



File No: 5(104)/1/2023/E. I

Dated 18.07.2025

### अधिसूचना/NOTICE

**विषय: संस्थान के विज्ञापन संख्या : IITR/1/2024, दिनांक 26.02.2024 द्वारा विज्ञापित तकनीशियन(1) के पदों (पोस्ट कोड TEC1 से TEC8) हेतु अर्ह व अनर्ह अभ्यर्थियों की अंतिम सूची एवं पाठ्यक्रम के संबंध में।**

संस्थान के नोटिस संख्या: 5(103)/1/2023/E.I, दिनांक 13.05.2025 के अनुक्रम में तकनीशियन(1) के पदों (पोस्ट कोड TEC1 से TEC8) के सापेक्ष में आवेदन करने वाले अभ्यर्थियों को सूचित किया जाता है कि उक्त पदों के आवेदन से संबंधित प्राप्त सभी त्रुटियों / आपत्तियों को निस्तारित करते हुए छानबीन समितियों की संस्तुतियों के आधार पर Eligible/Not Eligible आवेदकों की अंतिम सूची **(संलग्नक अ)** जारी की जा रही है।

In pursuance of Institute's Notice No.: 5(103)/1/2023/E. I, dated 13.05.2024 the candidates applied against the Posts of Technician (1) (Post Codes TEC1 to TEC8) are informed that after resolving all the errors / objections received related to the applications for the said posts, the final list of Eligible/Not Eligible applicants is being published (attached as Annexure-A) on the basis of the recommendations of the Screening Committees.

2. इस संस्थान के विज्ञापन संख्या: आईआईटीआर/1/2024 के विरुद्ध विज्ञापित तकनीशियन (1) के पद (पोस्ट कोड TEC1 से TEC8) से संबंधित सभी त्रुटियों/आपत्तियों का निपटारा कर दिया गया है और आगे किसी भी आपत्ति पर विचार नहीं किया जायेगा।

All errors / objections related to the post of technical assistant Technician (1) (Post Codes TEC1 to TEC8) advertised against this institute advertisement No: IITR/1/2024 stands disposed of and further no objections will be entertained.

3. अनुशंसित किए गए अभ्यर्थियों हेतु क्षेत्र-वार पाठ्यक्रम (syllabus) को संस्थान की वेबसाइट पर अधिसूचित किया जा रहा है। **(संलग्नक ब)**

The area-wise syllabus for Trade Test and Written Examination for the recommended applicants is attached to notice as **Annexure-B**.

4. सभी अर्ह अभ्यर्थियों को यह सूचित किया जाता है कि तकनीशियन (1) के पदों हेतु (पोस्ट कोड TEC1 से TEC8) की ट्रेड परीक्षा प्रवेश पत्र में उल्लिखित परीक्षा केंद्र पर केवल **लखनऊ** में दिनांक **01 अगस्त, 2025 (शुक्रवार)** को आयोजित की जायेगी। स्थान एवं तिथि परिवर्तन हेतु किसी भी अनुरोध पर विचार नहीं किया जाएगा।

It is hereby informed to all the eligible candidates that the Trade Test for the post of Technician (1) will be held on **01<sup>st</sup> August, 2025 (Friday)** at the center mentioned in the admit card in **Lucknow only**. Any request for change of Venue and date will not be entertained.

5. अभ्यर्थियों से अनुरोध है कि नवीनतम सूचना के लिए नियमित रूप से संस्थान की वेबसाइट [www.iitr.res.in](http://www.iitr.res.in) देखते रहें।  
For latest updates, candidates are requested to keep visiting institute's website [www.iitr.res.in](http://www.iitr.res.in) regularly.

Sd/-  
Administrative Officer  
CSIR-IITR



## सीएसआईआर-भारतीय विषविज्ञान अनुसंधान संस्थान CSIR-INDIAN INSTITUTE OF TOXICOLOGY RESEARCH

वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद् | COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH  
(विज्ञान एवं प्रौद्योगिकी मंत्रालय, भारत सरकार) | MINISTRY OF SCIENCE & TECHNOLOGY, GOVT. OF INDIA



Advertisement Number	IITR/1/2024	Post Code	TEC1
Designation of Post	Technician	Number of post(s) and its category	UR (01), ESM(01),SC(01)
Total number of online applications received by due date i.e. 31.03.2024.	162	Area / Division for which the post is being considered	Chemical Sciences

Criteria adopted by Screening Committee to shortlist candidates for Trade Test is Essential Qualification which are asunder:

SSC / 10th Standard / or equivalent with Science subjects, with minimum 55% marks and ITI certificate course in Laboratory Assistant in Chemical Plants or any other field of Chemical Sciences.

Or

SSC / 10th Standard / or equivalent with Science subjects, with minimum 55% marks and 2 years full time experience as an apprentice trainee from a recognized institution in the Laboratory Assistant in Chemical Plants or any other field of Chemical Sciences.

The Final list of ELIGIBLE applicants for the Trade Test is:

Sl. No.	Reg. No.	Sl. No.	Reg. No.
1	IITR/01/2024/720	15.	IITR/01/2024/2408
2	IITR/01/2024/817	16.	IITR/01/2024/2482
3	IITR/01/2024/946	17.	IITR/01/2024/2512
4	IITR/01/2024/993	18.	IITR/01/2024/2619
5	IITR/01/2024/1390	19	IITR/01/2024/2815
6	IITR/01/2024/1537	20	IITR/01/2024/2965
7	IITR/01/2024/1551	21	IITR/01/2024/2977
8	IITR/01/2024/1872	22	IITR/01/2024/3173
9	IITR/01/2024/1879	23	IITR/01/2024/2918
10.	IITR/01/2024/2009	24	IITR/01/2024/2728
11.	IITR/01/2024/2059	25	IITR/01/2024/2866
12.	IITR/01/2024/2128	26	IITR/01/2024/3134
13.	IITR/01/2024/2279	27	IITR/01/2024/3181
14.	IITR/01/2024/2402	28	IITR/01/2024/2947

The Final list of NOT ELIGIBLE applicants for the post is:

Sl. No.	Reg. No.	Sl. No.	Reg. No.
1.	IITR/01/2024/682	71.	IITR/01/2024/2008
2.	IITR/01/2024/693	72.	IITR/01/2024/2015
3.	IITR/01/2024/701	73.	IITR/01/2024/2029
4.	IITR/01/2024/704	74.	IITR/01/2024/2034
5.	IITR/01/2024/713	75.	IITR/01/2024/2039
6.	IITR/01/2024/714	76.	IITR/01/2024/2040
7.	IITR/01/2024/717	77.	IITR/01/2024/2055
8.	IITR/01/2024/728	78.	IITR/01/2024/2063
9.	IITR/01/2024/729	79.	IITR/01/2024/2109
10.	IITR/01/2024/743	80.	IITR/01/2024/2122
11.	IITR/01/2024/744	81.	IITR/01/2024/2149
12.	IITR/01/2024/746	82.	IITR/01/2024/2150
13.	IITR/01/2024/758	83.	IITR/01/2024/2151
14.	IITR/01/2024/814	84.	IITR/01/2024/2198
15.	IITR/01/2024/820	85.	IITR/01/2024/2225
16.	IITR/01/2024/903	86.	IITR/01/2024/2313

17.	IITR/01/2024/939	87.	IITR/01/2024/2329
18.	IITR/01/2024/970	88.	IITR/01/2024/2339
19.	IITR/01/2024/973	89.	IITR/01/2024/2371
20.	IITR/01/2024/989	90.	IITR/01/2024/2379
21.	IITR/01/2024/1022	91.	IITR/01/2024/2382
22.	IITR/01/2024/1029	92.	IITR/01/2024/2409
23.	IITR/01/2024/1033	93.	IITR/01/2024/2419
24.	IITR/01/2024/1034	94.	IITR/01/2024/2423
25.	IITR/01/2024/1053	95.	IITR/01/2024/2425
26.	IITR/01/2024/1064	96.	IITR/01/2024/2426
27.	IITR/01/2024/1082	97.	IITR/01/2024/2430
28.	IITR/01/2024/1090	98.	IITR/01/2024/2473
29.	IITR/01/2024/1122	99.	IITR/01/2024/2478
30.	IITR/01/2024/1124	100.	IITR/01/2024/2531
31.	IITR/01/2024/1125	101.	IITR/01/2024/2574
32.	IITR/01/2024/1145	102.	IITR/01/2024/2599
33.	IITR/01/2024/1149	103.	IITR/01/2024/2642
34.	IITR/01/2024/1150	104.	IITR/01/2024/2674
35.	IITR/01/2024/1154	105.	IITR/01/2024/2689
36.	IITR/01/2024/1171	106.	IITR/01/2024/2704
37.	IITR/01/2024/1172	107.	IITR/01/2024/2723
38.	IITR/01/2024/1187	108.	IITR/01/2024/2737
39.	IITR/01/2024/1238	109.	IITR/01/2024/2776
40.	IITR/01/2024/1252	110.	IITR/01/2024/2798
41.	IITR/01/2024/1254	111.	IITR/01/2024/2822
42.	IITR/01/2024/1301	112.	IITR/01/2024/2826
43.	IITR/01/2024/1330	113.	IITR/01/2024/2928
44.	IITR/01/2024/1349	114.	IITR/01/2024/2937
45.	IITR/01/2024/1392	115.	IITR/01/2024/2939
46.	IITR/01/2024/1427	116.	IITR/01/2024/2959
47.	IITR/01/2024/1436	117.	IITR/01/2024/2960
48.	IITR/01/2024/1468	118.	IITR/01/2024/2984
49.	IITR/01/2024/1476	119.	IITR/01/2024/2985
50.	IITR/01/2024/1485	120.	IITR/01/2024/3007
51.	IITR/01/2024/1489	121.	IITR/01/2024/3012
52.	IITR/01/2024/1519	122.	IITR/01/2024/3024
53.	IITR/01/2024/1545	123.	IITR/01/2024/3037
54.	IITR/01/2024/1558	124.	IITR/01/2024/3049
55.	IITR/01/2024/1573	125.	IITR/01/2024/3053
56.	IITR/01/2024/1605	126.	IITR/01/2024/3072
57.	IITR/01/2024/1608	127.	IITR/01/2024/3082
58.	IITR/01/2024/1643	128.	IITR/01/2024/3097
59.	IITR/01/2024/1653	129.	IITR/01/2024/3104
60.	IITR/01/2024/1715	130.	IITR/01/2024/3138
61.	IITR/01/2024/1754	131.	IITR/01/2024/3140
62.	IITR/01/2024/1764	132.	IITR/01/2024/3149
63.	IITR/01/2024/1796	133.	IITR/01/2024/3191
64.	IITR/01/2024/1855	134.	IITR/01/2024/3196
65.	IITR/01/2024/1877		
66.	IITR/01/2024/1891		
67.	IITR/01/2024/1914		
68.	IITR/01/2024/1915		
69.	IITR/01/2024/1936		
70.	IITR/01/2024/1937		

Advertisement Number	IITR/1/2024	Post Code	TEC2
Designation of Post	Technician	Number of post(s) and its category	OBC (01)
Total number of online applications received by due date i.e. 31.03.2024.	54	Area / Division for which the post is being considered	Sensor and Device Development

Criteria adopted by Screening Committee to shortlist candidates for Trade Test is Essential Qualification which are asunder:

SSC / 10th Standard / or equivalent with Science subjects, with minimum 55% marks and ITI Diploma in Electricals/Medical Electronics and Electronics Engineering or product development

Or

SSC / 10th Standard / or equivalent with Science subjects, with minimum 55% marks and 2 years full time experience as an apprentice trainee from a recognized institution in the Electricals/Medical Electronics and Electronics Engineering or product development..

The Final list of ELIGIBLE applicants for the Trade Test is:

Sl. No.	Reg. No.	Sl. No.	Reg. No.
1.	IITR/01/2024/1454	8.	IITR/01/2024/3160
2.	IITR/01/2024/1649	9.	IITR/01/2024/2124
3.	IITR/01/2024/2096	10.	IITR/01/2024/2702
4.	IITR/01/2024/2216	11.	IITR/01/2024/2740
5.	IITR/01/2024/2698	12.	IITR/01/2024/2796
6.	IITR/01/2024/3051	13.	IITR/01/2024/2970
7.	IITR/01/2024/3139		

The Final list of NOT ELIGIBLE applicants for the post is:

Sl. No.	Reg. No.	Sl. No.	Reg. No.
1.	IITR/01/2024/1012	24.	IITR/01/2024/2604
2.	IITR/01/2024/1016	25.	IITR/01/2024/2610
3.	IITR/01/2024/1023	26.	IITR/01/2024/2635
4.	IITR/01/2024/1160	27.	IITR/01/2024/2765
5.	IITR/01/2024/1180	28.	IITR/01/2024/2792
6.	IITR/01/2024/1191	29.	IITR/01/2024/2800
7.	IITR/01/2024/1218	30.	IITR/01/2024/2816
8.	IITR/01/2024/1356	31.	IITR/01/2024/2859
9.	IITR/01/2024/1374	32.	IITR/01/2024/2869
10.	IITR/01/2024/1563	33.	IITR/01/2024/2873
11.	IITR/01/2024/1867	34.	IITR/01/2024/2884
12.	IITR/01/2024/1996	35.	IITR/01/2024/2933
13.	IITR/01/2024/2056	36.	IITR/01/2024/2969
14.	IITR/01/2024/2076	37.	IITR/01/2024/3047
15.	IITR/01/2024/2086	38.	IITR/01/2024/3055
16.	IITR/01/2024/2203	39.	IITR/01/2024/3067
17.	IITR/01/2024/2247	40.	IITR/01/2024/3107
18.	IITR/01/2024/2331	41.	IITR/01/2024/3168
19.	IITR/01/2024/2392		
20.	IITR/01/2024/2393		
21.	IITR/01/2024/2417		
22.	IITR/01/2024/2520		
23.	IITR/01/2024/2523		



Advertisement Number	IITR/1/2024	Post Code	TEC3
Designation of Post	Technician	Number of post(s) and its category	OBC (01)
Total number of online applications received by due date i.e. 31.03.2024.	48	Area / Division for which the post is being considered	Plumber

Criteria adopted by Screening Committee to shortlist candidates for Trade Test is Essential Qualification which are asunder:

SSC / 10<sup>th</sup> standard / SSC or Equivalent with minimum 55% marks and ITI certificate in Plumber from any recognized nation/state Industrial Training Institute.

The Final list of ELIGIBLE applicants for the Trade Test is:

Sl. No.	Reg. No.	Sl. No.	Reg. No.
1.	IITR/01/2024/688	15.	IITR/01/2024/2505
2.	IITR/01/2024/812	16.	IITR/01/2024/2526
3.	IITR/01/2024/1358	17.	IITR/01/2024/2530
4.	IITR/01/2024/1383	18.	IITR/01/2024/2558
5.	IITR/01/2024/1766	19.	IITR/01/2024/2634
6.	IITR/01/2024/2067	20.	IITR/01/2024/2699
7.	IITR/01/2024/2082	21.	IITR/01/2024/2726
8.	IITR/01/2024/2211	22.	IITR/01/2024/2877
9.	IITR/01/2024/2242	23.	IITR/01/2024/2903
10.	IITR/01/2024/2296	24.	IITR/01/2024/2919
11.	IITR/01/2024/2345	25.	IITR/01/2024/3008
12.	IITR/01/2024/2364	26.	IITR/01/2024/3050
13.	IITR/01/2024/2406	27.	IITR/01/2024/2929
14.	IITR/01/2024/2414		

The Final list of NOT ELIGIBLE applicants for the post is:

Sl. No	Reg. No.	Sl. No	Reg. No.
1.	IITR/01/2024/734	12.	IITR/01/2024/2337
2.	IITR/01/2024/792	13.	IITR/01/2024/2385
3.	IITR/01/2024/837	14.	IITR/01/2024/2445
4.	IITR/01/2024/901	15.	IITR/01/2024/2486
5.	IITR/01/2024/1049	16.	IITR/01/2024/2544
6.	IITR/01/2024/1091	17.	IITR/01/2024/2548
7.	IITR/01/2024/1220	18.	IITR/01/2024/2766
8.	IITR/01/2024/1311	19.	IITR/01/2024/2857
9.	IITR/01/2024/1710	20.	IITR/01/2024/2990
10.	IITR/01/2024/1733	21.	IITR/01/2024/3195
11.	IITR/01/2024/2212		

Advertisement Number	IITR/1/2024	Post Code	TEC4
Designation of Post	Technician	Number of post(s) and its category	SC (01)
Total number of online applications received by due date i.e. 31.03.2024.	331	Area / Division for which the post is being considered	Electrician

Criteria adopted by Screening Committee to shortlist candidates for Trade Test is Essential Qualification which are asunder:

SSC / 10<sup>th</sup> standard / SSC or Equivalent with minimum 55% marks and ITI certificate in Electrician trade from any recognized national/state Industrial Training Institute.

The Final list of ELIGIBLE applicants for the Trade Test is:

Sl. No.	Reg. No.	Sl. No.	Reg. No.
1.	IITR/01/2024/956	90.	IITR/01/2024/2044
2.	IITR/01/2024/957	91.	IITR/01/2024/2048
3.	IITR/01/2024/969	92.	IITR/01/2024/2062
4.	IITR/01/2024/972	93.	IITR/01/2024/2064
5.	IITR/01/2024/983	94.	IITR/01/2024/2069
6.	IITR/01/2024/1020	95.	IITR/01/2024/2080
7.	IITR/01/2024/1030	96.	IITR/01/2024/2088
8.	IITR/01/2024/1041	97.	IITR/01/2024/2095
9.	IITR/01/2024/1059	98.	IITR/01/2024/2117
10.	IITR/01/2024/1127	99.	IITR/01/2024/2123
11.	IITR/01/2024/1133	100.	IITR/01/2024/2136
12.	IITR/01/2024/1135	101.	IITR/01/2024/2141
13.	IITR/01/2024/1136	102.	IITR/01/2024/2145
14.	IITR/01/2024/1143	103.	IITR/01/2024/2165
15.	IITR/01/2024/1165	104.	IITR/01/2024/2175
16.	IITR/01/2024/1169	105.	IITR/01/2024/2177
17.	IITR/01/2024/1177	106.	IITR/01/2024/2204
18.	IITR/01/2024/1209	107.	IITR/01/2024/2215
19.	IITR/01/2024/1221	108.	IITR/01/2024/2228
20.	IITR/01/2024/1245	109.	IITR/01/2024/2240
21.	IITR/01/2024/1247	110.	IITR/01/2024/2244
22.	IITR/01/2024/1257	111.	IITR/01/2024/2246
23.	IITR/01/2024/1261	112.	IITR/01/2024/2250
24.	IITR/01/2024/1266	113.	IITR/01/2024/2266
25.	IITR/01/2024/1268	114.	IITR/01/2024/2284
26.	IITR/01/2024/1318	115.	IITR/01/2024/2289
27.	IITR/01/2024/1319	116.	IITR/01/2024/2346
28.	IITR/01/2024/1321	117.	IITR/01/2024/2347
29.	IITR/01/2024/1378	118.	IITR/01/2024/2361
30.	IITR/01/2024/1386	119.	IITR/01/2024/2365
31.	IITR/01/2024/1396	120.	IITR/01/2024/2372
32.	IITR/01/2024/1398	121.	IITR/01/2024/2376
33.	IITR/01/2024/1399	122.	IITR/01/2024/2378
34.	IITR/01/2024/1402	123.	IITR/01/2024/2390
35.	IITR/01/2024/1405	124.	IITR/01/2024/2397
36.	IITR/01/2024/1417	125.	IITR/01/2024/2416
37.	IITR/01/2024/1473	126.	IITR/01/2024/2437
38.	IITR/01/2024/1481	127.	IITR/01/2024/2470
39.	IITR/01/2024/1487	128.	IITR/01/2024/2479

40.	IITR/01/2024/1488	129.	IITR/01/2024/2485
41.	IITR/01/2024/1492	130.	IITR/01/2024/2489
42.	IITR/01/2024/1512	131.	IITR/01/2024/2504
43.	IITR/01/2024/1518	132.	IITR/01/2024/2518
44.	IITR/01/2024/1534	133.	IITR/01/2024/2524
45.	IITR/01/2024/1539	134.	IITR/01/2024/2547
46.	IITR/01/2024/1552	135.	IITR/01/2024/2566
47.	IITR/01/2024/1613	136.	IITR/01/2024/2568
48.	IITR/01/2024/1619	137.	IITR/01/2024/2571
49.	IITR/01/2024/1642	138.	IITR/01/2024/2601
50.	IITR/01/2024/1645	139.	IITR/01/2024/2622
51.	IITR/01/2024/1647	140.	IITR/01/2024/2624
52.	IITR/01/2024/1652	141.	IITR/01/2024/2632
53.	IITR/01/2024/1662	142.	IITR/01/2024/2658
54.	IITR/01/2024/1690	143.	IITR/01/2024/2663
55.	IITR/01/2024/1694	144.	IITR/01/2024/2686
56.	IITR/01/2024/1698	145.	IITR/01/2024/2692
57.	IITR/01/2024/1708	146.	IITR/01/2024/2695
58.	IITR/01/2024/1718	147.	IITR/01/2024/2705
59.	IITR/01/2024/1721	148.	IITR/01/2024/2733
60.	IITR/01/2024/1740	149.	IITR/01/2024/2739
61.	IITR/01/2024/1752	150.	IITR/01/2024/2770
62.	IITR/01/2024/1755	151.	IITR/01/2024/2775
63.	IITR/01/2024/1777	152.	IITR/01/2024/2791
64.	IITR/01/2024/1816	153.	IITR/01/2024/2803
65.	IITR/01/2024/1819	154.	IITR/01/2024/2814
66.	IITR/01/2024/1836	155.	IITR/01/2024/2824
67.	IITR/01/2024/1839	156.	IITR/01/2024/2829
68.	IITR/01/2024/1841	157.	IITR/01/2024/2842
69.	IITR/01/2024/1854	158.	IITR/01/2024/2858
70.	IITR/01/2024/1857	159.	IITR/01/2024/2880
71.	IITR/01/2024/1871	160.	IITR/01/2024/2906
72.	IITR/01/2024/1882	161.	IITR/01/2024/2944
73.	IITR/01/2024/1887	162.	IITR/01/2024/2964
74.	IITR/01/2024/1902	163.	IITR/01/2024/2966
75.	IITR/01/2024/1905	164.	IITR/01/2024/2983
76.	IITR/01/2024/1909	165.	IITR/01/2024/2993
77.	IITR/01/2024/1910	166.	IITR/01/2024/2996
78.	IITR/01/2024/1912	167.	IITR/01/2024/3000
79.	IITR/01/2024/1913	168.	IITR/01/2024/3036
80.	IITR/01/2024/1918	169.	IITR/01/2024/3038
81.	IITR/01/2024/1931	170.	IITR/01/2024/3052
82.	IITR/01/2024/1949	171.	IITR/01/2024/3058
83.	IITR/01/2024/1954	172.	IITR/01/2024/3071
84.	IITR/01/2024/1969	173.	IITR/01/2024/3102
85.	IITR/01/2024/1975	174.	IITR/01/2024/3115
86.	IITR/01/2024/1986	175.	IITR/01/2024/3120
87.	IITR/01/2024/1991	176.	IITR/01/2024/3151
88.	IITR/01/2024/2017	177.	IITR/01/2024/3152
89.	IITR/01/2024/2023	178.	IITR/01/2024/3171

The Final list of NOT ELIGIBLE applicants for the post is:

Sl. No.	Reg. No.	Sl. No.	Reg. No.
1.	IITR/01/2024/935	78.	IITR/01/2024/2054
2.	IITR/01/2024/955	79.	IITR/01/2024/2074
3.	IITR/01/2024/960	80.	IITR/01/2024/2089
4.	IITR/01/2024/966	81.	IITR/01/2024/2091
5.	IITR/01/2024/974	82.	IITR/01/2024/2092
6.	IITR/01/2024/976	83.	IITR/01/2024/2098
7.	IITR/01/2024/985	84.	IITR/01/2024/2138
8.	IITR/01/2024/991	85.	IITR/01/2024/2140
9.	IITR/01/2024/1019	86.	IITR/01/2024/2172
10.	IITR/01/2024/1024	87.	IITR/01/2024/2181
11.	IITR/01/2024/1043	88.	IITR/01/2024/2187
12.	IITR/01/2024/1067	89.	IITR/01/2024/2222
13.	IITR/01/2024/1071	90.	IITR/01/2024/2223
14.	IITR/01/2024/1098	91.	IITR/01/2024/2230
15.	IITR/01/2024/1108	92.	IITR/01/2024/2232
16.	IITR/01/2024/1109	93.	IITR/01/2024/2248
17.	IITR/01/2024/1118	94.	IITR/01/2024/2295
18.	IITR/01/2024/1123	95.	IITR/01/2024/2304
19.	IITR/01/2024/1141	96.	IITR/01/2024/2319
20.	IITR/01/2024/1168	97.	IITR/01/2024/2367
21.	IITR/01/2024/1184	98.	IITR/01/2024/2381
22.	IITR/01/2024/1189	99.	IITR/01/2024/2399
23.	IITR/01/2024/1203	100.	IITR/01/2024/2401
24.	IITR/01/2024/1204	101.	IITR/01/2024/2424
25.	IITR/01/2024/1222	102.	IITR/01/2024/2460
26.	IITR/01/2024/1233	103.	IITR/01/2024/2462
27.	IITR/01/2024/1250	104.	IITR/01/2024/2466
28.	IITR/01/2024/1275	105.	IITR/01/2024/2477
29.	IITR/01/2024/1282	106.	IITR/01/2024/2484
30.	IITR/01/2024/1299	107.	IITR/01/2024/2488
31.	IITR/01/2024/1333	108.	IITR/01/2024/2540
32.	IITR/01/2024/1334	109.	IITR/01/2024/2562
33.	IITR/01/2024/1340	110.	IITR/01/2024/2564
34.	IITR/01/2024/1350	111.	IITR/01/2024/2588
35.	IITR/01/2024/1363	112.	IITR/01/2024/2636
36.	IITR/01/2024/1369	113.	IITR/01/2024/2666
37.	IITR/01/2024/1389	114.	IITR/01/2024/2679
38.	IITR/01/2024/1397	115.	IITR/01/2024/2694
39.	IITR/01/2024/1404	116.	IITR/01/2024/2703
40.	IITR/01/2024/1420	117.	IITR/01/2024/2712
41.	IITR/01/2024/1421	118.	IITR/01/2024/2721
42.	IITR/01/2024/1422	119.	IITR/01/2024/2767
43.	IITR/01/2024/1435	120.	IITR/01/2024/2784
44.	IITR/01/2024/1437	121.	IITR/01/2024/2820
45.	IITR/01/2024/1447	122.	IITR/01/2024/2855
46.	IITR/01/2024/1456	123.	IITR/01/2024/2885
47.	IITR/01/2024/1501	124.	IITR/01/2024/2894
48.	IITR/01/2024/1509	125.	IITR/01/2024/2912
49.	IITR/01/2024/1517	126.	IITR/01/2024/2934
50.	IITR/01/2024/1526	127.	IITR/01/2024/2945
51.	IITR/01/2024/1557	128.	IITR/01/2024/2954
52.	IITR/01/2024/1578	129.	IITR/01/2024/2971
53.	IITR/01/2024/1582	130.	IITR/01/2024/2976
54.	IITR/01/2024/1588	131.	IITR/01/2024/2981
55.	IITR/01/2024/1592	132.	IITR/01/2024/2982
56.	IITR/01/2024/1595	133.	IITR/01/2024/2987
57.	IITR/01/2024/1616	134.	IITR/01/2024/3010
58.	IITR/01/2024/1648	135.	IITR/01/2024/3054
59.	IITR/01/2024/1650	136.	IITR/01/2024/3057
60.	IITR/01/2024/1665	137.	IITR/01/2024/3061

61.	IITR/01/2024/1666	138.	IITR/01/2024/3077
62.	IITR/01/2024/1684	139.	IITR/01/2024/3098
63.	IITR/01/2024/1692	140.	IITR/01/2024/3100
64.	IITR/01/2024/1699	141.	IITR/01/2024/3103
65.	IITR/01/2024/1713	142.	IITR/01/2024/3109
66.	IITR/01/2024/1761	143.	IITR/01/2024/3114
67.	IITR/01/2024/1789	144.	IITR/01/2024/3117
68.	IITR/01/2024/1793	145.	IITR/01/2024/3126
69.	IITR/01/2024/1809	146.	IITR/01/2024/3143
70.	IITR/01/2024/1860	147.	IITR/01/2024/3145
71.	IITR/01/2024/1880	148.	IITR/01/2024/3157
72.	IITR/01/2024/1886	149.	IITR/01/2024/3172
73.	IITR/01/2024/1921	150.	IITR/01/2024/3178
74.	IITR/01/2024/1997	151.	IITR/01/2024/3208
75.	IITR/01/2024/2000	152.	IITR/01/2024/3209
76.	IITR/01/2024/2010	153.	IITR/01/2024/3217
77.	IITR/01/2024/2019		

Advertisement Number	IITR/1/2024	Post Code	TEC5
Designation of Post	Technician	Number of post(s) and its category	OBC (01)
Total number of online applications received by due date i.e. 31.03.2024.	32	Area / Division for which the post is being considered	Refrigeration/AC Technician

Criteria adopted by Screening Committee to shortlist candidates for Trade Test is Essential Qualification which are asunder:

SSC / 10<sup>th</sup> standard / SSS or Equivalent with Science subjects with minimum 55% marks and ITI certificate in Refrigeration / AC Technician trades from any recognized national/state Industrial Training Institute.

The Final list of ELIGIBLE applicants for the TradeTest is:

Sl. No.	Reg. No.	Sl. No.	Reg. No.
1.	IITR/01/2024/1035	8.	IITR/01/2024/2793
2.	IITR/01/2024/1607	9.	IITR/01/2024/2812
3.	IITR/01/2024/1833	10.	IITR/01/2024/2917
4.	IITR/01/2024/1995	11.	IITR/01/2024/3163
5.	IITR/01/2024/2294	12.	IITR/01/2024/3179
6.	IITR/01/2024/2637	13.	IITR/01/2024/2818
7.	IITR/01/2024/2743		

The Final list of NOT ELIGIBLE applicants for the post is:

Sl. No	Reg. No.	Sl. No	Reg. No.
1.	IITR/01/2024/788	11.	IITR/01/2024/2905
2.	IITR/01/2024/870	12.	IITR/01/2024/3014
3.	IITR/01/2024/1601	13.	IITR/01/2024/3056
4.	IITR/01/2024/2158	14.	IITR/01/2024/3068
5.	IITR/01/2024/2176	15.	IITR/01/2024/3132
6.	IITR/01/2024/2196	16.	IITR/01/2024/3205
7.	IITR/01/2024/2200	17.	IITR/01/2024/3213
8.	IITR/01/2024/2914	18.	IITR/01/2024/1968
9.	IITR/01/2024/2818	19.	IITR/01/2024/2731
10.	IITR/01/2024/2899		

Advertisement Number	IITR/1/2024	Post Code	TEC6
Designation of Post	Technician	Number of post(s) and its category	UR (01)
Total number of online applications received by due date i.e. 31.03.2024.	77	Area / Division for which the post is being considered	Computer Science

Criteria adopted by Screening Committee to shortlist candidates for Trade Test is Essential Qualification which are asunder:

SSC / 10<sup>th</sup> Standard or equivalent with science subjects, with minimum 55% marks and ITI Certificate or national/state trade certificate in Computer Hardware and Network Maintenance / Information Communication Technology System Maintenance trade.

or

SSC / 10<sup>th</sup> Standard or equivalent with Science subjects, with minimum 55% marks and 2 years full time experience as an apprentice trainee from a recognized Institution in Computer Hardware and Network Maintenance / Information Communication Technology System Maintenance trade.

or

SSC / 10<sup>th</sup> Standard or equivalent with Science subjects, with minimum 55% marks and 3 years of work experience in the relevant trade in a Ministry / Department / Organization / Public Sector Undertaking / Autonomous Body under Government of India / State / UT.

The Final list of ELIGIBLE applicants for the Trade Test is:

Sl. No.	Reg. No.	Sl. No.	Reg. No.
1.	IITR/01/2024/921	8.	IITR/01/2024/2184
2.	IITR/01/2024/1895	9.	IITR/01/2024/3032
3.	IITR/01/2024/2103	10.	IITR/01/2024/2472
4.	IITR/01/2024/2269	11.	IITR/01/2024/2886
5.	IITR/01/2024/2542	12.	IITR/01/2024/2889
6.	IITR/01/2024/2595	13.	IITR/01/2024/2079
7.	IITR/01/2024/2696	14.	IITR/01/2024/2805

The Final list of NOT ELIGIBLE applicants for the post is:

Sl. No.	Reg. No.	Sl. No.	Reg. No.
1.	IITR/01/2024/699	34.	IITR/01/2024/1993
2.	IITR/01/2024/708	35.	IITR/01/2024/1994
3.	IITR/01/2024/760	36.	IITR/01/2024/2005
4.	IITR/01/2024/808	37.	IITR/01/2024/2057
5.	IITR/01/2024/825	38.	IITR/01/2024/2090
6.	IITR/01/2024/858	39.	IITR/01/2024/2110
7.	IITR/01/2024/862	40.	IITR/01/2024/2214
8.	IITR/01/2024/896	41.	IITR/01/2024/2233
9.	IITR/01/2024/913	42.	IITR/01/2024/2237
10.	IITR/01/2024/914	43.	IITR/01/2024/2276
11.	IITR/01/2024/925	44.	IITR/01/2024/2315
12.	IITR/01/2024/962	45.	IITR/01/2024/2517
13.	IITR/01/2024/965	46.	IITR/01/2024/2533



14.	IITR/01/2024/967	47.	IITR/01/2024/2584
15.	IITR/01/2024/990	48.	IITR/01/2024/2626
16.	IITR/01/2024/998	49.	IITR/01/2024/2654
17.	IITR/01/2024/1062	50.	IITR/01/2024/2669
18.	IITR/01/2024/1157	51.	IITR/01/2024/2711
19.	IITR/01/2024/1175	52.	IITR/01/2024/2764
20.	IITR/01/2024/1205	53.	IITR/01/2024/2772
21.	IITR/01/2024/1228	54.	IITR/01/2024/2830
22.	IITR/01/2024/1289	55.	IITR/01/2024/2875
23.	IITR/01/2024/1295	56.	IITR/01/2024/2923
24.	IITR/01/2024/1366	57.	IITR/01/2024/2950
25.	IITR/01/2024/1433	58.	IITR/01/2024/3048
26.	IITR/01/2024/1464	59.	IITR/01/2024/3110
27.	IITR/01/2024/1610	60.	IITR/01/2024/3123
28.	IITR/01/2024/1730	61.	IITR/01/2024/3136
29.	IITR/01/2024/1743	62.	IITR/01/2024/3159
30.	IITR/01/2024/1967	63.	IITR/01/2024/3221
31.	IITR/01/2024/1973		
32.	IITR/01/2024/1974		
33.	IITR/01/2024/1979		

Advertisement Number	IITR/1/2024	Post Code	TEC7
Designation of Post	Technician	Number of post(s) and its category	PwBD (01), HH
Total number of online applications received by due date i.e. 31.03.2024.	26	Area / Division for which the post is being considered	Computer Science

Criteria adopted by Screening Committee to shortlist candidates for Trade Test is Essential Qualification which are asunder:

SSC / 10<sup>th</sup> Standard or equivalent with science subjects, with minimum 55% marks and ITI Certificate or national/state trade certificate in Computer Hardware and Network Maintenance / Information Communication Technology System Maintenance trade.

or

SSC / 10<sup>th</sup> Standard or equivalent with Science subjects, with minimum 55% marks and 2 years full time experience as an apprentice trainee from a recognized Institution in Computer Hardware and Network Maintenance / Information Communication Technology System Maintenance trade.

or

SSC / 10<sup>th</sup> Standard or equivalent with Science subjects, with minimum 55% marks and 3 years of work experience in the relevant trade in a Ministry / Department / Organization / Public Sector Undertaking / Autonomous Body under Government of India / State / UT.

The Final list of ELIGIBLE applicants for the Trade Test is:

Sl. No.	Reg. No.	Sl. No.	Reg. No.
1.	IITR/01/2024/738	4.	IITR/01/2024/2368
2.	IITR/01/2024/898	5.	IITR/01/2024/3130
3.	IITR/01/2024/1961		

The Final list of NOT ELIGIBLE applicants for the post is:

Sl. No	Reg. No.	Sl. No.	Reg. No.
1.	IITR/01/2024/685	12.	IITR/01/2024/1624
2.	IITR/01/2024/776	13.	IITR/01/2024/1981
3.	IITR/01/2024/777	14.	IITR/01/2024/2358
4.	IITR/01/2024/828	15.	IITR/01/2024/2377
5.	IITR/01/2024/856	16.	IITR/01/2024/2498
6.	IITR/01/2024/872	17.	IITR/01/2024/2537
7.	IITR/01/2024/875	18.	IITR/01/2024/2640
8.	IITR/01/2024/1088	19.	IITR/01/2024/2799
9.	IITR/01/2024/1326	20.	IITR/01/2024/2997
10.	IITR/01/2024/1541	21.	IITR/01/2024/3044
11.	IITR/01/2024/1561		

Advertisement Number	IITR/1/2024	Post Code	TEC8
Designation of Post	Technician	Number of post(s) and its category	UR (01), EWS(01)
Total number of online applications received by due date i.e. 31.03.2024.	29	Area / Division for which the post is being considered	Biological Science

Criteria adopted by Screening Committee to shortlist candidates for Trade Test is Essential Qualification which are asunder:

10<sup>th</sup> Standard / SSC or equivalent with Science subjects with minimum 55% marks and ITI Diploma in the area of any field of Biological Science.

The Final list of ELIGIBLE applicants for the Trade Test is:

Sl. No.	Reg. No.	Name	DOB
None Found Suitable (NFS)			

The Final list of NOT ELIGIBLE applicants for the post is:

Sl. No.	Reg. No.	Sl. No.	Reg. No.
1.	IITR/01/2024/737	16.	IITR/01/2024/2263
2.	IITR/01/2024/847	17.	IITR/01/2024/2350
3.	IITR/01/2024/1048	18.	IITR/01/2024/2447
4.	IITR/01/2024/1159	19.	IITR/01/2024/2516
5.	IITR/01/2024/1208	20.	IITR/01/2024/2653
6.	IITR/01/2024/1216	21.	IITR/01/2024/2661
7.	IITR/01/2024/1297	22.	IITR/01/2024/2671
8.	IITR/01/2024/1320	23.	IITR/01/2024/2757
9.	IITR/01/2024/1568	24.	IITR/01/2024/2865
10.	IITR/01/2024/1706	25.	IITR/01/2024/2913
11.	IITR/01/2024/1719	26.	IITR/01/2024/3040
12.	IITR/01/2024/2049	27.	IITR/01/2024/3064
13.	IITR/01/2024/2155	28.	IITR/01/2024/3164
14.	IITR/01/2024/2188	29.	IITR/01/2024/1303
15.	IITR/01/2024/2239		

**Syllabus for the technician examination (Chemistry)****a. TRADE TEST**

1. Determination of the pH of Samples
2. Properties of Acetic Acid Experiment
3. Properties of Acids and Bases
4. Reactivity Series Experiment
5. Study the Comparative Cleaning Capacity of a Sample of Soap in Soft and Hard water
6. Types of Reactions Experiment
7. Preparation of standard solution
8. Volumetric analysis of Acidimetric and alkalimetric titrations.

**b. Written Examination**

- **Fundamentals of chemistry:** Fundamental particle of Atom-electron Proton Neutron (Charge and mass only). Definition of atom and molecule. Atomic number mass number. Electronic configuration of element (Atomic numbers 1-30). Salient features of the modern periodic table groups and periods. Definition of ionic and covalent bond. Distinguish between the ionic and covalent compounds.
- **Solutions:** Define solution, solvent, and solute. Types of solution. Define and explain Molarity and Normality with Numerical problems.
- **Chemical reactions:** Chemical equation. Balanced chemical equation. Implications of a balanced chemical equation, types of chemical reactions: combination, decomposition, displacement, double displacement, precipitation, endothermic exothermic reactions, oxidation and reduction.
- **Acids, bases and salts:** Their definition in terms of furnishing of  $H^+$  and  $OH^-$  ions, General properties, examples and uses. Neutralization, concept of pH scale (Definition relating to logarithm not required), importance of pH in everyday life, preparation and uses of sodium hydroxide, bleaching powder, Baking soda, washing soda and plaster of Paris.
- **Metals and non-metals:** Properties of metals and non-metals. reactivity series, formation and properties of ionic compounds. Basic metallurgical processes. Corrosion and prevention.
- **Carbon Compounds:** Covalent bonding in carbon compounds. Versatile nature of carbon, Homologous series. Nomenclature of carbon compounds containing functional groups (halogens, alcohol, ketones, aldehydes, alkanes and alkynes), difference between saturated hydrocarbons and unsaturated hydrocarbons. Chemical properties of carbon compounds (combustion, oxidation, addition and substitution reaction). Ethanol and Ethanoic acid (only properties and uses), soaps and detergents.

## **Syllabus: Post Code-TEC-2, Area- Sensor and Device Development**

- Basic Concepts of Electricity: Current, Voltage, Resistance, Power, Energy, and their units.
- DC Machines: Working principles of DC generators and motors.
- AC Fundamentals: Sinusoidal waveforms, frequency, phase difference, and power factor.
- Transformers: Construction, working, and basic applications.
- Alternators and AC Motors: Principles of alternators and induction motors (single-phase and three-phase).
- Electrical Wiring: Wiring systems, connections, types of cables, wire joints, and colour codes.
- Basic Electronic Components: Resistors, capacitors, inductors, diodes, and transistors.
- Analog Electronics: Basics of amplifiers, oscillators, and their applications.
- Digital Electronics: Logic gates, truth tables, binary numbers, flip-flops, and counters.
- Semiconductor Devices: Working of diodes, BJTs, FETs, SCRs, and applications.
- Electronic Tools and Equipment: CRO, function generator, LCR meter, power supply, etc.
- Soldering and Desoldering: Tools, techniques, and best practices for safe electrical connections.
- Food Safety Testing Basics: Introduction to contaminants, adulterants, and quality parameters.

## **SYLLABUS FOR PLUMBER**

1. Plan and organize the work to make job as per specification applying different types of basic fitting operation and Check for dimensional accuracy following safety precautions. [Basic fitting operation – marking, Hacksawing, Chiseling, Filing, Drilling, Taping and Grinding etc. Accuracy:  $\pm 0.25\text{mm}$ ]
2. Perform Inner & Outer Thread cutting on Metal & Studs and thread cutting on different types of pipes & fittings accessories. Carry out cutting of Pipes of different Dia in different angle and Joining of pipes by gas welding, Soldering and Brazing. Construct Masonry brick wall and RCC casting. Brick wall cutting for concealing pipe line. Carry out Cutting and Bending of Pipes using Plumber's tools and equipment.
3. Join various type of PVC pipe by heat process or Welding. Construct complete pipe line circuit with different types of Joints and fixing Cocks & valve on Pipe line. Carry out cutting of different Types of PVC Pipe, joining and laying. Perform Water analysis test, Water Pressure test and Water distribution system by using Pipe line. Align and lay humid pipe line of different dia. and fitting & maintenance of drainage pipe line.
4. Install and maintain different Electric pumps. Join fittings for different purposes on PVC pipe line. Construct inspection chamber, manhole, gutter, septic tank, socket etc. Test pipe line as per site drainage pipe line layout. Perform removal of leakage pipe line.
5. Install, fix & maintain different valve & cock. Install& maintain water metre and water supply for fixture. Demonstrate method of bending for different materials & different pipe joint. Perform fitting and maintenance of Fixture at different place. Carry out fitting, fixing & laying installation of hot & cold water pipe line and symbolizing. Perform repairing & reconditioning of waste pipe line. Perform repairing & reconditioning, scraping & painting of sanitary fittings pipe line.
6. Read and apply engineering drawing for different application in the field of work. Demonstrate basic mathematical concept and principles to perform practical operations. Understand and explain basic science in the field of study.

### **SYLLABUS FOR ELECTRICIAN**

1. Prepare profile with an appropriate accuracy as per drawing following safety precautions. Prepare electrical wire joints; carry out soldering, crimping and measure insulation resistance of underground cable. Verify characteristics of electrical and magnetic circuits. Install, test and maintenance of batteries and solar cell. Estimate, Assemble, install and test wiring system. Plan and prepare Earthing installation. Plan and execute electrical illumination system and test. Select and perform measurements using analog / digital instruments and install/ diagnose smart meters. Perform testing, verify errors and calibrate instruments.
2. Plan and carry out installation, fault detection and repairing of domestic appliances. Execute testing, evaluate performance and maintenance of transformer. Read and apply engineering drawing for different application in the field of work. Demonstrate basic mathematical concept and principles to perform practical operations. Understand and explain basic science in the field of study. Plan, execute commissioning and evaluate performance of DC machines. Execute testing, and maintenance of DC machines and motor starters. Plan, execute commissioning and evaluate performance of AC motors. Execute testing, and maintenance of AC motors and starters. Plan, execute testing, evaluate performance and carry out maintenance of Alternator / MG set. Execute parallel operation of alternators. Distinguish, organize and perform motor winding.
3. Assemble simple electronic circuits and test for functioning. Assemble accessories and carry out wiring of control cabinets and equipment. Perform speed control of AC and DC motors by using solid state devices. Detect the faults and troubleshoot inverter, stabilizer, battery charger, emergency light and UPS etc. Plan, assemble and install solar panel. Erect overhead domestic service line, outline various power plant layout and explain smart distribution grid and its components. Examine the faults and carry out repairing of circuit breakers. Install and troubleshoot Electric Vehicle charging stations.
4. Read and apply engineering drawing for different application in the field of work. Demonstrate basic mathematical concept and principles to perform practical operations. Understand and explain basic science in the field of study.



## **SYLLABUS FOR REFRIGERATION AND AIR CONDITIONING TECHNICIAN**

1. Identify trade related hazards and safety procedures following safety precautions. Produce fitting jobs as per drawing (Range of operations: marking, sawing, filing, drilling, reaming, taping and dieing etc. Produce Sheet metal components (range of operation – marking, metal cutting, bending, riveting and soldering etc. Identify electrical safety. Join different wire, measure power, currents, volts and earth resistance etc. Connect single phase, three phase motors i.e. star and delta connections. Identify the electronic components and their colour code i.e. transistor, capacitor, diode, amplifier, I.C and able to work soldering. Perform gas welding, brazing, soldering observing related safety.
2. Identify RAC tools and equipment and recognize different parts of RAC system. Perform copper tube cutting, flaring, swaging, brazing. Test mechanical & electrical components. Perform leak test, vacuuming, gas charging, wiring & installation of refrigerator. Identify electrical and mechanical components of a refrigerator. Test compressor motor terminal, start compressor Direct with relay & without relay, technique of flushing, leak testing, replacing capillary & filter drier, evacuation & gas charging. Check components of frost-free refrigerator (electrical / mechanical), wiring of frost-free freezer & air distribution in refrigerator sector. Leak detection, evacuators & gas charging.
3. Dismantle, repair and assemble hermetic, fixed and variable speed compressor, and test performance. Identify the terminals of sealed compressor and their wiring and measure current, volts, watts and use of DOL starter with different types of motors. Perform selection of Hermetic compressor for different appliances, starting methods, testing controls & safety cut out used in sealed compressor. Identify the components of control system of Inverter A.C and wiring of control system. Perform servicing & de-scaling of condenser (internals & externals) used in different Appliances.
4. Perform fitting & adjustment of drier, filter & refrigerant controls used in different refrigeration system. Perform servicing of different evaporator used in different appliances. Carry out Recovery and Recycling of Refrigerant used, alternative of CFC, HFC re-cover, transfer & handling of gas cylinders. Retrofit CFC/HFC machine with ozone friendly refrigerant with understanding of the compatibility. Pack thermal insulation and prevent cooling leakage. Install window AC, test Electrical & electronics components & Fault diagnosis & remedial measures. Perform servicing of electrical & electronic control test, installation, wiring, fault finding & remedial measures of different split AC. Perform servicing of car AC. Fault diagnosis & remedial measures.
5. Read and apply engineering drawing for different application in the field of work. Demonstrate basic mathematical concept and principles to perform practical operations. Understand and explain basic science in the field of study. Carry out servicing, dismantling, checking different parts of different types of commercial compressor, re-placing worn out parts, Check lubrication system. Assemble & check performance. Perform servicing of different types of water-cooled condenser. Perform servicing and performance test of Cooling tower. Conduct Servicing, backwash & re-generate Water treatment plant of circulating water. Perform Fitting of expansion valve, adjustment of refrigerant flow according to heatload. Perform servicing of evaporator & chillers.
6. Carry out servicing and retrofit of Water cooler and dispenser. Service, retrofit of visible cooler and bottle cooler and test performance. Conduct servicing of deep freezer and test performance. Install, service, repair, gas charging and testing performance of Ice Cube machine. Repair, servicing & retrofit of ice candy plant. Perform servicing of Ice plant and evaporative condenser. Perform Servicing and preventive maintenance of walk in cooler & cold storage. Study psychrometric chart and measure psychrometric properties using psychrometric, anemometer i.e. DBT, WBT, RH, air flow etc.

Continued:2

7. Perform servicing of motor and blowers used in different air conditioning system. Construct, install, pack thermal and acoustic insulation of different air ducts. Perform servicing and maintenance of different types of air filters. Perform servicing, installation, fault diagnosis and remedial measures on Package AC with Air cooled condenser. Carry out Servicing, installation, fault diagnosis and remedial measures in Package A.C. with water cooled condenser. Identify the various components of central AC test electrical components and make wiring. Servicing of A.H.U, damper, check air flow, De-scaling of condenser and C.T servicing. Pump down the system, top up oil and gas and check temperature and pressure.
8. Identify components of DX system. Test components, make wiring of DX system. Test leak and evacuate, gas charge the system and check the performance. Maintenance, trouble shoot and operate the plant. Identify the different parts of VRF/VRV system, check and service VRF/VRV system. Identify different parts of indirect or chillers system. Check components and make wiring, leak test, evacuate and gas charge/ top up. Servicing the plant and trouble shoot. Identify chilled water pipe line. Servicing of dampers, FCU and water control valves. Troubles shoot both Central A.C. plant DX and indirect system. Check different control system, installation of other major components, servicing of all parts including cooling tower and water treatment plant. Perform Servicing, fault diagnosis, repair and maintenance of mobile A.C. leak test, evacuation, gas charging, check magnetic clutch and make wiring. Test performance after start. Perform preventive maintenance of different plants. Maintain log book based on daily operation.
9. Read and apply engineering drawing for different application in the field of work. Demonstrate basic mathematical concept and principles to perform practical operations. Understand and explain basic science in the field of study.

## **Syllabus for Computer Hardware and Network Maintenance / Information Communication Technology System Maintenance (TEC6)**

### **Computers**

Introduction to computers, classification, generations, applications. Basic blocks of a digital computer; Hand Tools Basics and Specifications; Types of cabinets, relation with mother board form factor; Main devices, components, Cards, boards inside a PC (to card or device level only); Types and specifications of the cables and connectors used for interconnecting the devices, boards, cards, components inside a PC; Precautions to be taken while opening and closing PC cabinet, removing and/or re-connecting cables inside a PC.

### **PC Hardware and Software**

Types of I/O devices and ports on a standard PC for connecting I/O devices; Function of keyboard and Mouse: brief principle, types, interfaces, connectors, cable; Function of monitor: brief principle, resolution, size, types, interfaces, connectors, cable; Function of Speakers and Mic: brief principle, types, interfaces, connectors, cable; Functions of serial and parallel ports: types of devices that can be connected, interface standards; Function of SMPS Tester and its use; Precaution to be taken while connecting/removing connectors from PC ports; Specifications of processor (Intel Celeron, P4 family, Xeon dual core, quad core, core2 duo, i3, i5, i7 and AMD); Memory device types; POST, BIOS, CMOS, and UEFI; BIOS and UEFI Security; Watt and Voltage; Power Fluctuation Types; Power Protection Devices; CPU Architecture; Multicore Processors; CPU Cooling Mechanism; RAID & RAID Levels; Video and Graphics Ports; USB, SATA, Twisted Pair, and Coax Cables and Connectors; SCSI and IDE; Monitor: Characteristics, Terms, and Display standards; Using Multiple Monitor; Thick and Thin clients; Safe Disposal Methods; How Hard Disks Work; Hard Drive Motherboard; Using Multiple Hard Drives for Performance and Reliability; Partitioning a hard disk (primary and extended partitions); Bad Sectors in Hard disk; Master Boot Record, Fixing Start-up process, difference between MBR and GPT; Types of software: System software-OS, Compiler; Application software; Updating the Software; High-level, Low-level language, Computer application: scientific, industrial, and business; Functions of an operating system; Disk operating system; Windows operating system; Concept of GUI, User Account in Windows; Desktop, Icon, drag and drop; My computer folder, Network places; Recycle bin, task bar, start menu, tool bar; Properties of files and folders; Executing application programs; Version of a software, Service pack, Software Installation; Post-installation: Backup procedure & specifications, Restore procedure; Legal aspects of using computers and software such as copyright, patent licensing etc.; Linux operating system: Basic Linux commands; Linux file system, The Shell; Users and file permissions, vi editor, X window system, Filter Commands, Processes; Shell Scripting; Concept of UNIX.

### **Preventive Maintenance, and Troubleshooting of PC**

Benefits of preventive maintenance; Preventive Maintenance: Dust, Internal components, Environmental Concerns, Software; Internet Reference Tools; Problems and Solutions for Hardware; Latest Tools & Gadgets for Desktop/Laptop Repairs.

### **Data backup and data recovery software**

Junk files, deleted files, un-deleting files; Maintenance of Temp folder, internet history, cookies, bookmark, Concepts of SAN, NAS and cloud storage.

### **Word Processing Software**

Word processing software and comparison of features. Creating and saving document; Formatting and editing; Setting page and margins; Tabs and indents; Creating multicolumn documents; Inserting pictures in documents.

### **Spreadsheet Software**

Features and advantages of a Spreadsheet; Creating Worksheet using a Spreadsheet Software; Formatting cells; Using formula in cells; Graphs and tables; Advanced features.

### **Power Point Presentation**

Power Point and its advantages; Creating Slide Shows; Fine tuning the presentation; Good presentation techniques.

### **Printer, Plotters, and Scanner**

Working principles and configuration of Dot Matrix printer, Laser printer, Ink jet/Desktop printer, Multifunction Printer, Passbook printer, High Speed Printer, Line Printer, Network Printer; Front panel controls and interfaces; Installation of a printer driver and self-test; Printer cable testing defects, effect and servicing; Printer head: types, cleaning and replacing procedures; Mechanical parts and sensors on printer, function; Working principle of Scanner, Barcode Scanner, Network Scanner, and Plotter and their common faults.

### **Computer Network**

Advantages of Networking, Peer-to-Peer and Client/Server Network; Network Topologies – Star, Ring, Bus, Tree, Mesh, Hybrid; Type of Networks: Local Area Networks (LAN), Metropolitan Area Networks (MAN), Personal Area Network (PAN), Controller Area Network (CAN), Wide Area Networks (WAN); Internet, Ethernet, Wi-Fi, Bluetooth, Mobile Networking; Wire and wireless Networking; Difference between Intranet and Internet, Extranet, 3G, 4G; Communication Media and Connectors: Unshielded twisted-pair (UTP), shielded twisted-pair (STP), Fibre Optic and coaxial cable, RJ-45, RJ-11, BNC; Colour codes of CAT6 cable; 568A and 568B convention; Data Communication – Analog and Digital Signals, Simplex, Half-Duplex and Full-Duplex transmission mode; Functions of different layers in OSI and TCP/IP model; Concept of wireless networking.

### **Configuration of Data communication equipment**

Network Components: Modem, Firewall, Hubs, Bridges, Routers, Gateways, Repeaters, Transceivers, Switches, Access point, etc.; Types, functions, advantages and applications of Network Component; VLAN Basic and configurations; Network simulation software and its use.

### **IP Addressing, TCP/IP, and Other Network Protocols**

Protocols, TCP/IP, FTP, Telnet etc.; Classes of IP Addressing; Setting IP Address (IPv4/IPv6) & Subnet Mask; Simple Mail Transfer Protocol (SMTP); Hyper Text Transfer Protocol (HTTP); Simple Network Management Protocol (SNMP); LDAP (Lightweight Directory Access Protocol); Network Security.

### **Sharing Resource, and Internet connection**

Architecture of Internet; Committed bandwidth; DNS Server; Internet Access Techniques; ISPs and examples (Broadband, Dialup, Wi-Fi); Social Networking Sites, Video Calling & Conferencing; Virus and its Protection using Anti-Virus, UTM and Firewall; SSID; Wireless controllers; SD WAN; Resource sharing through network; Working principle of Proxy Server, Objective and Features of Proxy Server; VPN.

### **Network Security, Protection, and troubleshooting**

Threats and basics of securing a wired and wireless network; Secure Administrative Access; Aadhar based authentication; Network performance study and enhancement; Techniques & strategies to prevent various attacks on network.

### **Control and monitoring of network devices**

Remote desktop software like NetMeeting, Team Viewer etc.; Audit process of a switch/router/APs etc.; Surveillance using network devices; Remote management of devices; Network monitoring and maintaining techniques.

### **Windows Server**

Server concepts, installation step, configuration of server; Concept of Active Directory and DNS; Setting up of DHCP, Routing and remote access.

### **Linux Server**

Basic configurations; Editing /etc/hosts file; Concept of DHCP, DNS, WEB SERVER(Apache), SAMBA; Linux package and package installer; Concept of virtual server and containers.

### **Internet and Web Browser**

World Wide Web; Web Browsing; Popular web browsing softwares; Configuration of web browser; Search Engines, Popular Search engines; Electronic Mail, Email Addressing, BCC and CC, Inbox, Outbox, Address book, SPAM.

### **IT Act and Law**

Cyber Security; Cyber Laws & IT Act; Importance of privacy and techniques to manage it.

### **Virtualization, and Cloud Computing**

Cloud Computing and Virtualization; Server Virtualization; Advantages of Server Virtualization; Client-Side Virtualization; Virtual Machine Requirements; Cloud Computing Characteristics.

## **Syllabus for Information Technology /Computer Operator and Programming Assistant (TEC7)**

### **Computer System**

Computersystem and its components,Hardware and Software, Function of motherboard components, and various processors, Input/Output devices, and their features, Operating System: types, basic commands, and features, Basic DOS Internal and External Commands, Types of memories and their features, Basic Hardware and software issues and their solutions, Usage of Application software, and Antivirus, Open-Source Software.

### **Word Processing Software**

MS office,MS Word features, Office button, toolbars, Creating, editing, saving, formatting, and printing MS Word documents, Working with objects, macro, mail merge, templates and other tools in MS Word, Inserting an image, table, and chart in a Word document.

### **Spread Sheet Application**

MSExcel features and Data Types, Cell referencing and linking Sheets. Various functions, sorting, filtering, and validating data,analysing data using charts, data tables, pivot tables, goal seek and scenarios.

### **Power Point Presentation**

Introduction to Open Office,Properties, editing and different formats of images and their uses,Use of Power Point and its advantages, Creating Slide Shows,Type of charts, Animation tools, Inserting an image, table, and chart in a presentation.

### **Database**

DBMS, RDBMS, DBA, Data Models, Database Users, Database Schema, Designing Database using Normalization Rules, Various data types Data integrity, DDL DML and DCL statements, Enforcing Primary key and foreign key, Adding Indices, Queries: Concepts of Transactions, ACID Property of Transaction Constraints, Joins and Functions, Joining of tables, Sub Queries, Functions used in query like sum, average, max, min, count etc.

### **Computer Networkand Internet**

Types of Computer Network,Communicating on a Local Network, Principles of Communications, Ethernet Networks, Routing Across Networks,Interaction of enduser devices and local networks with the global Internet,Network communication.Local Networks Devices in a network. Home,and Wi-FiNetworks,LAN Devices, World Wide Web, Concept of Internet, Web Browsers, Internet servers and Search engines, Domain naming Systems, and email communication,Video chatting tools, and Social Networking concepts.

## **Web Design**

Static and Dynamic Web pages, HTML and tags in HTML, Controls used in Web Pages, CSS and applying CSS to HTML, Open source CMS viz, Joomla, WordPress etc., and Web authoring tools viz. Kompozer, WordPress, Front Page etc.

## **JavaScript**

Programming and Scripting Languages, JavaScript and its application for the web, Web Servers and their features, JavaScript Basics: Data types, Variables, Constants and Conversion between data types, Arithmetic, Comparison, Logical Operators in JavaScript, Operator precedence, Program Control Statements and loops, Arrays in JavaScript: Concepts, types and usage, String data type in JavaScript. String, Math and Date. Functions in JavaScript, Built-in JavaScript functions, Pop Up boxes, Document Object Model, Animation and multimedia files in JavaScript.

## **Cyber Security**

Information Security, SSL, HTTPS, Security threats, information Security vulnerability and Risk management, Directory Services, Access Control, Security, Privacy protection, Audit and Security, IT Act and penalties for cybercrimes.

## **Cloud Computing**

Benefits of cloud services, different categories, Resources available in cloud.