MBA/MCA/M.E./M.TECH/M.ARCH
COMMON ENTRANCE TEST - 2025

For the Admission of Students under Management Quota

Information Brochure

CONSORTIUM OF SELF - FINANCING PROFESSIONAL, ARTS AND SCIENCE COLLEGES IN TAMILNADU.

Plot No: 1745, New Door No: 119, 13th Main Road, Anna Nagar, Chennai - 600 040.
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Website : www.tnsfconsortium.org

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MBA / MCA / M.E / M.Tech / M.Arch.,
COMMON ENTRANCE TEST - 2025
INFORMATION AND INSTRUCTIONS TO CANDIDATES

1.0 GENERAL

1.1 In persuance to the orders of the Honourable Supreme Court in the Islamic Academy of Education *vs.* State of Karnataka, 2003 (6) SCC 697, and P.A. Inamdar *vs.* State of Maharashtra, 2005 (6) SCC 537, a Common Entrance Test is to be conducted by an association of colleges of a particular type in that State. Seven Associations in the State of Tamilnadu have formed a Consortium in the name of "Consortium of Self Financing Professional, Arts and Science Colleges in Tamilnadu", where various Engineering Colleges, Arts, Science and Management colleges are also members. The Consortium has been granted permission to conduct Common Entrance Test - 2025 for MBA / MCA / M.E / M.Tech / M.Arch courses to admit students in various Private Engineering, Arts, Science and Management colleges under the Management Quota in the state of Tamilnadu by the "Committee to Regulate / Monitor the Admissions of Students to Professional, Arts and Science Colleges", Chennai *'vide'* its Proceeding No. COA / Engineering / 032 / 2025, Dated : 23.06.2025.

1.2 Acceptance of a person as a Candidate for writing the MBA/MCA/M.E/M.Tech/M.Arch Common Entrance Test 2025 does not confer on the person the right of Equivalent eligibility for admission to any of the above Courses. The decision on the eligibility of the candidates for admission to a course entirely rests with the respective admitting authorities offering the courses.

2.0

Sl. No.	Course	Eligibility
1.	M.B.A.	A pass in a recognised Bachelor's Degree of minimum 3 years duration and obtained at least 50% (45% in the case BC, BCM, MBC, SC, SCA and ST candidates belonging to Tamilnadu) in the qualifying degree examination. (a) 10 + 2 + 3 / 4 / 5 years pattern (or) (b) 10 + 3 years Diploma + 2 / 3 years pattern (or) (c) (i) 10 + 2 + AMIE* + 2 Year of experience (or) (ii) 10 + 3 Years diploma (awarded by the State Board of Technical Education) + AMIE* + 2 Year of experience
2.	M.C.A.	A pass in a recognised Bachelor's Degree of minimum 3 years duration in B.C.A or B.Sc (information Technology / Computer Science or equivalent) or a pass in a recognized Bachelor's degree of minimum 3 years duration (in disciplines other than the ones mentioned above) with Mathematics at 10 + 2 level or at Graduate Level and obtained at least 50% (45% in the case of BC, BCM, MBC, SC, SCA and ST candidates belonging to Tamilnadu) in the qualifying degree examination. (a) 10 + 2 + 3 / 4 / 5 years pattern (or) (b) 10 + 3 years Diploma + 2 / 3 years pattern (c) (i) 10 + 2 + AMIE* + 2 Year of experience (or) (ii) 10 + 3 years diploma (awarded by the State Board of Technical Education) + AMIE* + 2 Year of experience

3.	M.E./ M. Tech./ M. Arch. + / M.Plan.+	a. A pass in a recognised Bachelor's Degree or equivalent in the relevant field and obtained atleast 50% (45% in case of BC, BCM, MBC, SC, SCA and ST candidates belonging to Tamilnadu) in the qualifying degree examination. (i) B.E. / B.Tech. / B.Arch. Dgree Programmes (or) (ii) B.Pharm. Degree Programmes (or) (iii) Master's Degree in the relevant branch of Science / Arts, which are prescribed (or) b. (i) 10 + 2 + AMIE* + 2 Year of experience (or) (ii) 10 + 3 Years diploma (awarded by the State Board of Technical Education) + AMIE* + 2 Year of experience

* Candidates with Section 'A' & 'B' certificates (A.M.I.E.) and other similar certificates of professional bodies viz. Aeronautical Society of India etc., recognised by the Ministry of Human Resource Development, Govt. of India and enrolled before 31.05.2013 are considered to be equivalent to B.E./B.Tech. Degree holders, only with 2 years regular full time experience in the relevant field after successful completion of the course including project work. An experience certificate is to be produced by the candidates.

* Candidates who have qualified as AIIA (Associateship Examination of the Indian Institute of Architects) with a valid registration with the Council of Architecture are eligible.

NOTE:

i. Candidates with B.E. / B.Tech. Degree obtained through Distance / Weekend mode Programmes are not eligible. (Amendment : Engineering Degree accquired through Distance mode and was validated by the AICTE-UGC by conduction Special Examination as per Hon'ble Supreme Court's Order in SLP(c) No's. 19807-19808/2012 dt : 03.11.2017 **only are eligible).**

ii. Candidates with degree obtained without studying 10th Std., 12th Std., / 3 years Diploma are not eligible.

Candidates appearing for the final semester / year of examination of the said qualifying degree course during April / May 2025 may also apply for Common Entrance Test - 2025.

Acceptance of a person as a candidate for writing the Entrance Test does not confer on the person, the right of equivalent eligibility for admission to any of the above courses. The decision on the eligibility for admission to a course entirely rests with the admitting authority offering the courses.

Other state candidates can also appear for the Entrance Test, but the eligibility conditions will be fixed by the admitting authority / University.

2.2 **Permission to appear for the Common Entrance Test is only an enabling provision and does not mean that the candidate satisfies all the requirements stipulated for admission to the MBA / MCA / M.E / M.Tech / M.Arch courses as listed above.**

3.0 **DETAILS OF ENTRANCE TEST, HALL TICKET AND MARK SHEET.**

3.1 The application form (Data Sheet) is common for MBA / MCA / M.E / M.Tech / M.Arch Common Entrance Test. Candidates have to submit one application form only. The application form (Data sheet) for MBA / MCA / M.E / M.Tech / M.Arch can be obtained in person on payment of Rs.50/- (Rupees Fifty only) by cash from the Consortium office and MBA / MCA / M.E / M.Tech / M.Arch member colleges of the consortium (Refer Website : www.tnsfconsortium.org) or can be obtained by post by sending a requisition letter (written in english with clear address, Pincode & Mobile Number) addressed to

The Secretary

MBA / MCA / M.E / M.Tech / M.Arch Common Entrance Test - 2025.

Consortium of Self-Financing Professional, Arts and Science Colleges in Tamilnadu,
Plot No: 1745, New Door No: 119, 13ᵗʰ Main Road, Anna Nagar, Chennai - 600 040.

along with demand draft for Rs.100/- (Rupees One Hundred only) drawn in favour of **"Consortium of Self Financing Professional, Arts and Science Colleges in Tamilnadu" payable at Chennai, obtained from any nationalised bank.**

3.2 Detailed instructions and guidelines to fill applications for appearing in the Common Entrance Test are given in Section 6.

3.3 The Hall ticket must be brought to the Examination hall and produced for verification.

3.4 Schedule of MBA / MCA / M.E / M.Tech / M.Arch Common Entrance Test is as follows:

SCHEDULE OF MBA / MCA / M.E / M.Tech / M.Arch COMMON ENTRANCE TEST - 2025			
COURSE	DATE	DAY	TIME
MBA	26.07.2025	Saturday	10.00 a.m. to 12.00 Noon
MCA	26.07.2025	Saturday	2.30 p.m. to 4.30 p.m.
M.E., / M.Tech., / M.Arch.	27.07.2025	Sunday	10.00 a.m. to 12.00 Noon

3.5 The MBA / MCA / M.E / M.Tech / M.Arch Common Entrance Test Center will be indicated on the Hall Ticket.

3.6 Mark Sheet showing the marks scored by the candidates in the Common Entrance Test - 2025 will be mailed soon after the publication of results.

3.7 Mark Sheet must be produced by the candidates at the time of admission.

4.0 Details of MBA / MCA / M.E / M.Tech / M.Arch Common Entrance Test - 2025 Centers:

Refer **Annexure - 1** for the list of MBA / MCA / M.E / M.Tech / M.Arch CET - 2025 Examination Centers (Visit our consortium website www.tnsfconsortium.org for updated list of MBA / MCA / M.E / M.Tech / M.Arch Common Entrance Test - 2025 Centers)

4.1 Every effort will be made to comply with his/her choice of the Examination Center for the MBA / MCA / M.E / M.Tech / M.Arch Common Entrance Test. However, for reasons like non-availability of seats, another center may be allotted for a few candidates. **In any case, a center once allotted cannot be altered.**

4.2 If an applicant does not receive the Hall Ticket, the same can be obtained from the examination centre of his / her choice after producing the relavant proof (Xerox copy of the MBA / MCA / M.E / M.Tech / M.Arch CET - 2025 application form (Data Sheet) and xerox copy of the demand draft) thereof.

4.3 Candidates will appear for the MBA / MCA / M.E / M.Tech / M.Arch Common Entrance Test at the allotted Centres in time at their own cost and risk.

5.0 DETAILS OF QUESTION BOOKS AND ANSWER SHEETS.

5.1 Syllabus for Entrance Test

(a) M.B.A. Degree Programme:

The Question paper will be of 5 parts with the following topics.

Part 1 : To evalute the candidate's ability to pick out critically the data and apply the data to business decisions from given typical business situations.

Part 2 : To evalute the skill of the candidate in answering questions based on the passages in the comprehension.

Part 3 : To evalute the skill on solving mathematical problems of graduate level including those learnt in plus two or equivalent level.

Part 4 : To test on determining data sufficiency for answering certain questions using data given plus the knowledge of Mathematics and use of day-to-day facts.

Part 5 : To test the knowledge on written English with questions on errors in usage, grammar, punctuation etc.,

Candidates are required to answer 100 objective type questions in 2 hours. Each question will have four probable answers. The candidate has to choose the correct answer and shade the appropriate box against the question in the answer sheet with HB Pencil.

(b) MCA Degree Programme:

The question paper will be designed to test the capability of the candidates in the following areas:

1. Quantitative ability   2. Analytical reasoning

3. Logical reasoning   4. Computer awareness

There may also be a few questions on verbal activity, basic sciences etc.

The question paper will have 100 objective type questions, each objective type question will have four probable answers, the candidate has to choose the correct answer and shade the appropriate box against the question in the answer sheet with HB pencil.

(c) MBA / MCA / M.E / M.Tech / M.Arch Degree Programme:

As per the detailed syllabus given in Annexure 2.

5.2 Evaluation Scheme

While evaluating the answer, one mark is awarded for each correct answer. **No deduction will be made for incorrect answers and unanswered questions.**

The candidate is expected to attempt all the questions to secure the highest mark. In other words there is no choice among the questions.

The model questions are given in **annexure 2.** The candidate has to choose the correct answer and shade the corresponding box in the answer sheet with HB pencil for that question.

Wherever writing is involved use **"black ball point pen"** only.

A specimen answer sheet is given in **annexure 3.** By taking photo copies of this specimen answer sheet, you can practice yourself before appearing for the Common Entrance Test.

During evaluation, the answer sheets are fed into a scanner. The shaded information are captured by the scanner and the details are transferred to computer for evaluation. Even a small stray Pen / Pencil mark on the sheet will be captured by the scanner which may mislead the evaluation process. When you wish to make changes in the answer, erase the previous shading completely and shade the appropriate box. Shade the box fully so that alphabet printed inside completely disappears. Improper shading and light shading are likely to be missed by the scanner which may result in reduction of marks.

If more than one box is shaded for a question, it will be treated as wrong answer.

The candidates are advised to shade the boxes with HB pencil as this will help them to make changes if needed.

The candidates will not be permitted to take home the Question Book at the end of the MBA / MCA / M.E / M.Tech / M.Arch Common Entrance Test.

6.0 Instruction and Guidelines to fill applications

Candidates desirous of appearing for the **MBA / MCA / M.E / M.Tech / M.Arch Common Entrance Test - 2025** conducted by the Consortium should fill their applications in the prescribed format through any of the following two modes.

1. In the prescribed application format by post.

2. Online direct mode.

1. **IN THE PRESCRIBED APPLICATION FORMAT BY POST.**

(i) The candidates have to fill in the application form (Data Sheet) given along with the information booklet.

(ii) Send the completed application form (Data Sheet) along with the Examination fees in the form of a crossed demand draft for **Rs.400/- (Rupees Four Hundred Only) (Rs.200/- for Tamil Nadu SC/SCA/ST candidates)** drawn in favour of **"Consortium of Self Financing Professional, Arts and Science Colleges in Tamilnadu"** payable at **Chennai, obtained from any nationalised bank** (Refer Table -1 of Page 10, for Fee particulars). The SC/SCA/ST candidates will have to enclose and attested xerox copy of their permanent community certificate card issued by competent authority along with the application.

(iii) **If the Candidate is desirous of attending both MBA / MCA and M.E / M.Tech / M.Arch Common Entrance Test, he/she has to enclose an additional Common Entrance Test fees in the form of a demand draft for Rs.800/- (Rupees Eight Hundred Only) (Rs.400/- for Tamilnadu SC/SCA/ST candidates) along with the filled in application form (Data Sheet).** (Refer Table - 1 of Page 10, for Fee particulars.)

(iv) The completed application form (Data sheet) along with the enclosures should reach the following address **on or before 5.00 p.m. on 16.07.2025.**

The Secretary

MBA / MCA / M.E / M.Tech / M.Arch Common Entrance Test - 2025

Consortium of Self - Financing Professional, Arts and Science Colleges in Tamilnadu, Plot No: 1745, New Door No: 119, 13th Main Road, Anna Nagar, Chennai - 600 040.

(v) After processing, you must download Hall Tickets from the website (www.tnsfconsortium.org).

2. ONLINE DIRECT MODE

Candidates residing outside Tamilnadu and who are unable to reach the application distribution center to fill applications, may opt for this mode. The procedure is as follows:

(I)   Log into internet / Go to any internet browsing center

(ii)   Log on to www.tnsfconsortium.org

(iii)   Read the instructions thoroughly by downloading the **MBA / MCA / M.E / M.Tech / M.Arch COMMON ENTRANCE TEST - 2025** information brochure and follow the steps.

(iv)   For online registration of your application click on **MBA / MCA / M.E / M.Tech / M.Arch CET - 2025 ONLINE APPLICATION.**

(v)   Open the application format by clicking the **MBA / MCA / M.E / M.Tech / M.Arch CET - 2025 ONLINE APPLICATION** and type required data, upload your recent passport size colour photograph and signature. Then verify whether all data are correctly entered.

(vi)   Submit the application by clicking the submit button at the bottom of the application format.

(vii)   After a short time, your filled in application along with an application number will appear on the computer monitor screen. Take a Printout of this application on a A4 size standard copier paper.

(viii)   Send the completed application form (Data sheet) along with the enclosures and a crossed demand draft **Rs.450/-** (Examination fee **Rs.400/- and application fee Rs.50/-), Rs.250/-** for Tamilnadu **SC/SCA/ST candidates** (Examination fee **Rs.200/- and application fee Rs.50/- drawn in favour of "Consortium of Self Financing Professional, Arts and Science Colleges in Tamilnadu"** payable at Chennai, obtained from any nationalised bank (Refer Table - 1 of Page 10, for Fee particulars).

The SC/SCA/ST candidates will have to enclose an attested xerox copy of their permanent community certificate card issued by competent authority along with the application.

If the Candidate is desirous of attending both MBA / MCA and M.E / M.Tech / M.Arch Common Entrance Test, he/she has to enclose an additional Common Entrance Test fees in the form of a demand draft for Rs.850/- (Rupees Eight Hundred and fifty Only) Rs.450/- for Tamilnadu SC/SCA/ST candidates) along with the filled in application form (Data sheet). (Refer Table - 1 of Page 10, for Fee particulars).

(ix)   The application must be sent to the following address so as to reach the Consortium Office **on or before 5.00 p.m on 16.07.2025.**

The Secretary
MBA / MCA / M.E / M.Tech / M.Arch Common Entrance Test - 2025.
Consortium of Self - Financing Professional, Arts and Science Colleges in Tamilnadu,
Plot No: 1745, New Door No: 119, 13th Main Road, Anna Nagar, Chennai - 600 040.

(x)   On receipt of your application along with demand draft, processing will be done and you must download Hall Ticket from the website (www.tnsfconsortium.org).

NOTE :

1.   Candidates are requested to put a tick mark in the relevant boxes provided in the cover and also requested to write the six digit application number in the space provided for it.

2.   Other State candidates will be classified only under 'OTHERS' as applicable.

3.   Candidates are advised to post the completed application form (Data sheet) well in advance so that it will reach before the above specified date and time.

4.   The Consortium will not be responsible for postal or any other delay. Applications received after the above said date and time will be summarily rejected.

5.   **Candidates must write their Application Number and their Name on the back side of the Demand Draft, and also on the right hand top corner of all the xerox copies of certificates enclosed.**

6.   Xerox copy of the filled in apllication form (Data sheet) and Demand Draft can be retained by the candidates for future reference.

7.   Do not punch or staple the Data sheet. Do not fold, smudge or scribble on the Data sheet.

8.   The Data sheet should be kept loosely and safely and sent in the same cover provided for this purpose.

9.   All enclosures can be stapled together, but **the Data sheet should be kept separately** in the same cover along with the enclosures.

10.   The SC/SCA/ST candidates belonging to Tamilnadu desirous of availing fee concession should submit an attested xerox copy of the permanent community certificate card.

11.   Individual Application form should be enclosed with prescribed fee (Refer Table 1, Page 10). **Bulk applications and DD with Bulk Amount will not be accepted.**

12.   All the columns on both sides of the Application Form (Data sheet) must be filled without fail.

13.   Xerox copies of the application Form (Data Sheet) should not be used.

14.   The downloaded blank application from the Consortium Website should not be used.

15.   For further Correspondence kindly quote your application number and contact phone number.

        No Further Correspondence will be entertained on matters pertaining to the MBA / MCA / M.E / M.Tech / M. Arch Common Entrance Test - 2025.

TABLE 1 : MBA / MCA / M.E / M.Tech / M.Arch CET - 2025   FEE PARTICULARS

Sl.No	NAME OF THE COURSE	TEST FEE IN RUPEES	
		Tamilnadu SC/SCA/ST	Others
1.	MBA	200	400
2.	MCA	200	400
3.	Both MBA and MCA	400	800
4.	MBA - Online registration (Examination Fee+Application Fee)	250	450
5.	MCA - Online registration (Examination Fee+Application Fee)	250	450
6	Both MBA and MCA - Online registration (Examination Fee+Application Fee)	450	850
7.	M.E / M.Tech / M.Arch	200	400
8.	M.E / M.Tech / M.Arch Online registration (Examination Fee+Application Fee)	250	450
9.	Both MBA and M.E / M.Tech / M.Arch	400	800
10.	Both MBA and M.E / M.Tech / M.Arch Online registration (Exam Fee+Application Fee)	450	850

IMPORTANT DATES

1. Commencement of issue of Application Forms : 30.06.2025

2. Last Date of Issue of Application Forms : 15.07.2025

3. Last Date for the Submission of filled in Application for both online and offline : 16.07.2025

4. Commencement of Issue of Hall Tickets : 20.07.2025

5. Date of MBA / MCA Common Entrance Test - 2025 : 26.07.2025
   MBA : 10:00 am to 12:00 noon, MCA : 2:30 pm to 4:30 pm

6. Date of M.E., / M.Tech., / M.Arch Common Entrance Test - 2025 : 27.07.2025
   M.E. / M.Tech. / M.Arch. : 10:00 am to 12:00 noon

7. Publication of Results and Rank List : 08.08.2025

MBA / MCA / M.E / M.Tech / M.Arch Common Entrance Test - 2025 Centers

Code No.	ENGINEERING COLLEGES
101	Adhiparasakthi Engineering College, Melmaruvathur, Kancheepuram District - 603 319.
102	Arulmigu Meenakshi Amman Engineering College, Vadamavandal Village, Namandi (PO) Thiruvannamalai Dist - 604 410.
103	Arunai Engineering College, Mathur, Thiruvannamalai District - 606 603.
104	AVC College of Engineering, Mannampandal, Mayiladuthurai, Nagapattinam Dist - 609 305.
105	C Abdul Hakeem College of Engineering and Technology, Melvisharam, Vellore District - 632 509.
106	Dhaanish Ahmed College of Engineering, Vanchuvancherry, Padappai, Chennai - 603 101.
107	Dhanalakshmi Srinivasan Engineering College, Thuraiyur Road, Perambalur District - 621 212.
108	Dhanalakshmi Srinivasan College of Engineering, NH47, Palakkad Main Road, Navakkarai Post, Coimbatore - 641 105.
109	Dr. Sivanthi Aditanar College of Engineering, Tiruchendur, Thoothukudi District - 628 215.
110	EASA College of Engineering and Technology, Palakkad Main Road, Coimbatore - 641 105.
111	Easwari Engineering College, Ramapuram, Chennai - 600 089.
112	E G S Pillay Engineering College, Nagapattinam District - 611 002.
113	Ganadipathy Tulsi's Jain Engineering College, Kaniyambadi, Vellore District - 632 102.
114	I.F.E.T. College of Engineering, Valavanur Post, Villupuram - 605 108.
115	Indira Institute of Engineering and Technology, VGR Nagar, Pandur, Thiruvallur - 631 203.
116	J J College of Engineering and Technology, Poolankulathupatti Post, Thiruchirappalli District - 620 009.
117	Jaya Engineering College, Thirunindravur, Chennai - 602 024.
118	Jeppiaar Engineering College, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai - 600 119.
119	Jerusalem College of Engineering, Pallikaranai, Chennai - 601 302.
120	K L N College of Engineering, Pottapalayam, Sivagangai District - 630 611.
121	Karpaga Vinayaga College of Engineering and Tech., G.S.T Road, Chinnakolambakkam, Kanchipuram District - 603 308.
122	Karpagam College of Engineering, Othakkalmandabam, Coimbatore - 641 032.
123	Krishnasamy College of Engg. & Technology, Cuddalore - 607 109.
124	Loyola Institute of Technology and Sciece, Thovalai - Rajavoor Road, Thovalai Post, Kanyakumari Dt. - 629 302.
125	Madha Engineering College, Kundrathur, Chennai - 600 069.
126	Mailam Engineering College, Mailam, Villupuram District - 604 304.
127	Meenakshi College of Engineering, Vembuliamman Koil Street, K K Nagar (West), Chennai - 600 078.
128	Mohamed Sathak Engineering College, Kilakarai, Ramanathapuram District - 623 806.
129	Nandha Engineering College, Pitchandampalayam Post, Erode District - 638 052.
130	P S N A Colllege of Engineering and Technology, Dindigul District - 624 622.
131	P.S.G. College of Technology, Peelamedu, Coimbatore District - 641 004.
132	P.S.V. College of Engineering and Technology, Mittaapalli, Balinayanapalli Post, Krishnagiri Dist - 635 108.
133	Paavai Engineering College, Patchal, Namakkal - 631 018.
134	Panimalar Engineering College, Nazarethpet, Poonamallee, Chennai - 602 103.
135	Priyadarshini Engineering College, Vaniyambadi Post, Vellore District - 635 751.

Code No.	ENGINEERING COLLEGES
136	R M K Engineering College, Kavaraipettai, Gummidipoondi, Thiruvallur District - 601 206.
137	R V S College of Engineering and Technology, N Paraipatti Post, Karur Road, Dindigul District - 624 005.
138	Rajalakshmi Engineering College, Thandalam, Sriperumpudur Taluk, Kancheepuram District - 602 105.
139	S A Engineering College, Thiruverkadu, Chennai - 600 077.
140	S N S College of Technology, Kalappatti Post, Coimbatore District - 641 035.
141	Sengunthar Engineering College, Tiruchengode, Namakkal District - 637 205.
142	SKP Engineering College, Somasipadi, Chinnakangiyanur, Tiruvannamalai - 606 611.
143	Solamalai College of Engineering, S.V. Raja Nagar, Veerapanjan, Madurai - 625 020.
144	Sri Balaji Chockalingam Engineering College, Irumbedu Village, Arni Taluk, Tiruvannamalai District - 632 317.
145	Sri Krishna Engineering College, Panapakkam, Near Padappai, Chennai - 601 301.
146	Sri Muthukumaran Institute of Technology, Kundrathur Road, Mangadu, Chennai - 600 069.
147	Sri Sairam Enginering College, West Tambaram, Chennai - 600 044.
148	Sri Venkateswara College of Engg and Tech, Thirupachur, Thiruvallur District - 631 203.
149	SRM Valliammai Engineering College, Kattankulathur, Chennai - 603 203.
150	SSM College of Engineering, Salem Main Road, Komarapalayam, Namakkal District - 638 183.
151	St. Joseph's College of Engineering, Old Mahabalipuram Road (OMR), Chennai - 600 119.
152	Surya Group of Institutions, NH-45, GST Road, Vikravandi Post, Villupuram - 605 652.
153	Thangavelu Engineering College, Rajiv Gandhi Salai, Karapakkam, Chennai - 600 097.
154	Thirumalai Engineering College, Kilambi, Kancheepuram District - 631 551.
155	Vel Tech High Tech Dr. Rangarajan Dr. Sakunthala Engineering College, Avadi-Alamathi Road, Chennai - 600 062.
156	Vins Christian College of Engineering, Chunkankadai Post, Nagercoil, Kanyakumari District - 629 807.
	ARTS & SCIENCE AND MANAGEMENT COLLEGES
157	Adaikala Matha College, Arun Nagar, Vallam, Thanjavur - 613 403.
158	Dr. G R Damodaran College of Science, Coimbatore - 641 006.
159	Hindusthan College of Arts and Science, Hindusthan Gardens, Avinashi Road, Coimbatore - 641 028.
160	J J College of Arts and Science, Pudukkottai - 622 404.
161	Nadar Saraswathi College of Arts and Science, Theni District - 625 531.
162	Sacred Heart College, Thirupattur, Vellore District - 635 601.
163	Shrimati Indra Gandhi College, Tiruchrapalli - 620 002.
164	STET School of Management, Sundarakkottai, Mannargudi, Thiruvarur District - 614 001.
165	The American College , Tallakkulam , Madurai - 625 002.
166	MEASI Institute of Information Technology, Royapettah, Chennai - 600 014.
167	Vivekanandha Institute of Information and Management Studies, Namakkal - 637 205.
168	Virudhunagar Hindu Nadars' Senthikumara Nadar College, Virudhunagar - 626 001.

MODEL QUESTIONS

MBA DEGREE PROGRAMME

SECTION - I : ANALYSIS OF BUSINESS SITUATION

This section contains lengthy passages. Read the passages and also the directions before answering the question that follow the passage, the questions are of two types.

    (1) Data evaluation questions.

    (2) Data application questions.

SECTION - II : READING SOLVING

This part contains reading passages. You have to read the passages carefully. Each passage will be followed by questions based on its contents. Choose the best answer to each question out of the four probable answers given.

SECTION - III : PROBLEM SOLVING

How many multiples of 3 are there among the integers 15 to 105 inclusive?

    a) 30   b) 31

    c) 32   d) 33

SECTION - IV : DATA SUFFICIENCY

Each question will be followed by two statements (a) and (b). Your have to determine whether the data given in the statement are sufficient for answering the questions, use the data given, plus with your knowledge of mathematics and every day facts, to choose your answer.

SECTION - V : ENGLISH USAGE

In each of the sentences below, four words or phrases have been underline. Select the underlined part which contains an error in usage, grammar or punctuation.

e.g.: In a certain code language, 'nee muk pic' means 'grave and concern'; 'ill dic so' means 'every body else', and 'tur muk so' means body and soul.' Which of the following would mean 'every concern'?

    a) dic pic   b) ill nee

    c) pic nee   d) Cannot be determined

MCA DEGREE PROGRAMME

SECTION - I : QUANTITATIVE ABILITY

This section contains mathematical problems of graduate level including those learnt in plus two or equivalent level.

e.g.: Price of 250 gm of mangoes is Rs. 7.50. What is the price of 5 kg mangoes?

a) Rs. 120   b) Rs. 135

c) Rs. 150   d) Rs. 145

SECTION - II : ANALYTICAL REASONING

e.g.: Which of the following is a pair of co-primes?

a) (16,62)   b) (18,25)

c) (21,35)   d) (23,92)

SECTION - III : LOGICAL REASONING

e.g.: Which of the following will be the fourth to the right of the thirteenth letter/number from your right?

a) U   b) W

c) X   d) 7

SECTION - IV : COMPUTER AWARENESS

e.g.: A special type of computers

a) Servers   b) Supercomputers

c) Laptops   d) Mainframes

SECTION - V : ENGLISH USAGE AND BASIC SCIENCE

This section consists of questions, that evaluate the knowledge of the candidate in English Language. Also questions will be asked on General Sciences

e.g. : Memory is made up of

a) A set of wires   b) A set of circuits

c) A large number of cells   d) None of the above

M.E. / M.Tech / M.Arch Degree Programme

PART 01 - ENGINEERING MATHEMATICS

This section contains mathematical problems of graduate level including those learnt in plus two or equivalent level.

e.g.: Find the stationary point of $f(x, y) = x^2 + xy + 3x + 2y + 5$

a)   (1, 0)   b) (2, 0)   c) (−2, 1)   d)   (0, 0)

PART 02 - BASIC ENGINEERING AND SCIENCES

e.g.: Cantilever retaining walls can safely be used for a height not more than

a)   3 m   b)   6 m   c)   5 m   d)   4 m

PART 03 - CIVIL ENGINEERING AND GEO INFORMATICS

e.g.: In laminar flow, maximum velocity at the centre of pipe is how many times to the average velocity

a)   Two   b)   Four

c)   Three   d)   None of the above

PART 04 - MECHANICAL ENGINEERING

e.g.: Which of the following is a vector quantity.

a) Angle   b) Mass   c)   Moment   d)   Energy

PART 05 - PRODUCTION AND INDUSTRIAL ENGINEERING

e.g. : Which ONE of the following is NOT a property of a sand mould?

a) Permeability
b) Strength
c) Fluidity
d) Collapsibility

PART 06 - ELECTRICAL, ELECTRONICS AND INSTRUMENTATION ENGINEERING

e.g. : An active transducer is

a) photovoltaic cell   b) selsyn

c) strain gauge   d) photo emissive cell

PART 07 - ELECTRONIC AND COMMUNICATION ENGINEERING

e.g. : The quality factor of the coil for a series circuit having R = 10Ω, L = 0.1H, C = 10μF.

a) 5   b) 1

c) 10   d) 15

PART 08 - COMPUTER SCIENCE ENGINEERING AND INFORMATION TECHNOLOGY

e.g. : User-defined data type can be derived by_____

a) enum   b) struct

c) typedef   d) All the above

PART 09 - CHEMICAL ENGINEERING, CERAMIC TECHNOLOGY & BIOTECHNOLOGY

e.g. : Chemical potential is

a) An extensive property   b) A reference property

c) A path property   d) An intensive property

PART 10 - ARCHITECTURE

e.g. : The stone used in the construction of Kailasa temple at Ellora is?

a) Sandstone   b) Marble

c) Basalt   d) Lime stone

ANNEXURE - 3

Consortium of Self - Financing Professional,
Arts and Science Colleges in Tamilnadu, Chennai - 40
MBA / MCA / M.E / M.TECH / M.ARCH Common Entrance Test · 2025
SPECIMEN ANSWER SHEET

Name of the Examination Centre

Answer Sheet Number

Signature of the Candidate :

Name of the Candidate :

I certify that I have verified the entries and shading of Register Number and the Candidate's Signature.

Signature of the Invigilator :

Name of the Invigilator :

Seal of the Examination Centre

Register Number

[1] [1] [1] [1] [1] [1] [1] [1] [1] [1]
[2] [2] [2] [2] [2] [2] [2] [2] [2] [2]
[3] [3] [3] [3] [3] [3] [3] [3] [3] [3]
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[5] [5] [5] [5] [5] [5] [5] [5] [5] [5]
[6] [6] [6] [6] [6] [6] [6] [6] [6] [6]
[7] [7] [7] [7] [7] [7] [7] [7] [7] [7]
[8] [8] [8] [8] [8] [8] [8] [8] [8] [8]
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[0] [0] [0] [0] [0] [0] [0] [0] [0] [0]

Part 1 and 2 are compulsory (Question Numbers 1 To 75). You have to choose any one of the remaining parts 03 to 10. Write and shade the Part Number chosen for answering Question number 76 onwards.

Part Number

[1] [1]
    [2]
    [3]
    [4]
    [5]
    [6]
    [7]
    [8]
    [9]
[0] [0]

INSTRUCTIONS TO CANDIDATES

1. Use Ball Point Pen for writing the information. Use HB Pencil for shading inside the brackets as shown below :

   Correct Method

Q. No.	Answers
1	[a] ■ [c] [d]

   Wrong Method

Q. No.	Answers
1	[a] [b] [c] [d]

2. Ensure your choice before shading, If you wish to change your choice erase the pencil shading completely and shade the new brackets.

3. Do not make any stray marks inside the answer brackets as the scanner will treat it as multiple shading.

Q.No.	Answers	Q.No.	Answers	Q.No.	Answers	Q.No.	Answers
1	[a] [b] [c] [d]	31	[a] [b] [c] [d]	61	[a] [b] [c] [d]	91	[a] [b] [c] [d]
2	[a] [b] [c] [d]	32	[a] [b] [c] [d]	62	[a] [b] [c] [d]	92	[a] [b] [c] [d]
3	[a] [b] [c] [d]	33	[a] [b] [c] [d]	63	[a] [b] [c] [d]	93	[a] [b] [c] [d]
4	[a] [b] [c] [d]	34	[a] [b] [c] [d]	64	[a] [b] [c] [d]	94	[a] [b] [c] [d]
5	[a] [b] [c] [d]	35	[a] [b] [c] [d]	65	[a] [b] [c] [d]	95	[a] [b] [c] [d]
6	[a] [b] [c] [d]	36	[a] [b] [c] [d]	66	[a] [b] [c] [d]	96	[a] [b] [c] [d]
7	[a] [b] [c] [d]	37	[a] [b] [c] [d]	67	[a] [b] [c] [d]	97	[a] [b] [c] [d]
8	[a] [b] [c] [d]	38	[a] [b] [c] [d]	68	[a] [b] [c] [d]	98	[a] [b] [c] [d]
9	[a] [b] [c] [d]	39	[a] [b] [c] [d]	69	[a] [b] [c] [d]	99	[a] [b] [c] [d]
10	[a] [b] [c] [d]	40	[a] [b] [c] [d]	70	[a] [b] [c] [d]	100	[a] [b] [c] [d]
11	[a] [b] [c] [d]	41	[a] [b] [c] [d]	71	[a] [b] [c] [d]	101	[a] [b] [c] [d]
12	[a] [b] [c] [d]	42	[a] [b] [c] [d]	72	[a] [b] [c] [d]	102	[a] [b] [c] [d]
13	[a] [b] [c] [d]	43	[a] [b] [c] [d]	73	[a] [b] [c] [d]	103	[a] [b] [c] [d]
14	[a] [b] [c] [d]	44	[a] [b] [c] [d]	74	[a] [b] [c] [d]	104	[a] [b] [c] [d]
15	[a] [b] [c] [d]	45	[a] [b] [c] [d]	75	[a] [b] [c] [d]	105	[a] [b] [c] [d]
16	[a] [b] [c] [d]	46	[a] [b] [c] [d]	76	[a] [b] [c] [d]	106	[a] [b] [c] [d]
17	[a] [b] [c] [d]	47	[a] [b] [c] [d]	77	[a] [b] [c] [d]	107	[a] [b] [c] [d]
18	[a] [b] [c] [d]	48	[a] [b] [c] [d]	78	[a] [b] [c] [d]	108	[a] [b] [c] [d]
19	[a] [b] [c] [d]	49	[a] [b] [c] [d]	79	[a] [b] [c] [d]	109	[a] [b] [c] [d]
20	[a] [b] [c] [d]	50	[a] [b] [c] [d]	80	[a] [b] [c] [d]	110	[a] [b] [c] [d]
21	[a] [b] [c] [d]	51	[a] [b] [c] [d]	81	[a] [b] [c] [d]	111	[a] [b] [c] [d]
22	[a] [b] [c] [d]	52	[a] [b] [c] [d]	82	[a] [b] [c] [d]	112	[a] [b] [c] [d]
23	[a] [b] [c] [d]	53	[a] [b] [c] [d]	83	[a] [b] [c] [d]	113	[a] [b] [c] [d]
24	[a] [b] [c] [d]	54	[a] [b] [c] [d]	84	[a] [b] [c] [d]	114	[a] [b] [c] [d]
25	[a] [b] [c] [d]	55	[a] [b] [c] [d]	85	[a] [b] [c] [d]	115	[a] [b] [c] [d]
26	[a] [b] [c] [d]	56	[a] [b] [c] [d]	86	[a] [b] [c] [d]	116	[a] [b] [c] [d]
27	[a] [b] [c] [d]	57	[a] [b] [c] [d]	87	[a] [b] [c] [d]	117	[a] [b] [c] [d]
28	[a] [b] [c] [d]	58	[a] [b] [c] [d]	88	[a] [b] [c] [d]	118	[a] [b] [c] [d]
29	[a] [b] [c] [d]	59	[a] [b] [c] [d]	89	[a] [b] [c] [d]	119	[a] [b] [c] [d]
30	[a] [b] [c] [d]	60	[a] [b] [c] [d]	90	[a] [b] [c] [d]	120	[a] [b] [c] [d]

PART - 1

ENGINEERING MATHEMATICS
(Common to all Candidates)

Determinants and Matrices: Solving system of equations - Rank of the Matrix - Eigen values and eigen vectors - Reduction of quadratic form to canonical form.

Calculus and Differential Equations: Partial derivatives - Jacobians - Taylor's expansion - Maxima and Minima. Linear ordinary differential equations with constant coefficients-Simultaneous first order linear equations with constant coefficients. Formation of partial differential equation (PDE) - Solution of first order PDE - Solution of linear higher order PDE with constant coefficients.

Vector Calculus: Double and triple integrations and their applications - Gradient, Divergence, Curl and Laplacian - Green's, Gauss divergence and Stroke's theorem.

Functions of Complex Variables and Complex Integration: Analytic functions - Conformal Mapping- Bilinear transformation - Cauchy's integral theorem and integral formula - Taylor and Laurent Series - Singularities - Residues - Residue theorem and its applications.

Transforms: Laplace Transform - Inverse transforms - Application to solution of linear ordinary differential equations with constant coefficients. Fourier integral theorem - Fourier transform pair- Sine and Cosine transforms. Transform - Inverse Z-transform - Solution of difference equations using Z-transform.

Numerical Methods: Solution of Linear system by direct and iterative methods - Interpolation and approximation - Numerical Differentiation and Integration - Solving Ordinary Differential Equations.

Applied Probability: Probability and Random variables - Standard Discrete and Continuous distribution - Moments - Moment generating function and their properties. Two-Dimensional Random Variables-Covariance-Correlation and Regression.

PART - 2

BASIC ENGINEERING & SCIENCES
(Common to all Candidates)

Applied Mechanics: Law of Mechanics - Lame's theorem - Forces, Moments and Couples -Displacement, velocity and Acceleration - Friction - Moment of Inertia.

Mechanical Engineering: Laws of thermodynamics-Open and closed systems - Equation of state - Heat and Work.

Physics: Sound - Latices - Ultrasonic flaw detector - X-ray radiography - Interference Fringes- Planck's quantum theory - Laser and Fibre Optics.

Material Science: Fracture - Magnetic and Dielectric materials - Conductor and Semi conductor materials - Ceramic and Super conductor materials.

Civil Engineering: Fluid Statics and Dynamics - Boundary Layer- Pumps and Turbines Environmental Pollution.

Electrical Engineering : Ohm's Law - Kirchoff's Law - A.C. Circuits - D.C. Machines - Transformers - Synchronous machines - Instrumentation.

Computers: Computer organization - Architecture - Arrays - Pointers - User defines function - C program.

Chemistry: Adsorption - Chromatography - Chemical kinetics - Electrochemistry - Spectroscopy - Fuels and Combustion.

PART - 3

CIVIL ENGINEERING & GEO INFORMATICS

i) **Structural Engineering Division:**
Mechanics: Stress - Strain Relationships - Principal stresses and Principal strain in two dimension and three dimension. Composite Bars - Composite Beams - Elastic Constants. Beams and Bending - Shear Force and Bending Moment Diagrams - Flexural and Shear Stresses. Slope and Deflection of Beams. Thin and Thick Cylinders. Theories of Failure - Unsymmetrical Bending - Curved Beams -Theories of Columns. Combined Direct and Bending Stresses.

Structural Analysis: Static and Kinematic Indeterminancy - Energy Principles - Deflection of pin jointed plane frames - rigid frames. Classical Method of Analysis of Indeterminate structures (Slope deflection and Moment Distribution) - Matrix Method. Arches and Suspension Bridges - Influence, Line for Determinate and Indeterminate Structures. Plastic Analysis of Structures.

Building Materials: Cement - Concrete - properties of ingredients - Mix Design - Quality Control - Special Concrete - Concreting Methods - Brick - Brick Masonry - Stone - Timber - Steel.

Concrete Structures: Design Methods - Limit State Design for beams, slabs, columns and footings - retaining walls - Water Tanks, Prestressed Concrete - Principles - Methods - Losses - Deflection - Design.

Steel Structures: Steel Sections - Connections - Design of Tension and Compression Members - Beams, Column Bases - Plate Girders and Trusses.

ii) **Soil Mechanics and Foundation Engineering:**
Soil Mechanics: Nature of soil - phase relationships - Soil classification: Soil water - static pressure - effective stress principle: permeability - seepage: Stress distribution in soil - Consolidation (Terzaghi's one dimension consolidation theory): Compaction shear strength of soil - Mohr - Coulomb theory - determination of shear strength by different methods: slope stability analysis - protection measures.

Foundation Engineering: Site investigation - Scope and objectives - drilling techniques - depth and spacing of boreholes - sampling Techniques - penetration tests (SPT and SCPT) - plate load test - selection of foundation: Foundation types - shallow foundation - bearing capacity (Terzaghis Theory and BIS formula) - allowable bearing pressure - bearing capacity from field tests - settlement of foundation - allowable settlement - Codal provisions; Design of foundations - Isolated, combined and raft foundation; Pile foundations - static and dynamic pile driving formulae (Engineering News and Hiley method) - Pile groups - capacity and settlement - Codal provisions - pile load test - negative friction of piles; Earth pressure theories - Earth pressure on retaining walls - stability analysis of retaining wall.

iii) **Transportation Engineering:**
Highway Planning: Road Classification, Geometric Design of Highways, Construction of Earth, WBM, Bituminous and concrete roads, Design of flexible and rigid pavements. Drainage of roads, maintenance of roads.

Railways, Airways, Docks and Harbour Planning: Railway alignment, components of permanent way, geometric design Airport planning, components of airport, site selection, planning for terminal building runways. Harbour planning, components of harbour, inland water transport.

Traffic Engineering: Traffic characteristics, Traffic surveys, Traffic Signals, Road markings and signs.

iv) **Water Resources Engineering:**

Fluid Mechanics and Hydraulics: Properties of fluids. Fluid statics and relative equilibrium. Basic concepts of fluid flow-kinematics and dynamics. Concept of system and control volume application to continuity, momentum and energy equations. Dimensional analysis and model studies. Laminar and turbulent flow through pipes. Boundary layers. Steady uniform and gradually varied flow in open channels. Rapidly varied flows. Turbines and pumps and positive displacement pumps.

Hydrology and Ground Water : Hydrometeorology. Hydrologic cycle. Precipitation and its measurements. Abstractions. Runoff estimation. Hydrograph analysis. Unit Hydrograph. Hydrologic extremes floods and droughts. Rainwater harvesting. Properties of aquifer. Groundwater development. GEC norms. Well hydraulics. Steady and unsteady flows. Ground water quality.

Irrigation Engineering: Irrigation system. National water policy. Components of irrigation network. Design of lined and unlined channels. Waterways, head works, gravity dams and spillways. Design of weirs on permeable foundation. Soil water relations. Crop water requirements. Irrigation scheduling and methods. Dury, delta and base period. Irrigation water quality, Irrigation water management. Participatory approach.

v) **Environmental Engineering:**

Water and Waste water Engineering: Water requirements; water demand, quality standards; Development of water supply source, conveyance system; basic unit processes and operations for water treatment; water distribution; sewage characteristics; sewage treatment, primary and secondary treatment of sewage, sludge disposal, sewage disposal.

a) **Air Pollution and Control:** Types of Pollutants, their sources and impacts, air pollution meteorology, air pollution control, air quality standards and limits.

b) **Noise Pollution and Control:** Impacts of noise, permissible limits of noise pollution, measurement of noise and control of noise pollution.

vi) **Surveying And Remote Sensing:**

Surveying: Chain survey-traversing-plotting; Compasses-bearings-plane table-leveling-bench marks-temporary and permanent adjustments-reduction: contouring and volumes-theodolites-Gale's table-lay out-setting out works-curve ranging-mine surveying- techeometric survey-triangulation-base line -corrections-trigonometric leveling -errors and sources classification or errors-equation -level nets-astronomical survey-practical astonmy - photogrammetry-EDM-hydrographic survey-river.

Electronic survey: Infrared EDM-microwave system-modern positioning systems-trilateration.

Remote Sensing: Satellite system - EMR interaction with each feature, spectral signature -image characters - interpretation keys - Image enhancement, filters, classification - accuracy assessment-thematic maps.

GIS and Cartography: Cartography-map projection-map design-map compilation-generalization-map production-software and hardware GIS-data types-data base types-raster and vector-topology-data input-data analysis-DEM and TIN-data output-applications.

PART - 4
MECHANICAL, AUTOMOBILE & AERONAUTICAL ENGINEERING

i) **Mechanics:** Statics of Particles, Equilibrium of Rigid Bodies, Properties of Surfaces and Solids, Dynamics of Particles, Friction and Elements of Rigid Body Dynamics - Basics of Mechanisms, Kinematics of Linkage, Mechanisms, Kinematics of Cam Mechanisms, Gears and Gear and Trains, Friction, Force Analysis, Balancing and Vibration.

ii) **Strength of Materials and Design:** Stress, Strain and Deformation of Solids, Transverse Loading on Beams and Stresses in Beams, Deflection of Beams, Energy Principles, Thin cylinders and spherical resells Torsion - Fundamentals of Design for Strength and Stiffness of Machine Members, Design of Shafts and Couplings, Design of Fasteners and Welded Joints, Design of Springs and Engine Parts, Design of Engine parts, Bearings and Flywheels, Design of Transmission System for Flexible Elements, Spur Gears and Parallel Axis Helical Gears, Bevel, Worm Gears and Crossed Helical Gears, Design of Gear Boxes, Design of Cam, Clutches and Brakes.

iii) **Material Science and Metallurgy:** Constitution of Alloys and Phase Diagrams, Heat Treatment, Ferrous and Non ferrous Metals, Non-Metallic Materials, Mechanical Properties and Testing, Crystal Defects and Strengthening of Materials Conducting and Semi conducting Materials, Magnetic and Dielectric Materials, Nuclear Physics, Superconducting and New Engineering Materials.

iv) **Thermodynamics:** Basic Concepts and First Law, Second Law, Entropy and Availability, Properties of Steam, Psychometric, Ideal and Real Gases and Thermodynamic Relations, Fuels and Combustion - Gas Power Cycles, Stream Turbines, Internal Combustion Engines, Internal Combustion Engines Testing and Performance, Gas Turbines - Steam Nozzle, Air Compressor, Refrigeration and Air-Conditioning, Boilers, Cogeneration and Waste Heat Recovery.

v) **Heat Transfer:** Conduction, Phase Change Heat Transfer and Heat Exchangers, Radiation, Mass Transfer Refrigeration Cycle, Refrigerants, System Components and Balancing, Psychrometry, Air Conditioning Systems, Unconventional Refrigeration Cycles.

vi) **Production Technology:** Foundry Technology, Hot & Cold Working, Forging, Advances in Forming Process, Principles and Applications of Joining Processes, Theory of Metal Cutting, Centre Lathe and special Purpose Lathes, Reciprocating Machines, Milling Machines and Gear Cutting, ABRASIVE Process, Broaching, CNC Machine Tools and Part Programming.

vii) **Automotive Engines:** Engine Construction and Operation, SI Engine Fuel System, Cooling and Lubrication System, Combustion Chambers, Two Stroke Engines, Diesel Engine Basic Theory, Fuel Injection System, Air Motion, Combustion and Combustion Chambers, Supercharging and Turbo charging, Diesel Engine Testing and Performance.

viii) **Automotive Transmission and Pollution:** Clutch and Gear Box, Hydrodynamic Drive, Planetary Gear Boxes, Automatic Transmission Applications, Hydrostatic and Electric Drive -S.I. Engine Combustion and Emissions, Cl Engine Combustion and Emissions, Control Techniques for Reduction of SI and Cl Engine Emission, Test Procedure & Instrumentation for Emission Measurement and Emission Standards.

ix) **Aerodynamics:** Basic Fluid Mechanics, Two Dimensional Inviscid Incompressible Flow, Airfoil Theory, Subsonic Wing Theory, Laminar and Turbulent Flow, Fundamental Aspect of Compressible Flow, Shock and Expansion Waves, Two Dimensional compressible Flow, High speed flow over Airfoils, Wings and Airplane Configuration.

x) **Aerospace Propulsion:** Fundamentals of Gas Turbine Engines, Subsonic and Supersonic Inlets for Jet Engines, Centrifugal and Axial Flow Compressors, Combustion Chambers for Jet Engines, Turbines for Jet Engines, Nozzles for Jet Engines, Ramjet Propulsion, Hypersonic Airbreathing Propulsion, Chemical Rocket Propulsion, Advanced Propulsion Techniques.

PART - 5
PRODUCTION AND INDUSTRIAL ENGINEERING

i) **Basic Mechanisms and Elements of Design:** Mechanisms, Friction, Gearing and Cams, Balancing, Vibration, Fundamentals of Design, Design of Basic Machine Elements, Design of Mechanical drives, Design of Automotive components, Recent Advances.

ii) **Casting, Metal forming and Metal joining processes:** Casting Processes, Welding Processes, Special Casting Processes, Testing of Castings & Weldments -Fundamentals of Metal Forming, Forging and Rolling, Extrusion and Drawing Processes, Sheet Metal Forming Processes, Recent Advances, Mechanisms, Friction, Gearing and Cams, Balancing, Vibration, Fundamentals of Design, Design of Basic Machine Elements, Design of Mechanical drives, Design of Automotive components, Recent Advances.

iii) **Tool Engineering, Machine tool operation, Metrology and Inspection:** Mechanics of Metal Cutting, Tool Material, Tool Wear and Tool Life, Gear Manufacture, Concept & Programming of CNC machines, Advanced CNC programming & Tooling - General Concepts of measurements, Linear and Angular measurements, Measurement of Surface Finish Measuring Machines, Metrology of Screw Thread & Gears, Computer Aided Inspection and Laser Metrology - Strength and rigidity of machine tool structures, Slideways, Spindles and spindle supports, Machine Tool Dynamics.

iv) **Engineering Materials, and Computer Aided Manufacturing:** Introduction and Constitution of Alloys and Phase Diagrams, Heat Treatment, Ferrous and Non Ferrous Metals, Mechanical Properties and Testing, Welding and Foundry Metallurgy, Manufacturing Processes for Plastic, Mechanical, Chemical and Electro - chemical energy based processes, Electrical Energy based Waste Processes, Thermal Energy Process, Rapid Prototyping and Rapid Tooling - polymer Matrix Composites, Metal Matrix Composites, CERAMICS Matrix Composites, Advances in Polymers & Composites..

v) **Product and Process Design, Design of Jigs and Fixtures and press Tools:** Computer Aided Design, Computer Graphics Geometric Modeling, Product Design Concepts, Recent Advances, Process Planning, Estimating, Costing and Elements of Cost, Analysis of Overhead Expenses, Estimation of Costs for Forging, Casting and Welding, Estimation of Machine Time, Purpose Types and Functions of Jigs and Fixtures, Jigs, Fixtures, Press working Terminologies and Elements of dies and Strip Layout, Design and Development of Dies.

vi) **Operations Research:** Linear Programming, LP Extensions, Networks, Inventory Models, Dynamic Programming, Decision Analysis, Game Theory, Waiting Line Models, Markov Processes.

vii) **Operations Management:** Forecasting, Aggregate Planning, Capacity Management, Production Activity Control, Estimation and Costing, Product Cost Estimation, Software Cost Estimation, Costing Methods, Cost Analysis for Planning and Control.

viii) **Quality Control Reliability and Maintenance:** Quality Concepts, Statistical Process Control, Process Capability Analysis, Advanced Control Charts, Acceptance Sampling, Reliability Concepts, Failure Data Modeling, Reliability Prediction and Modeling, Reliability Management, Risk Assessment, Maintenance Concept, Maintenance Models, Maintenance Logistics, Total Production Maintenance, Fault Diagnosis.

PART - 6
ELECTRICAL & ELECTRONICS ENGINEERING AND INSTRUMENTATION ENGINEERING

i) **Electrical Circuits and Fields:** KCL, KVL, Nodal & Mesh analysis, transient response of D.C and A.C networks: sinusoidal steady-state analysis; resonance in electrical circuits; concepts of ideal voltage and current sources, network theorems, driving point admittance and transfer functions of two port network, three phase circuits; Fourier series and its application; Gauss theorem, electric field intensity and potential due to point, line, plane and spherical charge distribution, dielectric, capacitance calucations for simple configurations; Ampere's and Biot-Savart's Law, inductance calculations for simple configurations.

ii) **Electrical Machines:** Single phase transformer - equivalent circuit, phasor diagram, tests, regulation and efficiency; three phase transformer-connections; auto transformer; principles of energy conversion windings of rotating machines; D.C generators and motors - characteristics, starting and speed control armature reaction and commutation; three phase induction motors - performance characteristics, starting and speed control; single-phase induction motors; synchronous generators-performance, regulation, synchronous motors-starting characteristics, applications, synchronous condensers; fractional horse power motors; permanent magnet and stepper motors.

iii) **Power Systems:** Electric power generation - thermal, hydro, nuclear; transmission line parameters, steady-state performance of overhead transmission lines and cables and surgepropagation; distribution system, insulators, bundle conductors, corona and radio interferences effects; per-unit quantities; bus admittance and impedence matrices; load flow; voltage control and power factor correction; economic operation; symmetrical components, analysis of symmetrical and usymmetrical faults; principle of over current, differential and distance protections; concepts and solid state relays and digital protection; circuit breakers; principles of system stability-swing curves and equal area criterion.

iv) **Control Systems:** Principles of feedback; transfer function; block diagram; steady-state errors; stability-Routh and Nyquist criteria; Bode plots; compensation; root loci; elementary state variable formulation; state transition matrix and response for Linear time Invariant systems.

v) **Power Electronics and Drives:** Semiconductor power devices-diodes, transistors, thyristors, triacs, GTO, MOSFETs and IGBTs-static characteristic and principles

of operation; triggering circuits; phase control rectifiers; bridge converters-fully controlled and half controlled; principles of choppers and inverters, basic concepts of adjustable speed dc and ac drives.

vi) **Digital Electronics:**
   (a) Digital Logic Theory: Number systems-Combinational logic circuits-Minimization of Boolean functions-IC families - Arithmetic circuits, Multiplexer & decoders - Sequential circuits - Flip flops, counters, shift registers, Schmitt trigger, timers and multivibrators.
   (b) Microprocessor: General 8 bit microprocessor Architecture-8085, 8086 processor-Architecture, Memory, I/O interfacing, Instruction set, Addressing modes, Timing diagram & delays, Machine cycles, Interrupts, counters, Assembly language programming.
   (c) Microcontrollers: 8 bit microcontroller - 8051 architecture, bus configuration, Instruction sets, programming & applications.

vii) **Digital Signal Processing:** Analog signals-sampling & Aliasing-Discrete time signals & systems - LTI systems - Convolution sum-Difference equation representation - Z Transform & its Inverse-Discrete Fourier series & Fourier transform - Radix 2 FFT - Decimation in me and frequency-Inverse DFT using FFT-Analog Butterworth & Chebyshev filter design-IIR & FIR filter design and Realization.

viii) **Computer Control of Processes, Networks:** State models and state equations-controllability & observability-pole assignment-discrete data system - state space representation-stability-data hold, Z & modified Z transform - Pulse transfer function -programmable logic controllers.
   Data networks - switching OSI, Data link control, Media access protocol-BISYNC, SDLC, HDLC, CSMA /CD,TCP / IP Bridges, routers, gateways, Ethernet and Arcnet configuration.

ix) **Communication Engineering** : Modulation and demodulation systems - Types of transmission lines - losses - standing waves - Ground wave and space wave propagation - Digital communication concepts - Data Communication codes, serial and parallel interface -Network protocol - Types of satellites - Advantages of optical fibre communication.

x) **Measurements, Instrumentation and Transducers:** Measurement of R, L and C-BRIDGES POTENTIOMETERS & GALVANOMETERS - Measurement of voltage, current, power, power factor and energy- Instrument transformers, Q meter, Waveform Analyzers - Digital voltmeter, Multimeter - Time, Phase and frequency measurements - Oscilloscope - display and recording devices - Noise and interference in Instrumentation.

xi) **Industrial Instrumentation:** Measurement of displacement, stress, strain, force, torque, velocity, Acceleration, Shock, Vibration, Humidity, Viscosity & density - Pressure, temperature, flow & level measurement.

xii) **Analytical Instrumentation:** Spectro Photometers-Spectral methods of analysis-source detectors and applications-Ion conductivity - sampling systems, ion selective electrodes, conductivity and pH meters-Analyzers-Chromatography - NMR & X ray spectroscopy-GM and proportional counters Mass spectrometer.
   Units and standards-Calibration methods-Errors-Transducer classification, static characteristics, mathematical mode, zero, I and II order transducers - Response to different inputs - variable Resistance, Inductance and capacitance transducers-Piezo electric, Magnetostrictive, IC and smart sensors - Digital, Fibre optic, Hall effect and feedback transducers.

PART - 7
ELECTRONICS AND COMMUNICATION ENGINEERING

i) **Circuit Analysis:** DC Circuit analysis, Thevenin's and Norton's equivalent circuits, Sinusoidal steady state analysis, Transient and resonance in RLC circuits.
   (a) Electronic Devices: Diodes, bipolar Junction Transistors, FET, MOSFET, UJT, Thyristor.
   (b) Electronic Circuits: Small signal amplifers using BJT and FET Devices, Large signal amplifiers, Power supplies Feed back amplifiers, Oscillators, Pulse shaping circuits.
   (c) Digital Electronics: Logic gates, Combinational Circuits, Sequential circuits.
   (d) Linear Integrated Circuits: Operational amplifiers and its applications, PLL, Voltage regulators, A/D and D/A converters.
   (e) Measurements and Instrumentation: Transducers, Digital Instruments, Display and Recording systems.
   (f) Microprocessor and its applications: Microprocessors-8085 and 8086 architectures and interfaces, Micro-controller and applications.

ii) **Electromagnetic Fields:** Static Electric and Magnetic fields, Time varying Electric and Magnetic fields, Maxwell equations.
   (a) Transmission Lines and Networks: Transmission line equations, impedance matching, Filters.
   (b) EM waves and waveguides: Guided waves, Rectangular and cylindrical waveguides.
   (c) Antennas and Propagation: Aperture antennas, arrays, Propagation of radio waves.
   (d) Microwave Engineering: Microwave tubes, semiconductor devices, Passive components, Microwave Measurements.

iii) **Communication Theory and Systems:** AM, FM and PM, Sampling and Quantisation, PCM, DM, ADM, Multiplexing.
   (a) Digital Communication: Base band signaling, Band pass signaling, Error control coding, Spread spectrum techniques.
   (b) Computer Communication Networks: Definition of layers, data link protocols, Network interconnection. Message routing technologies, End-End protocols.
   (c) Optical Communication: Optical Fibers, Optical transmitters and receivers.

iv) **Signals and Systems:** Continuous time signals and systems-Fourier Transform, Laplace transform, Discrete time signals and systems - DTFT, DFT, Z-Transform.
   (a) Digital Signal Processing: IIR and FIR filters, Realization and implementation, Quantization effects.
   (b) Control Systems: Transfer function, Time and frequency response analysis, Stability analysis, state variable analysis.

PART - 8
COMPUTER SCIENCE AND ENGINEERING AND INFORMATION TECHNOLOGY

i) **Applied Probability and Operations Research:** Random Processes, Probability Distributions, Queuing Models and Simulation, Testing of Hypothesis, Design of Experiments.

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ii) **Discrete Mathematical Structures:** Formal Language and Automata-Graph Theory.

iii) **Compiler Design :** Optimization - Code Generation - Implementation - Principles of Programming Languages-Programming Paradigms.

iv) **Operating Systems and System Software:** Process Management, Storage Management, I/O Systems, Design and Implementation of LINUX OS, assemblers, Loaders, Linkers, Macro Processors.

v) **Distributed Systems:** Communication and Distributed Environment, Distributed Operating Systems, Distributed Shared Memory, Protocols, Fault Tolerance and Distributed File Systems, Distributed Object Based Systems.

vi) **Programming and Data Structures:** Problem Solving Techniques, Trees, Hashing and Priority Queues, Sorting, Graph, Heap Search.

vii) **Algorithm Analysis and Design Techniques:** Dynamic Programming, Greedy Algorithms, Advanced Algorithms, NP Completeness and Approximation Algorithms.

viii) **Microprocessors and Microcontrollers - Computer Architecture and Organization:** - Digital Fundamentals, Combinational Circuits, Synchronous and Asynchronous Sequential Circuits, Instruction Set Architecture (RISC, CISC, ALU Design), Instruction Level Parallelism, Processing Unit and Pipelining, Memory Organization.

ix) **Digital Signal Processing:** FFT, Filter Design.

x) **Computer Networks:** Data Communication Systems, Applications.

xi) **Database Management Systems:** Relational Model, Database Design, Implementation Techniques, Distributed Databases, Object Oriented Databases, Object Relational Databases, Data Mining and Data Warehousing.

xii) **Software Engineering Methodologies:** Software Product and Processes - Software Requirements Management - Requirements Engineering, Elicitation, Analysis, Requirements Development and Validation, Requirements Testing - Object Oriented Analysis And Design - Modular Design, Architectural Design, User Interface Design, Real Time Software Design, System Design, Data acquisition System - Software Testing and Quality Assurance - SQA Fundamentals, Quality Standards, Quality Metrics, Software Testing Principles, Defects, Test Case Design Strategies, Software Quality and reusability, Software Project Management, Software Cost Estimation, Function Point Models, Software Configuration Management, Software Maintenance.

xiii) **Artificial Intelligence :** Intelligent Agents, Search Strategies, Knowledge Representation, Learning, Applications.

xiv) **Mobile Computing :** Wireless Communication Fundamentals, Telecommunication Systems, Wireless Networks.

xv) **Security In Computing :** Program Security, Security in Operating Systems, Database and Network Security, Scientific Computing, Information Coding Techniques, Cryptography, Network Security.

PART - 9
CHEMICAL ENGINEERING, CERAMIC TECHNOLOGY AND BIOTECHNOLOGY

i) **Fluid Mechanics and Particle Technology:** Classification of fluids, flow patterns, manometry, continuity equation, Navier-Stokes equation, Bernoulli equation, Dimensional analysis, Flow through pipes, boundary layer concepts, Flow through fixed and fluidized beds, pumps - classification affinity laws, performance curves. Characteristics of solids, size analysis, Screening, Storage, Conveyance, Size reduction, Classifer, Centrifuges, Cyclones. Filtration, Mixing and agitation.

ii) **Chemical Technology and Process Calculations:** Gas calculations Material balance and Energy balance - Steady and unsteady state, Humidity and Saturation, Combustion, Thermo chemistry, Role of Chemical Engineers in Process industry, cement, glass and ceramic industries, paper industry-Oil, Soap, Detergent industries, Petroleum refining and petrochemicals - Polymer industry, Fertilizers, Food industry and other important process industries.

iii) **Thermodynamics and Kinetics:** Laws of thermodynamics, PVT behavior of fluids, Thermodynamic formulations, compression of fluids, Phase equilibria - Application of the correlation and prediction. Free energy change and reaction equilibria. Refrigeration -Principles, performance. Reaction rate - Laws, theories, analysis. Design of reactors, Factors affecting design, Thermal reactors and rates of heat exchanges. Non-ideal reactors, Heterogenous reactors and solid catalysts, Gas-solid catalytic reactors, Gas-solid non-catalytic reactors, Gas-Liquid reactors.

iv) **Heat and Mass Transfer:** Modes of Heat transfer. Heat conduction - steady and unsteady state, Natural and forced convection, Heat transfer to fluids with phase change, heat transfer coefficients, evaporation, heat exchangers-design and construction. Diffusion, Mass transfer coefficients, humidification, drying, absorption, distillation, extraction, leaching, crystallization, adsorption and ion exchange, analogies.

v) **Process Control and Computer Applications in Chemical Engineering:** Open loop systems, closed loop systems, Frequency response, advanced control systems, instrumentation. Application of spread sheet packages in Chemical engineering, Process flow sheeting, Development of software for design of equipments. Dynamic programming in Chemical engineering.

vi) **Organic and Surface Chemistry:** Carbohydrates, Oils, Fats and Waxes, Heterocyclic compounds, proteins, dyes and dyeing, Pharmaceutical chemistry. Adsorption - types, adsorption of gases over solids, isotherms, applications, ion exchange, adsorption chromatography, Catalysis-types, Equations.

vii) **Electro, Polymer and Corrosion Chemistry:** Factors influencing Corrosion, types of corrosion, corrosion control. Laws of migration of ions, conductometric titrations, advantages, galvanic cells, reversible and irreversible cells, Standard electrodes, electrode potentials, electrochemical series, Nernst equation. Polymeric materials, Teflon, Polymide, Nylon66, Kevlar, Polysters, Polythylene teryphthalate, poly butylenes, tetra phthalate, polycarbonates bakelite, reinforcement, composites. Introduction to spectroscopic analysis, Molecular spectroscopy, IR, NMR, Mass Spectrometry.

viii) **Environmental Pollution and Control:** Various methods of reduction of pollution, types of pollution, Air Pollution - sources and effects - control techniques, Water pollution - sources and effects - control techniques, Soil pollution - sources and effects - control techniques and Solid waste disposal.

ix) **Bioprocess Engineering:** Analysis of STR, Analysis of other configurations, Bioreactor scale-up, Modeling and simulation of Bioprocesses, Bioreactor considerations in Enzyme systems.

x) **Cell and Molecular Biology:** Cells, Cell lines, Cell culture, Cell Organelles and its functions, types of Cell divisions, cell cycle and its regulations mechanism. Transport Mechanism (passive, Active, ATPase pumps and Na^+ / K^+ pumps), Receptors, Signal Transduction, Models of Signal Amplification Secondary Messengers, Structure of Nucleic Acids, Replication, Transcription, Translation and DNA repair mechanism in Prokaryotes and Eukaryotes. Promoters, Enchancers and Transcription factors. Genetic Codes and Lac & trp operons.

xi) **Biochemistry and Microbiology:** Structure, function and metabolism of Carbohydrates, lipids Nucleic Acids and proteins. Enzymes and its mechanism. Electron Transport Chain system, High energy compound and reducing equivalents. History of Microbiology, Classification of Microorganism, Structural organization and multiplication of Microorganism. Physical and Chemical control of Microorganisms, Primary and Secondary metabolites and their applications.

xii) **Genetic Engineering:** Genes, control of gene expression, Restriction enzymes, Vectors, (prokaryotic and Eukaryotic) construction of cDNA and genomic Library. Screening of DNA libraries, PCR, RACE PCR, RAPD, RFLP, AFLP Site directed mutagenesis, Methods of Nucleic acid sequencing. Cloning vectors in plants, Transgenic and Knockout animals.

xiii) **Immunology:** Immune system, Immunity, Lymphoid organs, antigens, adjutants, types of immune response. Activation and different ion of T-cells and B-Cell responses. Immunity to viruses, Bacteria fungi and parasites, cytokines, complements, immunosuppression, allergy and hypersensitivity. Vaccines, Transplantation, Tumor Immunology, Autoimmunity and Autoimmune disorders.

xiv) **Bioinformatics:** Search engines and algorithms, data management, data echnology, biological databases and their uses. Pair wise sequence alignment (local and global), multiple sequence alignment, dot matrix, dynamic programming and Bayesian methods, BLAST, FASTA, machine learning and Hidden Markov models. Phylogenetic tree analysis. Bimolecular and celluar computing, microarray analysis and system Biology.

xv) **White wares, ceramic processing and fine ceramics:** Quarrying of ceramic materials, size reduction, mechanical separation, mixing and conveying, powder characterization, Classification of whiteware products, heavy clayware, tests and quality control.

xvi) **Glass, Cement, Refractory and Ceramic coatings:** Formation and Structure of glass, preparation of glass batch, glass melting process, Special glasses, annealing, different types of refractories, different types of cement, concrete, properties of cement and concrete.

PART - 10
ARCHITECTURE

i) **Building Materials, Construction and Technology:** Lime, Brick, Stone, Clay products, Timber, Industrial Timber; Paints and varnishes, Concrete, Special Concrete and lightweight concrete; Ferrous metals; non ferrous metals; Glass; Plastics; Eco friendly materials; Thermal Insulation materials and acoustic materials. Construction techniques and practices using the above listed materials; damp and water proofing; Pest control; Construction systems and equipment; Pre - stressed concrete and Tensile Structures; Grids domes; folded plates; Flat Slabs. Low cost construction & appropriate technologies.

ii) **History of Architecture:** Indian architecture - Hindu and Islamic; Indo Saracenic; Secular architecture of the princely states; Colonial and Post Independence Architecture; Works of masters such as Charles Correa; B V Doshi; Ananth Raje; Raj Rewal; Laurie Baker; Nari Gandhi; Kanvinde.

(a) Western architecture: Ancient Greek and Rome; Early Christian; Gothic and Renaissance: Baroque: Neo Classicism: Chicago School and development of skyscraper.

(b) Modern architecture: Art and Crafts: Art Noveau; Expressionism and Cubism; Bauhaus; International style; Post Modernism and Constructivism; Critical Regionalism; Theories and Projects of F L Wright; Le Corbusier; Gaudi, Groupius Aalto; Mies; Eisenmann; Zaha Hadid; Soleri; Hasan Fathy; Ando; Bawa; Gehry, Libeskind; Toyo Ito Lou Khan; Tschumi; Greg Lynn; Assymptote.

iii) **Theory and Principles of Architecture:** Elements of ordering principles; Organization of form and space; Design methodology and Creative thinking; Pattern Language; Contemporary Process Diagrams, Shape grammar, fractals, Digital hybrid, Liquid architecture.

iv) **Building Services:** Water supply and distribution systems; water and waste management Sewerage system; Electrical systems; Illumination and lighting; Air conditioning; Fire Safety; Building automation and IBMS.

v) **Building Science:** Climate responsive architecture; design of solar shading devices; acoustics & building design; Architecture & Energy-Active & passive solar architecture, Day lighting & natural ventilation, Landscape designs; Landscape & environment control.

vi) **Housing Urban Design and Town Planning:** National Housing Policy; Indra Awas Yogana Housing standards; housing projects in India: Urban morphology of early and contemporary cities; Case Studies on urban revitalization from developed and developed economies; Planning concepts - Patrick Geddes, Ebeneezer Howard, Le Corbusier, C A Perry; Urban planning, regional planning and Urban renewal in the Indian context.

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CHECK LIST TO BE VERIFIED BEFORE SUBMISSION OF THE APPLICATION FORM (DATA SHEET)

■ Data sheet completely filled with all details.

■ Common Entrance Test Fee as a Crossed Demand draft drawn from any nationalised bank in favour of "CONSORTIUM OF SELF-FINANCING PROFESSIONAL, ARTS AND SCIENCE COLLEGES IN TAMILNADU" payable at CHENNAI enclosed.

■ Application number and Name of the candidate written on the backside of the crossed Demand Draft.

■ Photo copy of proof of date of birth is enclosed.

■ Attested xerox copy of their permanent community certificate card issued by competant authority of Government of Tamil Nadu, Minority Certificate (if any) is enclosed.

■ Application number and Name of the candidate written on the top right hand corner of all the copies of enclosed Certificates.

IMPORTANT INFORMATION AT A GLANCE

IMPORTANT DATES

1. Commencement of Issue of Application Forms : 30.06.2025

2. Last Date of Issue of Application Forms : 15.07.2025

3. Last Date for the Submission of filled in Application for both online and offline : 16.07.2025

4. Commencement of Issue of Hall Tickets : 20.07.2025

5. Date of Common Entrance Test MBA/MCA
   MBA : 10:00 AM to 12:00 Noon, MCA : 2:30 PM to 4:30 PM : 26.07.2025

6. Date of Common Entrance Test
   M.E. / M.Tech. / M.Arch. : 10:00 AM to 12:00 Noon : 27.07.2025

7. Publication of Results and Rank List : 08.08.2025

HELP DESK

Timings			General Enquiries
Monday to Friday	-	9:00 AM to 5:00 PM	Tel : 9677496767
Saturday	-	9:00 AM to 1:00 PM	

Not working during Sundays and other Public Holidays.

FOR ALL INFORMATION, REGULAR UPDATES AND EMAIL SUPPORT
Visit our website : www.tnsfconsortium.org
Email : consortium004@gmail.com