the diagnosis and treatment was completed more than two years earlier. In these cases, a CT scan chest and fibreoptic 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.** <u>Pleurisy with Effusion</u>. Any evidence of significant residual pleural thickening will be a cause for rejection.

4. <u>Bronchitis</u>. 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. <u>Bronchial Asthma</u>. History of repeated attacks of bronchial asthma/ wheezing/ allergic rhinitis will be a cause for rejection.

6. <u>Radiographs of the Chest</u>. 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. <u>Thoracic surgery.</u> Candidate with history of any resection of the lung parenchyma will be considered unit. 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. <u>Head to toe examination</u>. 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.** <u>Gastro-Duodenal Disabilities</u>. 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. <u>Diseases of the Liver</u>. 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. <u>Disease of the Spleen</u>. Candidates who have undergone partial/ total splenectomy are unfit, irrespective of the cause for operation.

6. <u>Hernia</u>. 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 well-healed 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. <u>Abdominal Surgery</u>

(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. <u>Anorectal Conditions.</u> 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) <u>Fit</u>

(i) Only external skin tags.

(ii) After rectal surgery for polyps, haemorrhoids, fissure, fistula or ulcer, provided there is no residual/ recurrent disease.

- (b) <u>Unfit</u>
  - (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

# <u>Ultrasonography of Abdomen</u>

- 9. <u>Liver</u>
  - (a) <u>Fit</u>

 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) <u>Unfit</u>
  - (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. <u>Gall Bladder</u>

- (a) <u>Fit</u>
  - (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) <u>Unfit</u>
  - (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) <u>Unfit</u>

(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. <u>Pancreas</u>

- (a) <u>Unfit</u>
  - (i) Any structural abnormality.
  - (ii) Space Occupying Lesion/ Mass lesion.

(iii) Features of chronic pancreatitis (calcification, ductal abnormality, atrophy).

#### 13. <u>Peritoneal Cavity</u>

- (a) <u>Unfit</u>
  - (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. <u>Major Abdominal Vasculature (Aorta/ IVC)</u>. 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) <u>Unfit</u> – 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) <u>Fit</u> - 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

(i) <u>Unfit</u> – All grades of current varicocele.

(ii) <u>Fit</u> - 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 varicocoelectomy.

#### (c) Hydrocele

(i) <u>Unfit</u> – Current hydrocele on any side.

(ii) <u>Fit</u> - 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) <u>Unfit</u> – Current presence of cyst / mass.

(ii)  $\underline{Fit}$  – Post operative cases, where wound has healed well, there is no recurrence and only when benign on histopathology report.

#### (e) Epididymitis/ Orchitis

(i) <u>Unfit</u> – Presence of current orchitis or epididymitis/ tuberculosis.

(ii) <u>Fit</u> – After treatment, provided the condition has resolved completely.

## (f) Epispadias/ Hypospadias

(i)  $\underline{\text{Unfit}}$  – All are unfit, except glanular variety of hypospadias and epispadias, which is acceptable.

(ii)  $\underline{Fit}$  – Post-operative cases at least 08 weeks after successful surgery, provided recovery is complete and there are no complications.

## (g) <u>Penile Amputation.</u> Any amputation will make the candidate unfit.

#### (h) Phimosis

(i) <u>Unfit</u> – Current phimosis, if tight enough to interfere with local hygiene and voiding and/ or associated with Balanitis Xerotica Obliterans.

(ii) <u>Fit</u> – 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) <u>Unfit</u> – Current disease, if small enough to interfere with voiding.

(ii)  $\underline{Fit}$  – 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) <u>Stricture Urethra, Urethral Fistula</u>. Any history of / current cases or postop cases are unfit.

## (1) Sex reassignment surgery/ Intersex condition. Unfit

(m) <u>Nephrectomy.</u> All cases, irrespective of the type of surgery (Simple/ radical/ donor/ partial/ RFA/ cryo-ablation) are unfit.

## (n) Renal Transplant Recipients. Unfit

## 3. <u>Urine Examination</u>

(a) <u>**Proteinuria.**</u> Proteinuria will be a cause for rejection, unless it proves to be orthostatic.

(b) <u>**Glycosuria.**</u> 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.

(c) <u>Urinary Infections.</u> When the candidate has history or evidence of urinary infection it will entail full renal investigation. Persistent evidence of urinary infection will entail rejection.

(d) <u>**Haematuria.**</u> Candidates with history of haematuria will be subjected to full renal investigation.

# 4. <u>Glomerulonephritis</u>

(a) <u>Acute.</u> 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) <u>Chronic.</u> Candidate with chronic glomerulonephritis will be rejected.

5. <u>Renal Colic and Renal Calculi.</u> 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. <u>Sexual Transmitted Diseases and Human Immuno Deficiency Virus (HIV).</u> Seropositive HIV status and/ or evidence of STD will entail rejection.

# Ultrasonography of the Abdomen - Urogenital System

# 7. <u>Kidneys, ureters and urinary bladder</u>

(a) <u>Unfit</u>

- (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)  $\underline{Fit}$  - 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. <u>Scrotum and Testis</u>. 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. <u>Assessment of Diseases of the Skin.</u> 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 Hyperhydrosis is physiological, considering the situation that recruits face during medical examination. However, candidates with significant Palmoplantar Hyperhydrosis 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.

4. 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.

**5.** 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.

**6.** 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.

7. Naevus depigmentosus and Beckers naevus may be considered fit. Intradermal naevus, vascular naevi are to be made unfit.

8. Pityriasis Versicolor is to be made unfit.

**9.** Any fungal infection (like Tinea Cruris and Tinea Corporis) of any part of the body will be unfit.

**10.** Scrotal Eczema may be considered fit on recovery.

**11.** Canities (premature graying of hair) may be considered fit if mild in nature and no systemic association is seen.

**12.** Intertrigo may be considered fit on recovery.

**13.** Genital Ulcers should be considered unfit. Anal and perianal area should also be included as a part of genital examination to rule out STD.

**14.** Scabies may be considered fit only on recovery.

**15.** 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.** <u>**Clinical Examination.**</u> 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) <u>Spina Bifida</u>. 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.

4. <u>Radiograph Spine.</u> 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.

# 5. <u>Spinal Conditions Unfit for Air Force Duties (Both Flying and Ground Duties)</u>

# (a) <u>Congenital/ Developmental Anomalies</u>

(i) Wedge Vertebra

(ii) Hemivertebra

(iii) Anterior Central Defect

(iv) Cervical Ribs (Unilateral/ Bilateral) with demonstrable neurological or circulatory deficit

(v) Spinabifida:- All types are unfit except in sacrum and LV5 (if completely sacralised)

(vi) Loss of Cervical Lordosis when assessed with clinically restricted movement of cervical spine.

(vii) Scoliosis:-

- (aa) Lumbar Scoliosis greater than 15 degrees
- (ab) Thoracic scoliosis greater than 20 degrees
- (ac) Thoraco-lumbar scoliosis greater than 20 degrees

(viii) Atlanto-occipital and Atlanto-axial anomalies

(ix) Incomplete Block (fused) vertebra at any level in cervical, dorsal or lumbar spine.

(x) 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)

(xi) 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) <u>Traumatic Conditions</u>

- (i) Spondylolysis/ Spondylolisthesis
- (ii) Compression fracture of vertebra
- (iii) Intervertebral Disc Prolapse
- (iv) Schmorl's Nodes at more than one level

#### (c) <u>Infective</u>

(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) <u>Degenerative</u>

- (i) Spondylosis
- (ii) Degenerative Joint Disorders
- (iii) Degenerative Disc Disease
- (iv) Osteoarthrosis/ 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**

6. 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.

## 7. <u>Healed Fractures</u>

(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.

8. <u>Fingers and Hands</u>. Syndactyly and polydactyly will be assessed as unfit except when polydactyly is excised. Deformities and limitations to movements will be considered unfit.

9. <u>Wrist.</u> 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.

10. <u>Elbow.</u> 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.

11. Cubitus Varus of > 5 degree will be unfit.

**12.** <u>Shoulder Girdle</u>. History of recurrent dislocation of shoulder with or without corrective surgery will be unfit.

**13.** <u>Clavicle</u>. 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**

14 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.

**15.** Hallux rigidus is unfit for service.

**16.** 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 meta-tarso-phalangeal joint (claw toe deformity) are to be rejected.

17. Loss of any digits/ toes entails rejection.

**18.** Extra digits will entail rejection if there is bony continuity with adjacent digits. Cases of syndactyly will be rejected.

## 19. <u>Pes Planus (Flat feet)</u>

(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/herself 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.

20. <u>Pes Cavus and Talipes (Club Foot).</u> 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.

**21.** <u>Ankle Joints.</u> Any significant limitation of movement following previous injuries will not be accepted. Functional evaluation with imaging should be carried out wherever necessary.

**22.** <u>Knee Joint</u>. Any ligamentous laxity is not accepted. Candidates who have undergone ACL reconstruction surgery are to be considered unfit.

**23.** Genu valgum (knock knee) with intermalleolar distance > 5 cm in males and > 8 cm in females will be unfit.

24. Genu varum (bow legs) with intercondylar distance >7 cm will be considered unfit.

**25.** <u>**Genu Recurvatum.**</u> If the hyperextension of the knee is within 10 degrees and is unaccompanied by any other deformity, the candidate should be accepted as fit.

26. True lesions of the hip joint or early signs of arthritis will entail rejection.

## 27. <u>Peripheral Vascular System</u>

(a) <u>Varicose Veins</u>. All cases with active varicose veins will be declared unfit. Post-op cases of varicose veins also remain unfit.

(b) <u>Arterial System</u>. Current or history of abnormalities of the arteries and blood vessels e.g. aneurysms, arteritis and peripheral arterial disease will be considered unfit.

(c) <u>Lymphoedema.</u> 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/her consult his/her 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 Complex partial seizures, which may manifest as vegetative little significance. 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.

A history of severe head injury is a cause for rejection. Other sequelae of head 6. 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 pyschometry 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. 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.

7. 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.

8. 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.

**9.** 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 hyperhydrosis or restlessness during examination could be indicative of emotional instability and should be made unfit.

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

11. <u>Psychoneurosis.</u> 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.

**12.** Any evident neurological deficit should call for rejection.

**13.** 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.

14. 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.

**15.** <u>**Basal Electroencephalogram (EEG).</u>** 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: -</u>

(a) **<u>Background Activity.</u>** 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) <u>Hyperventilation</u>. Paroxysmal spikes and slow waves/spikes/focal spike pattern.

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

**16.** 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. <u>History.</u> Any significant history of otorrhoea, hearing loss, vertigo including motion sickness, tinnitus etc is to be elicited.

2. <u>Nose and Para-nasal Sinuses</u>. 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) <u>Unfit</u>
  - (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) <u>Fit</u>
  - (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. <u>Pharynx and Larynx</u>. 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 inservice 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. <u>Hearing loss.</u> 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. <u>Ears.</u> 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. <u>External Ear</u>. 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, atreisa/ 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. <u>Middle Ear</u>. 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 scarrign 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.

(j) Any implanted hearing devices e.g. cochlear implants, bone anchored hearing aids etc.

(k) 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. <u>Miscellaneous Ear Conditions.</u> 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. <u>Personal and Family History and External Examination</u>

(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  $\leq 1.5$  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).

(1) 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) <u>**Retinal lesions**</u>. 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. <u>Visual Acuity/ Colour Vision for Male and Female Candidates.</u> The visual acuity and colour vision requirements for male and female Candidates are detailed in **Appendix 'B'** and **Appendix 'C** respectively to this notification. Those who do not meet these requirements are to be rejected.

4. <u>Mvopia.</u> 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.** <u>**Refractive Surgeries.**</u> Candidates who have undergone Photo Refractive Keratotomy (PRK)/ Laser in-situ Kearomileusis (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) <u>Convergence (as assessed on RAF rule)</u>

(i) <u>Objective Convergence.</u> Average is from 6.5 to 8 cm. It is poor at 10 cm and above.

(ii) <u>Subjective Convergence (SC)</u>. 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) <u>Accommodation</u>. 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.

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

Table 1 - Accommodation Values – Age wise

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 for male and female Candidates are detailed in Appendix 'D' and Appendix 'E', respectively, 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.

<u>Appendix 'A'</u> [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

(para 3 above of Ophthalmology standards)

## VISUAL STANDARDS FOR MALE CANDIDATES 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 Candidates at NDA and 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
2.	A4G1	10+2/NDA Entry to Ground duty branches of IAF (AE(L), Adm, Lgs)	Hypermetropia: + 2.5D Sph Myopia: -2.5D Sph Astigmatism: +/- 2.0D Cyl	Uncorrected VA 6/36 & 6/36 Best Corrected VA 6/6 & 6/6	CP II for AE(L)/ Adm CP III only for Lgs

<u>Note 1</u>: Ocular muscle balance for personnel covered in Sl. Nos. 1 and 2 should conform to Appendix D to this Chapter.

<u>Note 2</u>: Visual standards of Air Wing Candidates at NDA and Flt Cdts of F (P) at AFA should conform to A1G1 F (P) standard (S1. No. 1 of Appendix B)

<u>Note 3:</u> 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

#### Appendix 'C'

(para 3 above of Ophthalmology standards) VISUAL STANDARDS FOR FEMALE CANDIDATES AT INITIAL ENTRY

Sl No.	Branch	Maximum Limits of Refractive Error	Visual Acuity (VA) with limits of maximum correction	Colour Vision
1	Flying Branch	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
2.	Ground Duty Branch	Hypermetropia: + 2.5D Sph Myopia: -2.5D Sph Astigmatism: +/- 2.0D Cyl	Uncorrected VA 6/36 & 6/36 Best Corrected VA 6/6 & 6/6	CP II for AE(L)/ Adm CP III only for Lgs

<u>Appendix 'D'</u> (para 8 above of Ophthalmology standards)

# STANDARD OF OCULAR MUSCLE BALANCE FOR FLYING DUTIES FOR MALE CANDIDATES

<b>C1</b>	Teat	Fit	Tommonomy Linfit	Downon on the Linfit
Sl.	Test	ГЦ	Temporary Unfit	Permanently Unfit
No.				
1	Maddox Rod	Exo-6 Prism D	Exo- Greater than 6 prism D	Uniocular suppression
	Test at 6	Eso -6 Prism D	Eso- Greater than 6 prism D	Hyper/ Hypo more than 2
ĺ	meters	Hyper-1 prism D	Hyper- Greater than 1 prism D	prism D
		Hypo- 1 prism D	Hypo- Greater than 1 prism D	
2	Maddox Rod	Exo-16 Prism D	Exo - Greater than 16 prism D	Uniocular suppression
	Test at 33 cm	Eso- 6 Prism D	Eso - Greater than 6 prism D	Hyper/ Hypo more than 2
		Hyper- 1 Prism D	Hyper Greater than 1 prism D	prism D
		Hypo- 1 Prism D	Hypo Greater than 1 prism D	
3	Hand held	All of BSV	Poor Fusional reserves	Absence of SMP, fusion
	Stereoscope	grades		Stereopsis
4	Convergence	Up to 10 cm	Up to 15 cm with effort	Greater than 15 cm with
				effort
5	Cover test for	Latent divergence	Compensated heterophoria/	Compensated heterophoria
	Distance and	/ convergence	trophia likely to improve with	- I
	Near	recovery rapid	treatment / persisting even after	
		and complete	treatment	

# <u>Appendix 'E'</u>

(para 8 above of

# Ophthalmology standards) STANDARD OF OCULAR MUSCLE BALANCE FOR FLYING DUTIES FOR FEMALE CANDIDATES

TEMALE CANDIDATES				
Test	Fit	Temporary Unfit	Permanently Unfit	
Maddox Rod	Exo-6 Prism D	Exo- Greater than 6 prism D	Uniocular suppression	
Test at 6	Eso -6 Prism D	Eso- Greater than 6 prism D	Hyper/ Hypo more than 2	
meters	Hyper-1 prism D	Hyper- Greater than 1 prism D	prism D	
	Hypo- 1 prism D	Hypo- Greater than 1 prism D		
Maddox Rod	Exo-16 Prism D	Exo - Greater than 16 prism D	Uniocular suppression	
Test at 33 cm	Eso- 6 Prism D	Eso - Greater than 6 prism D	Hyper/ Hypo more than 2	
	Hyper- 1 Prism D	Hyper Greater than 1 prism D	prism D	
	Hypo- 1 Prism D	Hypo Greater than 1 prism D		
Hand held	All of BSV	Poor Fusional reserves	Absence of SMP, fusion	
Stereoscope	grades		Stereopsis	
Convergence	Up to 10 cm	Up to 15 cm with effort	Greater than 15 cm with	
_			effort	
Cover test for	Latent divergence	Compensated heterophoria/	Compensated heterophoria	
Distance and	/ convergence	trophia likely to improve with		
Near	recovery rapid	treatment / persisting even after		
	and complete	treatment		
-	Maddox Rod Test at 6 meters Maddox Rod Test at 33 cm Hand held Stereoscope Convergence Cover test for Distance and	TestFitMaddox Rod Test at 6 metersExo-6 Prism D Eso -6 Prism D Hyper-1 prism DMaddox Rod Test at 33 cmExo-16 Prism D Eso- 6 Prism D Hyper-1 Prism D Hyper-1 Prism D Hypo-1 Prism DHand held StereoscopeAll of BSV gradesCover test for Distance and NearLatent divergence recovery rapid	TestFitTemporary UnfitMaddox RodExo-6 Prism DExo- Greater than 6 prism DTest at 6Eso - 6 Prism DEso- Greater than 6 prism DmetersHyper-1 prism DHyper- Greater than 1 prism DMaddox RodExo-16 Prism DExo - Greater than 1 prism DMaddox RodExo-16 Prism DExo - Greater than 16 prism DTest at 33 cmEso- 6 Prism DEso - Greater than 6 prism DHyper-1 Prism DHyper- 1 Prism DHyper Greater than 1 prism DHand heldAll of BSVPoor Fusional reservesStereoscopegradesUp to 15 cm with effortCover test forLatent divergence recovery rapidCompensated heterophoria/ trophia likely to improve with treatment / persisting even after	

## HAEMOPOIETIC SYSTEM

1. History of easy fatiguability, 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 female, 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 elicted.

2. <u>Dental Standards</u>. 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  $1^{st}$  and  $2^{nd}$  premolar will have a value of one point provided their corresponding opposite teeth are present.

(c) Each  $1^{st}$  and  $2^{nd}$  molar and well developed  $3^{rd}$  molar will have the value of points, provided in good opposition to corresponding teeth in the opposing jaw.

(d) In case  $3^{rd}$  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  $3^{rd}$  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. <u>Extra oral examination</u>

(a) <u>Gross facial examination</u>. 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) <u>Functional examination</u>

- (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. <u>Guidelines for awarding dental points in special situations</u>

(a) <u>**Dental caries.**</u> 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) <u>**Restorations.**</u> 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) <u>Loose teeth</u>. 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) <u>**Retained deciduous teeth.**</u> Retained deciduous teeth will not be awarded dental points.

(e) <u>Morphological defects.</u> Teeth with structural defects which compromise efficient mastication will not be awarded dental points.

# (f) <u>Periodontium</u>

- (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 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) <u>Malocclusion</u>. 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 opposition 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) <u>Hard and Soft tissues.</u> 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.

(j) <u>Orthotic appliances.</u> 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.

(k) <u>**Dental implants.**</u> 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.

(1) **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) <u>Tooth supported FPDs</u>
  - (aa) <u>Prosthesis, 3 units.</u> Dental points will be awarded for the abutments and the pontic.
  - (ab) <u>Prosthesis, more than 3 units.</u> Dental points will be awarded only to the abutments. No points will be awarded for the pontics.
  - (ac) <u>Cantilever FDPs.</u> 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) <u>Two unit cantilever FPDs.</u> 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. <u>The following will be criteria for declaring a candidate UNFIT</u>

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

(b) <u>Candidates reporting post maxillo-facial surgery</u>/ <u>maxillofacial</u> <u>trauma.</u> 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.

#### **APPENDIX-V**

#### (BRIEF PARTICULARS OF THE SERVICE ETC.)

1. Before a candidate joins the Academy, the parent or guardian will be required to sign :—

(a) A certificate to the effect that he fully understands that he/she or his/her son or ward shall not be entitled to claim any compensation or other relief from the Government in respect of any injury which his son or ward may sustain in the course of or as a result of the training or where bodily infirmity or death results in the course of or as a result of a surgical operation performed upon or anaesthesia administered to him/her for the treatment of any injury received as aforesaid or otherwise.

A bond to the effect that if, on account of his dismissal or discharge (b) or withdrawal from National Defence Academy for knowingly furnishing false particulars or suppressing material information in his application for admission to the said National Defence Academy or in the event of his being dismissed or discharged or withdrawn on disciplinary grounds from the said, National Defence Academy or for any reason not beyond the control of the cadet, he/she does not complete the prescribed period of training, or he, the cadet, does not accept a Commission if offered as conventated above, then the Guarantors and the cadet shall jointly and severally be liable to pay forthwith to Government in cash sums as the Government shall fix but not exceeding such expenses as shall have been incurred by the Government on account of the Cadet on his training and all the money received by the Cadets as pay and allowance from the Government together with interest on the said money calculated at the rate in force for Government loans.

2. The cost of training including accommodation, books, uniforms, boarding and medical treatment will be borne by the Government. Parents or guardians of cadets, will, however, be required to meet their pocket and other private expenses. Normally these expenses are not likely to exceed Rs. 3000.00 p.m. If in any case a cadet's parents or guardian is unable to meet wholly or partly even this expenditure financial assistance of Rs. 1000.00 p.m. for the period of training may be granted by the Government whose parents income is less than Rs. 21,000/- per month. Cadet whose parent's or guardian's income exceeds Rs. 21,000/- per month will not be liable for the assistance. If more than one son/ward simultaneously undergoing training at NDA, IMA, OTA and corresponding training establishment in the Navy and Air Force, then BOTH would be eligible for the financial assistance.

The parent/guardian of a candidate desirous of having financial assistance from the Government should immediately after his son/ward having been finally selected for training at the National Defence Academy submit an application through the District Magistrate of his District who will forward the application with his recommendation to the Commandant, National Defence Academy, Khadakwasla, Pune-411023. 3. Candidates finally selected for training at the Academy will be required to deposit the following amount with the Commandant, National Defence Academy, on their arrival there :—

(a)	Pocket allowance for five months	Rs. 15000.00
	@ Rs. 3000.00 per month.	
(b)	For items of clothing and equipment (Cost of clothing and equipment for candidates will be intimated subsequently at the time of Joining Instructions)	
(c)	Army Group Insurance Fund	Rs. 7200.00
(d)	Clothing items required at the time of joining (Cost of clothing and equipment for candidates will be intimated subsequently at the time of Joining Instructions)	
(e)	Incidental Expenditure during 1st Semester	Rs. 7138.00
	Total (less Ser (b) & (d) to be added later)	<b>Rs. 29338.00</b>

Out of the amount mentioned above the following amount is refundable to the candidates in the event of financial aid being sanctioned to them:—

- (a) Pocket allowance for five months @ Rs. 400.00 Rs. 2000.00 per month (Corresponding to Govt. Financial Assistance)
- (b) For items of clothing and equipment approximately (to be intimated later)

4. The following Scholarships/Financial Assistance are tenable at the National Defence Academy.

(1) PARASHURAM BHAU PATWARDHAN SCHOLARSHIP—This Scholarship is granted to cadets overall first in Academics of Passing out Course. One time scholarship amount is Rs. 5000/-.

(2) COLONEL KENDAL FRANK MEMORIAL SCHOLARSHIP— This scholarship is of the value of Rs. 4800.00 per annum and awarded to a MARATHA cadet who should be the son of an ex-serviceman. The scholarship is in addition to any financial assistance from the Government.

(3) KAUR SINGH MEMORIAL SCHOLARSHIP— Two scholarships are awarded to cadets who obtain the highest position amongst candidates from BIHAR. The value of each scholarship is Rs. 37.00 per mensem tenable for a maximum period of 4 years during the training at the National Defence Academy, Khadakwasla and thereafter at the Indian Military Academy, Dehra Dun and the Air Force Flying College; and Indian Naval Academy, Ezhimala where the cadets may be sent for training on completion of their training at the National Defence Academy. The scholarship will, however, be continued subject to maintaining good progress at the above institution.

(4) ASSAM GOVERNMENT SCHOLARSHIP—Two scholarships will be awarded to the cadets from ASSAM. The value of each scholarship is Rs. 30.00 per mensem and is tenable for the duration of a

cadet's stay at the National Defence Academy. The scholarships will be awarded to the two best cadets from ASSAM without any reference to the income of their parents. The cadets who are granted this scholarship will not be entitled to any other financial assistance from the Government.

#### (5) UTTAR PRADESH GOVERNMENT INCENTIVE SCHEME—

Uttar Pradesh Sainik Punarvas Nidhi a Trust under Hon'ble Governor of Uttar Pradesh has started a incentive scheme for cadets joining NDA/IMA/OTA/AF Academy/Naval Academy/Female Entry who are wards of

ex servicemen/widows upto JCO rank and are domicile of State of Uttar Pradesh in which there is a provision of <del>one time</del> grant of Rs 50,000/- for each cadet selected as a special incentive.

(6) KERALA GOVERNMENT SCHOLARSHIPS— All male/female cadets irrespective of gender and without any pre conditions to all Kerala state cadets who are admitted to OTA, NDA, IMA, Naval Academy, Air force Academy, Armed Forces Medical College, RIMC Schools, as a consolation shall be granted Rs 2,00,000/- only and those who get admission to Military, Naval and Airforce Nursing Schools shall be granted as a consolation Rs 1,00,000/-.

(7) **BIHARI LAL MANDAKINI PRIZE**—This is cash prize of Rs. 500.00 available for the best BENGALI boy in each Course of the Academy. Application Forms are available with the Commandant, National Defence Academy.

(8) ORISSA GOVERNMENT SCHOLARSHIPS—These scholarships, one for the Army, one for the Navy and the other for the Air Force of the value of Rs. 80.00 each per month will be awarded by the Government of Orissa to the cadets who are permanent residents of the State of ORISSA. Two of these scholarships will be awarded on the basis of merit-cum-means of the cadets whose parent's or guardian's income does not exceed Rs. 5,000/- per annum and the other one will be given to the best cadet irrespective of his parent's or guardian's income.

S.	State Government	Amount	Eligibility
<u>No</u> (9)	West Bengal *Income Initial Lump sum grant Scholarship per semester <b>Table Income group</b> Low - up to Middle - Rs. 9 pm	Low Middle High	<ul> <li>(i) The cadet must be Indian Citizen and the cadet and/or his of/or permanently domiciled in the State of West Bengal.</li> <li>(ii) The Cadet is not in receipt of any other financial assistance/grant from the Govt. of India and/or the State Government or any other authority excepting scholarship or stipend received on merit.</li> </ul>

(10)	of training ( months or du	0/- per month during the perio (subject to a maximum of 2 uration of the course whicheven the time outfit allowance of R	cadet's parent/guardian shall not exceed Rs.		
(11)	Nagaland	Rs. 1,00,000/- onetim payment	Nagaland State.		
(12)	Manipur	Rs. 1,00,000/- onetim payment	e Should be domicile of Manipur State.		
(13)	Arunachal Pradesh	Scholarship Rs.1,000/- pr One time outf Allowance Rs. 12,000/-			
(14)	Gujarat	Scholarship per annum	/- To the ward of Serving/Ex-servicemen (incl Ex/Serving Officer) of Native/ Domicile of Gujarat.		
(15)	<ul> <li>5) <u>Uttarakhand</u> <ul> <li>(a) Pocket Money Rs. 250/- pm for NDA Cadets of Uttarakhand domicile is paid to father/guardian of cadets (Ex-Servicemen/Widow, through respective Zilla Sainik Kalyan Officers.)</li> <li>(b) Cash Award of Rs. 50,000/- for NDA Cadets of Uttarakhand domicile is paid to father/guardian of cadets through Directorate of Higher Education, Haldwani.</li> </ul> </li> </ul>				
(16)	Punjab	Rs. 1,00,000/-(one time SI	hould be domicile of Punjab tate.		
(17)		entry schemes of	ward for successful candidates f Sikkim for all Officer'sentry chemes.		
(18)		nuj Nanchal Memorial Scho econd best all round Air Force	larship. Rs. 1500/- (One time e cadet of VI term		
(19)					

(20) HIMACHAL PRADESH GOVERNMENT SCHOLARSHIP—Four scholarships will be awarded to cadets from HIMACHAL PRADESH. The value of each scholarship is Rs. 30.00 per month during the first two years of training and Rs. 48.00 per month during the third year of training. These scholarships will be available to those cadets whose parent's income is below

Rs. 500.00 per month. No cadet in receipt of financial assistance from the Government will be eligible for this scholarship.

(21) TAMIL NADU GOVERNMENT SCHOLARSHIP—The Government of Tamil Nadu has instituted at NDA one scholarship per course of the value of Rs. 30/- per month plus an outfit allowance of Rs. 400/- (one only during the entire period of cadet's training) to be awarded to a cadet belonging to the State of TAMIL NADU whose parent's/guardian's monthly income does not exceed Rs. 500/-. The application by an eligible cadet can be made to the Commandant, National Defence Academy on their arrival.

In addition to the existing Scholarships, Directorate of Ex-Servicemen Welfare, Chennai under Tamil Nadu Government has sanctioned a onetime grant of Rs.1,00,000/- (Rupees One Lakh Only) to the eligible children of Ex-Servicemen who join NDA/IMA/Naval or Air Force Academy as Permanent Commissioned Officers.

(22) KARNATAKA GOVERNMENT SCHOLARSHIPS—The Govt. of Karnataka has awarded scholarships to cadets from Karnataka State who join the National Defence Academy. The value of the scholarship shall be Rs.1,500/- (Rupees One Thousand Five Hundred only) per month and outfit allowance in first term Rs.18,000/- per annum.

(23) ALBERT EKKA SCHOLARSHIP—The Government of Bihar has instituted at NDA 25 Merit Scholarships at Rs. 50/- per month for entire period of six terms at the NDA and Rs. 650/- one time towards clothing and equipment. The cadet awarded the above merit scholarship would not be eligible for any other scholarship or financial assistance from the Government. The application by an eligible cadet can be made to the Commandant, National Defence Academy on their arrival.

(24) FG OFFICER DV PINTOO MEMORIAL SCHOLARSHIP—Gp Capt. M Vashishta has instituted 3 scholarships of Rs. 125/- each per month at NDA for one term to be awarded to the first three cadets in the order of merit on completion of their first semester till end of second term. The cadets in receipt of Govt. Financial Assistance will not be eligible for the above scholarships. The application for eligible cadets can be made to the Commandant, NDA on arrival.

#### (25) FINANCIAL ASSISTANCE TO WARDS OF EX-SERVICEMEN— MAHARASHTRA STATE

The wards of Maharashtrian ex-service officers/men who are undergoing training as cadets at NDA will be given Rs. 50,000/- as one time incentive.

The parents/guardians of the wards should submit their applications to their respective Zilla Sainik Welfare Office along with the certificates obtained from the Academy. Terms and conditions governing these scholarships are obtainable from the Commandant, National Defence Academy, Khadakwasla, Pune -411 023.

# (26) AWARD OF FINANCIAL ASSISTANCE TO CANDIDATES OF HARYANA DOMICILE UNDER TRAINING AT NDA.

The Haryana State Govt. has declared a cash award of Rs. 1,00,000/-(Rupees one lakh) to every individual who successfully completes the training at NDA/IMA/OTA and other Defence Academies of National Status and domicile of State of Haryana.

# (27) INCENTIVE GRANT TO CADETS DOMICILE OF UT, CHANDIGARH UNDER TRAINING AT NDA.

Chandigarh Administration has introduced the scheme for grant of one time incentive of Rs. 1,00,000/- (Rupees one lakh) to the cadets who are resident of UT, Chandigarh and joined NDA.

## (28) SCHOLARSHIP/GRANT FOR NCT DELHI.

The cadets undergoing training at NDA and who are bonafide residents of NCT Delhi will get a monthly grant of Rs 2000/-. A bonafide resident would means those cadets whose permanent home address recorded in the documents at the time of joining NDA is that of National Capital Territory of Delhi ( and does not include NCR). This would be needed to be supported with a copy of the residence proof (Aadhaar Card, Voter Identity Card, Service Records of their parent etc.)

5. Immediately after the selected candidates join the Academy, a preliminary examination will be held in the following subjects:

(a) English;(b) Mathematics;(c) Science;(d) Hindi.

The standard of the examination in the subjects at (a), (b) and (c) will not be higher than that of the Higher Secondary Examination of an Indian University or Board of Higher Secondary Education. The paper in the subject at (d) is intended to test the standard attained by the candidate in Hindi at the time of joining the Academy.

Candidates are, therefore, advised not to neglect their studies after the competitive examination.

#### TRAINING

6. The selected candidates for the three services viz, Army, Navy and Air Force are given preliminary training both academic and physical for a period of 3 years at the National Defence Academy which is an Inter-Service Institution. The training during the first two and half years is common to the cadets of three wings. All the cadets on passing out will be awarded degrees from Jawaharlal Nehru University Delhi as under:-

(a) Army Cadets	-	B.Sc/ B.Sc (Computer)/ B.A
(b) Naval Cadets	-	B. Tech Degree*
(c) Air Force Cadets	-	B. Tech Degree* /B.Sc/B.Sc (Computer)

<u>Note\*</u>: All the cadets undergoing B.Sc/B.SC(Computer)/BA Degree programme shall be awarded the degree on the successful completion of Academics, Physical and Service Training at NDA. All the cadets undergoing B Tech programme shall be awarded the B.Tech degree on the subsequent Pre Commissioning Training Academies/ Institutions/ Ships/ Air Craft.

The selected candidates of the Naval Academy will be given preliminary training both academic and physical, for a period of 04 years at Indian Naval Academy, Ezhimala. The cadets of 10+2 Cadet Entry Scheme will be awarded a B. Tech Degree on successful completion of training.

7. On passing out from the National Defence Academy, Army Cadets go to the Indian Military Academy, Dehra Dun, Naval Cadets to Indian Naval Academy, Ezhimala and Air Force cadets and Ground Duty-Non Tech streams to Air Force Academy, Hyderabad and Air Force cadets of Ground Duty–Tech stream to Air Force Technical College, Bengaluru.

8. At the I.M.A, Army Cadets are known as Gentlemen/Lady Cadets and are given strenuous military training for a period of one year aimed at turning them into officer capable of leading infantry Sub-units. On successful completion of training Gentlemen/Lady Cadets are granted Permanent Commission in the rank of Lt subject to being medically fit in "SHAPE" one.

9. (a) The Naval cadets are selected for the Executive Branch of the Navy, on passing out from the National Defence Academy and are given further training at Indian Naval Academy, Ezhimala for a period of one year on successful completion of which they are promoted to the rank of Sub Lieutenants. The lady cadets would be eligible for induction into Naval Armament Inspectorate, Logistics and Education specialization.

(b) Selected candidates for the Naval Academy under (10+2 Cadet Entry Scheme) will be inducted as Cadets for four year B.Tech course in Applied Electronics & Communication Engineering (for Executive Branch), Mechanical Engineering (for Engineering Branch including Naval Architect specialization) or Electronics & Communication Engineering (for Electrical Branch) as per Naval requirements. On completion of the course, B. Tech Degree will be awarded by Jawaharlal Nehru University (JNU).

10. (a) Air Force Flying Branch Cadets receive flying training for a period of one and a half years. On successful completion of one year of basic flying training (Pilots), they are granted Permanent Commission (on probation) in the rank of Flying Officer, for a period of six months. Permanent Commission is then confirmed in respect of those officers who successfully complete the flying training conversion course for pilots lasting for a period of approximately six months.

(b) Air Force Ground Duties Branch Cadets are granted Permanent Commission (on probation) in the rank of Flying Officer, for six months on successful completion of training at AFA. On successful completion of the probationary period of approximately six months, the Permanent Commission is then confirmed.

#### **TERMS AND CONDITIONS OF SERVICES**

#### 11. Army Officers and equivalent ranks in Air Force and Navy

#### (a) Fixed Stipend for Cadet Training:-

Stipend to male/female Cadets during the entire	
duration of training in Service academies i.e. during	(Starting pay in Level
training period at IMA.	10)

\*On successful commissioning, the pay in the Pay matrix of the Officer commissioned shall be fixed in first Cell of Level 10 and the period of training shall not be treated as commissioned service and arrears on account of admissible allowances, as applicable, for the training period shall be paid to cadets.

## (b) <u>**Pay**</u>

(i)

Rank	Pay Level (in Rs.)
Lt to Maj	Lt - Level 10 (56,100 – 1,77,500)/-
	Capt - Level 10 B (61,300-1,93,900)/-
	Maj - Level 11 (69,400 – 2,07,200)/-
Lt Col to Maj Gen	Lt Col - Level 12A (1,21,200 – 2,12,400)/-
	Col - Level 13 (1,30,600 – 2,15,900)/-
	Brig - Level 13A (1,39,600 – 2,17,600)/-
	Maj Gen - Level 14 (1,44,200 –
5	2,18,200)/-
Lt Gen (HAG Scale)	Level 15 (1,82,200 – 2,24,100)/-
Lt Gen (HAG+Scale)	Level 16 (2,05,400 – 2,24,400)/-
VCOAS/Army Cdr/	Level 17 (2,25,000/-) (fixed)
Lt Gen (NFSG)	
COAS	Level 18 (2,50,000/-) (fixed)

#### (ii) MSP to the officer is as follows:-

Military Service Pay(MSP) to the officer	Rs 15,500 p.m. fixed
from the rank of Lt to Brig	

(iii) **<u>Flying Allowance</u>**: The Army Aviators (Pilots) serving in the Army Aviation Corps are entitled to flying allowance at Rs 25,000/- p.m.

#### (iv) **Other allowance:-**

Dearness Allowance	Admissible at the same rates and under the same conditions as are applicable to the civilian personnel from time to time.
Para Allce	Rs 10,500/- pm
Para Reserve	Rs 2,625/- pm
Allce	_

Para Jump	Rs 10,500/- pm
Instructor Allce	
Project Allce	Rs 3,400/- pm
Special Forces	Rs 25,000/- pm
Allce	
Technical Allce	Rs 3,000/- pm
(Tier-I)	
Technical Allce	Rs 4,500/- pm
(Tier-II)	

(v) Depending upon rank and area of posting, officer posted to Field Areas will be eligible for the following Field Area allowances:-

Level	Highly Active Field Area Allce	Field Area Allce	Modified Field Area Allce
Officers	Rs 16,900/- pm	Rs 10,500/- pm	Rs 6,300/- pm

#### **High Altitude Allowance**

Level	Category-I	Category-II	Category-III
Officers	Rs 3,400/- pm	Rs 5,300/- pm	Rs 25,000/- pm
Counter Insurgency Allowance			

Level	Counter Insurgency Allce in Peace Area	Counter Insurgency Allce in Field Area	Counter Insurgency Allce in Modified Field
	III I cace Mica		Area
Officers	Rs 10,500/- pm	Rs 16,900/- pm	Rs 13,013/- pm

- (vi) Siachen Allowance Rs 42,500/- per month.
- (vii) <u>Uniform allowance.</u> Rs 20,000/- per year.
- (viii) **<u>Ration in Kind.</u>** In peace and Field areas
- (ix) <u>Transport Allowance (TPTA)</u>

Pay Level	Higher TPTA Cities (Rs. Per month)	Other Places (Rs. Per month)	
Officers	Rs. 7200+DA thereon	Rs. 3600+DA thereon	

(x) <u>Children Education Allowance</u>. Rs. 2250/- per month per child for two eldest surviving only. CEA is admissible from Nursery to 12<sup>th</sup> Class.

(xi) <u>Hostel Subsidy</u>. Rs. 6,750/- per month per child for two eldest surviving only. Hostel Subsidy is admissible from Nursery to 12<sup>th</sup> Class.

(xii) The following monetary benefits are available to the Cadets (Direct)/NoKs in the event of invalidment on medical grounds/death of a Cadet (Direct) due to causes attributable to or aggravated by military training:

#### (I) <u>IN CASE OF DISABLEMENT</u>

(i) Monthly Ex-gratia amount of Rs. 9,000/- per month.

(ii) Ex-gratia disability award @ Rs. 16200/- per month shall be payable in addition for 100% of disability during period of disablement subject to prorata reduction in case the degree of disablement is less than 100%. No disability award shall be payable in cases where the degree of disablement is less than 20%.

(iii) Constant Attendant Allowance (CAA) @ Rs 6750/- per month for 100% disabled on the recommendation of Invaliding Medical Board (IBM).

#### (II) <u>IN CASE OF DEATH</u>

- (i) Ex-gratia amount of Rs. 12.5 lakhs to the NoK.
- (ii) Monthly Ex-gratia amount of Rs. 9000/- per month to the NoK.
- <u>Note</u>: 1. The Ex-gratia awards to Cadets (Direct) / NoK, shall be sanctioned purely on ex-gratia basis and the same shall not be treated as pension for any purpose.
  - 2. Dearness Relief at applicable rates shall be granted on monthly ex-gratia as well as ex-gratia disability award.

12. Army Group Insurance Fund provides insurance cover of Rs.15 (a) lakh on payment of one time non-refundable premium of Rs. 7,200/- (subject to revision from time to time) by cadets from the date of joining for pre-commission training i.e. for 3 years. If a cadet is relegated an additional premium of Rs. 1,355/- (subject to revision from time to time) per relegated term will be paid. For those who are invalidated out by IMB on account of disability and not entitled to any pension will be provided Rs.15 lakhs for 100 per cent disability. This will be proportionately reduced to Rs 3 lakhs for 20 per cent. However, for less than 20 percent disability, only an Ex-Gratia Grant of Rs. 50,000/- for first two years of training and Rs. 1 lakh during the third year of training will be paid. Disability due to alcoholism, drug addiction and due to the diseases of preenrolment origin will not qualify for disability benefit and Ex-Gratia Grant. In addition, cadets withdrawn on disciplinary grounds, expelled as undesirable or leaving the Academy voluntarily will also not be eligible for disability benefits and Ex-Gratia. There is no saving component under the scheme.

(b) The Lady/Gentlemen Cadets during pre commission trg when in receipt of stipend are insured for Rs. One Cr (wef 01 Apr 2022) as applicable to officers of the regular Army. For those who are invalidated out by Invalidated Medical Board (IMB) on account of disability and not entitled to any pension will be provided one time lumsum amount of Rs 25 lakhs for 100 percent disability. This will be proportionately reduced to Rs 5 lakhs for 20 percent disability. However, for less than 20 percent disability, an ex-gratia grant of Rs. 50,000/- only will be paid. Disability due to alcoholism, drug addiction and due to the diseases of pre-enrolment origin will not qualify for disability benefit and Ex-Gratia Grant. In addition, Lady/Gentleman Cadets withdrawn on disciplinary

grounds, expelled as an undesirable or leaving the Academy voluntarily will not be eligible for disability benefits and Ex-Gratia. Mandatory subscription at the rate of Rs. 10,000/- pm (subject to revision from time to time) will have to be paid in advance on monthly basis by the Lady/Gentlemen Cadets to become members under the AGI Scheme as applicable to Regular Army Officers. The subscription for the relegated period would also be recovered at the same rate.

S.No.	Army	Navy	Air Force	Minimum Reckonable Commissioned Service required for Substantive Promotion
1.	2.	3.	4.	5.
(a)	Lieutenant	Sub Lieutenant	Flying Officer	On Commission
(b)	Captain	Lieutenant	Flight Lieutenant	02 Years
(c)	Major	Lt. Commander	Squadron Leader	06 years
(d)	Lieutenant Colonel	Commander	Wing Commander	13 years
(e)	Colonel (Selection)	Captain (Selection)	Group Captain (Selection)	On Selection
(f)	Colonel	Captain	Group Captain	26 years
	(Time Scale)	(Time Scale)	(Time Scale)	-
(g)	Brigadier	Commodore	Air Commodore	On Selection
(h)	Major General	Rear Admiral	Air Vice Marshal	On Selection
(i)	Lieutenant General	Vice Admiral	Air Marshal	On Selection
(j)	General	Admiral	Air Chief Marshal	On Selection

## **13. PROMOTIONAL AVENUES:**

## **14. RETIREMENT BENEFITS**

Pension, gratuity and casualty pensionary award will be admissible in accordance with the rules in force from time to time.

#### 15. LEAVE

Leave will be admissible in accordance with the rules in force from time to time.

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