

**THIAGARAJAR COLLEGE OF ENGINEERING: MADURAI 625 015**  
**(An Autonomous Institution Affiliated to Anna University)**

**Minutes of the Fifty Seventh Meeting of Academic Council**

The Fifty Seventh meeting of Academic Council was held on 5<sup>th</sup> January 2019, Saturday at 11.00AM in the Seminar Hall at College Guest House under the Chairmanship of Dr.V.Abhaikumar, Principal. The following members were present.

1.	Dr.N.Vedachalam	ISRO Distinguished Professor, ISRO, Trivandrum
2.	Dr.R.Vasudevan	Dean, Co-curricular and Extracurricular Activities
3.	Dr.V.Mohan	Registrar
4.	Dr.S.Raju	Dean, Industry Institute Interaction
5.	Dr.N.Kamaraj	Dean, Students
6.	Dr.S.J. Thiruvengadam	Head, Dept. of ECE, Member Secretary
7.	Dr.S.Mercy Shalinie	Head, Dept. of Computer Science & Engineering
8.	Dr.C.Deisy	Head, Dept. of Information Technology
9.	Dr.S.Jeyabharathi	Head, Dept. of Mathematics
10.	Dr.M.Kottaisamy	Head, Dept of Chemistry
11.	Dr.R.Vasuki	Head, Dept. of Physics
12.	Dr.S.Parthasarathy	Head, Dept. of Computer Applications
13.	Dr.Jinu Loueshidha Kitchley	Head, Dept. of Architecture
14.	Mr.S.Sivakumar	Controller of Examinations
15.	Dr.T.Baskaran	Assistant Professor, Dept. of Civil Engineering
16.	Dr. PL.K.Palaniappan	Associate Professor, Dept. of Mechanical Engineering
17.	Dr.M.Saravanan	Assistant Professor, Dept. of Elect. & Electronics Engg.
18.	Dr.B.Subbulakshmi	Assistant Professor, Dept. of Computer Science and Engg.
19.	Dr.S.Pudumalar	Assistant Professor, Dept. of Information Technology
20.	Dr. S.Vijayalakshmi	Assistant Professor, Dept. of Computer Applications
21.	Dr. G.Kanagaraj	Associate Professor, Dept. of Mechatronics
22.	Dr.A.Madhumathi	Professor, Dept. of Architecture
23.	Dr. G.Jothilakshmi	Associate Professor, Dept of Mathematics
24.	Dr.S.Rajathi	Associate Professor, Department of Physics
25.	Dr.J.Shanmugapriya	Assistant Professor, Dept. of Chemistry
26.	Dr.C.Muruganantham	Professor, Dept. of Mechanical Engineering
27.	Mr.S.Yuvan Shankar Karthick	Student, B.E. Civil Engineering
28.	Ms.R.M.Meenakshi	Student, M.E. Power System Engineering
29.	Ms.S.Keerthana	Student, B.E. Computer Science and Engineering
30.	Mr.U.Senthil Kumar	Student, B.E. Mechatronics

The following members had expressed their inability to attend the meeting due to their pre-occupation.

1.	Dr.D.K.Subramanian	Former Professor, Indian Institute of Science, Bengaluru
2.	Dr.Rajeev Sukumaran	Senior Advisor, Teaching Learning Centre, IIT Madras
3.	Mr.A.M.Rafeek	Special Officer, CDC, DTE, Chennai
4.	Mr. M. V. Ramana Murthy	Director & Head, R&D Operations, Ericsson R&D, Bengaluru
5.	Dr.V.Chelladurai	Principal, Coimbatore Institute of Technology, Coimbatore
6.	Dr.M.Palaninatha Raja	Dean, Planning & Admin. and Head, Dept. of Mechatronics
7.	Dr.T. Velrajan	Head, Dept. of Civil Engineering
8.	Dr.K.Chockalingam	Head, Dept. of Mechanical Engineering
9.	Dr.S.Baskar	Head, Dept. of Electrical and Electronics Engineering
10.	Dr.V.R.Venkatashubramani	Assistant Professor, Dept. of Electronics & Commn. Engg

**The Agenda for the meeting:**

- To consider the business brought forward by the Boards of Studies and by the Standing Committee of the Academic Council.
- To discuss any other matter pertaining to the academic activities of the college.

**57:01** To confirm the minutes of the 56<sup>th</sup> meeting of the Academic Council held on 21<sup>st</sup> July 2018.

*Resolved to confirm the minutes of the 56<sup>th</sup> academic council held on 21<sup>st</sup> July 2018 as there were no comments on the minutes.*

**57:02** To review the action taken on the Minutes of the 56<sup>th</sup> meeting held on 21<sup>st</sup> July 2018

*The Chairman presented the actions taken on the suggestions made during the 55<sup>th</sup> Academic Council meeting. The Council resolved to ratify the actions taken as presented and accepted the time requested for implementation of few suggestions. .*

**57:03** To consider the recommendations of Board of Studies of Civil Engineering to introduce Scheduling of Courses and detailed syllabi for Second Semester B.E. (Civil Engineering) Degree Programme as given in **Annexure–A** (Page No 1 to 44).

*Resolved to approve the introduction of Scheduling of Courses and detailed syllabi for Second Semester B.E. (Civil Engineering) Degree Programme as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

**57:04** To consider the recommendations of Board of Studies of Civil Engineering to introduce Open Elective Course ‘18SEGA0 Project Management’ for M.E. Degree Programmes as given in **Annexure–B** (Page No 45 to 50).

*Resolved to approve the Open Elective Course ‘18SEGA0 Project Management’ for M.E. Degree Programmes as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

**57:05** To consider the recommendations of Board of Studies of Mechanical Engineering to introduce Scheduling of Courses, Categorization of Courses and detailed syllabi for Second Semester B.E. (Mechanical Engineering) Degree Programme as given in **Annexure–C** (Page No 51 to 88).

*Resolved to approve the Scheduling of Courses, Categorization of Courses and detailed syllabi for Second Semester B.E. (Mechanical Engineering) Degree Programme as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 57:06** To consider the recommendations of Board of Studies of Mechanical Engineering to introduce Scheduling of Courses, Elective Courses and detailed syllabus for second to Fourth Semester M.E. (Industrial Engineering) Degree Programme as given in **Annexure–D** (Page No 89 to 189).

*Resolved to approve the Scheduling of Courses, Elective Courses and detailed syllabus for second to Fourth Semester M.E. (Industrial Engineering) Degree Programme as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 57:07** To consider the recommendations of Board of Studies of Mechanical Engineering to introduce scheduling of Courses, elective courses and detailed syllabus for second to Fourth Semester M.E. (Manufacturing Engineering) Degree Programme as given in **Annexure–E** (Page No 190 to 295).

*Resolved to approve the scheduling of Courses, elective courses and detailed syllabus for second to Fourth Semester M.E. (Manufacturing Engineering) Degree Programme as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 57:08** To consider the recommendations of Board of Studies of Mechanical Engineering to introduce Audit Course ‘14MEAA0 Observation Skills’ for B.E. (Mechanical Engineering) Degree Programme as given in **Annexure–F** (Page No 296 to 298).

*Resolved to approve the Audit Course ‘14MEAA0 Observation Skills’ for B.E. (Mechanical Engineering) Degree Programme as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2017-18 onwards.

- 57:09** To consider the recommendations of Board of Studies of Mechanical Engineering to introduce Open Elective Course ‘18MGGA0 Multi-Objective Optimization’ for M.E. Degree Programmes as given in **Annexure–G** (Page No 299 to 302).

*Resolved to approve the Open Elective Course ‘18MGGA0 Multi-Objective Optimization’ for M.E. Degree Programmes as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 57:10** To consider the recommendations of Board of Studies of Electrical and Electronics Engineering to introduce Scheduling of Courses, Categorization of Courses and detailed syllabi for Second Semester B.E. (Electrical and Electronics Engineering) Degree Programme as given in **Annexure–H** (Page No 303 to 347).

*Resolved to approve the Scheduling of Courses, Categorization of Courses and detailed syllabi for Second Semester B.E. (Electrical and Electronics Engineering) Degree Programme as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 57:11** To consider the recommendations of Board of Studies of Electrical and Electronics Engineering to introduce scheduling of courses and detailed syllabus for Second to Fourth Semester M.E. (Power System Engineering) Degree Programme as given in **Annexure–J** (Page No 348 to 413).

*Resolved to approve the scheduling of courses and detailed syllabus for Second to Fourth Semester M.E. (Power System Engineering) Degree Programme as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 57:12** To consider the recommendations of Board of Studies of Electrical and Electronics Engineering to introduce scheduling of courses and detailed syllabus for Second to Fourth Semester M.E. (Control and Instrumentation) Degree Programme as given in **Annexure–K** (Page No 414 to 491).

*Resolved to approve the scheduling of courses and detailed syllabus for Second to Fourth Semester M.E. (Control and Instrumentation) Degree Programme as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 57:13** To consider the recommendations of Board of Studies of Electrical and Electronics Engineering to introduce Open Elective course '18PSGA0 Industrial Safety' for M.E. Degree Programmes as given in **Annexure–L** (Page No 492 to 496).

*Resolved to approve the Open Elective course '18PSGA0 Industrial Safety' for M.E. Degree Programmes as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 57:14** To consider the recommendations of Board of Studies of Electronics and Communication Engineering to introduce Scheduling of Courses and detailed syllabi for Second Semester B.E. (Electronics and Communication Engineering) Degree Programme as given in **Annexure–M** (Page No 497 to 533).

*Resolved to approve the Scheduling of Courses and detailed syllabi for Second Semester B.E. (Electronics and Communication Engineering) Degree Programme as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 57:15** To consider the recommendations of Board of Studies of Electronics and Communication Engineering to introduce Industry Supported Courses '*14EC1E0 Communication System Design using USRP*', '*14EC1F0 IEEE 802.11AX Wireless LAN Systems*', '*14EC1G0 5G Wireless Cellular Systems*' and '*14EC1H0 Signal Processing using SHARC Processor*' for B.E. (Electronics and Communication Engineering) Degree Programme as given in **Annexure–N** (Page No 534 to 541).

*Resolved to approve the Industry Supported Courses '*14EC1E0 Communication System Design using USRP*', '*14EC1F0 IEEE 802.11AX Wireless LAN Systems*', '*14EC1G0 5G Wireless Cellular Systems*' and '*14EC1H0 Signal Processing using SHARC Processor*' for B.E. (Electronics and Communication Engineering) Degree Programme as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2015-16 onwards.

- 57:16** To consider the recommendations of Board of Studies of Electronics and Communication Engineering to revise the syllabus for Open Elective Course '*18CNGA1 Convex Optimization*' for M.E. Degree Programmes as given in **Annexure–P** (Page No 542 to 546).

*Resolved to approve the revision of the syllabus for Open Elective Course '*18CNGA1 Convex Optimization*' for M.E. Degree Programmes as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 57:17** To consider the recommendations of Board of Studies of Electronics and Communication Engineering to introduce Audit Course on '*18CHAA0 Environmental Sciences*' for B.E. Degree Programmes as given in **Annexure–Q** (Page No 547 to 550).

*Resolved to approve the revision of the syllabus for Open Elective Course '*18CNGA1 Convex Optimization*' for M.E. Degree Programmes as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 57:18** To consider the recommendations of Board of Studies of Computer Science and Engineering to introduce Scheduling of Courses and detailed syllabi for Second Semester B.E. (Computer Science and Engineering) Degree Programme as given in **Annexure–R** (Page No 551 to 585).

*Resolved to approve the Scheduling of Courses and detailed syllabi for Second Semester B.E. (Computer Science and Engineering) Degree Programme as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 57:19** To consider the recommendations of Board of Studies of Computer Science and Engineering to introduce Industry Supported Courses '14CS1K0 Agile Software Development & Safe' and '14CS1L0 Heterogeneous Computing' for B.E. (Computer Science and Engineering) Degree Programme as given in **Annexure – S** (Page No. 586 to 592).

*Resolved to approve the Industry Supported Courses '14CS1K0 Agile Software Development & Safe' and '14CS1L0 Heterogeneous Computing' for B.E. (Computer Science and Engineering) Degree Programme as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2016-17 onwards.

- 57:20** To consider the recommendations of Board of Studies of Computer Science and Engineering to revise Course Outcomes and CO-PO Mapping for the courses of B.E. (Computer Science and Engineering) Degree Programme as given in **Annexure – T** (Page No. 593 to 675).

*Resolved to approve the revision of Course Outcomes and CO-PO Mapping for the courses of B.E. (Computer Science and Engineering) Degree Programme as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2016-17 onwards.

- 57:21** To consider the recommendations of Board of Studies of Computer Science and Engineering to introduce Scheduling of Courses and detailed syllabus for Second to Fourth Semester M.E. (Computer Science and Engineering) Degree Programme as given in **Annexure–U** (Page No 676 to 800).

*Resolved to approve the Scheduling of Courses and detailed syllabus for Second to Fourth Semester M.E. (Computer Science and Engineering) Degree Programme as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 57:22** To consider the recommendations of Board of Studies of Computer Science and Engineering to introduce Open Elective course '18CGGA0 Evolutionary Algorithms' for M.E. Degree Programmes as given in **Annexure–V** (Page No 801 to 805).

*Resolved to approve the Open Elective course '18CGGA0 Evolutionary Algorithms' for M.E. Degree Programmes as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 57:23** To consider the recommendations of Board of Studies of Information Technology to introduce Scheduling of Courses and detailed syllabi for Second Semester B.Tech.(Information Technology) Degree Programme as given in **Annexure–W** (Page No 806 to 839).

*Resolved to approve the Scheduling of Courses and detailed syllabi for Second Semester B.Tech.(Information Technology) Degree Programme as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 57:24** To consider the recommendations of Board of Studies of Information Technology to introduce industry supported course '14IT1U0 Regression Techniques for Engineering Applications' for B.Tech. (Information Technology) Degree Programme as given in **Annexure–X** (Page No 840 to 844).

*Resolved to approve the industry supported course '14IT1U0 Regression Techniques for Engineering Applications' for B.Tech. (Information Technology) Degree Programme as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2016-17 onwards.

- 57:25** To consider the recommendations of Board of Studies of Information Technology to introduce Scheduling of Courses and detailed syllabus for Second to Fourth Semester M.E. (Computer Science and Information Security) Degree Programme as given in **Annexure - Y** (Page No 845 to 885).

*Resolved to approve the Scheduling of Courses and detailed syllabus for Second to Fourth Semester M.E. (Computer Science and Information Security) Degree Programme as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 57:26** To consider the recommendations of Board of Studies of Information Technology to introduce Open Elective Course '18ISGA0 Data Analytics' for M.E. Degree Programmes as given in **Annexure - Z** (Page No 886 to 891).

*Resolved to approve the Scheduling of Courses and detailed syllabus for Second to Fourth Semester M.E. (Computer Science and Information Security) Degree Programme as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 57:27** To consider the recommendations of Board of Studies of Mechatronics to introduce Scheduling of Courses and Syllabi for Second Semester B.E. (Mechatronics) Degree Programme as given in **Annexure-AA** (Page No 892 to 928).

Resolved to approve the Scheduling of Courses and Syllabi for Second Semester B.E. (Mechatronics) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 57:28** To consider the recommendations of Board of Studies of Mechatronics to introduce Scheduling of Courses and detailed syllabus for Second to Fourth Semester for M.E.(Mechatronics) Degree Programme as given in **Annexure-AB** (Page No 929 to 1005).

*Resolved to approve the Scheduling of Courses and detailed syllabus for Second to Fourth Semester for M.E.(Mechatronics) Degree Programme as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 57:29** To consider the recommendations of Board of Studies of Mechatronics to introduce Open Elective Course '18MCGA0 Value Engineering' for M.E. Degree Programmes as given in **Annexure-AC** (Page No 1006 to 1010).

*Resolved to approve the Open Elective Course '18MCGA0 Value Engineering' for M.E. Degree Programmes as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 57:30** To consider the recommendations of Board of Studies of Architecture to introduce the courses '18GA210 Research Methodology', '18GA220 Urban Renewal and Conservation', '18GA230 Integrated Architectural Design II', '18GAFB0 Sustainable Water Management' and '18GAPB0 Digital Tools for Environmental Architecture' for M.Arch. Degree Programme as given in **Annexure -AD** (Page No. 1011 to 1026).

*Resolved to approve the courses '18GA210 Research Methodology', '18GA220 Urban Renewal and Conservation', '18GA230 Integrated Architectural Design II', '18GAFB0 Sustainable Water Management' and '18GAPB0 Digital Tools for Environmental Architecture' for M.Arch. Degree Programme as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.



- 57:31** To consider the recommendations of Board of Studies of Computer Applications to introduce Rules and Regulations for M.C.A. Degree Programme as given in **Annexure – AE** (Page No. 1027 to 1045).

*Resolved to approve the Rules and Regulations for M.C.A. Degree Programme as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 57:32** To consider the recommendations of Board of Studies of Master of Science to introduce curriculum and detailed syllabus for five year integrated M.Sc. (Data Science) Degree Programme as given in **Annexure – AF** (Page No.1046 to 1137).

*Resolved to approve the curriculum and detailed syllabus for five year integrated M.Sc. (Data Science) Degree Programme as presented in the Academic Council.*

This comes into effect for the students to be admitted from the academic year 2019-20 onwards.

- 57:33** To consider the recommendations of Board of Studies of Master of Science to introduce Rules and Regulations for five integrated M.Sc. (Data Science) Degree Programme as given in **Annexure – AG** (Page No.1138 to 1157).

*Resolved to approve the Rules and Regulations for five integrated M.Sc. (Data Science) Degree Programme as presented in the Academic Council.*

This comes into effect for the students to be admitted from the academic year 2019-20 onwards.

- 57:34** To consider the recommendations of the Standing Committee of this academic council to introduce the policy for CGPA into Percentage conversion for Undergraduate and Postgraduate Degree Programmes as given in **Annexure – AH** (Page No.1158).

*Resolved to approve the policy for CGPA into Percentage conversion for Undergraduate and Postgraduate Degree Programmes as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2001-02 onwards.

- 57:35** To consider the recommendations of the Standing Committee of this academic council to introduce Value Added courses '18PGAA0 Professional Authoring' and '18PGAB0 Value Education' for M.E. Degree Programmes as given in **Annexure – AJ** (Page No.1159 - 1160).

*Resolved to approve the Value Added courses '18PGAA0 Professional Authoring' and '18PGAB0 Value Education' for M.E. Degree Programmes as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

**57:36** To consider the recommendations of the Standing Committee of this academic council to introduce an audit course '*18NCAA0 National Integration and Awareness*' for B.E./B.Tech. Degree Programmes as given in **Annexure – AK** (Page No.1161 - 1163).

*Resolved to approve the audit course '18NCAA0 National Integration and Awareness' for B.E./B.Tech. Degree Programmes as presented in the Academic Council.*

This comes into effect for the students admitted from the academic year 2018-19 onwards.

During the academic council meeting, the members had suggested the following points:

1. 'Geoinformatics' is to be added in Soil Mechanics course in B.E. (Civil Engineering Programme)
2. 'GPS aided surveying' is to be added in Surveying course in B.E. (Civil Engineering Programme).
3. The course code is to be the same for common courses meant for two or more programmes.
4. Laboratory facilities are to be benchmarked with higher learning institutions.
5. The proposed 'Regulations for 5 Year Integrated M.Sc (Data Science)' shall be termed as the 'Regulations for 5 Year Integrated M.Sc.Degree Programme'.
6. The credit for the course '19DS330 Organizational Theory and Behaviour' is to be increased from 2 credit to 4 credit, in M.Sc (Data Science) Programme
7. The laboratory course '19DS180 Digital Electronics' is to be removed from the Programme. The course '19DS290 Professional Communication' is to be moved from second semester to first semester and the course code is to be changed as 19DS180.

Prepared by:

**Dr.S.J. Thiruvengadam**

Approved by:

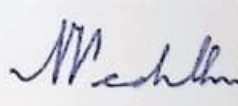
**Dr.V.Abhaikumar**  
*Principal*

# THIAGARAJAR COLLEGE OF ENGINEERING MADURAI – 625 015

(A Govt. Aided Autonomous Institution affiliated to Anna University)

57<sup>th</sup> Academic Council Meeting – Attendance sheet  
05<sup>th</sup> January, 2019 (Saturday)

## List of External Member

Sl.No	Name	Phone No. / e-mail	Signature
1.	Dr. D.K. Subramanian	ABSENT	—
2	Dr. N. Vedachalam	—	
3	Mr. Ramana Murthy	ABSENT	—
4.	Dr. V. Selladurai,	ABSENT	—
5.	Dr. Rajeev Sukumaran	ABSENT	—
6.	Mr. A.M. Rafeek	ABSENT	—

**57<sup>th</sup> Academic Council Meeting – Attendance sheet**  
**05<sup>th</sup> January, 2019 (Saturday)**

**List of Internal Members**

Sl.No	Name	Signature
7	Dr. V. Abhai Kumar	V. Abhai Kumar
8	Dr. R. Vasudevan	R. Vasudevan
9	Dr. V. Mohan	Mohan. V
10	Dr. S. Raju	S. Raju
11	Dr. N. Kamaraj	N. Kamaraj
12	Dr. M. Palaninatha Raja	M. Palaninatha Raja
13	Dr. T. Vel Rajan	T. Vel Rajan
14	Dr. S. Baskar	S. Baskar
15	Dr. K. Chockalingam	K. Chockalingam
16	Dr. S.J. Thiruvengadam	S.J. Thiruvengadam
17	Dr. S. Mercy Shalinie	S. Mercy Shalinie
18	Dr. C. Deisy	C. Deisy
19	Dr. Jinu Ioushidha Kitchely	Jinu Ioushidha Kitchely
20	Dr. S. Parthasarathy	S. Parthasarathy
21	Dr. S. Jeya Bharathi	S. Jeya Bharathi
22	Dr. R. Vasuki	R. Vasuki
23	Dr. M. Kottaisamy	M. Kottaisamy
24	Dr. T. Baskaran	T. Baskaran
25	Dr. PL.K. Palaniappan	PL.K. Palaniappan
26	Dr. M. Saravanan	M. Saravanan
27	Dr. C. Murugananthum	C. Murugananthum