

Annexure – A21(1)

PRE - EMPLOYMENT MEDICAL EXAMINATION STANDARDS

S No	Particulars		Standard			
			40 years & below		above 40 years	
(1)	(2)		(3)		(4)	
1	General Examination					
A	Height	Male	147.1		147.1	
		Female	142.1		142.1	
B	Weight	Male	Min. 45Kg.		Min. 45Kg.	
		Female	Min. 39Kg.		Min. 39Kg.	
NOTE : Significant under weight/ over weight & height more than 200 cms needs further investigations before declaring FIT.						
C	BMI	BMI below 18 and above 28 kg/m2, primary cause for abnormal BMI to be investigated before acceptance.			BMI below 18 and above 28 kg/m2, primary cause for abnormal BMI to be investigated before acceptance.	
		Cushing's Disease, Gigantism & Acromegaly with systemic involvement to be rejected.			Cushing's Disease, Gigantism & Acromegaly with systemic involvement to be rejected.	
D	Haematology	If HB is below 9 gm/dl and / or abnormal PBS, should be further investigated before acceptance. Haemophilia and Haemolytic anemias like Thalassemia major Sickle cell disease are not suitable for employment.			If HB is below 9 gm/dl and / or abnormal PBS, should be further investigated before acceptance. Haemophilia and Haemolytic anemias like Thalassemia major Sickle cell disease are not suitable for employment.	
2	Hearing	Should demonstrate an ability to hear an average conversational voice in a quiet room using both ears at a distance of six feet from the examiner with the back turned to the examiner. All cases of CSOM to be corrected by surgery before taking fitness.			Should demonstrate an ability to hear an average conversational voice in a quiet room using both ears at a distance of six feet from the examiner with the back turned to the examiner. All cases of CSOM to be corrected by surgery before taking fitness.	
		Audiometry will be done based on history and clinical examination and it will be done for all direct employees . It should be preserved. If Hearing Deficit is more than 40dB at 500,1000,2000 and 3000 Hz, not suitable for employment.			Audiometry will be done based on history and clinical examination and it will be done for all direct employees . It should be preserved. If Hearing Deficit is more than 40dB at 500,1000,2000 and 3000 Hz, not suitable for employment.	
3	EYES	Should not suffer from any chronic eye diseases.			Should not suffer from any chronic eye diseases.	
A	Visual Acuity					
	i) Distant & Near vision for trades like Pilots		Refer Annexure – A21(2)(for pilots only)		Refer Annexure – A21(2)(for pilots only)	
	ii) Distant vision for other trades		Better eye	Worse eye	Better eye	Worse eye

A	a) with glasses for Tech jobs	6/9	6/9	6/9	6/12
		or		or	
		6/6	6/12	6/6	6/18
	b) with or without glasses for non tech jobs	6/9	6/18	6/12	6/18
	iii) Near vision with or without glasses for other trades				
	a) Tech Jobs	N-6 both eyes		N-6 both eyes	
	b) Non tech jobs	N-8 both eyes		N-8 both eyes	
B	ONE EYE	Suitable for desk jobs only provided other parameters in relation to eye are normal.		Suitable for desk jobs only provided other parameters in relation to eye are normal.	
C	Intra Ocular Lens	IOL may be accepted if visual acuity is ok.		IOL may be accepted if visual acuity is ok.	
D	Color Vision	The Colour vision shall be tested for all candidates with Ishihara's Isochromatic plates in good light. Most cases of this type are characterized by a Red-Green deficiency. Colour deficient applicants are able to safely perform all jobs except those that require ability to differentiate colours correctly such as:		The Colour vision shall be tested for all candidates with Ishihara's Isochromatic plates in good light. Most cases of this type are characterized by a Red-Green deficiency. Colour deficient applicants are able to safely perform all jobs except those that require ability to differentiate colours correctly such as:	
		- Industrial staff dealing with machines involving recognition of coloured signals. - Technicians engaged in Laboratory work and Chemists. - Crane Operators. - Draughtsmen. - Drivers of all categories. - Electrical work. - Doctors and other Technical staff. - Scientific assistants - Security personnel - Pilots, Ground Engineers and staff - Electronic assembly - Navigation - CAD operators		- Industrial staff dealing with machines involving recognition of coloured signals. - Technicians engaged in Laboratory work and Chemists. - Crane Operators. - Draughtsmen. - Drivers of all categories. - Electrical work. - Doctors and other Technical staff. - Scientific assistants - Security personnel - Pilots, Ground Engineers and staff - Electronic assembly - Navigation - CAD operators	
		- Job involving coloured cables - Fire fighters - Electronic technicians - Panel operator - Other occupations where perception of colours is considered essential.		- Job involving coloured cables - Fire fighters - Electronic technicians - Panel operator - Other occupations where perception of colours is considered essential.	

D	Color Vision	For any other Jobs Identification of Primary Colours is necessary.	For any other Jobs Identification of Primary Colours is necessary.
		Officers and workmen in the above jobs require normal colour vision for proper pursuit. Defective colour vision is a disqualification for these jobs.	Officers and workmen in the above jobs require normal color vision for proper pursuit. Defective color vision is a disqualification for these jobs.
E	Squint cases	There is no good binocular vision. Even after surgery the chances of binocular vision are rare. They may be accepted for desk jobs only.	There is no good binocular vision. Even after surgery the chances of binocular vision are rare. They may be accepted for desk jobs only.
F	Myopia	Upto (-6) may be accepted provided the vision is normal after correction & retina is in good health. All candidates must be subjected to Fundoscopy & Indirect ophthalmoscopy.	Upto (-7) may be accepted provided the vision is normal after correction & retina is in good health. All candidates must be subjected to Fundoscopy & Indirect ophthalmoscopy.
		In case Myopia is not within acceptable limits, the candidate can be reassessed after correction through surgery.	In case Myopia is not within acceptable limits, the candidate can be reassessed after correction through surgery.
G	Hypermetropia	Upto (+7) may be accepted provided the vision improves to 6/9 & have a binocular vision.	Upto (+7) may be accepted provided the vision improves to 6/9 & have a binocular vision.
H	Pterygium	Not affecting the vision is acceptable. When the vision is affected or encroaching the cornea, to be accepted after surgery.	Not affecting the vision is acceptable. When the vision is affected or encroaching the cornea, to be accepted after surgery.
I	Retinal Detachment	The condition is treatable now, with advanced technology. Hence, the candidate with such abnormality should be given an option for correction. After correction, if the vision is normal, the candidate can be considered for employment in HAL. The candidate is required to come back after correction within 3 months for pre-employment medical examination. The expenses towards such correction will be borne by the candidate.	The condition is treatable now, with advanced technology. Hence, the candidate with such abnormality should be given an option for correction. After correction, if the vision is normal, the candidate can be considered for employment in HAL. The candidate is required to come back after correction within 3 months for pre-employment medical examination. The expenses towards such correction will be borne by the candidate.
J	Macular Degeneration	To be rejected	To be rejected
K	Retinitis Pigmentosa	To be rejected	To be rejected
4	Skin	a) Treated/ cured Hansen's disease with no deformity is acceptable except in food handling areas. Hansen should not be considered as a criteria for disqualifying.	a) Treated/ cured Hansen's disease with no deformity is acceptable except in food handling areas. Hansen should not be considered as a criteria for disqualifying.

4	Skin	b) Psoriasis involving more than 60% of body surface area, rendered temporarily unfit. After treatment it can be considered fit. Psoriatic arthritis with deformity unfit. Systemic Lupus Erythamatosus with complications and deformity is unfit.	b) Psoriasis involving more than 60% of body surface area, rendered temporarily unfit. After treatment it can be considered fit. Psoriatic arthritis with deformity unfit. Systemic Lupus Erythamatosus with complications and deformity is unfit.
		c) Vitiligo (Leukoderma) should not be considered as cause for rejection since it is neither communicable nor contagious.	c) Vitiligo (Leukoderma) should not be considered as cause for rejection since it is neither communicable nor contagious.
5	AIDS	Elisa HIV I & II Testing are recommended for all candidates with consent. A written consent / undertaking will be obtained from the candidate before administering the test <u>Appendix I</u> of Annexure - A21(1). Depending on the nature of jobs to be performed by the candidate / the post to which the candidate is selected, acceptance or rejection will be decided. Personnel who are HIV +ve would be fit for appointment only to such Departments / Areas of work where there is no risk involved towards the health of themselves and others viz in Departments like Design, Planning, Marketing, IT, MS, Finance, HR (excluding Canteen), Purchase, Security, Vigilance, wherein they will not be working on/with Machines, Tools etc	Elisa HIV I & II Testing are recommended for all candidates with consent. A written consent / undertaking will be obtained from the candidate before administering the test <u>Appendix I</u> of Annexure - A21(1). Depending on the nature of jobs to be performed by the candidate / the post to which the candidate is selected, acceptance or rejection will be decided. Personnel who are HIV +ve would be fit for appointment only to such Departments / Areas of work where there is no risk involved towards the health of themselves and others viz in Departments like Design, Planning, Marketing, IT, MS, Finance, HR (excluding Canteen), Purchase, Security, Vigilance, wherein they will not be working on/with Machines, Tools etc
6	Cardio Vascular System		
A	General Exam	There should not be any abnormality congenital or acquired. There should not be any significant functional or structural abnormality of the circulatory system. ECG should be mandatory.	There should not be any abnormality congenital or acquired. There should not be any significant functional or structural abnormality of the circulatory system. ECG should be mandatory.
B	Blood Pressure	Blood pressure less than 140/90 with or without drugs & no target organ damage can be accepted.	Blood pressure less than 140/90 with or without drugs & no target organ damage can be accepted.
		Candidates with newly detected high BP or uncontrolled hypertension will be made temporarily UNFIT (minimum 1 month) for confirmation of hypertension and control of BP. If BP is still high, will be rejected.	Candidates with newly detected high BP or uncontrolled hypertension will be made temporarily UNFIT (minimum 1 month) for confirmation of hypertension and control of BP. If BP is still high will be rejected.

C	Heart size	All cases of Cardiomegally should be evaluated thoroughly & cardiologist opinion to be taken.	All cases of Cardiomegally should be evaluated thoroughly & cardiologist opinion to be taken.
		Cases with poor LV Function (Less than 50%) will be rejected.	Cases with poor LV Function (Less than 50%) will be rejected.
D	Rh. Heart Disease	Rheumatic Heart diseases & other valvular diseases are not to be accepted.	Rheumatic Heart diseases & other valvular diseases are not to be accepted.
E	MVPS	All cases need to be investigated in the form of ECG, 2D Echo. Mitral Regurgitation, AF, Infective endocarditis to be ruled out before considering medical fitness. Mitral Regurgitation ,AF, Infective Endocarditis will be rejected.	All cases need to be investigated in the form of ECG, 2D Echo. Mitral Regurgitation, AF, Infective endocarditis to be ruled out before considering medical fitness. Mitral Regurgitation, AF, Infective Endocarditis will be rejected.
F	ASD	Acceptable after surgical correction. Small ASD for which surgical correction is not advised is also acceptable with cardiologist opinion.	Acceptable after surgical correction. Small ASD for which surgical correction is not advised is also acceptable with cardiologist opinion.
G	VSD	Acceptable after surgical correction. Small VSD for which surgical correction is not advised is also acceptable with cardiologist opinion.	Acceptable after surgical correction. Small VSD for which surgical correction is not advised is also acceptable with cardiologist opinion.
H	PDA	Acceptable after surgical correction	Acceptable after surgical correction
I	Isolated Dextrocardia	Before accepting to be evaluated by cardiologist	Before accepting to be evaluated by cardiologist
J	Sinus Arrhythmias	Sinus arrhythmia may be accepted.	Sinus arrhythmia may be accepted.
K	Other conduction disorders	PVC more than 5 / minute, in pairs or multifocal, AF, RBBB & LBBB should be evaluated and cardiologist opinion to be taken for fitness.	PVC more than 5 / minute, in pairs or multifocal, AF, RBBB & LBBB should be evaluated and cardiologist opinion to be taken for fitness.
		Poor LV Function (Less than 50%) will be rejected	Poor LV Function (Less than 50%) will be rejected.
L	Murmurs	All cardiac murmurs to be evaluated and opinion of cardiologist to be taken for Medical fitness. Established Valvular Heart Disease to be rejected.	All cardiac murmurs to be evaluated and opinion of cardiologist to be taken for Medical fitness. Established Valvular Heart Disease to be rejected.
M	IHD	IHD, angioplasty/ CABG cases should be evaluated and can be taken after cardiologist opinion. If cardiac functions are normal, will be accepted.	IHD, angioplasty/ CABG cases should be evaluated and can be taken after cardiologist opinion. If cardiac functions are normal, will be accepted.
7	Respiratory System	a) Bronchial asthma with normal-pulmonary functions accepted.	a) Bronchial asthma with normal-pulmonary functions accepted.
		b) Acute Pulmonary Tuberculosis is temporarily unfit. Will be reviewed after completion of 6 months treatment without any further extension.	b) Acute Pulmonary Tuberculosis is temporarily unfit. Will be reviewed after completion of 6 months treatment without any further extension.

7	Respiratory System	Fit if:	Fit if:
		- has completed specified treatment.	- has completed specified treatment.
		- 3 successive sputum tests are negative for AFB.	- 3 successive sputum tests are negative for AFB.
		- Serial CXR - PA should show improvements.	- Serial CXR - PA should show improvements.
		c) Significant Lungs cysts should be accepted after successful surgery.	c) Significant Lungs cysts should be accepted after successful surgery.
		d) Cases of Bronchiectasis with good respiratory reserve can be considered for employment.	d) Cases of Bronchiectasis with good respiratory reserve can be considered for employment.
8	Abdomen	e) Cases of COPD is unfit for employment.	e) Cases of COPD is unfit for employment.
		a) Organomegaly, abdominal masses should be investigated before employment. Gall bladder polyps to be operated before appointment. Multiple gall stones if found, should be operated before appointment.	Organomegaly, abdominal masses should be investigated before employment. Gall bladder polyps to be operated before appointment. Multiple gall stones if found, should be operated before appointment.
		b) All hernias, Hydrocoele, fistula in Ano, Hemorrhoids, Varicocele undescended testes, pilonidal sinus should be surgically corrected before appointment.	b) All hernias, Hydrocoele, fistula in Ano, Hemorrhoids, Varicocele undescended testes, pilonidal sinus should be surgically corrected before appointment.
		c) Any palpable lymph node to be biopsied & fitness to be decided after the biopsy report.	c) Any palpable lymph node to be biopsied & fitness to be decided after the biopsy report.
		d) Varicose veins without complication can be accepted after surgeon's opinion. If surgery is advised then will be accepted after surgery.	d) Varicose veins without complication can be accepted after surgeon's opinion. If surgery is advised then will be accepted after surgery.
		e) Chronic Pancreatitis, Chronic Hepatitis, Cirrhosis of Liver and Liver transplants to be rejected.	e) Chronic Pancreatitis, Chronic Hepatitis, Cirrhosis of Liver and Liver transplants to be rejected.
9	Genito Urinary System	f) Cause for major abdominal surgeries and present status should be evaluated before acceptance. Malignancies detected after surgery to be rejected	f) Cause for major abdominal surgeries and present status should be evaluated before acceptance. Malignancies detected after surgery to be rejected.
		a) Phimosis & Paraphimosis/ Hypospadiasis to be accepted after surgical correction at the expense of the candidate.	a) Phimosis & Paraphimosis/ Hypospadiasis to be accepted after surgical correction at the expense of the candidate.
		b) Testicular mass proved due to malignancy should be rejected	b) Testicular mass proved due to malignancy should be rejected
		c) Renal stones of above 4mm can be accepted after treatment/Lithotripsy provided renal functions are proved normal by USG/other test	c) Renal stones of above 4mm can be accepted after treatment/Lithotripsy provided renal functions are proved normal by USG/other test.

9	Genito Urinary System	d) Mobile kidney/single kidney/ Horse shoe shaped kidney can be accepted, after thoroughly investigating by Isotope scan and other relevant tests and after urologist's opinion.	d) Mobile kidney/single kidney/ Horse shoe shaped kidney can be accepted, after thoroughly investigating by Isotope scan and other relevant tests and after urologist's opinion.
		e) Poly cystic kidney to be rejected	e) Poly cystic kidney to be rejected
		f) All Genito urinary infections can be accepted after treatment.	f) All Genito urinary infections can be accepted after treatment.
		g) Cases of Renal Transplant may be rejected in the event a Medical Examination Report suggests that the condition is unfit to render service.	g) Cases of Renal Transplant may be rejected in the event a Medical Examination Report suggests that the condition is unfit to render service.
10	Breast	Any Lump in the Breast to be operated before joining & malignancy to be excluded.	Any Lump in the Breast to be operated before joining & malignancy to be excluded.
11	HBsAg positive cases	HBsAg (Australian Antigen) + ve, without complication may be accepted.	HBsAg (Australian Antigen) + ve, without complication may be accepted.
12	Nervous System		
A	Speech / Gait	It should be Normal & abnormality to be evaluated thoroughly before appointment	It should be Normal & abnormality to be evaluated thoroughly before appointment
B	Nystagmus	Candidate with Nystagmus should be evaluated by a competent neurologist for fitness of the specific job.	Candidate with Nystagmus should be evaluated by a competent neurologist for fitness of the specific job.
C	Motor system	Should be Normal	Should be Normal
		a) Candidates should not be suffering from chronic neurological diseases however, congenital facial palsy is accepted.	a) Candidates should not be suffering from chronic neurological diseases however, congenital facial palsy is accepted.
		b) Epilepsy Candidates under regular treatment may be accepted only for desk jobs.	b) Epilepsy Candidates under regular treatment may be accepted only for desk jobs.
13	Musculoskeletal System	Only progressive musculoskeletal disorders should be considered as disqualification. Non-progressive congenital abnormality should be evaluated by neurologist before fitness for the specific job.	Only progressive musculoskeletal disorders should be considered as disqualification. Non-progressive congenital abnormality should be evaluated by neurologist before fitness for the specific job.
		Muscular dystrophies can be considered under physically handicapped quota.	Muscular dystrophies can be considered under physically handicapped quota.
14	Gynaecology	a) Fibroid uterus, Ovarian cyst should be removed before appointment, if symptomatic & clinically significant.	a) Fibroid uterus, Ovarian cyst should be removed before appointment, if symptomatic & clinically significant.
		b) Pregnant women shall not be appointed till the confinement is over. They can be made fit any time after six weeks, but not later than six months from the date of delivery.	b) Pregnant women shall not be appointed till the confinement is over. They can be made fit any time after six weeks, but not later than six months from the date of delivery.

14	Gynaecology	c) Married female candidates of reproductive age should undergo pregnancy test and Ultrasound Sonography of Abdomen and Pelvis prior to the actual date of joining, if there is a time gap of one month or more from the date of pre-medical examination and actual date of joining/reporting.	c) Married female candidates of reproductive age should undergo pregnancy test and Ultrasound Sonography of Abdomen and Pelvis prior to the actual date of joining, if there is a time gap of one month or more from the date of pre-medical examination and actual date of joining/reporting.
15	Psychiatry	Schizophrenia, paranoid disorder, alcohol dependence, Presenile Dementia & Drug addicts are not suitable.	Schizophrenia, paranoid disorder, alcohol dependence, Presenile Dementia & Drug addicts are not suitable.
16	Endocrine System		
A	Diabetes Mellitus	If blood sugar level, HbA1C are normal with or without treatment and no target organ damage can be accepted.	If blood sugar level, HbA1C are normal with or without treatment and no target organ damage can be accepted.
B	Thyrotoxicosis	Can be considered if under control with drug therapy and there are no complications proved by investigation. If initial thyroid function is abnormal they are temporally unfit (minimum 6 wks) and can be made fit, if thyroid functions are normal after treatment.	Can be considered if under control with drug therapy and there are no complications proved by investigation. If initial thyroid function is abnormal they are temporally unfit (minimum 6 wks) and can be made fit, if thyroid functions are normal after treatment.
C	Goiter & Hypothyroidism	Cases of goiter to be evaluated fully & cases of Hypothyroidism can be considered if good control with drug therapy & there are no complications proved by investigations.	Cases of goiter to be evaluated fully & cases of Hypothyroidism can be considered if good control with drug therapy & there are no complications proved by investigations.
D	Acromegaly	Acromegaly cases unsuitable for employment	Acromegaly cases unsuitable for employment
17	Malignancy/ Cancer	It should be considered as Unfit for employment. All pre malignant conditions should be thoroughly investigated before giving fitness.	It should be considered as Unfit for employment. All pre malignant conditions should be thoroughly investigated before giving fitness.
		They should be biopsied and if found pre-malignant should be treated accordingly and will be reviewed after 3 months. If biopsy reveals malignancy to be rejected.	They should be biopsied and if found pre-malignant should be treated accordingly and will be reviewed after 3 months. If biopsy reveals malignancy to be rejected.
Note: (a). Wherever time is not specified for re-evaluation, the same will be done within a maximum period of 3 months from the original date of examination, wherein the candidate was declared temporarily unfit. (b). As far as possible, specialist / super specialist opinion to be taken from empanelled hospitals , where the expertise is not available internally.			