

F/TTI/Empanel Faculty/902 /2020

### **Notification for Empanelment of Experts**

Technical Training Institute of HAL caters to the Training & Development needs of workmen and junior officers of HAL. TTI also engages about 2000 Apprentices in Ex-ITI, Diploma & Graduate Engineering categories for Apprenticeship Training Program.

TTI invites application from industry experts/Academicians/Trade experts/Field experts/Retired Personnel in following category as **Visiting Faculty Members**

- I. For handling session/demonstration in HRD Programs/Skill Development programs as per Enclosure-I.
- II. For handling Trade theory sessions, Trade practical training for Trade Apprentices and Supervisory Development programs for Diploma & Graduate Apprentices. The details of trades/branches/areas on lecture sessions/practical training to be organised is placed at Enclosure-II

#### **Educational Qualification and Experience for faculty of HRD Programs/Skill Development Programs:**

NAC/Diploma/Degree in the respective area from recognized University/Board with minimum 10 years working experience in industry/academics

#### **Educational Qualification and Experience for Trade Apprentices/Supervisory Development programs**

Degree/Diploma in the respective area from recognized University/Board with one/two years post qualification experience respectively in the relevant field Or NTC/NAC in the trade with 3 years of post qualification experience in the relevant field. In case of Trade apprentice program, preference will be given to a candidate with Craft Instructors Certificate (CIC).

#### **General Guidelines:**

- a. The candidate must have good subject knowledge, practical experience and communication and presentation skills.
- b. Duration of lecture session/practical/demonstration vary from 02 hrs to 06 hrs in a day depending on the program and its schedule.
- c. Remuneration for Category-I & II are Rs. 550.00 per hour and Rs. 225 per hour respectively.
- d. Empanelled faculty members services will be utilized as and when required.

Interested applicants may submit their application in the prescribed format attached along with the relevant enclosures to the above e-mail address on or before 05/09/2020. Incomplete application will not be considered.

**Subject field****Sl. No. Subjects/Area**

1	Materials Management & Outsourcing
2	Lean Manufacturing Concepts
3	Aerospace Materials & Processes
4	Quality Concepts & 7 QC Tools
5	ISO:14001 EMS
6	Aircraft Power Plant Assembly Procedure
7	NADCAP Awareness
8	AS 9100 C Awareness
9	Finance Procedure & Practices
10	Fuel Systems Assembly & Testing
11	Landing Gear Systems
12	Geometric Dimensioning and Tolerancing
13	Aircraft Structure Repair Techniques
14	Basics of Engineering Drawing
15	CNC Operations & Programming Concepts
16	Flight Control Systems & Subsystems
17	Aircraft/ Helicopter Electrical Systems
18	Sealant and Sealing Techniques
19	Composites Materials & Manufacturing Technology
20	Looming & Crimping
21	Metrology & Measuring Instruments
22	Aerospace Welding Technology
23	2D & 3D Modeling using Auto CAD
24	Helicopter Systems
25	NDT Methods
26	Aircraft Assembly Operations
27	Quality Circles & Quality Tools
28	Communication & Navigation Systems
29	Quality in Composites Manufacturing
32	Works & Contracts Procedure and Practices
33	Engine Electrical Systems
34	Cockpit Display Systems
35	HR & Security Procedure & Practices
36	Leadership & Motivation
37	Cabin Atmosphere Control Systems
38	Heat Treatment Theory and Practices
39	Aircraft & Helicopter Engine Removal and Replacement Techniques
40	Aircraft Acceptance Standard & Test Procedures
41	Flight safety & FOD Prevention
42	Armament & Escape Systems
43	Industrial Safety
44	Soft Skills- Communication, Presentation, Interpersonal Relationship
45	Basic Computer
46	MS Office- Word, Excel, Power Point & Access
47	Web design, Internet, E-commerce
48	Java, VBA, Tally, Cyber Security
49	C++ programing concepts
50	GAS, ARC, MIG/MAG, TIG welding, Welding Defects
51	Turning, Milling, Grinding, Thread cutting
52	Cutting Tool, Tool Geometry, Material
53	Metrology & Measuring instruments
54	Assembly Tools & concepts
55	Sheet metal Development- Laying out pattern
56	Sheet metal forming
57	Process shop operation
58	CNC Tools & Fixtures

**Enclosure-II****LIST OF TOPICS FOR APPRENTICESHIP TRAINING PROGRAM**

<b>Sl No.</b>	<b>Topics</b>
1	Safety & General Precautions
2	Basic Hand Tools
3	Cutting Tools & Power Tools
4	Measuring Instruments
5	Metals - Ferrous & Non-Ferrous
6	Heat Treatment
7	Limits, Fits & Tolerance
8	Gauges
9	Speed, Feed & Depth Of Cut
10	Drills & Drilling
11	Milling
12	Half Nut/Apron. Nut & Gear Mechanism
13	Grinding
14	Lathe & Lathe work
15	Indexing
16	Different Types of Machines (Shaping, Slotting, Planning etc.
17	Super Finishing Processes (Lapping & Honning)
18	CNC Machine & Programming
19	Coolants & Lubricants
20	Bearings
21	Files & Fitting
22	Jigs, Fixtures & Templates
23	Welding & Welding Joints
24	Sheet Metal Technology
25	Basics of Foundry Technology
26	Transmission of Motion & Power
27	Rivets & Riveted Joints
28	Threaded Fasteners
29	Pipes & Pipe Joints
30	Keys, Cotter & Cotter Joints
31	Repair & Maintenance of Machines
32	Safety in Welding
33	Introduction to Welding Technology
34	Welding Tools, Equipments & Accessories
35	Different types of joining of Metals
36	Gas Welding & Cutting
37	Arc Welding
38	Carbon Arc Welding
39	Submerged Arc Welding
40	TIG & MIG Welding
41	Electro Slag Welding
42	Stud Welding
43	Plasma Arc Welding
44	Thermal Chemical Process

45	Radiant energy Process
46	Pressure Welding Process
47	Testing of Welds
48	Defects in welding
49	Welding Symbols
50	Electrical Safety
51	Nature of Electricity & Fundamental Laws
52	Work, Power & Energy
53	Electrical Measurement Instruments
54	Heating Effects of Electric Current
55	Chemical Effects of Electric Current
56	Magnetism & Electromagnetism
57	Electromagnetic Induction
58	Measuring Instruments
59	Hand Tools & Accessories
60	D C Generator
61	D C Motor
62	Cells & Batteries
63	Single Phase AC Circuits
64	Poly Phase AC Circuits
65	Alternators
66	Transformers
67	3 Phase Induction Motors
68	Single Phase Motors
69	Synchronous Motors
70	Illumination
71	Automobile Electrical System
72	Fundamentals of Electronics
73	Soldering Techniques
74	Earthing Principles etc.
75	Electrical Wiring, IE Rules etc.
76	Introduction to sheet Metal Work
77	Different Types of Sheet Metals as per BIS
78	Sheet Metal Cutting Tools & Stakes
79	Sheet Metal Folded Joints
80	Patterns & Templates
81	Development & Surfaces
82	Fastening of Sheet Metals
83	Sheet Metal Fabrication
84	Sheet Metal Machines
85	Painting
86	Material Handling
87	Estimation & Costing in Sheet Metal
88	Types of Foundries
89	Metal Casting
90	Sand Testing
91	Wood Working
92	Hand Tools & Accessories used in Foundry
93	Moulding & Composition

94	Binders & additives
95	Casting
96	Iron Ores & Grades
97	Steel Manufacturing Process
98	Furnaces
99	Computer Foudamentals
100	MS Windows
101	Office Automation Tools
102	Netqorking
103	C++, Java Language
104	Visual Basics, SQL
105	Basics of CNC Technology
106	CNC Programming & Execution of program
107	DNC Operation
108	CNC - Turning
109	CNC-Milling
110	BIS Symbols

# TECHNICAL TRAINING INSTITUTE

## APPLICATION FORMAT FOR EMPANELMENT OF EXPERTS

### 1. Personal Details

a. Name:	
b. Date of birth:	
c. Address(Residential)	Postal Address
d. Contact phone no:	
e. Mobile No:	
f. E-mail ID	

### 2. Educational Qualifications (Please attach copies of certificate)

Sl. No.	Qualification	University	Year
1.			
2.			
3.			
4.			

**3. Industrial/Academic Experience (Please attach copies of certificate)**

<b>Sl. No.</b>	<b>Name of the organisation</b>	<b>No. years of experience</b>	<b>Nature experience</b>

**4. Present working status:**

**5. Special achievements :**

**6. Subjects interested to handle:**

**7. Category for which application submitted:**

I

II

Both

**Date**

**Signature of the candidate**