feet, with planovalgus, eversion of heel, cannot balance himself on toes, cannot skip on the forefoot, tender painful tarsal joints, prominent head of talus will be considered unfit. Restriction of the movements of the foot will also be a cause for rejection. Rigidity of the foot, whatever may be the shape of the foot, is a cause for rejection.
21. **Pes Cavus and Talipes (Club Foot).** Mild degree of idiopathic pes cavus without any functional limitation is acceptable. Moderate and severe pes cavus and pes cavus due to organic disease will entail rejection. All cases of Talipes (Club Foot) will be rejected.
22. **Ankle Joints.** Any significant limitation of movement following previous injuries will not be accepted. Functional evaluation with imaging should be carried out wherever necessary.
23. **Knee Joint.** Any ligamentous laxity is not accepted. Candidates who have undergone ACL reconstruction surgery are to be considered unfit.
24. Genu valgum (knock knee) with intermalleolar distance > 5 cm in males and > 8 cm in females will be unfit.
25. Genu varum (bow legs) with intercondylar distance >7 cm will be considered unfit.
26. **Genu Recurvatum.** If the hyperextension of the knee is within 10 degrees and is unaccompanied by any other deformity, the candidate should be accepted as fit.
27. True lesions of the hip joint or early signs of arthritis will entail rejection.
28. Peripheral Vascular System
- (a) **Varicose Veins.** All cases with active varicose veins will be declared unfit. Post-op cases of varicose veins also remain unfit.
- (b) **Arterial System.** Current or history of abnormalities of the arteries and blood vessels e.g. aneurysms, arteritis and peripheral arterial disease will be considered unfit.
- (c) **Lymphoedema.** History of past/ current disease makes the candidate unfit.

CENTRAL NERVOUS SYSTEM

1. A candidate giving a history of mental illness/ psychological afflictions requires detailed investigation and psychiatric referral. Such cases should normally be rejected. Most often the history is not volunteered. The examiner should try to elicit a history by direct questioning, which may or

may not be fruitful. Every examiner should form a general impression of the candidate's personality as a whole and may enquire into an individual's stability and habitual reactions to difficult and stressful situations. Family history and prior history of using medication is also relevant.

2. History of insomnia, phobias, nightmares or frequent sleepwalking or Bedwetting, when recurrent or persistent, will be a cause for rejection.

3. Common types of recurrent headaches are those due to former head injury or migraine. Other forms of occasional headache must be considered in relation to their probable cause. A candidate with migraine, which was severe enough to make him consult his doctor, should normally be a cause for rejection. Even a single attack of migraine with visual disturbance or Migrainous epilepsy is to be made unfit.

4. History of epilepsy in a candidate is a cause for rejection. Convulsions/ fits after the age of five are also a cause for rejection. Convulsions in infancy may not be of ominous nature provided it appears that the convulsions were febrile convulsions and were not associated with any overt neurological deficit. Causes of epilepsy include genetic factors, traumatic brain injury, stroke, infection, demyelinating and degenerative disorders, birth defects, substance abuse and withdrawal seizures. Enquiry should not be limited only to the occurrence of major attacks. Seizures may masquerade as — “faints” and therefore the frequency and the conditions under which — “faints” took place must be elicited. Such attacks will be made unfit, whatever their apparent nature. An isolated fainting attack calls for enquiry into all the attendant factors to distinguish between syncope and seizures e.g. fainting in school are of common occurrence and may have little significance. Complex partial seizures, which may manifest as vegetative movements as lip smacking, chewing, staring, dazed appearance and periods of unresponsiveness, are criteria for making the candidate unfit.

5. History of repeated attacks of heat stroke, hyperpyrexia or heat exhaustion bars employment for Air Force duties, as it is an evidence of a faulty heat regulating mechanism. A single severe attack of heat effects, provided the history of exposure was severe, and no permanent sequelae were evident is, by itself, not a reason for rejecting the candidate.

6. A history of severe head injury is a cause for rejection. Other sequelae of head injury like post-concussion syndrome, focal neurological deficit and post traumatic epilepsy should be noted which may be associated with subjective symptoms of headache, giddiness, insomnia, restlessness, irritability, poor concentration and attention deficits. Post traumatic neuropsychological impairment can also occur which includes deficits in attention concentration, information processing speeds, mental flexibility and frontal lobe executive functions and psychosocial functioning. Neuropsychological testing including psychometry can assess these aspects. It is important to realize that sequelae may persist for considerable period and may even be permanent. Fracture of the skull need not be a cause for rejection unless there is a history of associated intracranial damage or any residual bony defect in the calvaria.

7. When there is a history of severe injury or an associated convulsive attack, an electroencephalogram should be carried out which must be normal. Presence of burr holes will be cause for rejection for flying duties, but not for ground duties. Each case is to be judged on individual merits. Opinion of Neurosurgeon and Psychiatrist must be obtained before acceptance.

8. When a history of nervous breakdown, mental disease, or suicide of a near relative is obtained, a careful investigation of the personal past history from a psychological point of view is to be obtained. Any evidence of even the slightest psychological instability in the personal history or present condition should entail rejection and the candidate should be referred to the psychiatrist for further evaluation.

9. If a family history of epilepsy is admitted, an attempt should be made to determine its type. When the condition has occurred in a near (first degree) relative, the candidate may be accepted, if he has no history of associated disturbance of consciousness, neurological deficit or higher mental functions and his electroencephalogram is completely normal.

10. The assessment of emotional stability must include family and personal history, any indication of emotional instability under stress as evidenced by the occurrence of undue emotionalism as a child or of any previous nervous illness or breakdown. The presence of stammering, tic, nail biting, excessive hyperhidrosis or restlessness during examination could be indicative of emotional instability and should be made unfit.

11. All candidates who are suffering from psychosis are to be rejected. Drug dependence in any form will also be a cause for rejection.

12. **Psychoneurosis.** Mentally unstable and neurotic individuals are unfit for commissioning. Juvenile and adult delinquency, history of nervous breakdown or chronic ill-health is causes for

rejection. Particular attention should be paid to such factors as unhappy childhood, poor family background, truancy, juvenile and adult delinquency, poor employment and social maladjustment records, history of nervous breakdown or chronic ill-health, particularly if these have interfered with employment in the past.

13. Any evident neurological deficit should call for rejection.

14. Tremors are rhythmic oscillatory movements of reciprocally innervated muscle groups. Two categories are recognized: normal or physiologic and abnormal or pathologic. Fine tremor is present in all contracting muscle groups, it persists throughout the waking state, the movement is fine between 8 to 13 Hz. Pathologic tremor is coarse, between 4 to 7 Hz and usually affects the distal part of limbs. Gross tremors are generally due to enhanced physiological causes where, at the same frequency, the amplitude of the tremor is grossly enhanced and is elicited by outstretching the arms and fingers which are spread apart. This occurs in cases of excessive fright, anger, anxiety, intense physical exertion, metabolic disturbances including hyperthyroidism, alcohol withdrawal and toxic effects of lithium, smoking (nicotine) and excessive tea, coffee. Other causes of coarse tremor are Parkinsonism, cerebellar tremors (intentional tremors), essential (familial) tremor, tremors of neuropathy and postural or action tremors.

15. Candidates with stammering will not be accepted for Air Force duties. Careful assessment by ENT Specialist, Speech therapist, psychologist/ psychiatrist may be required in doubtful cases.

16. **Basal Electroencephalogram (EEG).** EEG is to be recorded for candidates for aircrew duties only in case there is a history of epilepsy in the family, past history of head injury and/or any other psychological or neurological abnormality noted in the past. These aspects will be carefully enquired into. In case of other candidates also, EEG can be taken if indicated or considered necessary by the medical examiner. Those with following EEG abnormalities in resting EEG or EEG under provocative techniques will be rejected for aircrew duties: -

(a) **Background Activity.** Focal, excessive and high amplitude beta activity/hemispherical asymmetry of more than 2.3 Hz/generalized and focal runs of slow waves approaching background activity in amplitude.

(b) **Hyperventilation.** Paroxysmal spikes and slow waves/spikes/focal spike pattern.

(c) **Photo Stimulation.** Bilaterally synchronous or focal paroxysmal spikes and slow waves persisting in post-photoc stimulation period/suppression or driving response over one hemisphere.

17. Non specific EEG abnormality will be acceptable provided opinion of Neuropsychiatrist/ Neurophysician is obtained. The findings of EEG will be entered in AFMSF-2. In case an EEG is reported as abnormal, the cadet would be referred to CHAF (B) for a comprehensive evaluation by neurophysician followed by review by a Board at IAM IAF.

EAR, NOSE AND THROAT

1. **History.** Any significant history of otorrhoea, hearing loss, vertigo including motion sickness, tinnitus etc is to be elicited.

2. **Nose and Para-nasal Sinuses.** The following entails rejection:

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

(b) Obstruction to free breathing as a result of a marked septal deviation. Post corrective surgery with residual mild deviation with adequate airway patency will be acceptable.

(c) Septal perforation is unacceptable. However, asymptomatic anterior (cartilaginous) septal perforation may be accepted by ENT specialist provided chronic granulomatous diseases have been ruled out and nasal mucosa is healthy.

(d) Atrophic rhinitis.

(e) Any history/clinical evidence suggestive of allergic rhinitis/ vasomotor rhinitis will entail rejection.

(f) Any infection of the para-nasal sinuses will be declared unfit. Such cases may be accepted following successful treatment at the Appeal Medical Board.

(g) Current nasal polyposis is a cause for rejection. However, such cases 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 04 weeks post-surgery.

3. **Oral Cavity**

- (a) **Unfit**
 - (i) Current/ operated cases of leukoplakia, erythroplakia, submucous fibrosis, ankyloglossia and oral carcinoma.
 - (ii) Current oral ulcers/ growths and mucous retention cysts.
 - (iii) Trismus due to any cause.
 - (iv) Cleft palate, even after surgical correction.
- (b) **Fit**
 - (i) Completely healed oral ulcers.
 - (ii) Operated cases of mucus retention cyst with no recurrence and proven benign histology. Evaluation in these cases should be done after minimum 04 weeks post-surgery.
 - (iii) Sub-mucous cleft of palate with or without bifid uvula not causing Eustachian tube dysfunction may be accepted by ENT specialist, provided PTA, tympanometry and speech are normal.

4. **Pharynx and Larynx.** The following conditions will entail rejection:

- (a) Any ulcerative/ mass lesion of the pharynx.
 - (b) Candidates in whom tonsillectomy is indicated. Such candidates may be accepted minimum 02 weeks after successful surgery provided there are no complications and histology is benign.
 - (c) Cleft palate.
 - (d) Any disabling condition of the pharynx or larynx causing persistent hoarseness or dysphonia.
 - (e) Chronic laryngitis, vocal cord palsy, laryngeal polyps and growths.
5. Obstruction or insufficiency of Eustachian tube function will be a cause for rejection. Altitude chamber ear clearance test will be carried out before acceptance in in-service candidates.
6. The presence of tinnitus necessitates investigation of its duration, localization, severity and possible causation. Persistent tinnitus is a cause for rejection, as it is liable to become worse through exposure to noise and may be a precursor to Otosclerosis and Meniere's disease.
7. Specific enquiry should be made for any susceptibility to motion sickness. An endorsement to this effect should be made in AFMSF-2. Such cases will be fully evaluated and, if found susceptible to motion sickness, they will be rejected for flying duties. Any evidence of peripheral vestibular dysfunction due to any cause will entail rejection.

8. A candidate with a history of dizziness needs to be investigated thoroughly.

9. **Hearing loss.** The following are not acceptable:

- (a) Any reduction less than 600 cm in CV/ FW.
- (b) Wherever PTA is indicated and thresholds are obtained, the audiometric loss greater than 20 db, in frequencies between 250 and 8000 Hz.
- (c) Free field hearing loss is a cause for rejection.

Note: In evaluating the audiogram, the baseline zero of the audiometer and the environmental noise conditions under which the audiogram has been obtained should be taken into consideration. On the recommendation of an ENT Specialist, an isolated unilateral hearing loss up to 30 db may be condoned provided ENT examination is otherwise normal.

10. **Ears.** A radical/modified radical mastoidectomy entails rejection even if completely epithelialised and good hearing is preserved. Cases of cortical mastoidectomy in the past with the tympanic membrane intact, normal hearing and presenting no evidence of disease may be accepted.

11. **External Ear.** The following defects of external ear should be declared unfit:

- (a) Gross deformity of pinna which may hamper wearing of uniform/ personal kit/ protective equipment, or which adversely impacts military bearing.
- (b) Cases of chronic otitis externa.
- (c) Exostoses, atresia/ narrowing of EAM or neoplasm preventing a proper examination of the ear drum.
- (d) Exaggerated tortuosity of the canal, obliterating the anterior view of the tympanic membrane will be a cause for rejection.
- (e) Granulation or polyp in external auditory canal.

12. **Middle Ear.** The following conditions of middle ear will entail rejection:-

- (a) Current otitis media of any type.
- (b) Attic, central or marginal perforation.
- (c) Tympanosclerosis or scarring affecting >50 % of the Pars Tensa of TM is unfit even if PTA and tympanometry are normal. Evidence of healed chronic Otitis Media in the form of

Tympanosclerosis or scarring affecting <50 % of Pars Tensa of TM will be assessed by ENT spl and will be acceptable if PTA and tympanometry are normal. A trial of decompression chamber may be carried out, if indicated, for aircrew, ATC/FC, submariners/divers.

- (d) Any residual perforation in cases of old otitis media.
- (e) Marked retraction or restriction in TM mobility on pneumatic otoscopy.
- (f) Any hearing impairment on forced Whisper test.
- (g) Deranged pure tone audiometry thresholds.
- (h) Tympanometry showing patterns other than Type 'A' tympanogram.
- (i) Any implanted hearing devices e.g. cochlear implants, bone anchored hearing aids etc.
- (j) After middle ear surgeries viz. stapedectomy, ossiculoplasty, any type of canal-wall down mastoidectomy.

Note: Healed healthy scars of neo-tympanic membrane involving <50 % of Pars Tensa due to Type 1 Tympanoplasty (with or without Cortical Mastoidectomy) for Chronic Otitis Media (Mucosal type) and Myringotomy (for Otitis Media with Effusion) may be acceptable if PTA, Tympanoplasty are normal. Assessment of operated cases will be done only after a minimum of 12 weeks. A trial in Decompression Chamber may be carried out, if indicated, for aircrew, ATC/FC, submariners/ divers.

13. **Miscellaneous Ear Conditions.** The following ear conditions will entail rejection:-

- (a) Otosclerosis.
- (b) Meniere's disease.
- (c) Vestibular dysfunction including nystagmus of vestibular origin.
- (d) Bell's palsy following ear infection.

OPHTHALMIC SYSTEM

1. Visual defects and medical ophthalmic conditions are amongst the major causes of rejection from flying duties. Therefore, a thorough and accurate eye examination is of great importance for all candidates, especially those for flying duties.

2. **Personal and Family History and External Examination**

- (a) Squint and the need for spectacles for other reasons are frequently hereditary and a family history may give valuable information on the degree of deterioration to be anticipated. Candidates, who are wearing spectacles or found to have defective vision, should be properly assessed. All cases of squint should be made unfit by recruiting MO and by Specialist. Individuals with manifest squint are not acceptable for commissioning. 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.
- (b) Ptosis interfering with vision or visual field is a cause for rejection till surgical correction remains successful for a period of six months. Mild ptosis which is not affecting vision/ visual field in day or night may be considered fit. In such situations, the assessment in central 30 degree of visual field should be done properly.
- (c) Candidates with uncontrollable blepharitis, particularly with loss of eyelashes, are generally unsuitable and should be rejected. Severe cases of blepharitis and chronic conjunctivitis should be assessed as temporarily unfit until the response to treatment can be assessed.
- (d) These cases of Ectropion/ Entropion are to be made unfit. Mild ectropion and entropion which in the opinion of ophthalmologist will not hamper day to day functioning in any way, may be made fit.
- (e) All cases of progressive pterygium to be made unfit by recruiting MO and specialist. Regressive non vascularised pterygium likely to be stationary occupying ≤ 1.5 mm of the peripheral cornea may be made fit by eye spl after measurement on a slit lamp.
- (f) All cases of nystagmus are to be made unfit except for physiologic nystagmus.
- (g) Naso-lacrymal occlusion producing epiphora or a mucocele entails rejection, unless surgery produces relief lasting for a minimum of six months and the post op syringing is patent.
- (h) Uveitis (iritis, cyclitis, and choroiditis) is frequently recurrent, and candidates giving a history of or exhibiting this condition should be carefully assessed. When there is evidence of permanent lesions such candidates should be rejected.
- (j) Corneal scars, opacities will be cause for rejection unless it does not interfere with vision. Such cases should be carefully assessed before acceptance, as many conditions are recurrent.
- (k) Cases with Lenticular opacities should be assessed carefully. As a guideline any opacity causing visual deterioration, or is in the visual axis or is present in an area of 7 mm around the pupil, which may cause glare phenomena, should not be considered fit. The propensity of the

opacities not to increase in number or size should also be a consideration when deciding fitness. 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. (It should be less than 10 in number and central area of 4 mm to be clear).

(l) Visual disturbances associated with headaches of a migrainous type are not a strictly ocular problem, and should be assessed in accordance with para 3 of Central Nervous System Section mentioned above. Presence of diplopia or detection of nystagmus requires proper examination, as they can be due to physiological reasons.

(m) Night blindness is largely congenital but certain diseases of the eye exhibit night blindness as an early symptom and hence, proper investigations are necessary before final assessment. As tests for night blindness are not routinely performed, a certificate to the effect that the individual does not suffer from night blindness will be obtained in every case. Certificate should be as per **Appendix 'A'** to this notification. A proven case of night-blindness is unfit for service.

(n) Restriction of movements of the eyeball in any direction and undue depression/ prominence of the eyeball requires proper assessment.

(o) **Retinal lesions.** A small healed chorio-retinal scar in the retinal periphery not affecting the vision and not associated with any other complications can 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.

3. **Visual Acuity/ Colour Vision.** The visual acuity and colour vision requirements are detailed in **Appendix 'B'** to this notification. Those who do not meet these requirements are to be rejected.

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

5. **Refractive Surgeries.** Candidates who have undergone Photo Refractive Keratotomy (PRK)/ Laser in-situ Keratomileusis (LASIK) may be considered fit for commissioning in the Air Force in all branches. Post PRK/LASIK candidates must meet the following criteria of visual requirements for the branch as laid down below:-

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

(b) The axial length of the eye should not be more than 25.5 mm as measured by IOL master.

(c) At least 12 months should have elapsed post uncomplicated stable PRK/LASIK with no history or evidence of any complication.

(d) The post PRK/LASIK corneal thickness as measured by a corneal pachymeter should not be less than 450 microns.

(e) Individuals with high refractive errors (>6D) prior to LASIK are to be excluded.

6. Radial Keratotomy (RK) surgery for correction of refractive errors is not permitted for any Air Force duties. Candidates having undergone cataract surgery with or without IOL implants will also be declared unfit.

OCULAR MUSCLE BALANCE

7. Individuals with manifest squint are not acceptable for commissioning. The assessment of latent squint or heterophoria in the case of aircrew will be mainly based on the assessment of the fusion capacity. A strong fusion sense ensures the maintenance of binocular vision in the face of stress and fatigue. Hence, it is the main criterion for acceptability.

(a) Convergence (as assessed on RAF rule)

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

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

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

Table 1 - Accommodation Values – Age wise

Age in Yrs	17-20	21-25	26-30	31-35	36-40	41-45
<i>Accommodation (in cm)</i>	<i>10-11</i>	<i>11-12</i>	<i>12.5-13.5</i>	<i>14-16</i>	<i>16-18.5</i>	<i>18.5-27</i>

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

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

Appendix 'A'

[Refers to para 2 (m) Ophthalmology standards]

CERTIFICATE REGARDING NIGHT BLINDNESS

Name with initials _____
 Batch No. _____ Chest No. _____

I hereby certify that to the best of my knowledge, there has not been any case of night blindness in our family, and I do not suffer from it.

Date:

(Signature of the candidate)

Countersigned by
 (Name of Medical Officer)

Appendix 'B'

(para 3 above of
 Ophthalmology standards)

VISUAL STANDARDS AT INITIAL ENTRY

Sl No.	Med Cat	Branch	Maximum Limits of Refractive Error	Visual Acuity (VA) with limits of maximum correction	Colour Vision
1	A1G1	F (P) including WSOs, Flying Branch cadets at AFA	Hypermetropia: + 1.5D Sph Manifest Myopia: Nil Astigmatism: +0.75D Cyl (within +1.5 D Max) Retinoscopic myopia: Nil	6/6 in one eye and 6/9 in other, correctable to 6/6 only for Hypermetropia	CP-I

Note 1: Ocular muscle balance for personnel covered in Sl. Nos. 1 and 2 should conform to Appendix C to this Chapter.

Note 2: Visual standards of Air Wing Cadets at NDA and Flt Cds of F (P) at AFA should conform to A1G1 F (P) standard (Sl. No. 1 of Appendix B)

Note 3: The Sph correction factors mentioned above will be inclusive of the specified astigmatic correction factor. A minimum correction factor upto the specified visual acuity standard can be accepted

STANDARD OF OCULAR MUSCLE BALANCE FOR FLYING DUTIES

<i>Sl. No.</i>	<i>Test</i>	<i>Fit</i>	<i>Temporary Unfit</i>	<i>Permanently Unfit</i>
1	<i>Maddox Rod Test at 6 meters</i>	<i>Exo-6 Prism D Eso -6 Prism D Hyper-1 prism D Hypo- 1 prism D</i>	<i>Exo- Greater than 6 prism D Eso- Greater than 6 prism D Hyper- Greater than 1 prism D Hypo- Greater than 1 prism D</i>	<i>Unocular suppression Hyper/ Hypo more than 2 prism D</i>
2	<i>Maddox Rod Test at 33 cm</i>	<i>Exo-16 Prism D Eso- 6 Prism D Hyper- 1 Prism D Hypo- 1 Prism D</i>	<i>Exo - Greater than 16 prism D Eso - Greater than 6 prism D Hyper Greater than 1 prism D Hypo Greater than 1 prism D</i>	<i>Unocular suppression Hyper/ Hypo more than 2 prism D</i>
3	<i>Hand held Stereoscope</i>	<i>All of BSV grades</i>	<i>Poor Fusional reserves</i>	<i>Absence of SMP, fusion Stereopsis</i>
4	<i>Convergence</i>	<i>Up to 10 cm</i>	<i>Up to 15 cm with effort</i>	<i>Greater than 15 cm with effort</i>
5	<i>Cover test for Distance and Near</i>	<i>Latent divergence / convergence recovery rapid and complete</i>	<i>Compensated heterophoria/ trophia likely to improve with treatment / persisting even after treatment</i>	<i>Compensated heterophoria</i>

HAEMOPOIETIC SYSTEM

1. History of easy fatigability, general weakness, petechiae/ ecchymosis, bleeding from gums and alimentary tract, persistent bleeding after minor trauma and menorrhagia in case of females should be carefully elicited. All candidates should be examined for clinical evidence of pallor (anaemia), malnutrition, icterus, peripheral lymphadenopathy, purpura, petechiae/ ecchymoses and hepatosplenomegaly.

2. In the event of laboratory confirmation of anaemia (<13g/dl in males and <11.5g/dl in females), further evaluation to ascertain type of anaemia and aetiology has to be carried out. This should include a complete haemogram (to include the PCV MCV, MCH, MCHC, TRBC, TWBC, DLC, Platelet count, reticulocyte count and ESR) and a peripheral blood smear. All the other tests to establish the aetiology will be carried out, as required. Ultrasonography of abdomen for gallstones, upper GI Endoscopy/ proctoscopy and hemoglobin electrophoresis etc. may be done, as indicated, and the fitness of the candidate, decided on the merit of each case.

3. Candidates with mild microcytic hypochromic (Iron deficiency anaemia) or dimorphic anaemia (Hb < 10.5g/dl in females and < 11.5g/dl in males), in the first instance, may be made temporarily unfit for a period of 04 to 06 weeks followed by review thereafter. These candidates can be accepted, if the complete haemogram and PCV, peripheral smear results are within the normal range. Candidates with macrocytic/ megaloblastic anaemia will be assessed unfit.

4. All candidates with evidence of hereditary haemolytic 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 to be considered unfit for service.

5. In the presence of history of haemorrhage into the skin like ecchymosis/ petechiae, epistaxis, bleeding from gums and alimentary tract, persistent bleeding after minor trauma or lacerations/ tooth extraction or menorrhagia in females and any family history of haemophilia or other bleeding disorders a full evaluation will be carried out. These cases will not be acceptable for entry to service. All candidates with clinical evidence of purpura or evidence of thrombocytopenia are to be considered unfit for service. Cases of Purpura Simplex (simple easy bruising), a benign disorder seen in otherwise healthy women, may be accepted.

6. Candidates with history of haemophilia, von Willebrand's disease, on evaluation, are to be declared unfit for service at entry level.

DENTAL FITNESS STANDARDS

1. The examiner should enquire whether the candidate has any past history of major dental procedures or alterations. Significant past history of ulceration or infection of the tongue, gums or throat should be documented. History suggestive of premalignant lesions or pathologies that are prone for recurrence should be elicited.

2. **Dental Standards.** The following dental standards are to be followed and candidates whose dental standard does not conform to the laid down standards will be rejected:-

(a) Candidate must have a minimum of 14 dental points and the following teeth must be present in the upper jaw in good functional opposition with the corresponding teeth in the lower jaw:-

(i) Any four of the six anterior

(ii) Any six of the ten posterior

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

(c) 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.

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

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

(f) All removable dental prosthesis will be removed during oral examination and not be awarded any dental points except in the case of ex-serviceman applying for re-enrolment, who will be awarded dental points for well fitting removable prostheses.

3. **Extra oral examination**

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

(b) **Functional examination**

(i) Temporomandibular joint (TMJ). TMJs will be bilaterally palpated for tenderness and/or clicking. Candidates with symptomatic clicking and/or tenderness or dislocation of the TML on wide opening will be rejected.

(ii) Mouth Opening. A mouth opening of less than 30 mm measured at the incisal edges will be reason for rejection.

4. **Guidelines for awarding dental points in special situations**

(a) **Dental caries.** Teeth with caries that have not been restored or teeth associated broken down crowns, pulp exposure, residual root stumps, teeth with abscesses and/or sinuses will not be counted for award of dental points.

(b) **Restorations.** Teeth having restorations that appear to be improper/broken/discolored will not be awarded dental points. Teeth restored by use of inappropriate materials, temporary or fractured restorations with doubtful marginal integrity or peri-apical pathology will not be awarded dental points.

(c) **Loose teeth.** Loose/mobile teeth with clinically demonstrable mobility will not be awarded dental points. Periodontally splinted teeth will not be counted for award of dental points.

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

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

(f) **Periodontium**

(i) The condition of the gums, of the 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.

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

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

(g) **Malocclusion.** Candidates with malocclusion affecting masticatory efficiency and phonetics shall not be recruited. 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. However, if in the opinion of the dental officer, the malocclusion of teeth is not hampering efficient mastication, phonetics, maintenance of oral hygiene or general nutrition or performance of duties efficiently, then candidates will be declared FIT. The following criteria have to 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 bite which is causing traumatic indentations on the palate will not be counted for award of points.

(h) **Hard and 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. All potentially malignant lesions will be 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. Any hard or soft tissue lesion will be a cause of rejection.

(i) **Orthotic 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 fixed or removable orthodontic appliances will be declared UNFIT.

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

(k) **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 the pontics.

(ac) Cantilever FDPs. 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 implants.

(m) A maximum of 02 implants will be permitted in a candidate. No points will be given for implants/implant supported prosthesis in excess of the 02 permissible implants. In the case of a candidate having 03 more implants/implant supported prosthesis, which 02 are to be awarded marks will be based on the clinical judgment of the dental officer.

5. **The following will be criteria for declaring a candidate UNFIT**

(a) **Oral hygiene.** Poor oral health status in the form of gross visible calculus, periodontal pockets and/or bleeding from gums will render candidate UNFIT.

(b) **Candidates reporting post maxillo-facial 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 the laid down criteria.

(c) Candidate with dental arches affected by advanced stage of generalized active lesions of pyorrhoea, acute ulcerative gingivitis, and gross abnormality of the teeth or jaws or with numerous caries or septic teeth will be rejected.

1. Please visit www.joinindianarmy.nic.in for Medical Standards and Procedure of Medical Examination of Officers' Entry into Army as applicable.