

#### **MUNICIPAL ADMINISTRATION & WATER SUPPLY DEPARTMENT**

Notification No.01/DMA/Recruitment/2024

Mail ID: application.maws@tn.gov.in

Date: 02.02.2024

Website: https://tnmaws.ucanapply.com

This notification is published as per the provisions of the G.O.(MS).No.144, Municipal Administration and water Supply (ME.1) Department, Dated 14.11.2023, the Managing Director, TWAD Board Letter No.20240/RS/A2/2018, Dated 24.01.2024 and the Managing Director, Chennai Metropolitan Water Supply and Sewerage Board Letter No.CMWSSB/P&A/R&A/RA3/14649/2021, Dated 24.01.2024, to fill the vacant posts indicated in this notification, in the offices under the Directorate of Municipal Administration, Tamil Nadu Water Supply and Drainage Board and Chennai Metropolitan Water Supply and Sewerage Board.

As per the provisions of the above said Government order selection process will be done through ANNA UNIVERSITY, Chennai.

Applications are invited from eligible candidates only through online mode upto **12.03.2024** for direct recruitment of notified posts on temporary basis, which are having the scale of pay indicated against the concerned posts as notified.

#### 1. DETAILS OF VACANCIES:

Table - I

Posts for which selection is made in two stages
(i) Written Examination (ii) Interview

SI.			No. o	of Vacancies		
No.	Name of the Post	DMA	TWADB	CMWSSB	TOTAL	Scale of Pay
1.	Assistant Engineer (Corporation)	146			146	
2.	Assistant Engineer (Civil/Mechanical)			145	145	
3.	Assistant Engineer (Municipality)	80			80	
4.	Assistant Engineer (Civil)		58		58	Rs.37,700 -1,38,500
5.	Assistant Engineer (Mechanical)		14		14	Pay matrix, Level – 20)
6.	Assistant Engineer (Electrical)			71	71	
7.	Assistant Engineer (Planning) (Corporation)	156			156	
8.	Town Planning Officer Grade II / Assistant Engineer (Planning) (Municipality)	12			12	Rs.35,900-1,31,500 (Pay matrix, Level – 13)
9.	Junior Engineer		24		24	
10.	Technical Assistant	257			257	
11.	Draughtsman (Corporation)	35			35	
12.	Draughtsman (Municipality)	130			130	Rs.35,400-1,30,400
13.	Overseer	92			92	(Pay matrix, Level – 11)
14.	Town Planning Inspector / Junior Engineer (Planning)	102			102	
15.	Work Inspector	367			367	Rs.18,200-67,100 (Pay matrix, Level – 5)
16.	Sanitary Inspector* (Corporation & Municipality)	244			244	Rs.35,400-1,30,400 (Pay matrix, Level – 11)
	TOTAL	1621	96	216	1933 **	·

DMA – Directorate of Municipal Administration

TWADB - Tamilnadu Water Supply & Drainage Board

CMWSSB - Chennai Metropolitan Water Supply & Sewerage Board

- \* 110 Vacancies of Sanitary Inspector posts may be increased (244+110) subject to the outcome of the Writ Appeal in WA No.728/2023 in WP (MD) No.12923/2018.
- \*\* Vacancies shown here are the vacancies after deducting 3% of vacancies for the reservation for meritorious sports persons as per G.O.(Ms) No.6, Youth Welfare and Sports Development (S1) Department, Dated 20.02.2019.

#### Note:-

Unless and otherwise specified, the number of vacancies notified in Table-I is approximate and is subjected to modification.

#### 2. DISTRIBUTION OF VACANCIES

The rule of reservation for appointments is applicable to this recruitment and the post wise, ULB / Department wise distribution of vacancies are tabulated below.

## I. No. of vacancies in Corporations

Corporation commissioner is the appointing authority for the below mentioned posts (Table II, III, IV, V and VI)

A. Assistant Engineer: 146

Table - II

		>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
SI. No.	Corporation Name	Total No. of Vacancy	GT	SC(A)(W)(PSTM)	MBC/DC	BC(OBCM)	GT (W)	SC	MBC/DC(W)	BC (OBCM) (W)	GT	BC(OBCM)	GT(PSTM)	SC (W)	MBC/DC	BC(OBCM)(PSTM)	BC(M)	SC	MBC/DC(PSTM)	BC(OBCM)(W)	GT(W)
1	Avadi	11	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
2	Coimbatore	3	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Cuddalore	5	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Dindigul	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Erode	11	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
6	Hosur	5	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Kancheepuram	5	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Karur	5	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Kumbakonam	4	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Madurai	7	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0
11	Nagercoil	5	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Salem	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Sivakasi	4	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Tambaram	17	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0
15	Thanjavur	4	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Thoothukudi	11	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
17	Tirunelveli	5	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Tiruppur	19	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19	Trichy	14	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0
20	Vellore	11	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
	Total	146	16	17	17	16	13	7	8	8	8	8	8	5	4	3	2	2	2	1	1

## B. Assistant Engineer (Planning): 156

Table - III

			1	2	3	4	5	6	7	8	9	10	11	12
SI. No.	Corporation Name	Total No. of Vacancy	GT	SC(A)(W)(PSTM)	MBC/DC	BC(OBCM)	GT (W)	SC	MBC/DC(W)	BC (OBCM) (W)	GT	BC(OBCM)	GT(PSTM)	SC (W)
1	Avadi	9	1	1	1	1	1	1	1	1	1	0	0	0
2	Coimbatore	10	1	1	1	1	1	1	1	1	1	1	0	0
3	Cuddalore	7	1	1	1	1	1	1	1	0	0	0	0	0
4	Dindigul	5	1	1	1	1	1	0	0	0	0	0	0	0
5	Erode	12	1	1	1	1	1	1	1	1	1	1	1	1
6	Hosur	7	1	1	1	1	1	1	1	0	0	0	0	0
7	Kancheepuram	6	1	1	1	1	1	1	0	0	0	0	0	0
8	Karur	6	1	1	1	1	1	1	0	0	0	0	0	0
9	Kumbakonam	6	1	1	1	1	1	1	0	0	0	0	0	0
10	Madurai	10	1	1	1	1	1	1	1	1	1	1	0	0
11	Nagercoil	4	1	1	1	1	0	0	0	0	0	0	0	0
12	Salem	8	1	1	1	1	1	1	1	1	0	0	0	0
13	Sivakasi	7	1	1	1	1	1	1	1	0	0	0	0	0
14	Tambaram	5	1	1	1	1	1	0	0	0	0	0	0	0
15	Thanjavur	5	1	1	1	1	1	0	0	0	0	0	0	0
16	Thoothukudi	10	1	1	1	1	1	1	1	1	1	1	0	0
17	Tirunelveli	12	1	1	1	1	1	1	1	1	1	1	1	1
18	Tiruppur	8	1	1	1	1	1	1	1	1	0	0	0	0
19	Trichy	10	1	1	1	1	1	1	1	1	1	1	0	0
20	Vellore	9	1	1	1	1	1	1	1	1	1	0	0	0
	Total	156	20	20	20	20	19	16	13	10	8	6	2	2

## C. Technical Assistant: 257

Table - IV

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
SI. No.	Distribution of Vacancy	Madurai	Coimbatore	Tiruppur	Trichy	Tambaram	Salem	Tirunelveli	Erode	Vellore	Thoothukudi	Avadi	Thanjavur	Hosur	Nagercoil	Dindigul	Cuddalore	Kancheepuram	Sivakasi	Karur	Kumbakonam	Total
	Total No. of Vacancy	20	20	10	21	24	19	15	13	16	15	16	8	6	8	7	7	8	8	8	8	257
1	GT	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18
2	SC(A)(W)(PSTM)	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18
3	MBC/DC	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18
4	BC(OBCM)	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18
5	GT (W)	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	19
6	SC	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18
7	MBC/DC(W)	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	18
8	BC (OBCM) (W)	1	0	1	1	1	1	1	1	1	1	1	1	0	1	0	0	1	1	1	1	16
9	GT	1	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	9
10	BC (OBCM)	1	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	9
11	GT(PSTM)	1	1	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	10
12	SC (W)	1	1	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	10
13	MBC/DC	1	1	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	10
14	BC(OBCM)(PSTM)	1	1	0	1	1	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	9
15	BC (M)	1	1	1	1	1	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	10
16	SC	1	1	1	1	1	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	8
17	MBC/DC (PSTM)	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
18	BC(OBCM)(W)	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
19	GT(W)	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
20	BC(OBCM)	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
21	GT	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
22	SC(PSTM)	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
23	MBC/DC(W)	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
24	BC(OBCM)	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
25	GT(LV/VI)	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
26	SC(W)	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
27	GT	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
28	MBC/DC	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
29	GT (W)	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
30	BC (OBCM)(W)	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

## D. Draughtsman: **35**

Table - V

			1	2	3	4	5	6	7
SI. No.	Corporation Name	Total No. of Vacancy	GT	SC(A)(W)(PSTM)	MBC/DC	BC(OBCM)	GT (W)	SC	MBC/DC(W)
1	Avadi	2	1	1	0	0	0	0	0
2	Coimbatore	4	1	1	1	1	0	0	0
3	Dindigul	1	1	0	0	0	0	0	0
4	Erode	2	1	1	0	0	0	0	0
5	Hosur	1	1	0	0	0	0	0	0
6	Karur	1	1	0	0	0	0	0	0
7	Madurai	1	1	0	0	0	0	0	0
8	Nagercoil	1	1	0	0	0	0	0	0
9	Salem	4	1	1	1	1	0	0	0
10	Sivakasi	1	1	0	0	0	0	0	0
11	Tambaram	4	1	1	1	1	0	0	0
12	Thanjavur	1	1	0	0	0	0	0	0
13	Thoothukudi	2	1	1	0	0	0	0	0
14	Tirunelveli	1	1	0	0	0	0	0	0
15	Tiruppur	4	1	1	1	1	0	0	0
16	Trichy	3	1	1	1	0	0	0	0
17	Vellore	2	1	1	0	0	0	0	0
	Total	35	17	9	5	4	0	0	0

## E. Sanitary Inspector: 238

Table - VI

			_	7	က	4	2	9	7	8	6	10	1	12	13	14	15	16	17	18	19	20	21	22
SI. No	Corporation Name	Total No. of Vacancy	GT	SC(A)(W)(PSTM)	MBC/DC	BC(OBCM)	GT (W)	SC	MBC/DC(W)	BC (OBCM) (W)	GT	BC(OBCM)	GT(PSTM)	SC (W)	MBC/DC	BC(OBCM)(PSTM)	BC(M)	SC	MBC/DC(PSTM)	BC(OBCM)(W)	GT(W)	BC(OBCM)	GT	SC(PSTM)
1	Avadi	18	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0
2	Coimbatore	4	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Cuddalore	12	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
4	Dindigul	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Erode	12	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
6	Hosur	9	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Kancheepuram	9	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Karur	4	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Kumbakonam	12	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
10	Madurai	11	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
11	Nagercoil	9	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Salem	13	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
13	Sivakasi	11	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
14	Tambaram	16	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
15	Thanjavur	8	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Thoothukudi	19	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0
17	Tirunelveli	16	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
18	Tiruppur	15	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
19	Trichy	22	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20	Vellore	17	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0
	Total	238	20	19	19	19	17	17	17	17	16	13	13	11	8	7	7	6	4	3	2	1	1	1

## II. No of vacancies in Municipalities

A. Director of Municipal Administration is the Appointing Authority for the posts such as Assistant Engineer, Town Planning Officer, Grade – II / Assistant Engineer (Planning), Sanitary Inspector, Overseer and Draughtsman.

Table - VII

SI.	Distribution of		Nam	ne of the Posts		
No.	Vacancies	Assistant Engineer	Town Planning Officer, Grade II	Sanitary Inspector	Overseer	Draughtsman
1.	GT (G)	13	1	2	14	19
2.	GT (W)	5	1	0	6	9
3.	GT (B& LV)	1	0	0	1	1
4.	GT (W)(D & HH)	1	0	0	1	1
5.	GT (Ex-Ser)	0	0	0	1	2
6.	GT (PSTM)	3	1	0	4	6
7.	GT (W)(PSTM)	1	0	0	1	2
8.	BC (OBCM)(G)	12	1	0	13	16
9.	BC (OBCM) (W)	5	2	1	6	8
10.	BC (OBCM)(PSTM)	3	1	0	3	4
11.	BC (OBCM)(W) (PSTM)	1	0	0	1	2
12.	BC (OBCM)(Ex-Ser)	0	0	0	1	2
13.	BC (OBCM) (Authism)	0	0	0	0	1
14.	BC (OBCM)(B& LV)	0	0	0	0	1
15.	BCM (G)	2	1	0	2	2
16.	BCM (W)	1	0	0	1	2
17.	BCM (PSTM)	0	0	0	0	1
18.	MBC/DC (G)	8	1	1	9	13
19.	MBC/DC (G) (HH/LD/LC/AC/DF)	1	0	0	1	1
20.	MBC/DC (W)	4	0	0	4	7
21.	MBC/DC (PSTM)	2	1	0	2	3
22.	MBC/DC (Ex-Ser)	0	0	0	1	1
23.	MBC/DC (W)(PSTM)	1	0	0	1	1
24.	SC (G)	7	1	1	7	10
25.	SC (W)	3	1	0	4	5
26.	SC (PSTM)	1	0	1	2	3
27.	SC (W)(PSTM)	1	0	0	1	1
28.	SC (Ex.Ser)	0	0	0	1	1
29.	SC (A)(G)	1	0	0	1	1
30.	SC (A)(G) (PSTM)	1	0	0	1	1
31.	SC (A)(W) (PSTM)	1	0	0	1	2
32.	ST (PSTM)	1	0	0	1	1
	Total	80	12	6	92	130

# A. (i) Municipal Commissioner is the Appointing Authority for Town Planning Inspector / Junior Engineer (Planning) post: **102**

Table - VIII

	(i) Town F	Planning Ins	pector/Ju	unior Engin	eer (Plannii	ng)	
				Distril	oution of Va	cancies	
SI. No.	Name of the Municipality	Current Vacancy	GT	SC(A) (W) (PSTM)	MBC/DW	BC (OBCM)	GT(W)
1.	Adirampattinam	1	1	0	0	0	0
2.	Ambur	1	1	0	0	0	0
3.	Attur	1	1	0	0	0	0
4.	Bodinayakanur	1	1	0	0	0	0
5.	Chithambaram	1	1	0	0	0	0
6.	Coonoor	1	1	0	0	0	0
7.	Dharapuram	1	1	0	0	0	0
8.	Dharmapuri	2	1	1	0	0	0
9.	Edanganasalai	1	1	0	0	0	0
10.	Gobichettipalayam	1	1	0	0	0	0
11.	Gudalur (T)	1	0	0	0	0	1
12.	Gudalur(C)	1	1	0	0	0	0
13.	Kadayanallur	1	1	0	0	0	0
14.	Kallakurichi	1	0	1	0	0	0
15.	Kangeyam	1	0	1	0	0	0
16.	Karaikudi	2	1	1	0	0	0
17.	Karumathampatti	1	1	0	0	0	0
18.	Keelakarai	1	1	0	0	0	0
19.	Kodaikanal	2	1	1	0	0	0
20.	Koothanallur	1	1	0	0	0	0
21.	Kottakuppam	1	1	0	0	0	0
22.	Kovilpatti	2	0	1	1	0	0
23.	Krishnagiri	2	1	1	0	0	0
24.	Kulithalai	1	1	0	0	0	0
25.	Kuzhithurai	1	1	0	0	0	0
26.	Madukkarai	1	1	0	0	0	0
27.	Manamadurai	1	1	0	0	0	0
28.	Mannargudi	1	1	0	0	0	0
29.	Maraimalainagar	2	1	1	0	0	0
30.	Mayiladuthurai	3	1	1	1	0	0

	(i) Town P	Planning Ins	pector/J	unior Engir	eer (Planni	ng)	
				Distri	bution of Va	cancies	
SI. No.	Name of the Municipality	Current Vacancy	GT	SC(A) (W) (PSTM)	MBC/DW	BC (OBCM)	GT(W)
31.	Mettupalayam	1	1	0	0	0	0
32.	Mettur	1	1	0	0	0	0
33.	Nagappattinam	1	1	0	0	0	0
34.	Namakkal	2	1	1	0	0	0
35.	Narasingapuram	1	0	0	1	0	0
36.	Nelliyalam	1	0	1	0	0	0
37.	Palani	1	0	1	0	0	0
38.	Pallapatti	1	1	0	0	0	0
39.	Panruti	1	1	0	0	0	0
40.	Perambalur	1	0	1	0	0	0
41.	Pernampet	1	1	0	0	0	0
42.	Pollachi	1	1	0	0	0	0
43.	Ponneri	1	1	0	0	0	0
44.	Poonthamalle	2	1	1	0	0	0
45.	Pudukkottai	1	1	0	0	0	0
46.	Pugalur	1	1	0	0	0	0
47.	Punjaipuliampatti	1	0	1	0	0	0
48.	Rajapalayam	2	0	1	1	0	0
49.	Ramanathapuram	2	1	1	0	0	0
50.	Ranipet	1	1	0	0	0	0
51.	Sattur	1	0	1	0	0	0
52.	Sholighur	1	1	0	0	0	0
53.	Sivagangai	1	1	0	0	0	0
54.	Surandai	1	1	0	0	0	0
55.	Tenkasi	1	1	0	0	0	0
56.	Tharamangalam	1	1	0	0	0	0
57.	Theni-Allinagaram	2	1	1	0	0	0
58.	Thirumuruganpoondi	1	1	0	0	0	0
59.	Thiruninravur	1	1	0	0	0	0
60.	Thirupathur	1	1	0	0	0	0
61.	Thiruvallur	1	1	0	0	0	0
62.	Thiruvannamalai	2	1	1	0	0	0
63.	Thiruverkkadu	2	1	1	0	0	0

	(i) Town P	lanning Ins	pector/J	unior Engin	eer (Plannii	ng)	
				Distril	bution of Va	cancies	
SI. No.	Name of the Municipality	Current Vacancy	GT	SC(A) (W) (PSTM)	MBC/DW	BC (OBCM)	GT(W)
64.	Thirvathipuram	1	1	0	0	0	0
65.	Thittakudi	1	1	0	0	0	0
66.	Thuraiyur	2	1	1	0	0	0
67.	Thuvakudi	1	0	1	0	0	0
68.	Tindivanam	1	1	0	0	0	0
69.	Tiruchendur	1	1	0	0	0	0
70.	Tiruchengode	1	1	0	0	0	0
71.	Tirukkoyilur	1	1	0	0	0	0
72.	Tiruvarur	1	1	0	0	0	0
73.	Udhagamandalam	2	1	1	0	0	0
74.	Udumalpet	1	1	0	0	0	0
75.	Ulundurpettai	1	1	0	0	0	0
76.	Usilampatti	1	0	1	0	0	0
77.	Vadalur	1	1	0	0	0	0
78.	Valparai	1	1	0	0	0	0
79.	Vaniyambadi	1	1	0	0	0	0
80.	Vedaranyam	1	0	0	1	0	0
81.	Vickramasingapuram	1	1	0	0	0	0
82.	Villupuram	2	1	1	0	0	0
83.	Virudhunagar	1	0	0	0	1	0
84.	Walajapet	1	1	0	0	0	0
_	Total	102	69	27	5	1	0

# B. (ii) Municipal Commissioner is the Appointing Authority for Work Inspector post : **367**

Table - IX

(ii) W	ork Inspector	I	ı							
					Di	stribution o	f Vacan	cies		
SI. No.	Name of the Municipality	Current Vacancy	GT	SC(A) (W/DW) (PSTM)	MBC/ DC	BC (OBCM)	GT (W)	sc	MBC (W)	BC (OBCM) (W)
1	Adirampattinam	2	1	1	0	0	0	0	0	0
2	Ambasamudram	2	1	1	0	0	0	0	0	0
3	Ambur	4	1	1	1	1	0	0	0	0
4	Arakkonam	3	0	1	1	1	0	0	0	0
5	Arani	2	0	1	1	0	0	0	0	0
6	Aranthangi	2	1	1	0	0	0	0	0	0
7	Arcot	3	1	1	1	0	0	0	0	0
8	Ariyalur	2	0	1	1	0	0	0	0	0
9	Aruppukottai	2	0	0	1	1	0	0	0	0
10	Attur	4	1	1	1	1	0	0	0	0
11	Bhavani	2	1	1	0	0	0	0	0	0
12	Bodinayakanur	3	0	0	1	1	1	0	0	0
13	Chengalpattu	3	1	1	1	0	0	0	0	0
14	Chinnamanur	2	0	1	1	0	0	0	0	0
15	Chithambaram	3	1	1	1	0	0	0	0	0
16	Colachel	3	1	1	1	0	0	0	0	0
17	Coonoor	4	1	1	1	1	0	0	0	0
18	Cumbum	3	1	1	1	0	0	0	0	0
19	Devakottai	3	0	1	1	1	0	0	0	0
20	Dharapuram	4	1	1	1	1	0	0	0	0
21	Dharmapuri	5	0	0	1	1	1	1	1	0
22	Edanganasalai	2	1	1	0	0	0	0	0	0
23	Gobichettipalayam	4	1	1	1	1	0	0	0	0
24	Gudalur (N)	1	0	1	0	0	0	0	0	0
25	Gudalur (T)	2	0	1	1	0	0	0	0	0
26	Gudalur(C)	2	1	1	0	0	0	0	0	0
27	Gudiyatham	2	1	1	0	0	0	0	0	0

(ii) W	ork Inspector									
					Di	stribution o	f Vacan	cies		
SI. No.	Name of the Municipality	Current Vacancy	GT	SC(A) (W/DW) (PSTM)	MBC/ DC	BC (OBCM)	GT (W)	sc	MBC (W)	BC (OBCM) (W)
28	Idappadi	2	0	1	1	0	0	0	0	0
29	Jayankondam	3	1	1	1	0	0	0	0	0
30	Jolarpet	1	0	1	0	0	0	0	0	0
31	Kadayanallur	3	0	1	1	1	0	0	0	0
32	Kalakkad	2	1	1	0	0	0	0	0	0
33	Kallakurichi	4	0	1	1	1	1	0	0	0
34	Kangeyam	3	0	1	1	1	0	0	0	0
35	Karaikudi	5	1	1	1	1	1	0	0	0
36	Karamadai	2	1	1	0	0	0	0	0	0
37	Karumathampatti	2	1	1	0	0	0	0	0	0
38	Kayalpattinam	1	1	0	0	0	0	0	0	0
39	Keelakarai	2	1	1	0	0	0	0	0	0
40	Kodaikanal	5	1	1	1	1	1	0	0	0
41	Kollencode	2	1	1	0	0	0	0	0	0
42	Komarpalayam	3	1	1	1	0	0	0	0	0
43	Koothanallur	2	1	1	0	0	0	0	0	0
44	Kottakuppam	2	1	1	0	0	0	0	0	0
45	Kovilpatti	5	1	1	1	1	1	0	0	0
46	Krishnagiri	4	1	1	1	1	0	0	0	0
47	Kulithalai	2	1	1	0	0	0	0	0	0
48	Kunrathur	2	1	1	0	0	0	0	0	0
49	Kuzhithurai	2	1	1	0	0	0	0	0	0
50	Lalgudi	2	1	1	0	0	0	0	0	0
51	Madhuranthagam	2	1	1	0	0	0	0	0	0
52	Madukkarai	2	1	1	0	0	0	0	0	0
53	Manamadurai	2	1	1	0	0	0	0	0	0
54	Manapparai	3	1	1	1	0	0	0	0	0
55	Mangadu	2	1	1	0	0	0	0	0	0
56	Mannargudi	3	1	1	1	0	0	0	0	0
57	Maraimalainagar	4	1	1	1	1	0	0	0	0

(ii) W	ork Inspector									
					Dis	stribution o	f Vacan	cies		
SI. No.	Name of the Municipality	Current Vacancy	GT	SC(A) (W/DW) (PSTM)	MBC/ DC	BC (OBCM)	GT (W)	sc	MBC (W)	BC (OBCM) (W)
58	Mayiladuthurai	2	0	1	1	0	0	0	0	0
59	Melur	2	1	1	0	0	0	0	0	0
60	Melvisharam	2	0	0	1	1	0	0	0	0
61	Mettupalayam	4	1	1	1	1	0	0	0	0
62	Mettur	4	0	1	1	1	1	0	0	0
63	Musiri	2	1	1	0	0	0	0	0	0
64	Nagappattinam	4	1	1	1	1	0	0	0	0
65	Namakkal	5	1	1	1	1	1	0	0	0
66	Nandhivaram Guduvanchey	2	1	1	0	0	0	0	0	0
67	Narasingapuram	2	0	1	1	0	0	0	0	0
68	Nellikuppam	2	1	1	0	0	0	0	0	0
69	Nelliyalam	2	1	1	0	0	0	0	0	0
70	Oddanchatram	1	0	1	0	0	0	0	0	0
71	Padmanabhapuram	2	1	1	0	0	0	0	0	0
72	Palani	4	1	1	1	1	0	0	0	0
73	Palladam	3	0	1	1	1	0	0	0	0
74	Pallapatti	2	1	1	0	0	0	0	0	0
75	Pallipalayam	2	0	1	1	0	0	0	0	0
76	Panruti	2	1	1	0	0	0	0	0	0
77	Paramakudi	3	0	1	1	1	0	0	0	0
78	Pattukkottai	3	1	1	1	0	0	0	0	0
79	Perambalur	3	0	1	1	1	0	0	0	0
80	Periyakulam	1	0	1	0	0	0	0	0	0
81	Pernampet	2	1	1	0	0	0	0	0	0
82	Pollachi	3	1	1	1	0	0	0	0	0
83	Ponneri	2	1	1	0	0	0	0	0	0
84	Poonthamalle	4	0	1	1	1	1	0	0	0
85	Pudukkottai	3	0	1	1	1	0	0	0	0

· /	ork Inspector				Dis	stribution o	f Vacano	cies		
SI. No.	Name of the Municipality	Current Vacancy	GT	SC(A) (W/DW) (PSTM)	MBC/ DC	BC (OBCM)	GT (W)	sc	MBC (W)	BC (OBCM) (W)
86	Pugalur	2	1	1	0	0	0	0	0	0
87	Puliyangudi	1	0	1	0	0	0	0	0	0
88	Punjaipuliampatti	2	0	1	1	0	0	0	0	0
89	Rajapalayam	4	0	0	1	1	1	1	0	0
90	Ramanathapuram	4	0	1	1	1	1	0	0	0
91	Rameswaram	2	0	1	1	0	0	0	0	0
92	Ranipet	3	1	1	1	0	0	0	0	0
93	Rasipuram	3	0	1	1	1	0	0	0	0
94	Sankarankovil	2	0	1	1	0	0	0	0	0
95	Sathyamangalam	3	1	1	1	0	0	0	0	0
96	Sattur	1	1	0	0	0	0	0	0	0
97	Sengottai	2	1	1	0	0	0	0	0	0
98	Sholighur	1	1	0	0	0	0	0	0	0
99	Sirkali	2	1	1	0	0	0	0	0	0
100	Sivagangai	2	1	1	0	0	0	0	0	0
101	Srivilliputhur	2	1	1	0	0	0	0	0	0
102	Surandai	2	1	1	0	0	0	0	0	0
103	Tenkasi	4	0	1	1	1	1	0	0	0
104	Tharamangalam	2	1	1	0	0	0	0	0	0
105	Theni-Allinagaram	5	0	1	1	1	1	1	0	0
106	Thirumuruganpoondi	3	1	1	1	0	0	0	0	0
107	Thiruninravur	2	1	1	0	0	0	0	0	0
108	Thirupathur	4	1	1	1	1	0	0	0	0
109	Thiruthani	3	0	1	1	1	0	0	0	0
110	Thiruthuraipoondi	2	1	1	0	0	0	0	0	0
111	Thiruvallur	4	1	1	1	1	0	0	0	0
112	Thiruvannamalai	5	1	1	1	1	1	0	0	0
113	Thiruverkkadu	5	0	1	1	1	1	1	0	0
114	Thirvathipuram	2	1	1	0	0	0	0	0	0

(ii) W	(ii) Work Inspector									
					Dis	stribution o	f Vacano	cies		
SI. No.	Name of the Municipality	Current Vacancy	GT	SC(A) (W/DW) (PSTM)	MBC/ DC	BC (OBCM)	GT (W)	sc	MBC (W)	BC (OBCM) (W)
115	Thittakudi	2	1	1	0	0	0	0	0	0
116	Thuraiyur	3	1	1	1	0	0	0	0	0
117	Thuvakudi	2	0	1	1	0	0	0	0	0
118	Tindivanam	3	1	1	1	0	0	0	0	0
119	Tiruchendur	2	1	1	0	0	0	0	0	0
120	Tiruchengode	3	0	1	1	1	0	0	0	0
121	Tirukkoyilur	2	1	1	0	0	0	0	0	0
122	Tirumangalam	3	1	1	1	0	0	0	0	0
123	Tiruvarur	3	1	1	1	0	0	0	0	0
124	Udhagamandalam	5	1	0	0	1	0	1	1	1
125	Udumalpet	3	1	1	1	0	0	0	0	0
126	Ulundurpettai	1	1	0	0	0	0	0	0	0
127	Usilampatti	2	1	1	0	0	0	0	0	0
128	Vadalur	2	1	1	0	0	0	0	0	0
129	Valparai	4	1	1	1	1	0	0	0	0
130	Vandavasi	2	1	1	0	0	0	0	0	0
131	Vaniyambadi	2	1	1	0	0	0	0	0	0
132	Vedaranyam	3	0	1	1	1	0	0	0	0
133	Vellakovil	1	0	1	0	0	0	0	0	0
134	Vickramasingapuram	2	1	1	0	0	0	0	0	0
135	Villupuram	4	1	1	1	1	0	0	0	0
136	Virudhunagar	3	0	0	1	1	1	0	0	0
137	Viruthachalam	3	1	1	1	0	0	0	0	0
138	Walajapet	2	1	1	0	0	0	0	0	0
Total		367	95	127	76	45	16	5	2	1

# III. No. of vacancies in TWAD Board – Assistant Engineer (Civil & Mechanical) and Junior Engineer

Table - X

		Name of the Posts					
SI. No.	Distribution of Vacancies	Assistant Engineer (Civil)	Assistant Engineer (Mechanical)	Junior Engineer			
1.	GT (G)	9	3	4			
2.	GT(G) (PSTM)	2	1	1			
3.	GT (G) DAP-HH	1	0	0			
4.	GT (W)	4	1	1			
5.	GT (W) (PSTM)	1	0	1			
6.	BC (G)	8	2	3			
7.	BC (G) PSTM	2	0	1			
8.	BC (G) DAP- LD (OA, OL, others) / LC,AC,DF,SLD	1	0	0			
9.	BC (W)	4	1	2			
10.	BC (M) (G)	0	0	1			
11.	BC (M) (PSTM)	1	0	0			
12.	BC(M)(W) (PSTM)	1	0	0			
13.	MBC / DC(G)	6	2	3			
14.	MBC/DC(G) (PSTM)	2	0	0			
15.	MBC/DC(W)	2	1	2			
16.	MBC/DC(W) (PSTM)	2	0	0			
17.	SC(G)	5	0	2			
18.	SC(G) (PSTM)	2	1	1			
19.	SC(W)	2	1	1			
20.	SC (W) (PSTM)	0	0	1			
21.	SC(A) (G)	1	0	0			
22.	SC(A) (G)(PSTM)	0	1	0			
23.	SC(A) W	1	0	0			
24.	ST (G)	1	0	0			
	Total	58	14	24			

## IV. No. of vacancies in CMWSSB – Assistant Engineer (Civil / Mechanical) and Assistant Engineer (Electrical)

Table - XI

		Name of the posts			
SI.No.	Distribution of vacancies	Assistant Engineer (Civil / Mechanical)	Assistant Engineer (Electrical)		
1	GT(G)	24	13		
2	GT (G) (PSTM)	7	3		
3	GT (G) (DAP)-HH	1	0		
4	GT(W)	10	5		
5	GT(W) (PSTM)	3	2		
6	BC (OBCM) (G)	22	11		
7	BC (OBCM)(G) (PSTM)	5	2		
8	BC (OBCM) (G) DAP – LD (OA,OL), LC, DF, AC	1	0		
9	BC (OBCM) (W)	9	5		
10	BC (OBCM) (W) (PSTM)	2	1		
11	BC (M) (G)	1	2		
12	BC(M) (G)(PSTM)	1	0		
13	BC(M)(G) DAP – LD (OA, OL), LC, DF, AC	1	0		
14	BC(M) (W)	1	1		
15	BC(M)(W) (PSTM)	1	0		
16	MBC/ DC (G)	17	7		
17	MBC/DC (G)(PSTM)	4	2		
18	MBC/ DC (W)	5	3		
19	MBC/ DC(W) (PSTM)	3	1		
20	SC (G)	11	6		
21	SC (G) (PSTM)	4	1		
22	SC(G)-DAP-HH	0	1		
23	SC (W)	4	3		
24	SC (W) (PSTM)	3	0		
25	SC(A) (G)	1	2		
26	SC(A) (W)	2	0		
27	ST (G)	2	0		
	Total	145*	71*		

<sup>\* 3</sup> vacancies / Turns allotted for Differently Abled Persons in the cadre of Assistant Engineer (Civil / Mechanical) and 2 vacancies allotted for Differently Abled Persons in the cadre of Assistant Engineer (Electrical) are not included, since the category of disabilities to be filled up against the above vacancies / Turns as per the Roster are not suitable to the post of Assistant Engineer in the Board as per G.O.(Ms).No.08, WDAP (DAP-3.2) Department dated 15.07.2020. The above vacancies will be notified and filled up by interchanging among other categories of disabilities suitable to Assistant Engineer post, after the approval of Government.

#### 3. IMPORTANT DATES AND TIME:

Date of Notification		02/02/2024			
Last date and time for subm Online Application	ission of	12/03/2024, 5.45 pm.			
Application Availability in the for Online Uploading	e Website	09/02/2024, 10.00 am to 12/03/2024, 5.45 pm.			
Application Correction wind	ow period	13/03/2024, 10 15/03/2024, 5.4			
DAT	E OF WRITT	EN EXAMINATION	ON		
For the Posts in SI.No.1 to 8 and 14	Paper-I : Su (Degree Sta	ubject Paper andard)	30.06.2024 09.30 A.M. to 12.30 P.M.		
(SI.No.14 - Candidate having qualification of Degree in Planning) and SI.No. 16.	Paper-II: (Compulsory) Part A Tamil Eligibility Test (SSLC Standard)  Part B General Studies		30.06.2024 02.00 P.M. to 05.00 P.M.		
For the Posts in SI.No.9 to 13 and 14	(Degree Standard)  Paper-I : Subject Paper (Diploma Standard)		29.06.2024 09.30 A.M. to 12.30 P.M.		
(SI.No. 14 - Candidate having qualification of Diploma in Civil & Diploma in Architecture) and SI.No.15.	Paper-II : (Compulsory) Part A Tamil Eligibility Test (SSLC Standard)		29.06.2024 02.00 P.M. to 05.00 P.M.		
For the Post in SI.No.14 (Candidate having qualification of Degree in Planning and opting Diploma qualification post shall write Paper-II in Diploma Standard).	Part B General Stu (Diploma S				

Candidates can apply only through online mode. Any other mode / form of applications will be summarily rejected. For details regarding Age, Educational qualification, Reservation of vacancies, General Information, Eligibility conditions, other Important Instructions etc., candidates must refer instruction to the candidate in Directorate of Municipal Administration's website <a href="https://tnmaws.ucanapply.com">https://tnmaws.ucanapply.com</a>.

#### 4. QUALIFICATION

#### (A) AGE LIMIT (as on 01.07.2024):

	Ma	ximum Age Limit
Details of Posts	"Others" [i.e., Applicants not belonging to SCs, SC(A)s, STs, MBCs/DCs, BC(OBCMs) and BCMs]	Scheduled Castes / Scheduled Castes (Arunthathiyas), Scheduled Tribes, Most Backward Classes / Denotified Communities, Backward Classes (OBCMs), Backward Classes (Muslims) and Destitute Widows of all categories.
SI.No.1 to 16	32* years	No Maximum age limit

#### Note:

(i) As per G.O (Ms) No.91, Human Resources Management (S) Department, dated 13.09.2021, the Maximum Age Limit prescribed for appointment by direct recruitment is enhanced by 2 years.

#### [\*Maximum Age Limit has been increased from 30 to 32 years].

**Explanation:** No maximum age limit shall mean that the applicants should not have completed 60 years of age either on the date of notification or at the time of selection / appointment to the post.

- (ii) That he/she satisfies the age prescribed in the special rules on 1<sup>st</sup> July of the year in which the vacancy is notified.
- (iii) No person shall be eligible for appointment to any post unless he/she has completed 18 years on the 1<sup>st</sup> July of the year in which the vacancy is notified
- (iv) "Others" [i.e., Applicants not belonging to SCs, SC(A)s, STs, MBC/DCs, BC(OBCM)s, BCMs] who have put in five years and more of service in the <u>State/Central Government</u> are not eligible even if they are within the age limit. (Section 3(r) of Tamil Nadu Government Servants (Conditions of Service) Act, 2016).

#### **5. AGE CONCESSION:**

#### (i) For Persons with Bench mark Disability:

Persons with Benchmark Disability are eligible for age concession upto 10 years over and above the maximum age limit prescribed. (Section 64 of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016)

#### (ii) For Ex-servicemen (Others):

- a. The maximum age limit for Ex-servicemen is 50 years. (Section 63 of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016 and as per G.O (Ms) No.91, Human Resources Management (S) Department, dated 13.09.2021).
- b. The above mentioned age concession will not apply to the Ex-servicemen applicants who have already been recruited to any class or service or category. (Section 3(j) of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016)

## 6. EDUCATIONAL QUALIFICATION (as on 31.01.2024)

Applicants should possess the following or its equivalent qualification awarded by any University or Institution recognized by the University Grants Commission/ AICTE as the case may be.

Table - XII

SI. No.	Name of the Post	Educational Qualification
1.	Assistant Engineer (Corporation)	Must possess B.E. degree in Civil or Mechanical Engineering or B.Tech degree in Civil or Mechanical Engineering or any other qualification considered equivalent.
2.	CMWSSB Assistant Engineer (Civil / Mechanical)	Must possess a degree in Engineering (Civil or Mechanical) of any university or Institution recognized by the University Grants Commission for the purpose of its grant. A Degree in Production Engineering or Industrial Engineering awarded by the Anna University also recognized as equivalent to B.E., (Mechanical) for the purpose of appointment to the above said post. Provided that preference shall be given to persons who have acquired master's degree in Public Health Engineering granted by an University or Institution recognized by the University Grants Commission for the purpose of its grant. A pass in section A & B of the A.M.I.E. examination.
3.	Assistant Engineer (Municipality)	Must possess B.E. degree in Civil Engineering or Mechanical Engineering or Electrical Engineering or any other qualification considered equivalent thereto awarded by any University or Institution.
4.	TWAD Board Assistant Engineer (Civil)	A degree in Civil Engineering from any University or Institution recognized by the University Grants Commission for the purpose of its grant. Preference shall be given in the case of persons who possess the Post Graduate Degree or the Post Graduate Diploma in Public Health Engineering.
5.	TWAD Board Assistant Engineer (Mechanical)	A degree in Mechanical Engineering from any University or Institution recognized by the University Grants Commission for the purpose of its grant. Preference shall be given in the case of persons who possess Post Graduate Degree or the Post Graduate Diploma in Public Health Engineering.
6.	CMWSSB Assistant Engineer (Electrical)	Must possess a Degree in Electrical Engineering or Electrical and Electronics Engineering or Electronics and Communication Engineering of any University or

SI. No.	Name of the Post	Educational Qualification
		Institution recognized by the University Grants Commission for the purpose of its grant. Provided that preference shall be given to the persons who have acquired Master's Degree in Electrical Engineering of any University or Institution recognized by the University Grants Commission for the purpose of its grant or a pass in Section A & B of the A.M.I.E Examination with Electrical or Electrical and Electronics or Electronics & Communication.
7.	Assistant Engineer (Planning) (Corporation)	Must possess a degree in Planning or Civil Engineering or Architecture or any other qualification considered equivalent thereto awarded by any Recognized University or Institution.  Provided that preference shall be given to those who have completed Master Degree in Planning.
8.	Town Planning Officer Grade II / Assistant Engineer (Planning) (Municipality)	Must possess a degree in Planning or Civil Engineering or Architecture or any other qualification considered equivalent thereto awarded by any Recognized University or Institution.  Provided that preference shall be given to those who possess Master Degree in Planning.
9.	TWAD Board Junior Engineer	The licentiate in Civil Engineering or licentiate in Sanitary Engineering Diploma or D.C.E. awarded by State Board of Technical Examination and Training, Madras or any Diploma recognized by the Government of Tamil Nadu as equivalent thereto for appointment under the said Government.
10.	Technical Assistant	Must possess a Diploma in Civil or Mechanical Engineering awarded by the Directorate of Technical Education, Government of Tamil Nadu or its equivalent.
11.	Draughtsman (Corporation)	Must possess a Diploma in Civil or Mechanical Engineering awarded by the Directorate of Technical Education, Government of Tamil Nadu or its equivalent.
12.	Draughtsman (Municipality)	Must possess a Diploma in Civil Engineering or Mechanical Engineering or Electrical Engineering.
13.	Overseer	Must possess a Diploma in Civil Engineering or Mechanical Engineering or Electrical Engineering.
14.	Town Planning Inspector / Junior Engineer (Planning) (Municipality)	Must possess a Diploma in Civil Engineering or Degree in Planning or Diploma in Architecture from any institution:  Provided that preference shall be given to those who possess Post Graduate Diploma in Town Planning.

SI. No.	Name of the Post	Educational Qualification
15.	Work Inspector	Must possess a Diploma in Civil Engineering or Mechanical Engineering or Electrical Engineering from an institute approved by the Government of Tamil Nadu.
16.	Sanitary Inspector (Corporation & Municipality)	Must possess a B.Sc degree in Zoology allied with Chemistry or Chemistry allied with Zoology or B.Sc degree in Public Health or Environmental Science or Microbiology or Bio-Chemistry;  and  Must have completed Sanitary Inspector course from any institution approved by the Government of Tamil Nadu.

#### Note:

- (i) The educational qualifications prescribed for these posts should have been obtained by passing the required qualification in the following order of studies viz. 10<sup>th</sup> + HSC/Diploma + U.G. Degree + P.G. Degree as required under Section 25 of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016. The results of examination should have been declared on or before the date of this Notification. [Section 20 (4) (iv) of the Tamil Nadu Government Servants (Conditions of Service) Act 2016]
- (ii) Applicants claiming equivalence of qualification to the prescribed qualification should upload and submit evidence for equivalence of qualification in the form of Government Order issued on or before the date of this notification and submit along with online application, failing which, their application will be summarily rejected after due process. The Government Orders regarding equivalence of qualification issued after the date of this notification will not be accepted.
- (iii) The qualifications considered equivalent are indicated in Annexure-II to this notification

#### 7) KNOWLEDGE IN TAMIL:

Applicants should possess adequate knowledge in Tamil.

#### 8) CERTIFICATE OF PHYSICAL FITNESS:

Applicants selected for appointment to the said post are required to produce a certificate of physical fitness in the prescribed format. The model format is enclosed in <a href="#">Annexure III</a> of this notification. The said Certificate should be submitted by the selected candidate to the Appointing Authority at the time of joining to the said post.

Table - XIII

SI. No.	Name of the Post	Standard of Vision	Form of Certificate of Physical Fitness
1.	Assistant Engineer (Corporation)	Standard III or better	HH, LD
2.	Assistant Engineer (Civil/Mechanical)		(OA, OL, Others), LC, AC, DF, SLD.
3.	Assistant Engineer (Municipality)		(Other than
4.	Assistant Engineer (Civil)		Sl.No. 2 & 6)
5.	Assistant Engineer (Mechanical)		For CINO 2 8 G UU I D
6.	Assistant Engineer (Electrical)		For Sl.No.2 & 6, HH, LD (OA,OL) LC, AC, DF
7.	Assistant Engineer (Planning) (Corporation)		
8.	Town Planning Officer Grade II / Assistant Engineer (Planning) (Municipality)		
9.	Junior Engineer	Standard III or better	HH, LD
10.	Technical Assistant		(OA, OL, Others), LC, AC, DF, SLD.
11.	Draughtsman (Corporation)		LO, AO, DI , OLD.
12.	Draughtsman (Municipality)		
13.	Overseer		
14.	Town Planning Inspector / Junior Engineer (Planning) (Municipality)		
15.	Work Inspector		
16.	Sanitary Inspector (Corporation & Municipality)	Standard III or better	LD (OA, OL), AC, DF

**Colour blindness will be a disqualification**. Applicants with defective vision should produce Eye Fitness Certificate from a qualified Eye Specialist working in Government Hospital.

#### Table - XIV

## SCHEME OF EXAMINATION: I) WRITTEN EXAMINATION (OBJECTIVE TYPE) (OMR METHOD)

### **DEGREE STANDARD**

			Minimum qualifying marks for selection		
Subject	Duration	Maximum marks	SCs, SC(A)s, STs, MBC/DC, BC(OBCM)s &BCMs	Others	
One of the following subjects in which the candidate has acquired his/her Degree qualification Paper-I (Subject Paper)  Engineering (Posts in SI.No. 1 to 6) 1. Civil Engineering (Code No.101) 2. Mechanical Engineering (Code No.102) 3. Electrical Engineering (Code No.103)  Planning (Posts in SI.No. 7 & 8) 4. Civil Engineering (Code No.101), 5. Town Planning (Code No.104) 6. Architecture (Code No.105)  For the Post in SI.No.16 7. Public Health and sanitation** (Code No.110)	3 hours	300	153	204	
For All the Posts:  Paper II (Objective Type) Part A Tamil Eligibility Test (SSLC std) (100 Questions / 150 Marks)	3	150	Note: Minimum qualify marks (40% of 150). Answer sheets of Pape of Paper-II will not be candidate does not s qualifying marks in Pa	er-I and Part B evaluated, if the ecure minimum	
Part-B General Studies (100 Questions / 150 Marks)  General Knowledge (Degree standard) (Code No.301) (Posts in Sl.No.1 to 8 and 16) – 75 questions and Aptitude and Mental ability Test (SSLC standard – 25 questions)	hours	150			
(II) INTERVIEW		60			
Total		510			

<sup>\*\*</sup> All the Canditates appearing for Sanitary Inspector post shall write Paper-I – Public Health and Sanitation (Code No.110)

- Those who are possessing degree in Civil Engineering or equivalence in Civil Engineering, (Refer Annexure II) will write Paper I Civil Engineering (Code No.101).
- Those who are possessing degree in Mechanical Engineering or equivalence in Mechanical Engineering (Refer Annexure II) will write Paper I Mechanical Engineering (Code No. 102).
- Those who are possessing degree in Electrical Engineering or equivalence in Electrical Engineering or Degree in Electronics and Communication Engineering (Refer Annexure II) will write Paper I Electrical Engineering (Code No. 103).
- Those who are appearing for Assistant Engineer (Planning) posts in Corporations and Town Planning Officer Grade-II / Assistant Engineer (Planning) posts in Municipalities possessing degree in Civil Engineering will write Paper I Civil Engineering (Code No.101).
- Those who are appearing for Assistant Engineer (Planning) in Corporations, Town Planning Officer Grade-II / Assistant Engineer (Planning) posts in Municipalities and Town Planning Inspector / Junior Engineer (Planning) posts in Municipalities and possessing degree in town planning will write Paper I Town planning (Code No.104) and they should write Paper II General Studies in Degree standard (Code No.301) as well as Paper II General Studies in Diploma Standard (Code No.401).
- Those who are appearing for Assistant Engineer (Planning) posts in Corporations and Town Planning Officer Grade-II / Assistant Engineer (Planning) posts in Municipalities and possessing Degree in Architecture will write Paper I Architecture (Code No.105).
- Those who are appearing for Sanitary Inspector posts, will write Paper I Public Health and Sanitation (Code No.110).

### Table - XV

# SCHEME OF EXAMINATION: I) WRITTEN EXAMINATION (OBJECTIVE TYPE) (OMR METHOD)

## **DIPLOMA STANDARD**

	Duration		Minimum qualifying marks for selection	
Subject		Maximum marks	SCs, SC(A)s, STs, MBC/DC, BC (OBCM)s & BCMs	Others
One of the following subjects in which the candidate has acquired his / her Diploma qualification Paper-I (Subject Paper)  Engineering (Posts in Sl.No. 9 to 13 and 15)  1. Civil Engineering (Code No.201)  2. Mechanical Engineering (Code No.202)  3. Electrical Engineering (Code No.203)  Planning (Post in Sl.No. 14)  4. Civil Engineering (Code No.201)  5. Architecture (Code No.205)	3 hours	300	153	204
For All the Posts:  Paper II (Objective Type)  Part A  Tamil Eligibility Test (SSLC Standard) (100 Questions / 150 Marks)		150	Note: Minimum qualifying marks – 60 marks (40% of 150).  Answer sheets of Paper-I and Part B of Paper-II will not be evaluated, if the candidate does not secure minimum qualifying marks in Part A of Paper-II.	
Part-B General Studies (100 Questions / 150 Marks)  General Knowledge (Code No.401) (Diploma Standard) (Posts in Sl.No.8 to 14) – 75 questions and Aptitude and Mental ability Test (SSLC Standard – 25 questions)	3 hours	150		•
(II) INTERVIEW		60*		
Total		510		

- Those who are possessing Diploma in Civil Engineering, will write Paper
   I Civil Engineering (Code No.201).
- Those who are possessing Diploma in Mechanical Engineering, will write Paper I – Mechanical Engineering (Code No. 202).
- ➤ Those who are possessing Diploma in Electrical Engineering, will write Paper I Electrical Engineering (Code No.203).
- ➤ Those who are appearing for Town Planning Inspector/Junior Engineer (Planning) posts in municipalities and possessing Diploma in civil Engineering will write Paper I Civil Engineering (Code No.201).
- ➤ Those who are appearing for Assistant Engineer (Planning) in Corporations, Town Planning Officer Grade-II / Assistant Engineer (Planning) posts in Municipalities and Town Planning Inspector / Junior Engineer (Planning) posts in Municipalities and possessing degree in town planning will write Paper I Town planning (Code No.104) and they should write Paper II General Studies in Degree standard (Code No.301) as well as Paper –II General Studies in Diploma Standard (Code No.401).
- ➤ Those who are appearing for Town Planning Inspector/Junior Engineer (Planning) posts in municipalities and possessing Diploma in Architecture will write Paper I Architecture (Code No.205).

#### Note:

- a) Answer sheets of Paper-I, and Part B of Paper II of the candidates will not be evaluated, if the candidate does not secure minimum qualifying marks (40% of 150) in Part-A of Paper-II.
- b) Only marks secured in Paper-I and Part-B of Paper-II will be considered for ranking.
- c) The questions for all the subjects (Except Civil Engineering and Mechanical Engineering) included in Paper I will be set in English language only. The questions for the subjects in Civil Engineering and Mechanical Engineering will be set both in English and Tamil Languages. The questions in Part–B of Paper-II will be set both in Tamil and English Languages. Candidates should choose and specify in the application, only the prescribed subject in which they have obtained the educational qualification for appearing to the examination.
- d) If answer / answer sheet of a candidate for one paper is declared not fit for valuation, the answer sheet of the candidate for the remaining papers will not be evaluated.
- e) The syllabus is available in Annexure-I of this Notification.
- f) As per the order issued in G.O.(Ms) No.49, Human Resources Management (M) Department, dated 23.05.2022, the differently abled candidates can avail exemption from writing Part-A in Paper-II (Objective Type) (Tamil Eligibility Test). Such candidates have to furnish the required details in the online application without fail. Subsequent claim will receive no attention. The candidates need to upload Disability Certificate as prescribed in G.O. (Ms) No. 08, Welfare of Differently Abled Persons (DAP 3.2) Department dated 21.09.2021. Model format is enclosed in Annexure–V of this notification.

## Instructions to the candidates who are claiming exemption for Tamil Eligibility Test:

- (i) As per the orders issued in G.O.(Ms.) No.49, Human Resource Management (M) Department, dated 23.05.2022, read along with G.O.Ms.No.8, Welfare of Differently Abled Persons (DAP 3.2) Department, dated 21.09.2021, the differently-abled candidates who are even below the 40% of disability can also avail the exemptions from writing Tamil Eligibility Test i.e., Part-A in Paper-II of examination if they have claimed such exemptions in their online application.
- (ii) The candidates who have been exempted to write Tamil Eligibility Test shall be allowed to write only General Studies Paper i.e., Part-B in Paper-II.
- (iii) Part-A of Paper-II Tamil Eligibility Test shall contain 100 questions from 1 to 100. Part-B of Paper-II the General Studies paper contains 100 questions from 101 to 200 and time duration to write each part of the said examination shall be given 1 Hour and 30 minutes.
- (iv) All the exempted candidates with disability who have physical limitation with regard to writing, including that of speed and not availing the services of a scribe shall also be allowed compensatory time of a minimum of thirty minutes for an examination of one and a half hour (1 Hour and 30 minutes.) duration in the General Studies paper as per G.O.Ms.No.8, Welfare of Differently Abled Persons (DAP 3.2) Department, dated 21.09.2021.
- (v) The said exempted candidates must also enter in to the examination hall in the A.N. session half an hour before the commencement of examination.
- (vi) In the case of OMR method of examination, they shall be allowed to write the examination from 2.00 P.M. to 5.00 P.M. All the candidates are permitted to leave the examination hall only after the closure of examination even though they are exempted to write Tamil Eligibility Test.
- (vii) The disability certificate as prescribed in the Appendix to G.O. (Ms.) No. 8, Welfare of Differently Abled Persons (DAP 3.2) Department, dated 21.09.2021, should be obtained from the competent authority (viz. Chief Medical Officer / Civil Surgeon / Medical Superintendent /Notified Medical Authority of a Government Health Care Institution)

- and it has to be produced / uploaded along with the online application failing which, the application of the candidate (who claims exemption from Tamil Eligibility Test) will be rejected after due process.
- (viii) The exemption from Tamil Eligibility Test, Compensatory time and scribe will be provided only if the candidates have made such claims in their online application and uploaded the Medical Certificate as prescribed in Appendix to the G.O. (Ms.) No. 8, Welfare of Differently Abled Persons (DAP 3.2) Department, dated 21.09.2021

#### 9. CENTRES FOR EXAMINATION:

The examination will be held at the following centres.

Table - XVI

SI. No	Name of the Centre	Centre Code	SI. No	Name of the Centre	Centre Code
1.	Ariyalur	1001	21.	Ranipet	1021
2.	Chengalpattu	1002	22.	Salem	1022
3.	Chennai	1003	23.	Sivagangai	1023
4.	Coimbatore	1004	24.	Tenkasi	1024
5.	Cuddalore	1005	25.	Thanjavur	1025
6.	Dharmapuri	1006	26.	The Nilgiris	1026
7.	Dindigul	1007	27.	Theni	1027
8.	Erode	1008	28.	Thiruvallur	1028
9.	Kallakurichi	1009	29.	Thiruvannamalai	1029
10.	Kancheepuram	1010	30.	Thiruvarur	1030
11.	Nagercoil	1011	31.	Thoothukudi	1031
12.	Karur	1012	32.	Tiruchirappalli	1032
13.	Krishnagiri	1013	33.	Tirunelveli	1033
14.	Madurai	1014	34.	Tirupathur	1034
15.	Mayiladuthurai	1015	35.	Tiruppur	1035
16.	Nagapattinam	1016	36.	Vellore	1036
17.	Namakkal	1017	37.	Villupuram	1037
18.	Perambalur	1018	38.	Virudhunagar	1038
19.	Pudukkottai	1019			
20.	Ramanathapuram	1020			

#### Note:

- (i) Applicants should choose only one of the above centres for writing the examination. Applicants will be allotted a venue in the selected centre.
- (ii) Request for change of examination centre will not be permitted
- (iii) This Department reserves the right to increase or decrease the number of examination centres and to re-allot the applicants accordingly.
- (iv) Applicants should appear for the written examinations /certificate verification / interview at their own expenses.

#### **10. SELECTION PROCEDURE:**

Selection will be made in two stages i.e., (i) Written Examination and ii) Interview. The final selection will be made on the basis of the total marks obtained by the applicants at the written examination and interview taken together subject to the rule of reservation for appointments. Applicants' appearance in the written examination and interview is compulsory. The applicant who has not appeared for any of the subjects in the written examination or interview will not be considered for selection, even if he/she secures the minimum qualifying marks for selection.

The successful candidates are called for interview in the order of merit in accordance with the communal reservation.

#### 11. (A) EMPLOYMENT DETAILS

Candidates who are in the service of the Indian Union or a State in India or in the employment of Local Bodies or Universities or Quasi Government Organizations or Public Sector Units constituted under the authority of the Government of India or of a State in India, whether in regular service or in temporary service must inform the department of such fact, at the time of applying for this examination. Suppression of the fact of employment by candidates shall result in rejection of candidature after due process. Candidates should produce No Objection Certificate when called for interview.

## (B) DECLARATION REGARDING CRIMINAL CASES (OR) DISCIPLINARY CASES:

- Candidates who have been declared pending criminal or disciplinary cases in their online application, must upload / produce the copy of First Information Report (FIR) or memorandum of charges / show cause notice, as the case may be. Failure to upload / produce such papers along with online application, shall result in rejection of candidature after due process.
- 2. Candidates who have been declared conviction in criminal cases or punishment in disciplinary cases, in their online application, must upload / produce the relevant court orders and/or release orders or memorandum of proceedings, as the case may be, along with online application. Failure to upload / produce such papers, shall result in rejection of candidature after due process.
- 3. In case, any criminal case is filed / disciplinary action is taken or conviction / punishment is imposed on a candidate after submission of the on- line application at any stage of the recruitment process, before the completion of entire selection process, such candidates should report this

fact to the Department in the next immediate stage. Failure to comply with these instructions shall result in rejection of candidature after due process and debarment for a period of one year.

4. Any violation of these instructions will result in rejection of application and forfeiture of his/her candidature after due process.

#### 12. GENERAL INFORMATION:

(a) The rule of reservation for appointments is applicable to this recruitment for each post separately.

#### (b) Person Studied in Tamil Medium

- i. As per Section 2(d) of the Tamil Nadu Appointment on preferential basis in the services under the State of Persons Studied in Tamil Medium Act, 2010, as amended by Act 35 of 2020, Person studied in Tamil medium means a person who has studied through Tamil medium of instruction upto the educational qualification prescribed for direct recruitment in the rules or regulations or orders applicable to any appointment in the services under the State.
- ii. Candidates claiming to be Persons studied in Tamil Medium (PSTM) must upload the document at the time of submission of online application for the same in the form of SSLC, HSC, Transfer Certificate, Provisional Certificate, Convocation Certificate, Degree Certificate, PG Degree Certificate, Mark Sheets, Certificate from the Board or University or from the Institution, as the case may be, with a recording that he/she had studied the entire duration of the respective course(s) through Tamil Medium of instruction.
- iii. Candidates must upload all **documents at the time of submission of online application** as evidence of having studied in the Tamil medium.

  Example:

If the prescribed educational qualification is Degree, then the candidate should have studied from the First Standard to SSLC, Higher Secondary Course and Degree through Tamil Medium of instruction.

iv. If no such document as evidence for 'PSTM' is available, a certificate obtained from the Principal/ Head Master/ District Educational Officer/ Chief Educational Officer / District Adi Dravidar Welfare Officer / Controller of Examinations / Head/ Director of Educational Institution/ Director/ Joint Director of Technical Education / Registrar of Universities, as the case may be, in the prescribed format and that must be uploaded at the time of submission of online application, for each and every educational qualification up to the educational qualification prescribed.

- v. Failure to upload such documents at the time of submission of online application as evidence for 'Persons Studied in Tamil Medium' for all educational qualification up to the educational qualification prescribed, shall result in the rejection of candidature after due process.
- vi. Documents uploaded at the time of submission of online application as proof of having studied in Tamil medium, for the partial duration of any course / private appearance at any examination shall not be accepted and shall result in the rejection of candidature after due process.
- (c) The selection for appointment to the said posts is purely provisional subject to the final orders in the writ petitions, if any, pending on the files of the Hon'ble Madras High Court and its Madurai Bench.
- (d) As per Sections 26 and 27 (c) of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016, reservation of appointment to "Destitute Widows" can apply only to work inspector post in municipalities (Post Sl.no.15.)
- (e) As per Sections 26 and 27 (c) of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016, reservation of appointment to "Ex-servicemen" will apply to the posts such as Technical Assistant (Sl.no.10), Draughtsman (Sl.no.11 & 12), Overseer (Sl.no.13), Town Planning Inspector / Junior Engineer planning (Sl.no.14) and Work inspector (Sl.no.15).
- (f) PERSONS WITH BENCHMARK DISABILITY:

The 4% reservation for Differently Abled Persons (DAP) will be applicable as per G.O. (Ms.) No. 20, Welfare of Differently Abled Persons (DAP.3.2) Department, dated 20.06.2018, G.O (Ms.) No. 08, Welfare of the Differently Abled Persons (DAP 3.2) Department dated 15.07.2020, G.O (Ms.) No.06, Welfare of the Differently Abled Persons (DAP 3.2) Department dated 21.10.2019, G.O. (Ms.) No. 22, Welfare of Differently Abled Persons (DAP.3.2) Department, dated 03.08.2023, G.O. (Ms.) No. 35, Welfare of Differently Abled Persons (DAP.3.2) Department, dated 27.12.2022, and G.O(Ms.) No.133, Labour Welfare and Skill Development (M1) Department dated 27.07.2023. The following posts have been identified with suitable Differently Abled Categories as detailed below:

Table - XVII

SI.No.	Name of the Post	Standard of Vision	Form of Certificate of Physical Fitness	
1.	Assistant Engineer (Corporation)			
2.	Assistant Engineer (Civil/ Mechanical)			
3.	Assistant Engineer (Municipality)			
4.	Assistant Engineer (Civil)	Standard III or better		
5.	Assistant Engineer (Mechanical)		HH, LD (OA, OL, Others), LC, AC, DF, SLD. (Other than SI.No. 2 & 6)	
6.	Assistant Engineer (Electrical)			
7.	Assistant Engineer (Planning)			
8.	Town Planning Officer Grade II / Assistant Engineer (Planning)			
9.	Junior Engineer			
10.	Technical Assistant		For Sl.No.2 & 6, HH, LD (OA,OL) LC, AC, DF	
11.	Draughtsman (Corporation)			
12.	Draughtsman (Municipality)			
13.	Overseer (Municipality)			
14.	Town Planning Inspector / Junior Engineer (Planning) (Municipality)			
15.	Work Inspector (Municipality)			
16.	Sanitary Inspector (Corporation & Municipality)	Standard III or better	LD (OA, OL), AC, DF.	

- (g) Persons with Benchmark Disability should upload a copy of Disability Certificate in the format prescribed in the Rights of Persons with Disabilities Rules, 2017 [Department of Empowerment of Persons with Disabilities (Divyangjan), Ministry of Social Justice and Empowerment, Government of India] and issued by the competent authority defined in GO Ms. No.28, Welfare of Differently Abled Persons (DAP 3.1), dated 27.07.2018, while submitting the online application.
- (h) If no qualified and suitable women applicants are available for selection against the vacancies reserved for them, those vacancies will be filled by male applicants belonging to the respective communal categories. (Section 26 (5) of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016).
- (i) Wherever vacancies are reserved for Arunthathiyars on preferential basis, even after filling the vacancies reserved for SC (Arunthathiyars) on preferential basis, if more number of qualified Arunthathiyars are available,

they shall be entitled to compete with the Scheduled Castes other than Arunthathiyars in the inter-se-merit among them and if any post reserved for Arunthathiyars remain unfilled for want of adequate number of qualified applicants, it shall be filled by Scheduled Castes other than Arunthathiyars. (Section 27 of the Tamil Nadu Government Servants (Conditions of Service) Act, 2016).

- (j) Evidence for all the claims made in the online application should be uploaded at the time of submission of online application. Any subsequent claim made after submission of online application will not be entertained. Failure to upload the documents at the time of submission of online application will entail rejection of application after due process.
- (k) Suppression of following material information in the online application regarding
  - (i) Employment in the Service of the Indian Union or a State in India or in the employment of Local Bodies or University or Quasi Government Organization or Public Sector units constituted under the authority of the Government of India or of a State in India in regular service or temporary service.
  - (ii) Willful suppression of criminal cases/disciplinary action pending/ punishments if any, against the applicant (iv) violation of undertaking given by the applicant in the online application etc,. may invite suitable penal action including debarment for a specific period as decided by the Department for various recruitments/ selections conducted by the Department, besides rejection of application after due process.
- (I) Correct and true information regarding arrest, convictions, criminal or any disciplinary proceedings initiated / pending or finalised, debarment / disqualification by any recruiting agency if any, should also be furnished to this Department at the time of online application. The details thereof, i.e. originals of the judgement / order / G.O. dropping further action in the departmental proceedings or any document that may prove the suitability of such applicants for appointment in such cases must be produced at the stage / time of certificate verification without fail. All such events that occur after the submission of online application and till the date of his / her selection and appointment shall be reported to the Department forthwith. Failure to report on the part of the applicant will be considered as suppression of material information and will attract suitable penal action.
- (m) Incomplete applications and applications containing wrong claims or incorrect particulars relating to category of reservation / eligibility / age/gender / communal category / educational qualification / medium of instruction / physical qualification / other basic qualifications and other basic eligibility criteria will be summarily rejected after due process.

#### 13. **DETERMINATION OF COMMUNITY FOR TRANSGENDER:**

- (i) The Transgender candidates, who do not possess any community certificate may choose to be considered under Most Backward Classes as per G.O.(Ms) No.28, Backward Classes, Most Backward Class and Minorities Welfare Department, dated 06.04.2015 or under 'others'.
- (ii) The Transgender candidates who belong to Scheduled Caste/ Scheduled Caste (Arunthathiyar) / Scheduled Tribe communities and possess community certificate as such, shall be considered as per their respective community.
- (iii) The Transgender candidates who belong to the communities other than Scheduled Caste/ Scheduled Caste (Arunthathiyar) / Scheduled Tribe and possess community certificate as such are permitted to choose to be considered as belonging to their own community or as Most Backward Class whichever is advantageous to them. (G.O.(Ms.) No.90, Social Welfare and Nutritious Meal Programme [SW8(2)] Department, dated 22.12.2017)

#### 14. OTHER IMPORTANT INSTRUCTIONS:

- i. Applicants should ensure their eligibility for the examination: Before applying for / appearing for the examination, the applicants should ensure their eligibility for such examination and that they fulfil all the conditions in regard to age, educational qualifications, etc., as prescribed in this notification. Their admission to all stages of the examination will be purely provisional, subject to satisfying the eligibility conditions. Mere admission to the written examination / certificate verification / interview / counseling or inclusion of name in the selection list will not confer on the candidates any right to appointment. The candidature is therefore, provisional at all stages and the Department reserves the right to reject candidature at any stage after due process, even after selection has been made, if a wrong claim or violation of rules or instructions is confirmed.
- ii. The memorandum of admission (hall ticket) for eligible applicants will be made available in the Department's website <a href="https://tnmaws.ucanapply.com">https://tnmaws.ucanapply.com</a> for downloading by applicants. The memorandum of admission will **not** be sent by post. The applicants must comply with each and every instruction given in the memorandum of admission.
- iii. Applicants requiring clarification can contact the office of the Directorate of Municipal Administration in person or over the Toll-Free No. 044-29864451 on all working days between 10.00 am and 5.45 pm. Queries relating to online application may be sent to <a href="mailto:application.maws@tn.gov.in">application.maws@tn.gov.in</a> and other queries may be sent to <a href="mailto:mawsgrievances@tn.gov.in">mawsgrievances@tn.gov.in</a>

- iv. COMMUNICATION TO APPLICANTS: Individual communication regarding the date and time of certificate verification, interview and counseling (as applicable) will not be sent to the applicants by post. The details will be made available on the Department's website. Applicants will be informed of the above fact only through SMS and e-mail and they should watch the Department's website in this regard. Department is not responsible for non-delivery of SMS/e-mail due to any reasons.
- v. During the process of recruitment, from Notification till completion of selection process, no information / clarification on the selection particulars / details will be furnished to any petitions / representations including petitions received under Right to Information Act, CM cell petitions, and Grievance Petition would be furnished.

#### vi. MOBILE PHONES AND OTHER ARTICLES BANNED:

- Except the permitted writing material (Black ball point pen), applicants are not allowed to bring cellular phones, electronic or any other type of calculators, watches and rings with inbuilt memory notes, recording devices either as a separate piece or part of something used by the applicant such as watch or ring etc., or any other electronic devices and non electronic devices such as P&G design data book, mathematical and drawing instruments, log tables, stencils of maps, slide rules books, notes, loose sheets, rough sheets, hand bags etc., into the examination hall / room.
- 2) If they are found to be in possession of any such things or instruments, they will not be allowed to write the examination further, besides invalidation of answer paper and / or debarment. If it is considered necessary, they will be subjected to thorough physical search including frisking on the spot.
- 3) Applicants are advised, in their own interest, not to bring any of the banned items including mobile phones to the venue of the examination, as arrangements for safekeeping of the same cannot be assured.
- vii. If any of their claims is found to be incorrect, it will lead to rejection of their candidature after due process and suitable penal action including debarment.
- viii. UNFAIR MEANS STRICTLY PROHIBITED: No applicant shall copy from the papers of any other applicant or permit his / her papers to be copied or give or attempt to give or obtain or attempt to obtain irregular assistance of any description.
- ix. CONDUCT IN THE EXAMINATION HALL: No applicant should misbehave in any manner or create a disorderly scene in the examination

hall or harass the staff employed by the Department for the conduct of the examination. Any such misconduct will be viewed seriously and penalised.

- **x.** For violation of "Instructions to Candidates" in any manner, suitable penalty will be imposed as deemed fit by the Department.
- **xi.** Requests from candidates for furnishing of their marks or answer paper copy before the completion of the entire selection process, will not be entertained by this Department.
- **xii.** After conclusion of the entire selection process, complete particulars of all candidates who had applied for recruitment to the post shall be made available on the Department's website.

#### 15. HOW TO APPLY:

- 1) Applicants should apply only through online mode in the Department's website <a href="https://tnmaws.ucanapply.com">https://tnmaws.ucanapply.com</a>
- 2) The applicants shall not share the ID with any other person or agency.
- 3) Applicants should select the name of the post for which the applicant wishes to apply.
- 4) Online applications uploaded without the photograph, details of specified documents in Annexure IV and signature will be rejected after due process.

#### 5) Online Application Correction Window:

After the last date for submission of online application, the candidates are allowed to edit their online application during the Online Application Correction Window period as mentioned in this Notification. After the last date of Correction Window period, no modification is allowed in the online applications. The applications will be processed as per the details finally furnished by the candidates. It is the responsibility of the candidates and the Department has no liability for subsequent rejection of application caused due to editing the details already submitted in online application. Request / representation addressed to the Department for modification of claims in the online application, in any mode, will not be entertained. Hence, the applicants are instructed to fill the online application with utmost care and caution.

#### 6) **PRINT OPTION**:

- a) After submitting the application, applicants can save / print their application in PDF format.
- b) On entering user ID and password, applicants can download their application and print, if required.
- c) Applicants need not send the printout of the online application or any other supporting documents to the Department.

#### 16. UPLOAD OF DOCUMENTS:

In respect of recruitment to this post, the candidates shall mandatorily upload the certificates / documents (in support of all the claims made / details furnished in the online application) at the time of submission of online application itself. It shall be ensured that the online application shall not be submitted by the candidates without mandatorily uploading the required certificates.

Refer Annexure IV for the list of documents to be uploaded by the Applicants.

#### 17. LAST DATE FOR SUBMISSION OF APPLICATION:

- i) Online application can be submitted upto 05.45 pm on 12.03.2024 after which the link will be disabled.
- ii) Similarly, online application correction window period is from 13.03.2024 10.00 am to 15.03.2024 05.45 pm.
- iii) The applicants are permitted to upload the documents upto 05.45 pm on 15.03.2024, after which the link will be disabled.

For detailed information, applicants may refer to the "Instructions to candidates" at the Department's website <a href="https://tnmaws.ucanapply.com">https://tnmaws.ucanapply.com</a>.

#### **DISCLAIMER**

"The Government orders relating to Equivalence of qualification are available in the Annexure-II of the Notification. However, if the applicant possesses an equivalence of qualification other than one mentioned in the Department's website and if Government orders to this effect have been issued on or before the date of this notification, applicants should furnish the details of the same while making application and should upload a copy of the Government orders, along with online application, failing which their application will be rejected after due process. The Government orders regarding equivalence of qualification issued after the date of this notification will not be considered for this recruitment".

Commissioner, Greater Chennai Corporation Director of Municipal Administration

Director of Town Panchayats

Managing Director, TWAD Board Managing Director, CMWSSB

## ANNEXURE- I [SYLLABUS FOR WRITTEN EXAMINATION]

Paper-I

## **CIVIL ENGINEERING**

(Degree Standard)

**CODE NO: 101** 

#### **UNIT-I: BUILDING MATERIALS AND CONSTRUCTION PRACTICES**

Properties and testing of engineering materials-brick, stones, M-sand, aggregates, cement, timber, recycled and modern materials-glass, plastic FRP, ceramic- concrete – properties and testing-mix design-admixtures, Self- compacting concrete steel construction practice-stonemasonry, brickmasonry, R.C.C. and block masonry – construction equipment - building bye-lawsand development regulations practiced in Tamil Nadu - Provisions for fire safety, lighting and ventilation-Acoustics.

#### **UNIT-II: ENGINEERING SURVEY**

Survey -Chain- Compass - Plane table - levelling -Theodolite - computation of area and volume - L.S. and C.S. - Contour - Traversing - traverse adjustment-Heights and Distances - Tacheometry and Triangulation - total station and GPS and Remote sensing techniques for surveying.

## **UNIT III: ENGINEERING MECHANICS AND STRENGTH OF MATERIALS**

Forces- types-laws - centre of gravity-moment of inertia-friction-Stresses and strains -Thermal stress- elastic constants - Beams - Bending moment and shear force in beams - Theory of simple bending - deflection of beams - torsion - Combined stresses - stresses on inclined planes - Principal stresses and principal planes - Theories of Failure - Analysis of plane trusses.

#### **UNIT -IV: STRUCTURAL ANALYSIS**

Indeterminate beams - Stiffness and flexibility methods of structural analysis – Slope deflection – Moment Distribution method–Arches and suspension cables-Theory of columns - moving loads and influence lines – Matrix method- Stability of retaining walls – plastic theory- Seismic analysis of high rise building

## **UNIT- V: GEO TECHNICAL ENGINEERING**

Formation of soils - types of soils - classification of soils for engineering practice - Field identification of soils - Physical properties and testing of soils - Three phase diagram - permeability characteristics of soils - stress distribution in soils - Theory of consolidation, shear strength parameters of soils - stabilization of soil - Compaction of soils- Stability analysis of slope - Soil exploration - Soil sampling techniques - SPT - Borelog profile - shallow foundations - Terzhagi's bearing capacity theory - Pile foundation-pile load test- Group action of piles - settlement of foundations- Ground Improvement techniques.

## <u>UNIT- VI: ENVIRONMENTAL ENGINEERING AND POLLUTION CONTROL</u>

Sources of water - Water Demand Characteristics and analysis of water - hydraulics for conveyance and transmission - water borne diseases - Functional design of water treatment plant - desalination plant- water distribution system - pipe

network analysis- characteristics and composition of sewage - Planning and design of sewerage system - sewer appurtenances - Pumping of sewage - sewage treatment and disposal - Design of storm water drain - plumbing system in high rise building - industrial waste treatment - solid waste management - Air and Noise pollution control - E-Waste management.

## <u>UNIT -VII : DESIGN OF REINFORCED CONCRETE, PRESTRESSED CONCRETE</u> AND STEEL STRUCTURES

Design of concrete members limit state and working stress design concepts-design of slabs - one way, two way and flat slabs - Design of singly anddoubly reinforced sections and flanged sections - design of columns and footings - Pre - stressing - systems and methods - post tensioning slabs - Design of pre - stressed members for flexure. Design of tension and compression members - Design of bolted and welded connections design of members of truss - designs of columns and bases - design of beams, plate girders and gantry girder- design of liquid storage structures - elevated and underground - design of retaining wall.

## <u>UNIT-VIII: HYDRAULICS AND WATER RESOURCES ENGINEERING</u>

Hydrostatics - applications of Bernoulli equation — losses in pipes - flow measurement in channels - open channel flow- types of pumps and characteristics - Applications of Momentum equation, Kinematics of flow.

Water resources in Tamil Nadu - Water resource planning - Master plan for water management - flood control - Runoff estimation - hydrograph - flood routing-Soil plant water relationship - Water requirement for crops - Irrigation methods-Design of alluvial canal and design of head works. Water logging and land reclamation - cross drainage works.

#### **UNIT - IX: URBAN AND TRANSPORTATION ENGINEERING**

Urbanization trend and impact - Slum clearance and slum improvement programmes - Different mode of transport and their characteristics. Geometric design of highways. Pavement materials and testing - alternate pavement materials-modified binders - Design and Construction of bituminous and concrete roads - pavement distress and evaluation - Maintenance of roads - Railways - Components of permanent way - Signaling, Interlocking and train control - drainage in roads and railways. Airport planning - Components of Airport - Site selection - Runways - Planning of terminal buildings Harbours & Ports - Layout of a harbour - Docks - Breakwaters.

#### **UNIT -X: PROJECT MANAGEMENT AND ESTIMATION**

Construction management- Construction planning-Scheduling and monitoring-Cost control, Quality control and inspection - Network analysis - CPM and PERT - methods of project management - Resources planning and resource management - Types of estimates - Preparation of technical specifications and tender documents – e-tender - Building valuation - law relating to contracts and arbitration.

#### Paper-I

#### **MECHANICAL ENGINEERING**

(Degree Standard)

**CODE NO: 102** 

#### **UNIT-I: MECHANICS, KINETICS AND DYNAMICS**

Statics of Particles, Equilibrium of Rigid bodies, Mechanism of Deformable Bodies, Properties of Surfaces and Solids, Centroid, Centre of Gravity, Dynamics of Particles, Elements of Rigid Body Dynamics, Basics of Mechanisms, Kinematics of mechanisms, gyroscope, Gears and Gear Trains, Fly Wheels and Governors, Balancing of Rotating and Reciprocating Masses, Friction in Machine Elements, Force Analysis, Balancing, Single Degree Free Vibration, Forced Vibration, mechanisms for Vibration Control, Effect of Damping, Vibration Isolation, Resonance, Critical Speed of Shaft.

#### **UNIT-II: STRENGTH OF MATERIALS AND DESIGN**

Stress, Strain and Deformation of Solids, Combined Stresses, Theories of Failures, Transverse Loading on Beams, Stresses in Beams, Torsion, Deflection of Beams, Energy Principles, Thin Cylinders and Thick Cylinders, Spherical Shells, Fundamentals of Design for Strength and Stiffness of Machine Members, Design of Shafts and Couplings, Design for Static and Dynamic Loading, Design of Fasteners and Welded Joints, Reverted Joints, Design of Springs, Design of Bearings, Design of Flywheels, Design of Transmission Systems for Flexible Elements, Spur Gears and Parallel Axis Helical Gears, Bevel Gears, Worm Gears and Crossed Helical Gears, Design of single and two stage speed reducers, Design of cam, Clutches and Brakes, Design of Piston and Connecting Rods.

#### **UNIT-III: FLUID MECHANICS AND TURBO MACHINERY**

Fluid properties, fluid statics, manometry, buoyancy, control volume analysis of mass, momentum and energy, fluid acceleration, differential equations of continuity and momentum, Bernoulli's equation, Dimensional Analysis, viscous flow of incompressible fluids, boundary layer, elementary turbulent flow, flow through pipes, head losses in pipes, bends. Turbo machinery: Pelton wheel, Francis and Kaplan turbines - impulse and reaction principles - velocity diagrams, pumps and its applications-Valves and Types - Theory of Jet Propulsion- Pulse Jet - Ram Jet Engines, Online Continuous Flow Monitoring System.

#### **UNIT-IV: THERMAL ENGINEERING AND THERMODYNAMICS**

Basic concepts, Zeroth, First and Second laws of thermodynamics, thermodynamic system and processes, Carnot cycle. Irreversibility and availability, behaviour of ideal and real gases, thermodynamic relations, properties of pure substances, calculation of work and heat in ideal processes, analysis of thermodynamic cycles related to energy conversion, Fuel and combustion, Fuels Characteristics, Emissions and Controls, Testing of IC Engine-Renewable sources of Energy.Power Engineering: Steam Tables, Rankine, Brayton cycles with

regeneration and reheat. I.C. Engines: air-standard Otto, Diesel cycles. Refrigeration and air-conditioning: Vapour refrigeration cycle, heat pumps, gas refrigeration, Reverse Brayton cycle; moist air: psychometric chart, basic psychometric processes.

#### **UNIT-V: HEAT AND MASS TRANSFER**

Modes of heat transfer - one dimensional heat conduction, resistance concept, electrical analogy, unsteady heat conduction, fins dimensionless parameters in free and forced convective heat transfer, various correlations for heat transfer in flow over flat plates and through pipes, thermal boundary layer, effect of turbulence, radiative heat transfer, black and grey surfaces, shape factors, network analysis; heat exchanger performance, LMTD and NTU methods.

Basic Concepts of Mass transfer, Diffusion Mass Transfer, Fick's Law of Diffusion Steady state Molecular diffusion, Convective Mass Transfer, Momentum, Heat and Mass Transfer Analogy, Convective Mass Transfer Correlations, Radioactive Heat Transfer.

## **UNIT-VI: MATERIALS SCIENCE AND METALLURGY**

Constitution of alloys and phase diagrams, Iron–Iron Carbide Phase Diagram - steels, cast iron, phase trans formations – diffusion - TTT diagram, ferrous and nonferrous alloys, heat treatment of ferrous and non-ferrous metal, surface modification techniques, powder metallurgy, non-metallic materials, mechanical properties and testing, crystal defects and strengthening mechanisms, conducting and semi conducting materials, magnetic and dielectric materials, Engineering ceramics, Engineering and commodity polymers, composites, nano-materials.

#### **UNIT-VII: PRODUCTION TECHNOLOGY**

Foundry Technology- types of pattern, cores, moulding and casting methods, Solidification, design of castings, defects, Melting Furnaces, Hot and Cold working, Metal Forming Processes - types, Defects and Remedies, Sheet Metal Operation, metal joining processes, types and design of weldment, welding metallurgy, welding defects, Casting, Welding Inspection (NDT), Manufacturing of Thermo Setting and Thermo Plastic Products, Metal cutting, Cutting Tool Nomenclature, Machinability machine tools - center lathe, drilling, milling, grinding, gear cutting and broaching, Machining Time Calculation, unconventional machining processes, Micro Manufacturing, CNC machine tools, Manual Part Programming - Machining and Turning Centre.

## <u>UNIT-VIII: METROLOGY AND QUALITY CONTROL</u>

Limits, Fits and Tolerance, Linear and angular measurements, Interferometry, laser interferometers - Types, Computer Aided Inspection, Basic concept of CMM - Types of CMM, Machine vision, Form measurement – Straightness - Flatness, Roundness, Surface finish measurement, contact and non-contact method, Measurement of power, flow and temperature. Statistical quality control, control charts, acceptance sampling, reliability, TQM, 5S, ISO standards.

#### UNIT-IX: CAD/ CAM/CIM/FEA

Fundamentals of Computer Graphics, Geometric Modelling, Visual Realism, Assembly of Parts, CAD Standards, Fundamentals of CIM, Production Planning and Control, Computer Aided Process Planning, Cellular Manufacturing, Flexible Manufacturing System and Automated Guided Vehicle System, Group Technology, Production Flow Analysis, Industrial Robotics, Additive Manufacturing, Just in Time(JIT), lean manufacturing, One Dimensional Problems in FEA, Two Dimensional Scalar Variable Problems, Two dimensional vector variable problems, Isometric Parametric Formulation.

#### <u>UNIT-X: INDUSTRIAL ENGINEERING AND MANAGEMENT</u>

Workstudy-Techniques, Method study and work measurements - objectives-basic procedure, machine loading and scheduling, product sequencing, inventory control - EOQ - quantity discounts, ABC Analysis material handling systems, operations research, Linear Programming, simplex method, Transportation model, Assignment model CPM and PERT, Queuing Models. Management theory and practice, planning - Decision making, Organizing, staffing, Motivation, Leadership, controlling, control techniques, Industrial Safety - Standards - OSHA.

## Paper-I

#### **ELECTRICAL ENGINEERING**

(Degree Standard)

**CODE NO:-103** 

#### **UNIT - I: ELECTRICAL CIRCUITS**

Circuit elements – Kirchoff's Laws – Mesh and Nodal Analysis - Network Theorems and Applications for DC and AC circuits: Thevenin's Theorem, Norton's Theorem, Superposition Theorem, Maximum Power Transfer Theorem – Sinusoidal Steady State Analysis of RL-RC-RLC Circuits- Resonant Circuits - Natural and Forced Response – Transient Response of RL-RC-RLC Circuits - Two - port networks— Three Phase Circuits-Star-delta transformation-real and reactive power-power factor.

## **UNIT - II: ELECTRIC AND MAGNETIC FIELDS**

Coulomb's Law-Electric Field Intensity-Electric Flux Density-Gauss's Law-Divergence – Electric Field and Potentialdue to Point, Line, Plane and Spherical Charge Distributions - Effect of Dielectric Medium - Capacitance of Simple Configurations - Magnetic Circuits- Magnetomotive force – Reluctance - Faraday's laws-Lenz's law – Biot-Savart's law - Ampere's law - Fleming's Left and Right Hand Rule-Lorentz force - Inductance - Self and Mutual Inductance - Dot Convention-Coupled Circuits.

## **UNIT - III: MEASUREMENTS AND INSTRUMENTATION**

Units and Standards – Static and Dynamic Characteristics – Types of Errors-Error Analysis – Measurement of Current, Voltage, Power, Power-factor and Energy – Indicating instruments – Measurement of Resistance, Inductance, Capacitance and Frequency – Bridge Measurements – Instrument Transformers-Electronic Measuring Instruments – Multi meters-True RMS meter-Spectrum Analyzer- Power Quality Analyzer- Recording Instruments-X-Y Recorder-Magnetic Recorders-Digital Data Recorder-Oscilloscopes-DSO-LED and LCD Display- Transducers and their applications to the Measurement of Non-Electrical Quantities like Temperature, Pressure, Flow-rate, Displacement, Acceleration, Noise level – Data Acquisition Systems – A/D and D/A Converters- Data Transmission Systems-PLC –smart meters.

#### <u>UNIT – IV: CONTROL SYSTEMS</u>

Mathematical Modelling of Physical Systems – Transfer Function - Block Diagrams and Signal Flow Graphs and their Reduction using Mason's Rule – Time Domain and Frequency Domain Analysis of Linear Time Invariant (LTI) System – Errors for Different Type of Inputs and Stability Criteria for Feedback Systems – Stability Analysis Using Routh-Hurwitz Array – Nyquist Plot and Bode Plot – Root Locus – Gain and Phase Margin – Basic Concepts of Compensator Design – PI, PD and PID Controllers-State Variable formulation- state transition matrix- Eigen values and Eigen vectors-free and forced responses of Time Invariant systems-controllability and observability.

#### **UNIT -V: ELECTRICAL MACHINES**

D.C. Machines – Construction, Excitation methods – Armature Reaction and Commutation – Characteristics and Performance Analysis – Generators and Motors—Starting, Speed Control and braking – Testing– Losses and Efficiency. Transformers-Types-Construction and Operation- Testing – Equivalent Circuits—Losses and Efficiency-All day efficiency – Regulation – Parallel Operation – Three Phase Transformers – Auto-transformer. Induction Machines – Construction, Principle of operation – Rotating Magnetic Field – Performance, Torque-Speed Characteristics, No-load and Blocked Rotor tests, Equivalent Circuit, – Starting, Speed Control and braking – Single-Phase Induction Motors – Linear Induction Motors – Hysteresis Motors – Reluctance Motors. Synchronous Machines – Construction – Operating characteristics and Performance analysis – Efficiency and Voltage regulation – Parallel operation – V and inverted V curves of synchronous motors – Power factor improvement- permanent magnet synchronous motor-Permanent magnet brushless DC motor – stepper motor

#### **UNIT -VI: POWER SYSTEMS**

Single Line Diagram of Power System-Per Unit Quantities-Power Generation Types- Hydro, Thermal and Nuclear Stations – Pumped storage plants – Co generation – Economic and operating factors – Modelling and performance characteristics of Power transmission lines and Cables-HVDC transmission—Mechanical Design of Transmission Lines-Sag-Insulators –  $Z_{Bus}$  and  $Y_{Bus}$  formulation-Load flow studies – Shunt and Series Compensation - Symmetrical and Un symmetrical Faults Analysis -Transient and Steady - State Stability of Power Systems – Equal Area Criterion-Voltage and Frequency Control – Power System Transients – Power System Protection – Circuit Breakers – Relays, classification of protection schemes-overcurrent, distance, differential and carrier-Equipment protection-transformer, generator, motor, busbars and transmission line –AC and DC Distribution-deregulation-energy conservation and energy auditing.

#### UNIT -VII: ANALOG AND DIGITAL ELECTRONICS

Semi conductor Devices – PN junctions – Transistors – FET – Zener, Photo diodes and their applications – Rectifier circuits – Voltage regulators – Multipliers. Biasing circuits – Small signal amplifiers – Frequency response – Multistage amplifiers – Coupling methods – Large signal amplifiers – Push-pull amplifiers – Feedback amplifiers – Oscillators – Operational amplifiers and its applications – Precision rectifiers – Multivibrators - Voltage Controlled Oscillator-Timer. Digital logic gate families (DTL,TTL,ECL,MOS,CMOS) – Logic gates - Simplification of Logic Functions- Design of Combinational circuits - Sequential logic circuits-latch– Flipflops– Counters – Registers – multiplexers and demultiplexers- Schmitt triggers-Memories (ROM, PLA and FPGA).

#### **UNIT – VIII: POWER ELECTRONICS AND DRIVES**

Principle of Operation and Static and dynamic behaviour of Power Semi conductor devices – Power Diode, DIAC, SCR, TRIAC, GTO, MOSFET and IGBT-

Single and Three Phase AC to DC Converters –uncontrolled and controlled rectifiers- performance parameters— Single and Three Phase AC to AC converters – Switched Mode Power Supplies—buck, boost and buck-boost converter topologies - switching losses-Inverters - Single and Three Phase Inverters — Voltage control-Pulse Width Modulation techniques — harmonic elimination techniques — Uninterrupted Power Supplies- Electrical drives-motor load dynamics-load torque characteristics - Speed Control of DC Drives— Converter / Chopper fed DC motor drives- Speed control of AC drives- induction motor drives —stator voltage control and V/f control-synchronous motor drives-V/f control, self control, margin angle control and power factor control.

#### **UNIT -IX: DIGITAL PROCESSORS AND COMMUNICATION**

Architecture of 8085, 8086 and 8051 - Instruction Sets - Assembly Interfacing Language Programming for memory and I/O: 8255 Programmable Peripheral Interface 8253 Programmable Timer Interface-8279 Programmable Keyboard and Display Interface-8257 Direct Memory Access Interface - Embedded processors (ARM and PIC basics only). Classification of Signals and systems-Properties of Discrete Fourier Transforms-FFT Computation -FIR Filters – IIR Filters: Butterworth Filters – Chebyshev Filters. Digital Communication Systems Pulse Code Modulation and Demodulation—Adaptive Delta Modulation - Frequency Division and Time Division Multiplexing - Data Communication Network Topologies - 7-layer OSI Protocol - IoT concepts.

#### <u>UNIT –X: RENEWABLE ENERGY SOURCES AND STORAGE DEVICES</u>

Renewable Energy – Sources and Features - Solar Radiation Spectrum-Radiation Measurement - Solar Photovoltaic Cell – principle of operation - types-MPPT – Microhydel - Operating principle - Wind Energy – components - wind power turbine types - MPPT- Site Selection - Types of Wind Generators – smartgrid - Electric vehicles -V2G and G2V- Fuel Cells- Batteries - types and characteristics-Super Capacitors.

#### Paper-I

#### **TOWN PLANNING**

(Degree Standard)

**CODE NO:104** 

#### **UNIT-I: INTRODUCTION TO PLANNING - SCOPE AND CONTENT**

Planning System in India, Introduction to Master Plan, Structure Plan, Detailed Development Plans, City Corporate Plan and Smart City Plan. New Town concepts, case studies in India & U.K. – Concept of Region, Types of Region, Regionalization – Evolution of Regional Planning. Institutional framework for Regional Planning – Regional disparities, Resources in Regional development. Multi-level Planning – Regional Planning in India, Regional Plan case Studies, USA, U.K., Japan.

#### **UNIT-II: PLANNING THEORY AND TECHNIQUES**

Process of evolution of human settlement planning - Principles in Planning - Rationality in Planning, Blueprint and Process mode, Disjointed Incremental mode of Planning, Normative versus Functional mode of Planning - Type of planning surveys, data identification for various plan preparation. Delphi, Trade off-game, Simulation models, Gravity analysis, Lowry model, Threshold analysis, Multivariate analysis - Optimization and economic analysis methods in project formulation and implementation, PBBS - URDPFI Guidelines.

## <u>UNIT-III: URBAN SOCIOLOGY, ECONOMICS, GEOGRAPHY: THEORIES AND APPLICATIONS</u>

Socio-economic groups, structures and Institutions as related to urban and rural communities - Ecological processes and structures in Indian Cities - Social Change & Economic Development - Agglomeration economics - Economics of scale, Multiplier effect concept, scope, limitation - Basic and non-basic activities of economics base, methods of base identification - Land-use determinants, Locational Dynamics of urban Land-use - Spatial organization of Urban settlements - Cityregion, Urban Sprawl and Fringe - Urbanization in India and Tamil Nadu with reference to settlements and population distribution.

#### UNIT-IV: ENVIRONMENTAL ISSUES RELATED TO PLANNING

Components of Environment – Classification of Environmental Resources - Purpose and Objectives in Environmental Protection - Institutional and Legal Support in management of the Environment – Environmental Policies, and issues - Environmental Impact Assessment Practice in India - Types, Conceptual Approach and Phases of EIA – Impact Identification - Public Participation in the Process of Environmental Decision Making Process – Environmental Concepts – Sustainable Planning – Eco Cities, Compact Cities, Smart growth.

#### <u>UNIT-V: URBAN INFRASTRUCTURE NETWORK PLANNING ISSUES</u>

Obligatory and Discretionary Services, Implication of Urban Form and Size on Services, Norms and Standards, National Building Code, 2016. National and Local guidelines – Demand Strategy, Issues and Tasks, Operation and Management Aspects of each Service - Water Supply, Sewerage / Drainage, Solid Waste Management, Roads and Street Lighting - Priority, Placement Network Options, Effective System Analysis – Private and Public partnership and innovative concepts and practices in Infrastructure Development.

#### **UNIT-VI: PROJECT FORMULATION AND IMPLEMENTATION**

Types of Project, Project Cycle, Identification, Selection, Preparation - Capital Investment Programme, Internal Rate of Return, Net present Value – Cost Benefit & Analysis, Social Cost Benefit analysis, Budgeting, Tender procedures - Appraisal techniques – Project Proposal and objectives, Current base line conditions, Financial and Economical Appraisal, Socio cultural assessment - Process Monitoring – Key issues, Monitoring Schedule, Data collection, Design, strategy, CPM, PERT - Framework, Impact Evaluation – Approaches, Key issues, Alternative to large scale qualitative Evaluation designs.

#### UNIT-VII: PLANNING LEGISLATION AND LEGAL FRAME WORK

The concept of law, Indian Constitution. Rights of Ownership and development of property. Statutory control as a positive tool in plan preparation and implementation - Evolution, scope and Significance of Planning Legislation. History and survey of development of planning legislation in India - Panchayat Act, Municipality Act, Corporation Act, TNULB Act, Land Acquisition, Rehabilitation and Resettlement Act, 2013. Provisions in the above acts related to functions, powers, role and responsibilities of local bodies including elected representatives and officers- 73<sup>rd</sup> and 74<sup>th</sup> CAA and their implications on planning and development. Local Body finance, revenue, expenditure and resource mobilization - T & C Planning Act of Tamil Nadu 1971, Urban Development Act - Implications of Land ceiling, betterment levy and development charges. Concept of arbitration. The Tamil Nadu Real Estate (Regulation and Development) Act, 2016.

#### <u>UNIT-VIII: ISSUES IN TRAFFIC AND TRANSPORTATION PLANNING</u>

Highway classification - Traffic characteristics - Horizontal and Vertical alignment, Land use & Transportation relationships - Sight distance - Cross sectional elements- at grade and Grade separated intersections - Volume Count - Origin and Destination - Parking and Public Transport - Surveys - Inventory of Transport facilities - Methods of Survey - Different modes - Capacities-Limitations- Planning Aspects - Coordination - Para Transit modes - Private transport - Urban Transportation Planning Process - Trip Generation - Trip Distribution - Modal Split - Trip Assignment, Transit Oriented Development, Bus Rapid Transit System.

#### UNIT-IX: REMOTE SENSING AND G.I.S., IN PLANNING

Basics of Remote Sensing and GIS. - Classification of spatial and non-spatial data application of spatial data in urban and regional planning - Identification of required spatial data layers, Applications of GPS – Coding schemes – digitization of spatial data – editing spatial data usable for the given planning problem – Land use Suitability Analysis, Land use Modeling, Existing Land use Preparation using Mobiles, Use of Satellites, Aerial Photographs, Drones in Physical Planning.

## **UNIT-X: CURRENT TRENDS AND ISSUES IN PLANNING**

Concepts of sustainable urban development, sustainable Transportation, E – Governance – City Development Plans - Business Plans, JNNURM, AMRUT, National Rural Health Mission, Public private partnership, local bodies and urban finance. Land Pooling concept, Transfer of Development Right, Accommodation Reservation, Formulation of Re-development and Urban Expansion Plans - Local Area Plans, Town Planning Schemes - Special Economic Zone, Value Capture Finance Policy Framework – Swiss Challenge Model.

#### Paper-I

#### **ARCHITECTURE**

(Degree Standard)

**CODE NO: 105** 

#### **UNIT-I: THEORY OF ARCHITECTURE**

- Definition of Architecture, an integration of aesthetics and function
- Elements of Architecture-Form, Space, light, colour, etc.
- Principles of Architecture Proportion, Scale, balance, rhythm, symmetry, hierarchy, pattern and axis.
- Functional aspects of architecture site, structure, skin, circulation etc.
- Concepts in Architectural Design
- Understanding the meaning of character & style of buildings with examples
- Design Communication & Graphics

#### **UNIT-II: HISTORY OF ARCHITECTURE & CULTURE**

- Egyptian, West Asian, Greek & Roman Architecture factors influencing the styles, understanding the architectural character with examples
- Buddhist Architecture
- Evolution of Hindu Temple and Architectural contributions of Dravidian, Pallava, Chola, Pandya and Indo-Aryan Periods – Outstanding examples of these periods.
- Development of Indo-Islamic Architecture Delhi Sultanate, Provincial & Mughal styles
- Modern Architecture various philosophies & schools of thought in Europe, three generations of modern architects & their contributions
- CIAM, TEAM X, Post Modern Architecture, Deconstruction, High-Tech Architecture, Critical Regionalism
- Architecture of India under Colonial rule
- Post independent architecture of India
- Contemporary World Architecture & Parametric Design

#### **UNIT-III: MATERIALS AND CONSTRUCTION TECHNIQUES**

Properties, characteristics, strengths, manufacturing, components & Applications of materials & methods of construction & detailing for the following—Stone – Brick & Clay Products – Lime – Cement – Mortar – Timber – Concrete–Ferrous and Non-Ferrous Metals – Glass – Plastics–Asphalt, Sealants & Adhesives–Protective and Decorative Coatings – Surface finishing & flooring materials - Water Proofing and Damps Proofing Materials – Rural Building Materials (Bamboo, Soil, etc.)

## <u>UNIT IV: BUILDING SYSTEMS AND SERVICES CURRENT DEVELOPMENT & NEW TRENDS</u>

Water Supply & Plumbing – Sources, treatment & distribution systems Sources of water, Quality of water & treatment methods, water requirements for different building typologies, Distribution of water – Choice of pipe materials, fittings

& fixtures, Systems of plumbing in all types of buildings Types of pumps – Reciprocating, centrifugal, deep well, submersible automatic pumps, sewerage pump, compressors vacuum pump.

- Waste water & Sewage Disposal
- Primary & Secondary treatments–Modern types of sewage treatment plants –
   Sewer line fixtures, traps, manholes & septic tanks.
- Solid Waste collection, treatment, disposal & modern drainage systems Incinerator, Composting, Vermi composting, Sanitary Land fill, Bio-gas system & modern renewable energy systems, Modern plumbing systems – Selection of pumps & construction of pump rooms.
- Electrical & Electronic Systems
- Electrical installations in buildings transformers, switch gears, sub stations Single / Three phase supply - Types of earthing for safety, Conduits laying, Bus way & Bus bars, Main and distribution boards - Types of wires, wiring systems and their choice, Planning electrical wiring for building, Communication & data systems – communication spaces, pathways, cabling systems, voice & data, communication, electronic security systems, computer labs / server rooms, etc.
- Lighting Design Installation & Application in buildings.
- Air conditioning Systems & Applications
- Window, Split & Packaged Units, Centralized a/c system A/c plants, DX system, Chilled water system, Air cooled & water cooled condensers, Air distribution systems VAV & VRV systems, Cooling towers, Fan coil units, circulation pumps, trenches & ducting configuration, sizing & space requirements.
- Vertical Movement systems Elevators, Escalators & moving walkways design criteria & Installation.
- Fire safety Fire detection system, Fire alarm system, Fire fighting systems,
   Dry and wet risers, Automatic Sprinklers, Smoke detectors, NBC guidelines.
- Acoustics Fundamentals, Building design & construction measures for good hearing & sound reinforcement & surface treatment for interiors.

#### **UNIT-V: HUMAN SETTLEMENTS PLANNING**

- Origin of Human settlements In India & the rest of the world River valley civilizations (Indus Valley, Mesopotamia, Egyptian & Chinese) Traditional planning principles in India Vernacular architecture of India approaches & concepts Classical & Medieval planning in Europe Evolution of modern planning concepts Garden city concept, Neighbourhood concept, Geddesian triad, etc.
- Elements of Human settlements functions & linkages, Structure & form
- Urban Planning & Renewal Master planning, Zoning regulations, SEZ, PUD, Urban Renewal Plan, Redevelopment, Rehabilitation & Conservation, JNNURM.
- DCR, CRZ for coastal areas
- Issues in contemporary Urban planning

## <u>UNIT-VI</u>: <u>URBAN STUDIES – Urban Design, Urban Housing & Conservation</u>

- Urban Design need, aspects, scope & components of urban space –
  Historic urban form of Greek, Roman, Mediaeval, Renaissance & Modern &
  post-modern periods Indian Urbanism temple towns, Mughal city form,
  medieval cities, colonial urbanism, planned capital cities Theorising &
  Reading urban space Image ability & townscape elements, genius loci,
  collective memory, historic reading of the city & its artefacts by Rossi, social
  aspects of urban space, gender & class, contribution of Jane Jacobs, William
  Whyte Issues of Urban space URDPFI.
- Housing issues in the Indian Context, Socio-Economic aspects, Housing Standards, Site Planning & Housing Design, Housing Process.
- Conservation Understanding the need & purpose, definition, Adaptive reuse, International agencies & their role in conservation–Conservation In India Role of ASI & INTACH policies & legislations, case studies craft issues Conservation practice listing, documenting, assessing architectural character, structure report & developing guidelines Urban Conservation Conservation Planning TDR, Heritage tourism.

## <u>UNIT-VII: ENVIRONMENTAL STUDIES, SITE PLANNING & LANDSCAPE</u> ECOLOGY

- Environment, Ecosystems & bio-diversity Environmental Pollution, Human population & social issues with relation to the environment – Environmental laws in India.
- Site Planning Introduction to basic terminologies, Methods of surveying, Instruments & Application, Levelling, Site Drawings, Importance of Site Analysis – On-site & off-site factors, Study of micro climate, Site Diagramming, Site Context, Site planning & Site layout principles.
- Introduction to Landscape Architecture Elements of Landscape Design plant material, water & landforms, Garden Design Japanese, Italian Renaissance & Mughal, Site Planning Organisation of spaces circulation, built form and open spaces, site planning and micro climate, site planning for neighbourhood parks, children's play area and campus development Landscaping of Functional areas Urban open spaces and principle of urban landscape Street landscaping, landscape design for waterfront areas and functional areas in urban centers green roofs and walls.

## **UNIT-VIII: CLIMATIC DESIGN & ENERGY EFFICIENT ARCHITECTURE**

- Climate & Human comfort, Solar Control, Heat flow through materials & building envelope design, Air movement patterns through natural & built forms, Design strategies for different climate types.
- Energy Efficiency Importance & Significance, Passive Heating & Cooling techniques, case studies, day Lighting & Natural ventilation, Use of Renewable energy systems – Current & future trends.

#### <u>UNIT-IX: CONSTRUCTION TECHNOLOGY & PROJECT MANAGEMENT</u>

- Construction systems & Practice Construction methods & equipments,
   Construction Technology for High-rise buildings, Construction management.
- Project Management Introduction, Project programming & Critical path method, Cost model analysis, Programming evaluation review technique – PERT network – Computerized Project Management.

#### **UNIT-X: PROFESSIONAL ETHICS & TOOLS FOR PRACTICE**

- Architectural profession Code of conduct & ethics, role of COA & IIA –
  Architect's Services, Scale of fees, Architectural Competitions Tender &
  Contracts Legal aspects Important Legislations & current trends.
- Specification necessity, importance, types & classification Specification writing - Estimation (Approximate & detailed) – Current trends.
- Drawing & visualization tools image editing, 2D & 3D modelling, 3D visualization Photoshop AutoCad 2000 Revit 3D MAX Sketch up

## Paper-I PUBLIC HEALTH AND SANITATION

(Degree Standard)

**CODE NO:110** 

## **Unit-I: Chemistry**

- Pesticide Chemistry Composition & reaction of various pesticides. Applied Chemistry – Manufacture of soap, oils, detergents, food products, Adulteration of Consumables.
- Chemical & Physical Properties of Water, pH, treatment methods hard water heavy water, Chemicals used for water treatment.
- Chemical formula, Composition of lime & bleaching powder & their reactions. Spot test reagents and tests with them – Cupferron, DMG, thiourea, magneson, alizarin and Nessler reagent.
- Application of coordination compounds Estimation of nickel using DMG and aluminium using oxine. Estimation of hardness of water using EDTA. Biologically important coordination compounds – Chlorophyll, hemoglobin, vitamin – B12. (their structure and applications). Metal Carbonyls: Mono and Poly nuclear Carbonyls of Ni, Fe, Cr, Co and Mn-Synthesis, structures and bonding.
- Green Catalysis Heterogeneous use of zeolites, silica, alumina, supported catalysis – bio catalysis: Enzymes, microbes, phase transfer catalysis (miscellar/surfactant).
- Analytical Chemistry Data Analysis Theory of errors idea of significant figures and its importance with examples Precision accuracy methods of expressing accuracy error analysis minimizing errors methods of expressing precision average deviation standard deviation and confidence limit.Purification of solid compounds extraction use of immiscible solvents.Chromatography Techniques Principles adsorption, partition and ion exchange chromatography, column chromatography adsorbents preparation of column elution, recovery of substance and applications. TLC choice of adsorbent and solvent preparation of chromatogram (R<sub>f</sub> value) and applications Paper chromatography Solvents used factors affecting R<sub>f</sub> value separation of amino acid mixtures.
- Radioacitivity Radioactive Emanations, Alpha rays, Beta rays and Gamma rays. The Disintegration theory – Group Displacement Law. Rate of disintegration and Half-life period. Radioactive disintegration series. The Gieger – Nuttal rule – Artificial radioactivity. Induced radioactivity.

#### **Unit-II: Zoology**

- Human Physiology Function of Digestion, Circulation, Respiration, Excretion and Nervous system - Metabolism.
- Ecology Ecosystem, Food Chain and Food Web, Population Ecology, Human Population environment, Animal Population
- Introduction to Micobes, Zoonosis and Immunology. Insects Beneficial and harmful insects - Vectors, their life cycle & Metamorphosis- mechanism of causing diseases to human beings & animals - control measures, Domestic pests & their control measures. Rodents & their control
- Genetics, Biomolecules, Chemical bonds, Organic reactions, Catalysis, Volumetric Analysis, Purification of Organic Compounds, Polymers, Chromatography, Laboratory Hygeine and Safety Rules.
- Economic Entomology, Vermiculture, Economic Zoology
- Natural resources Renewable and Non-Renewable resources.
   Environment & Sanitation Air and Ventilation Solid Waste Management –
   Bio-Medical Waste Plastic Waste Excreta Liquid filth disposal of the dead Personal hygiene, camp sanitation, housing, Industrial and trade, Instruments & equipments for the Control & pests, vectors, rodents & diseases.

#### **Unit-III: Micro biology**

- Micro-organism Beneficial & harmful micro-organisms, Metabolism, Enzymes, Vitamins, Immunology Human Anatomy and Physiology, Human Microbial diseases, Molecular biology and Genetic Engineering Medical Bacteriology, Virology, Mycology and Parasitology Sources of infection & mode of infections. Pathogenic micro organisms & their Control & Management. Mosquitoes, flies, bed bug, louse, fleece, ticks, mites, protozoans – their life cycle triematodes – Cestodes.
- Water borne, air borne diseases, Communical & non-communical diseases.
   Faecal contamination, coliforms in waterFood Microbiology, Environmental Microbiology and Industrial Microbiology. Microbial genetics, Vermiculture, Ecosystem
- Common diseases infective diseases insect borne air borne and water borne. Common diseases of the respiratory system and nervous system.

## **Unit-IV: Bio-Chemistry**

- Nutrition education Introduction to nutrition education nutrition education for maternal and child health – Child Nutrition – Nutrition education – methods and media – Nutrition education and family health– Nutrition education in diet therapy – Carbo-hydrates, Proteins & Liquids.
- Chemicals used for the control of disease-causing organisms such as insects, bacteria, virus, actinomycetes, worms, rodents etc. Bio Physical chemistry, Collision Theory, Enzymes, Metabolism of food, Metabolic pathways, Food ecology.
- Genetics, Gene regulation, Vaccines, Bio analytical techniques, Nutritional Biochemistry, Bio Organic chemistry. Human Physiology and nutrition with Microbiology, Virology and basic immunology.
- Various sources of drugs, pharmacologically active constituents in plants.
   Classification of drugs, chemical biological mechanism of drug action– action at cellular sites. Drug receptors and biological responses.
   Mechanism of different types of drug action.
- Absorption of drugs factors affecting absorption of drugs, routes of administration – local, enema, oral and external, parental routes – advantages and disadvantages –Indian medicinal plants – tulsi, neem, keezhanelli.
- AIDS symptoms and prevention.
- Overview of Anesthetics, Antipyretics and anti-inflammatory agents, Antibiotics and Antiseptics and disinfectants. Composition of blood – blood grouping and matching. Blood pressure – Diabetes – and other non Communicable disease.

#### **Unit-V: Public Health**

- Public Health Services, Public Health administration, Public Health laboratories, Tamil Nadu Public Health act. Human Anatomy and Physiology, Statistics and basics of Epidemiology
- Drainage, Sanitary Convenience, Abatement of nuisance, Prevention, notification & treatment of diseases, Notified infectious diseases, Maternity & Child Welfare, Sanitation & Buildings, Abatement of Overcrowding, Lodging houses,Food control, Fairs & Festivals, Provisions of acts & rules selected to Public Health & Sanitation, SWM act 2016, Registration of birth & death act 1969, Act & rules related to Waste Management & environment Management, National health program including AIDS, Polio, control measures of corona, Swine flu, dengue, Immunity & immunization Care & treatment of patients with infection, Disinfection & Sterilization, First aid & emergency care, Vital Health Statistics & maintenance of records.

 Human behaviour, Health Seeking Behavior & Social control, SBCC (Social and Behavioral Change Communication), Public Policy, Disasters and Health Management. Principles and modes of Health education & IEC activities.

#### <u>Unit – VI: Environmental Science</u>

- Water: Use and over exploitation of surface and ground water, floods, droughts, conflicts over water (international and inter-state). Water Contamination – BoD, CoD, Eutrophication, dissolved oxygen, flora & fauna in water bodies.
- Ecosystem and Environmental ecology, Ecology and health, Environmental Health, Population growth and explosion and impacts on environment, Role of IT in Environmental Health, Food chain and Web. Human health and welfare, Animal Population and human health
- Environmental Pollution: types, causes, effects and controls: Air, Water, soil and noise Pollution and control measures and management of Nuclear hazards and human health risks.
- Solid and Liquid Waste Management Control measures of urban and industrial waste.
- Environmental Laws: Environment Protection Act, Air (Prevention & Control of Pollution) Act; Water (Prevention and Control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity (CBD).
- Resettlement and rehabilitation of projects affected persons. Disaster management: floods, earthquake, cyclone and landslides. Global Climate Change and its impacts. Environmental movements: Chipko, Silent Valley, Bishnois of Rajasthan. Environmental conservation. Environmental communication and public awareness.

## Paper-I

#### **CIVIL ENGINEERING**

(Diploma Standard)

#### **CODE NO:201**

#### **UNIT-I: ENGINEERING MECHANICS**

Direct Stresses and strains (Tensile and compressive) due to Axial forces – Deformation of elastic bar due to uni-axial force - Shear force and bending moment diagrams for statically determinate beams - Geometrical properties of sections – Stresses in beams due to bending –Stresses in shafts due to torsion – Pin jointed perfect frames with vertical loads on nodal points (method of joints only).

#### **UNIT-II: MECHANICS OF STRUCTURE**

Deflection of cantilever and simply supported beams – Shear force and bending moment diagrams for statically indeterminate structures (Propped cantilever, Fixed Beams, continuous beams, Non-sway Portal frames) using Mohr's theorems and moment distribution method. Euler's and Rankin's formula for columns– Stresses due to eccentric loads – combined stresses due to direct loads and bending moments in rectangular sections.

#### **UNIT-III: CONSTRUCTION MATERIALS & CONSTRUCTION PRACTICE**

Bricks, Tiles, Cement, Fine Aggregate, Coarse Aggregate, Timber, Ply wood, Steel, Glass, Plastics, PVC, UPVC, Paints, Mortars, Concrete – Different types, qualities, requirements, standard specifications, Admixtures for cement mortar and concrete. Different types of Foundations, Masonry, Floors, Roofs, Doors and Windows, Weathering Course, Damp proof course, Plastering, Painting, Colour Washing – Specifications for different works.

#### **UNIT-IV: TRANSPORTATION ENGINEERING**

Roads – Different types – methods of formation of water bound macadam, bituminous and concrete roads – Hill roads – Requirements – Camber, gradient, super elevation, carriage way, pavements, drainage system, sight distance etc., Traffic Engineering, Bridges – Classification of bridges – Site selection and alignment – Foundation, substructure and super-structure. Sub-grade soil – Soil mass as a three phase system – Grain size classification - Atterberg limits – IS Classification of soils–Compaction – Shear strength – Road Arboriculture – Express Highways – Rapid Transport System.

#### **UNIT-V: HYDRAULICS**

Measurement of pressure in liquids – Pressure distribution and total pressure on immersed surfaces – Types of flow (Laminar, turbulent, steady, unsteady, uniform, nonuniform) – Flow through pipes –Losses – Hydraulic gradient and total energy lines. Bernoullis theorem – use of Orifice, Mouthpiece, Orifice meter and Venturimeters – Flow through channels – Bazin's and manning's formula – Economical sections for open channels, Pumps – Reciprocating pumps – Centrifugal

pumps – Characteristics – Discharge – Power and efficiency, Ground water – Types of well – Test for yield of wells.

#### **UNIT-VI: SURVEYING**

Types of Surveys –Chain surveying – Compass surveying – Levelling – Contour surveying–Theodolite surveying–Trignometrical leveling –Tacheometry–Field work – Simple problems. Curves, Global Positioning System (GPS), Remote sensing– Photogrammetric Surveying and Hydrographic Surveying, Total Station and Geographical Information System (GIS).

#### UNIT-VII: ENVIRONMENTAL ENGINEERING AND POLLUTION CONTROL

Sources of water— Conveyance of water — Treatment of water — Quality of water— Tests on water — Distribution systems — Sewers — Collection and conveyance of sewage — Sewer Appurtenances — Drainage arrangements and Sanitary fittings in buildings — Treatment and disposal of sewage, Solid waste Management. Environmental pollution — Air — water — Soil — Noise - Pollution Control.

#### **UNIT-VIII: ESTIMATING AND COSTING**

Systems of taking out quantities – Trade and Group systems – Material requirement for different items of works – Preparation of data for works – Report writing – Valuation of buildings and properties – Fixation of rents – Approximate estimates – Detailed estimate and Abstract estimate for buildings, well, sump, septic tanks, compound wall, roads etc.

#### **UNIT-IX: STRUCTURAL ENGINEERING**

Reinforced cement concrete structure – Analysis and design of singly and Doubly reinforced rectangular and T-beam sections – Cantilever, simply supported, continuous beams – One way and two way slabs – Lintels and sunshades – Staircases – Rectangular and circular short columns – Isolated column footings. (All designs by Limit State Method only). Steel structures – simple beams – Tension and compression members – simple columns.

## **UNIT-X: CONSTRUCTION MANAGEMENT**

Planning of a project – Factors to be considered – Project reports – Organization structure on construction departments – Construction planning – CPM and PERT networks – Contracts – Tenders and Tender documents – Bill-Supervision and Quality control – Safety measures in construction sites – Banking practice – Cash flow diagrams. Entrepreneurship, Ethics in Engineering, Use of computers – Information Management, Financial Management, Disaster Management – Types of Natural calamities – Causes for major disaster – Preparedness – Response and Recovery.

#### Paper-I

#### **MECHANICAL ENGINEERING**

(Diploma Standard)

#### **CODE NO:202**

#### **UNIT-I: INDUSTRIAL MANAGEMENT**

X and Y theories of Management, Contributions of Henry Fayol and F.W. Taylor for Management - job evaluation by Ranking method and factor comparison method - motivating techniques - fixing selling price of a product - break even analysis for make or buy decision – sinking fund method and straight line method of calculating depreciation- ABC analysis – determination of economic order quantity – TQM – ISO standards – certification.

## **UNIT-II: INDUSTRIAL ENGINEERING**

Factors influencing plant location - principles of layout – techniques used to improve layout - primary and secondary causes of an accident - personal protective devices - method study procedure - flow diagram, string diagram and two handed process chart - principles of motion economy-procedure for conducting stopwatch time study, production study and ratio delay study - objectives of preplanning, routing, scheduling, despatching and controlling - difference between inspection and quality control - types of plant maintenance – TPM.

#### **UNIT-III: PRODUCTION TECHNOLOGY**

Foundry - patterns - special casting techniques - welding - hot and cold working - drawing, rolling and forging - powder metallurgy - plastics - rubber - ceramics- refractories - lathe work - planner - shaper - slotter - drilling machine - milling machines - grinding machines - broaching - boring and jig boring - Gears manufacturing practice - Heat treatment and metal finishing - press work

#### UNIT-IV: ELECTRICAL AND ELECTRONICS ENGINEEERING

Units, Ohm's law, Kirchoff's law, Faraday's law - D.C. Circuits, batteries - electro magnetism - single phase and three phase A.C. circuits - Induction motors - Electronics- diodes - resisitors - capacitors-transistors-logic gates.

## **UNIT-V: MECHANICS OF MATERIALS**

Mechanical properties of metals - simple stresses and strains - modulus of elasticity - geometrical properties of sections - thin cylinders bending moment and shear force - theory of simple bending - torsion and springs - transmission of motion—gear drives and belt drives.

#### **UNIT-VI: HEAT POWER ENGINEERING**

Working principle and comparison of otto and diesel cycles - construction and working of two stroke and four stroke engines - Heat balance test on I.C. engine - working principle of single and multistage compressors - Comparison of reciprocating and rotary compressors - classification of steam boilers - construction and working of steam turbines- working principle of steam power plant - Main elements of a nuclear power plant - Vapour compression cycle - factors affecting human comfort - working principle of a window air conditioner and central air conditioning system.

#### **UNIT-VII: COMPUTER APPLICATIONS**

Working principle and constructional details of computer - classification of computer - Input / Output devices - flow charting - MS Office & Star Office - creating documents - presentations - sending emails.

#### **UNIT-VIII: FLUID MECHANICS AND MACHINERY**

Working of differential manometer - use of venturimeter and orifice classification of mouthpieces meter - working of pelton wheel, francis turbine and kaplan turbine - construction and working principle of reciprocating pump, centrifugal pump and gear pump - quick return mechanism of shaping machine - table movement in a milling machine.

#### **UNIT-IX: COMPUTER INTEGRATED MANUFACTURING**

CAD – Definition – geometric modeling – wireframe, surface and solid modeling – graphic standards – GKS, IGES, PHIGS and DXF. CAM–definition–group technology– part families–parts classification and coding–CAPP–types. CNC–definition–components of CNC–ATC–CNCEDM. Part program–format–coordinate system – types of motion control – types of interpolation – G and M codes – subprogram – canned cycles.

#### **UNIT-X: DESIGN OF MACHINE ELEMENTS**

Factors affecting selection of material – classification of bearings – sliding contact and rolling contact bearings – radial and thrust bearings – limits – fits – tolerance – classification of fits –cams and followers – types.

## Paper-I ELECTRICAL ENGINEERING

(Diploma Standard)

**CODE No:203** 

## **UNIT-I: CIRCUIT THEORY AND DC MACHINES**

Electrostatics - Fundamentals of electric circuits - DC Circuits - Network Theorems (Simple problems in DC) - Single phase AC and 3 phase AC circuits - Resonant circuits- Electro magnetism - DC Generator - Types - construction - working - characteristic curves - Armature reaction- application. DC Motor - Types - construction - working - characteristics - commutation - application - speed control - D.C Starters - Maintenance of DC machines - Storage batteries.

#### **UNIT-II: A.C. MACHINES AND SPECIAL MACHINES**

Single phase transformer - construction - EMF equation - OC & SC Test - Regulation and efficiency- parallel operation. Three phase transformer - construction- Testing - Parallel operation - Maintenance Alternator - construction - EMF equation - methods of obtaining sine-wave - parallel operation - Testing- Determination of voltage regulation. Synchronous Motor - construction - starting methods - application. 3 phase induction motor - construction and working principle - phasor diagram - starters - speed control - maintenance. Single phase induction motors - working principle - types- applications - Special machines - PMSM, SRM, Stepper motor, PMBLDC motors.

#### **UNIT-III: MEASUREMENTS AND INSRUMENTS**

Classification and characteristics of instruments - operating forces—construction and working of M.I., MC and Dynamometer type instruments – Instrument transformers- Direct measurement of current, voltage and resistance-Measurement of Power – Measurement of energy- single phase and 3 phase Energy meters. Measurement of power factor - Maximum demand indicator - Synchroscope-Measurement of frequency - AC Bridges - Anderson bridge - Schering bridge-Cathode ray Oscilloscope – Sensing elements - Transducers – Passive, active transducers.

#### UNIT-IV. ELECTRONIC DEVICES AND CIRCUITS

Semi conductor Diodes –Rectifiers – Half wave, full wave and Bridge rectifier- Filters- 3 phase rectifiers - Bipolar junction Transistors (BJT) – biasing – configuration - Field effect Transistors (JFET & MOSFET) and Uni junction Transistor (UJT) – Transistor oscillators - Special semiconductor devices - Gunn diode, varactor diode, Zener diode, Tunnel diode - Silicon controlled Rectifier - DIAC-TRIAC –IGBT –Opto electronic devices – LDR, LED, LCD, Opto coupler, IR transmitter and receiver, Laser diode , Solar cell, Photo diode, Photo transistor – Diode clipper – Diode clamper –Voltage doubler - Multi vibrators -Astable, Monostable, Bistable – Schmitt trigger.

#### **UNIT-V: ANALOG AND DIGITAL ELECTRONICS**

Operational amplifiers - characteristics - applications - Number system-Boolean algebra- De-Morgan's theorems - Logic gates- Digital logic families-Combinational circuits - Sequential circuits - Flipflops, Counters, shift registers - Memory devices - D / A and A / D converters.

#### UNIT-VI: GENERATION, TRANSMISSION AND SWITCH GEAR

Generation of electrical energy – Inter connected system – Load curves and load duration curves–Tariff -Economics of power generation - Fuel cells – AC transmission - voltage regulation and transmission efficiency - Sag – HVDC transmission - Line Insulators and Underground cables- Cable faults –Murray loop test for cable fault detection -Circuit breakers - Lightning arrestors - Fuses - HRC fuse – Protective relays - Grounding.

#### **UNIT-VII: DISTRIBUTION AND UTILISATION**

AC and DC Distribution - Substations - Busbar system - Industrial Drives - Types of electric drives and choice of electric motor. Electric Traction -System of track electrification -Traction mechanics - Traction motors and control - Magnetic levitation. Illumination - Laws of illumination -Lighting systems - construction and characteristics of Arc, incandescent, Sodium vapour, Mercury vapour CFL and LED lamps. Electric heating - Electric furnaces - Electric welding - Electric welding equipments.

## UNIT-VIII: MICRO PROCESSOR AND MICRO CONTROLLER

Introduction to microprocessors - 8085 micro processor - Architecture – Instruction set – Addressing mode – Instruction cycle.

8051 micro controller – Architecture – Instruction set – Assembler - Addressing modes - Programmes – I/O programming – Timer programming- Serial communication – Interrupts- IC 8255 - Peripheral interfacing techniques with 8051 – Applications.

#### UNIT-IX:

## A. POWER ELECTRONICS AND DRIVES

Thyristor family- SCR trigger circuits – Commutation circuits- Phase controlled rectifier – Choppers – Inverters – SMPS –UPS – Control of DC drives – Four quadrant control of DC motor - Control of AC drives.

#### **B. ELECTRICAL ESTIMATION & ENERGY AUDITING**

Indian Electricity Rules – 1956 - Standard symbols for various wiring items, accessories - Wiring systems – wire size – Selection of fuses - Earthing- Testing of installations - Domestic, commercial and industrial installation estimate – Energy auditing- Energy conservation – Selection of cable – Lighting systems – Pumping systems.

## **UNIT-X: CONTROL OF ELECTRICAL MACHINES**

Control circuit components –Switches, relays, timers, contactors – DC motor control circuits- Jogging, dynamic braking, plugging, reversing control circuit- speed control using UJT& SCR – AC motor control circuits- DOL starter, Auto transformer starter, Star-delta starter – Rotor resistance starter – plugging –dynamic braking – Industrial control circuits - Programmable logic controller – Components of PLC - Inputmodule – output module - programming – Ladder diagram for DOL, star- delta starter.

## Paper-I ARCHITECTURE

(Diploma Standard)

**CODE:205** 

#### **UNIT-I: ENGINEERING MECHANICS**

Simple Stresses and Strain – Stress and Strain – Modulus of Elasticity / Elastic constants – Application of stress and strain in engineering field – Behaviour of ductile and brittle material – Loads – Shear Force and Bending Moment – Geometrical properties of sections – Centroid – Moment of Inertia – Stress in Beams and Shafts – Stresses in Beams due to bending – Stress in shafts due to torsion – Pin Jointed Frames - Analytical Method – Graphical Method.

#### **UNIT-II: BUILDING MATERIALS & CONSTRUCTION**

Properties, characteristics, strengths, manufacturing, components & applications of materials & methods of construction & detailing for the following:

Stone – Brick & Clay Products – Lime – Cement – Timber – Concrete – Ferrous and Non- Ferrous Metals – Glass – Plastics – Asphalt, Sealants & Adhesives – Protective and Decorative Coatings – Water Proofing and Damps Proofing Materials – Rural Building Materials (Bamboo, Soil, etc.).

#### **UNIT-III: HISTORY & THEORY OF ARCHITECTURE**

#### **History of Architecture**

Egyptian Architecture – Greek Architecture – Roman Architecture – Early Christian & Byzantine Architecture – Gothic Architecture – Renaissance Architecture. Indian Architecture – Indus Valley Civilization, Buddhist Architecture, Hindu Architecture – Islamic Architecture in India. Modern Architecture, Post Modernism, Deconstructivism Contemporary World Architecture.

#### Theory of Architecture

Definition of Architecture – Architecture as satisfying functional, aesthetic & psychological human needs. Elements of Architecture – Form, Space, Light, colour, etc. Principles of Architecture – Proportion, Balance, Scale, Symmetry, etc.

#### **UNIT-IV: STRUCTURAL ENGINEERING**

Slope and Deflection of Beams – Propped Cantilevers – Fixed Beams – Arches – Continuous Beams – Theorem of Three Moments – Continuous Beams – Moment Distribution Method – Columns and Struts – Combined Bending and Direct Stresses – Earth Pressure and Retaining Walls – Working Stress Method Design of Beams for Flexure by L.S.M – Design of T-Beams and Continuous Beams by L.S.M – Design of Beams for Shear by L.S.M – Design of One way Slabs by L.S.M - Design of Two way Slabs by L.S.M - Design of Staircases by L.S.M - Design of Columns by L.S.M - Design of Column Footings – Design of Simple Beams – Design of Tension Members – Design of Compression Members – Design of Welded Connections.

#### **UNIT-V: ENVIRONMENTAL ENGINEERING**

Sources of Water – Collections and Conveyance of Water–Quality of Water–Treatment of Water – Distribution System – Appurtenances and Maintenance of Water Lines – Collections and Conveyance of Sewage – Treatments and Disposal – Environmental Pollution and Control - Industrial Waste Water Treatment and Solid Waste Disposal – Land, Water & Air Pollution.

#### **UNIT-VI: BUILDING SERVICES**

Water Supply & Sewage Disposal, Mechanical Systems – Pumps & Motors, Electrical Systems - Generation & Distribution, Ventilation & Lighting, Air Conditioning – Principles, systems & applications, Vertical Transportation systems, Fire Hazards, Safety & Design Regulations, Acoustics.

#### **UNIT-VII: SITE SURVEY & PLANNING**

Chain Surveying – Compass Surveying – Plane Table Surveying – Levelling – Theodolite – Contouring – Minor Instruments. Site Drawings – Site marking, Importance & procedures for making site drawings & dimensioning.

#### **UNIT-VIII: SPECIFICATION & ESTIMATION**

Stages of Detailed Estimate – Measurements & Material Requirement – Specification & Report Writing – Approximate Estimates – Areas and Volumes – Data – Valuation – Detailed Estimate.

#### **UNIT-IX: TOWN PLANNING**

Town Planning Principles – Road and Street Planning – Housing – Economy, Society, Environment and Transport Policy and Planning – Town Planning Rules, Building Bye-Laws & Development Control Rules.

#### **UNIT-X: COMPUTER AIDED DRAFTING & VISUALIZATION**

2D & 3D Drafting & Visualization - Using AutoCAD, etc - Setting limits and creating entities like LINE, ARC, CIRCLE etc - Editing the drawing with edit commands like TRIM, FILLET, COPY, MOVE etc., Creating 2D building working drawings. Visualization using SKETCH UP, 3D MAX, etc.

## Paper-II Part-A

#### **TAMIL ELIGIBILITY TEST**

## (கட்டாயத்தமிழ் மொழித்தகுதி தேர்விற்கான பாடத்திட்டம்) (கொள்குறி விணாவிற்கான தலைப்புகள்)

#### பத்தாம் வகுப்பு தரம்

- பிரித்தெழுதுதல் / சேர்த்தெழுதுதல்.
- 2. எதிர்ச்சொல்லை எடுத்தெழுதுதல்.
- பொருந்தாச் சொல்லைக் கண்டறிதல்.
- 4. பிழைத்திருத்தம் (1) சந்திப்பிழையை நீக்குதல் (2) மரபுப்பிழைகள், வழுவுச் சொற்களை நீக்குதல் / பிறமொழிச் சொற்களை நீக்குதல்.
- 5. ஆங்கிலச் சொல்லுக்கு நேரான தமிழ்ச் சொல்லை அறிதல்.
- 6. ஒலி மற்றும் பொருள் வேறுபாடறிந்து சரியான பொருளையறிதல்.
- 7. ஒரு பொருள் தரும் பல சொற்கள்.
- 8. வேர்ச் சொல்லைத் தேர்வு செய்தல்.
- 9. வேர்ச் சொல்லைக் கொடுத்து / வினைமுற்று, வினையெச்சம், வினையாலணையும் பெயர், தொழிற் பெயரை / உருவாக்கல்.
- 10. அகர வரிசைப்படி சொற்களை சீர்செய்தல்.
- 11. சொற்களை ஒழுங்குப்படுத்தி சொற்றொடராக்குதல்.
- 12. இரு வினைகளின் பொருள் வேறுபாடு அறிதல். (எ.கா) குவிந்து, குவித்து.
- 13. விடைக்கேற்ற வினாவைத் தேர்ந்தெடுத்தல்.
- 14. எவ்வகை வாக்கியம் எனக் கண்டெழுதுதல் தன்வினை, பிறவினை, செய்வினை, செயப்பாட்டு வினை வாக்கியங்களை கண்டெழுதுதல்.
- உவமையால் விளக்கப்பெறும் பொருத்தமான பொருளைத் தேர்ந்தெழுதுதல்.
- 16. அலுவல் சார்ந்த சொற்கள் (கலைச்சொல்).
- 17. விடை வகைகள்.
- 18. பிறமொழிச் சொற்களுக்கு இணையான தமிழ்ச் சொற்களைக் கண்டறிதல். (எ.கா) கோல்டு பிஸ்கட் தங்கக்கட்டி.
- 19. ஊர்ப் பெயர்களின் மரூஉவை எழுதுக. (எ.கா) தஞ்சாவூர்- தஞ்சை.
- 20. நிறுத்தற் குறிகளை அறிதல்.
- 21. பேச்சு வழக்கு, எழுத்து வழக்கு (வாரான் வருகிறான்).
- 22. சொற்களை இணைத்து புதிய சொல் உருவாக்கல்.
- 23. பொருத்தமான காலம் அமைத்தல் (இறந்தகாலம், நிகழ்காலம், எதிர்காலம்).
- 24. சரியான வினாச் சொல்லைத் தேர்ந்தெடு.

- 25. சரியான இணைப்புச் சொல் (எனவே, ஏனெனில், ஆகையால், அதனால், அதுபோல).
- 26. அடைப்புக்குள் உள்ள சொல்லைத் தகுந்த இடத்தில் சேர்க்க.
- 27. இரு பொருள் தருக.
- 28. குறில் நெடில் மாற்றம், பொருள் வேறுபாடு.
- 29. கூற்று, காரணம் சரியா? தவறா?
- 30. கலைச் சொற்களை அறிதல். எ.கா. – Artificial Intelligence – செயற்கை நுண்ணறிவு Super Computer – மீத்திறன் கணினி
- 31. பொருத்தமான பொருளைத் தெரிவு செய்தல்.
- 32. சொற்களின் கூட்டுப் பெயர்கள் (எ.கா) புல் புற்கள்.
- 33. சரியான தொடரைத் தேர்ந்தெடுத்தல்.
- 34. பிழை திருத்துதல் (ஒரு-ஓர்).
- 35. சொல் பொருள்- பொருத்துக.
- 36. ஒருமை பன்மை பிழை.
- 37. பத்தியிலிருந்து வினாவிற்கான சரியான விடையைத் தேர்ந்தெடு.

#### Paper-II

#### Part-B

#### **GENERAL STUDIES**

(Degree Standard)

**CODE NO. 301** 

#### **UNIT-I: GENERAL SCIENCE**

- 1. Scientific Knowledge and Scientific temper Power of Reasoning.
- 2. Rote Learning Vs Conceptual Learning Science as a tool to understand the past, present and future.
- 3. Nature of Universe General Scientific Laws Mechanics -Properties of Matter, Force, Motion and Energy Everyday application of the basic principles of Mechanics, Electricity and Magnetism, Light, Sound, Heat, Nuclear Physics, Laser, Electronics and Communications.
- 4. Elements and Compounds, Acids, Bases, Salts, Petroleum Products, Fertilizers, Pesticides.
- 5. Main concepts of Life Science, Classification of Living Organisms, Evolution, Genetics, Physiology, Nutrition, Health and Hygiene, Human diseases.
- 6. Environment and Ecology.

#### **UNIT-II: CURRENT EVENTS**

- History-Latest diary of events National symbols Profile of States Eminent personalities and places in news – Sports - Books and authors.
- 2. Polity-Political parties and political system in India-Public awareness and General administration -Welfare Oriented Government schemes and their utility, Problems in Public Delivery Systems.
- 3. Geography-Geographical landmarks.
- 4. Economics- Current socio-economic issues.
- 5. Science-Latest inventions in Science and Technology.
- 6. Prominent personalities in various spheres- Arts, Science, Literature and Philosophy.

#### **UNIT-III: GEOGRAPHY OF INDIA**

- Location Physical features Monsoon, rainfall, weather and climate Water resources - Rivers in India - Soil, minerals and natural resources - Forest and wildlife - Agricultural pattern.
- 2. Transport Communication.
- 3. Social geography Population density and distribution Racial, linguistic groups and major tribes.
- 4. Natural calamity Disaster Management Environmental pollution: Reasons and preventive measures Climate change Green energy.

#### **UNIT-IV: HISTORY AND CULTURE OF INDIA**

- 1. Indus valley civilization Guptas, Delhi Sultans, Mughals and Marathas Age of Vijayanagaram and Bahmani Kingdoms South Indian history.
- 2. Change and Continuity in the Socio-Cultural History of India.
- 3. Characteristics of Indian culture, Unity in diversity Race, language, custom.
- 4. India as a Secular State, Social Harmony.

#### **UNIT-V: INDIAN POLITY**

- 1. Constitution of India-Preamble to the Constitution-Salient features of the Constitution Union, State and Union Territory.
- 2. Citizenship, Fundamental rights, Fundamental duties, Directive Principles of State Policy.
- 3. Union Executive, Union legislature State Executive, State Legislature Local governments, Panchayat Raj.
- 4. Spirit of Federalism: Centre-State Relationships.
- 5. Election-Judiciary in India–Rule of law.
- 6. Corruption in public life Anti-corruption measures Lokpal and LokAyukta Right to Information Empowerment of women Consumer protection forums, Human rights charter.

#### **UNIT-VI: INDIAN ECONOMY**

- 1. Nature of Indian economy Five year plan models an assessment Planning Commission and Niti Ayog.
- 2. Sources of revenue Reserve Bank of India Fiscal Policy and Monetary Policy Finance Commission Resource sharing between Union and State Governments Goods and Service Tax.
- 3. Structure of Indian Economy and Employment Generation, Land reforms and Agriculture Application of Science and Technology in agriculture Industrial growth Rural welfare oriented programmes Social problems Population, education, health, employment, poverty.

## **UNIT-VII: INDIAN NATIONAL MOVEMENT**

- National renaissance Early uprising against British rule -Indian National Congress - Emergence of leaders – B.R.Ambedkar, Bhagat Singh, Bharathiar, V.O.Chidambaranar, Jawaharlal Nehru, Kamarajar, Mahatma Gandhi, Maulana Abul Kalam Azad, Thanthai Periyar, Rajaji, Subash Chandra Bose, Rabindranath Tagore and others.
- 2. Different modes of Agitation: Growth of Satyagraha and Militant movements.
- 3. Communalism and partition.

## <u>UNIT-VIII: History, Culture, Heritage and Socio - Political Movements in</u> Tamil Nadu

- 1. History of Tamil Society, related Archaeological discoveries, Tamil Literature from Sangam age till contemporary times.
- 2. Thirukural: (a) Significance as a Secular literature
  - (b) Relevance to Everyday Life.

- (c) Impact of Thirukkural on Humanity
- (d) Thirukkural and Universal Values-Equality, Humanism, etc.,
- (e) Relevance to Socio Politico Economic affairs.
- (f) Philosophical content in Thirukkural
- Role of Tamil Nadu in freedom struggle

  Early agitations against British Rule Role of women in freedom struggle.
- 4. Evolution of 19th and 20th Century Socio-Political movements in Tamil Nadu–Justice Party, Growth of Rationalism- Self Respect Movement, Dravidian movement and Principles underlying both these movements, Contributions of Thanthai Periyar and Perarignar Anna.

#### **UNIT-IX**: Development Administration in TamilNadu

- 1. Human Development Indicators in Tamil Nadu and a comparative assessment across the Country Impact of Social Reform movements in the Socio-Economic Development of Tamil Nadu.
- 2. Political parties and Welfare schemes for various sections of people Rationale behind Reservation Policy and access to Social Resources Economic trends in Tamil Nadu Role and impact of social welfare schemes in the Socio-economic development of Tamil Nadu.
- 3. Social Justice and Social Harmony as the Cornerstones of Socio Economic development.
- 4. Education and Health systems in Tamil Nadu.
- 5. Geography of Tamil Nadu and its impact on Economic growth.
- 6. Achievements of Tamil Nadu in various fields.
- 7. e-governance in Tamil Nadu.

#### **UNIT-X: APTITUDE AND MENTAL ABILITY**

- 1. Simplification Percentage Highest Common Factor (HCF) -Lowest Common Multiple (LCM).
- 2. Ratio and Proportion.
- 3. Simple interest-Compound interest-Area-Volume-Time and Work.
- 4. Logical Reasoning Puzzles Dice Visual Reasoning Alpha numeric Reasoning Number Series.

#### Paper - II

#### Part-B

#### **GENERAL STUDIES**

(Diploma Standard)

**Code No. 401** 

#### **UNIT-I: GENERAL SCIENCE**

- 1. Nature of Universe Measurement of Physical Quantities General Scientific Laws in Motion Force, Pressure and Energy Everyday application of the basic principles of Mechanics, Electricity, Magnetism, Light, Sound, Heat and Nuclear Physics in our daily life.
- 2. Elements and Compounds, Acids, Bases, Salts, Petroleum Products, Fertilizers, Pesticides, Metallurgy and Food Adulterants.
- 3. Main concepts of Life Science, Classification of living organisms, Evolution, Genetics, Physiology, Nutrition, Health and Hygiene, Human diseases.
- Environmental Science.

#### **UNIT-II: CURRENT EVENTS**

- 1. Latest diary of events National symbols–Profile of states –Eminent personalities and places in news–Sports –Books and Authors.
- 2. Welfare Scheme of Government Political parties and Political system in Tamil Nadu and India.
- 3. Latest inventions in Science and Technology Geographical Land Marks Current Socio Economic issues.

#### **UNIT-III: GEOGRAPHY**

- 1. Earth Location Physical Features Monsoon, rainfall, weather and climate—Water resources–Rivers –Soil, Minerals and Natural resources– Forest and Wildlife–Agriculture pattern.
- 2. Transport- Communication.
- 3. Population density and distribution in Tamil Nadu and India.
- Calamities—Disaster Management—Environment Climate change.

#### **UNIT-VI: HISTORY AND CULTURE OF INDIA**

- 1. Indus Valley Civilization –Guptas, Delhi Sultans, Mughals and Marathas South Indian History.
- 2. Characteristics of Indian Culture, Unity in Diversity–Race, Language, Custom.
- India as a Secular State.

#### **UNIT-V: INDIAN POLITY**

1. Constitution of India—Preamble to the Constitution—Salient features of the Constitution—Union, State and Union Territory.

- 2. Citizenship, Fundamental Rights, Fundamental Duties, Directive Principles of State Policy.
- 3. Union Executive, Union Legislature–State Executive, State Legislature–Local Governments, Panchayat Raj.
- 4. Spirit of Federalism: Centre-State Relationships.
- 5. Election-Judiciary in India-Rule of Law.
- 6. Corruption in public life Anti-Corruption measures Lokpal and Lokayukta Right to Information Empowerment of Women Consumer Protection Forums Human Rights Charter.

#### **UNIT-VI: INDIAN ECONOMY**

- 1. Nature of Indian economy–Five year plan models an assessment Planning Commission and NITI Aayog.
- 2. Sources of revenue–Reserve Bank of India Finance Commission–Resource sharing between Union and State Governments –Goods and Service Tax.
- 3. Economic Trends Employment Generation, Land Reforms and Agriculture Application of Science and Technology in Agriculture Industrial growth Rural Welfare oriented programmes Social Problems –Population, Education, Health, Employment, Poverty.

## **UNIT-VII: INDIAN NATIONAL MOVEMENT**

- National Renaissance –Early uprising against British Rule–Indian National Congress – Emergence of Leaders –B.R.Ambedkar, Bhagat Singh, Bharathiar, V.O.Chidambaranar, ThanthaiPeriyar, Jawaharlal Nehru, Rabindranath Tagore, Kamarajar, Mahatma Gandhi, Maulana AbulKalam Azad, Rajaji, Subhash Chandra Bose, Muthulaksmi Ammaiyar, Muvalur Ramamirtham and other National Leaders.
- 2. Different modes of Agitation of Tamil Nadu and movements.

## <u>UNIT-VIII: HISTORY, CULTURE, HERITAGE AND SOCIO - POLITICAL</u> MOVEMENTS OF TAMIL NADU

- 1. History of Tamil Society, related Archaeological Discoveries, Tamil Literature from Sangam age till contemporary times.
- 2. Thirukkural:
  - a) Significance as a Secular Literature.
  - b) Relevance to Everyday Life.
  - c) Impact of Thirukkural on Humanity.
  - d) Thirukkural and Universal Values Equality, Humanism etc.
  - e) Relevance to Socio Politico Economic affairs.
  - f) Philosophical content in Thirukkural.

- 3. Role of Tamil Nadu in freedom struggle Early agitations against British Rule– Role of women in freedom struggle.
- 4. Various Social reformers, Social reform movements and
- 5. Social transformation of Tamil Nadu.

#### **UNIT-IX: DEVELOPMENT ADMINISTRATION IN TAMIL NADU**

- 1. Social Justice and Social Harmony as the Cornerstones of Socio-Economic Development.
- 2. Education and Health systems in Tamil Nadu.
- 3. Geography of Tamil Nadu and its impact on Economic growth.

#### **UNIT-X: APTITUDE & MENTAL ABILITY TESTS**

- Simplification—Percentage—Highest Common Factor(HCF)— Lowest Common Multiple(LCM).
- 2. Ratio and Proportion.
- 3. Simple Interest– Compound Interest–Area–Volume–Time and Work.
- 4. Logical Reasoning Puzzles Dice–Visual Reasoning–Alpha Numeric Reasoning– Number Series.

## ANNEXURE-II

SI. No.	Degree considered as Equivalent to the Qualification prescribed in the Rule	G.O.
1.	B.E. (Production Engineering) and B.E. (Industrial Engineering) awarded by the Universities in Tamil Nadu be treated as an equivalent qualification to the B.E. Degree in Mechanical Engineering.	G.O.No.183, Personnel and Administrative Reforms (R) Department, dated 06.06.1995.
2.	B.E Manufacturing Engineering awarded by Anna University is equivalent to that of B.E Mechanical Engineering.	G.O.(Ms) No.309, Higher Education (J2) Department, dated 17.12.2018.
3.	B.E Manufacturing Engineering (Part- time) awarded by Anna University is equivalent to that of B.E Mechanical Engineering of the Anna University.	G.O.Ms.No.9 Energy (B2) Department, dated 28.01.2010.
4.	B.E/B.Tech in 'Production Engineering' degree offered by Anna University is equivalent to B.E/B.Tech in 'Mechanical Engineering'	G.O(Ms) No.270, Higher Education (J1) Department, dated 03.12.2019
5.	B.E/B.Tech in 'Manufacturing Engineering' degree offered by Anna University is equivalent to B.E/B.Tech in 'Mechanical Engineering' offered by Anna University	
6.	B.E / B.Tech in 'Mechanical (sandwich – 5 year Engineering' degree offered by Anna University is equivalent to B.E/B.Tech in 'Mechanical Engineering' offered by Anna University	
7.	B.E. Production Engineering (Sandwich) offered by P.S.G College of Technology, Coimbatore affiliated to Anna University is equivalent to B.E Mechanical Engineering	G.O.Ms.No.58, Higher Education (J1) Department, dated 06.05.2022
8.	B.E. Mechatronics Engineering awarded by Anna University is equivalent to B.E Mechanical Engineering	G.O.Ms.No.211, Higher Education (K1) Department,dated17.07.2023
9.	6 years integrated U.G. Level Engineering B.Tech. Degree programme in Civil Engineering / Mechanical Engineering (for Speech and Hearing Impaired Students) awarded by Kalasalingam Universityis equivalent to B.Tech. in similar programmes offered by Anna University.	G.O.(Ms) No.41, Higher Education (J2) Department, dated 03.03.2014.
10.	Government of India has recognized the following courses of Section A & B Examination as revised, conducted by the Institution of Engineers (India), Kolkata as equivalent to Degree in the Appropriate branch of Engineering of the Recognized Universities in India.	The Gazette of India, February 11, 2006 (MAGHA 22, 1927) Part–I– Section1
	1. Civil Engineering	
	Electrical Engineering.     Machanical Engineering.	
	Mechanical Engineering	

SI. No.	Degree considered as Equivalent to the Qualification prescribed in the Rule	G.O.
11.	B.E., degree acquired through Distance Learning Mode by the candidates enrolled during academic seasons 2001-2005 in	G.O(Ms)No.19, Higher Education (K1) Department dated 02.02.2022
	(i) JRN Rajasthan, Vidyapeeth, Udaipur (Rajasthan),	
	(ii) IASE Sardarshahar, (Rajasthan),	
	(iii) AAI, Allahabad, (Uttar Pradesh) validated by AICTE–UGC by conducting special examination as per the Supreme Court's Order(C) Nos.19807–19808/2012, Dated 03.11.2017 be validated and approved as equivalent to degrees of regular stream for the purpose of employment in Public Services	
12.	B.E. (Civil and Transportation Engineering) awarded by Bharathiyar University is equivalent to B.E. (Civil Engineering).	G.O.(Ms).No.110, Public Works (B2) Department, dated 30.04.2008.
13.	B.E. (Civil Engineering with Diversification in Construction Engineering and Management) awarded by Anna University, B.E. (Civil Engineering and Computerbased construction) awarded by Anna University and Madurai Kamaraj University and B.E. (Civil Engineering with Diversification in Environmental Engineering) awarded by the Anna University are equivalent to B.E. (Civil Engineering).	G.O.(Ms).No.232, Public Works(B2) Department, dated 23.07.2008.
14.	B.Sc., (Civil Engineering) awarded by Kurukshetra University is equivalent to B.E. (Civil Engineering).	G.O.Ms.No.260, Public Works (B2) Department, dated 16.11.09.
15.	(i) B.E. (Environmental Engineering) Degree of Avinashilingam Institute for Home Science and Higher Education for Women Deemed University is equivalent to B.E.(Civil Engineering)	G.O.(Ms)No.178, Higher Education (J1) Department, dated 17.07.2015.
	(ii) B.E. (Civil Engineering with Diversification in Building Technology) Degree of Anna University is equivalent to B.E. (Civil Engineering).	
16.	B.Tech (Mechanical) / B.Tech (Civil) (Part-Time) obtained from Vellore Institute of Technology, Vellore is equivalent to B.E. (Mechanical) / B.E. (Civil) (Regular)	G.O.(Ms) No.77, Higher Education (J2) Department, dated 03.03.2016.
17.	B.E. Civil Engineering and Planning offered by SNS College of Technology, Coimbatore affiliated to Anna University is equivalent to B.E/B.Tech Civil Engineering	G.O.Ms.No.150, Higher Education (J1) Department,dated 03.05.2023
18.	(i)B.E. (Civil and Structural Engineering) is equivalent to B.E. (Civil Engineering) and	G.O.(Ms) No.102, Agriculture (AA3) Department, dated 11.05.2010.
	(ii) B.E. (Mechanical and Production Engineering) is equivalent to B.E. (Mechanical Engineering).	
19.	B.E., (Electrical and Electronics) Degree is equivalent to B.E., (Electrical)	அரசாணை (நிலை) எண்.262, உயர்கல்வித் (ஜே2) துறை, நாள்.28.07.2009.

SI. No.	Degree considered as Equivalent to the Qualification prescribed in the Rule	G.O.
20.	B.E (Electronics & Instrumentation Engineering) Degree awarded by Anna University is equivalent to B.E Electrical Engineering or Electronics and Communication Engineering.	G.O.(Ms).No.178, Higher Education (J1) Department, dated 17-07-2015
21.	B.E/B.Tech in Electrical and Electronics Engineering (sandwich) degree offered by Anna University is equivalent to B.E/B.Tech in 'Electrical and Electronics Engineering' offered by Anna University.	G.O (Ms) No.270, Higher Education (J1) Department dated 03.12.2019
22.	The Diploma in Civil Engineering awarded by the College of Military Engineering, Pune, be recognized for the purpose of recruitment of Ex-Servicemen to posts in Public Services.	G.O.(Ms.) No.299, Personnel and Administrative Reforms (R) Department, dated 18.12.1998

## ANNEXURE - III

CERTIFICATE OF PHYSICAL FITNESS B	BY	A SINGLE MEDICAL OFFICER
		THE CIVIL MEDICAL BOARD
Signature of Candidate		
I/We do hereby certify that I/We Selvan / Selvi	have exan	nined (full name) Thiru / Thirumathi / a Candidate for
Selvan / Selvi employment under the Government as Office in the	ir	the
Office in the whose signature is given above and of	cannot disc	cover that he/she has any disease
communicable or otherwise, constitutions weight is in excess of/below the standard p	al affliction	or bodily infirmity/except that his/her
I/We do not consider this a disquali	ification of tl	ne employment he/she seeks.
His/Her age is according to his appearance about / years.	/ her own	statement years and by
I/We also certify that he/she has ma	arks of Sma	all Pox/ Vaccination.
Chest measurement in Inches	On full In:	spiration
	On full ex	piration
	Difference	e expansion
Height in ft.		
Weight in kg.		
Cardio–Vascular System		
Respiratory System		
His/Her vision is normal		
Hypermetropic/ Myop	oic/	Astigmatic/
[Here enter the degree of defect and the st	trength of co	orrection glasses]
Hearing is normal / defective (much or slig	ht)	
Urine-Does chemical examination show		
(i) Albumen (ii) Sugar State spec	cific gravity:	
Personal marks (at least two should be me	entioned) Fo	or Identification
	1.	
	2.	
SIGNATURE:		
RANK:		
DESIGNATION:	PRESIDE	ENT:
	Member	(I).
		(II)
STATION:		STATION:

DATE:

DATE :

The candidate must make the statement required below prior to his / her Medical Examination and must sign the declaration appended there to. His attention is specially directed to the warning contained in the note below:-

1)	State your name in full:			
2)	State your age and birth place:			
3)	(a) Have you ever had small pox, intermittent or any other fever, enlargement or suppuration of glands spitting of blood, asthma, inflammation of lungs, heart disease, fainting attacks, rheumatism, appendicitis?			
	OR			
	(b) any other di confinement to treatment?	sease or accide bed and medica		
4)	When, where your last vaccinated			
5)	Have you or any of your near relations been afflicted with consumption, serefula gout, asthma, fits, epilepsy or insanity?			
6)	Have you suffered from any form of nervousness due to over work or any other cause?			
7)	Furnish the following particulars concerning your family:			
	Father's age, if living and state of health	Father's age at death and cause of death	No. of brothers living, their ages, state of health	No. of brothers dead, their ages at and cause of death
	(1)	(2)	(3)	(4)
	Mother's age, if living and state of health	Mother's age at death and cause of death	No. of Sisters living, their ages and state of health	No. of Sisters dead, their ages at and cause of death
	(1)	(2)	(3)	(4)

I declare all the above answers to be to the best of my belief, true and correct.

#### **CANDIDATE'S SIGNATURE**

**Note:** The candidate will be held responsible for the accuracy of the above statement by willfully suppressing any information he will incur the risk of losing the appointment and if appointed, of forfeiting all claim to superannuation allowance or gratuity.

## **ANNEXURE-IV**

# <u>List of Documents to be uploaded (Not less than 200KB in PDF)</u> (single or multiple page in 200 KB in PDF)

1)	SSLC Mark Sheet	
2)	HSC Mark Sheet	
3)	Educational Qualification (Provisional Certificate / Degree Certificate / Consolidated Mark Sheet)  a. Diploma Certificate.  b. Post Diploma Certificate. c. U.G. Degree Certificate. d. P.G. Degree Certificate. e. Certificate for Sanitary Inspector Course Completion.  Note:  If the issue date of provisional certificate / U.G. Degree / P.G. Degree Certificate / Diploma falls after the date of notification (i.e., 02.02.2024), candidates should upload evidence for having acquired the prescribed qualification on or before the date of Notification, failing which their applications will be rejected.	
4)	G.O. for Equivalence of qualification to the prescribed educational qualification (if applicable)	
5)	PSTM Certificates up to prescribed entire qualification (1st Standard to prescribed qualification) (if applicable)	
6)	Community Certificate from Competent Authority. (In case of women candidates, mentioning Father's Name only and not in Husband's Name.)	
7)	Differently Abled Certificate obtained from competent authority. (if applicable)	
8)	Destitute Widow Certificate from competent authority (if applicable)	
9)	Ex-Servicemen Certificate (i) PPO (ii) Discharge Book (iii) Bonafide Certificate and other relevant documents.(if applicable)	
10)	(a)Transgender Certificate issued by the Tamil Nadu Transgender Welfare Board (TNTGWB)  (b) Transgender ID Card with Gender (if applicable)	
11)	Exemption for Tamil Eligibility Test (if applicable) (Format enclosed as Annexure VI of this document)	
12)	Gazetted copy for name change (if applicable)	
13)	Documents / Court Orders proving Acquittal / Conviction / Release Orders or FIR / Memorandum of Charges / Showcause notice in case of pending cases for Criminal cases registered / Disciplinary cases (if applicable)	
14)	No Objection Certificate (if applicable).	
15)	A Passport size latest colour photograph.	
16)	Other Documents (if any)	

For further details refer the "Instructions to the Candidates" in this notification.

## **ANNEXURE-V**

## APPENDIX-I

## Certificate regarding physical limitation in an examinee to write

This is certify that, I have examined Mr./Ms./Mrs		
(Name of the candidate with disability) a person with(Nature and percentage of disability as mentioned in the	e certificate of disability)	
	_	
S/o / D/o a resident or (Village / District / State and to state that He / She has physic his / her writing capabilities owning to his / her disability.	al limitation which hampers	
Due to the above mentioned disability following concession may	be given:-	
Exemption from Tamil / Second Language.		
2. Extra hours for writing theory exam.		
3. Allocation of a scribe.		
4. Overlooking spelling mistakes and grammatical errors.		
5. Using calculator / assistive devices.		
6 (any other assistive	devices or concessions).	
*strike out the non applicable.		
	Signature	
(Chief Medical Officer / Civil Surgeon / Medical Superintende		
Medical Authority of a Government	nent Health Care Institution)	
	Name & Designation	
Name of Government Hospital / Health Care Centre / The Notified Medical Authority		
Place:		
Date:		
Signature / Thumb impression	(Photo of the Differently	
of the Differently Abled Person  Abled Person and Stam to be fixed here)		
	to be fixed field,	

## Note:

Certificate should be given by a specialist of the relevant stream / disability (e.g. Visual Impairment – Ophthalmologist, Locomotor disability – Orthopedic specialist / PMR etc.,)