

தமிழ்நாடு அறிவியல் தொழில்நுட்ப மாநில மன்றம் TAMIL NADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

(Established by Government of Tamilnadu)
Directorate of Technical Education Campus, Chennai - 600 025

Phone: 044-2230 1428

Web: www.tanscst.nic.in

Telefax: 044 - 2230 1552

E-mail: ms.tanscst@nic.in/enquiry.tanscst@nic.in

DR. R. SRINIVASAN, M.Sc., Ph.D., F.I.C.S., M.A.C.S. (USA). Member Secretary

Ref: TNSCST/POP.SCI./AR/35/2019-20/ 12638

29.09.2020

To Mr.P.Anbarasu Assistant Professor/ EEE Sri Eshwar College of Engg., Kondampatti, Vadasithur Coimbatore – 641 202

Sir/Madam.

Sub: Financial Assistance under Popularisation of Science (2019-20) -

sanction intimation - Reg.

Ref: Your proposal dt.13.11.2019

With reference to your proposal cited above, the Council has sanctioned a sum of Rs.20000/- (Rupees Twenty thousand only) as financial assistance to conduct "Tech Trend – 2020 (Technology Dissemination and Awareness) for Government school students". Kindly mention in all your communications, invitations and advertisements as that the programme is sponsored by TNSCST, Chennai and NCSTC, New Delhi.

Those who are not completed, kindly inform the exact date and venue of the programme within a week to the Council to enable us for monitoring the programme. Approved grant will be released on submission of Detailed Report, Utilization Certificate and Statement of Expenditure as per the guidelines.

Yours faithfully,

Member Secretary

Brown

Encl.: Guidelines and format of Utilization Certificate

Copy to: The Principal Sri Eshwar College of Engg., Kondampatti, Vadasithur Coimbatore – 641 202



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DR. R. SRINIVASAN, M.Sc., Ph.D., F.I.C.S., M.A.C.S. (USA). Member Secretary

Ref: TNSCST/POPS/AR/ 07/2019-20/ 35 20

30.01.2021

To
The Principal
Sri Eshwar College of Engg.,
Kondampatti, Vadasithur
Coimbatore – 641 202

Sir/Madam,

Sub: Partial Financial Support - Popularisation of Science (2019-20) - approved

grant release - Reg.

Ref: Council Sanction letter 28.09.2020

With reference to the above, kindly find enclosed herewith a cheque for Rs.20000/- (Rupees Twenty thousand only) as approved financial assistance towards conduct of "Tech Trend – 2020 (Technology Dissemination and Awareness) for Government school students". Kindly acknowledge the receipt of grant...

Thanking you,

Yours faithfully,

Member Secretary

Encl : Cheque for Rs. 20000 /- No.691022 dt.29.01.2021

Copy to: Mr.P.Anbarasu Assistant Professor/ EEE Sri Eshwar College of Engg., Kondampatti, Vadasithur Coimbatore – 641 202



Branch: DOTE CAMPUS DOTE OFFICE BUILDINGS GUINDY, CHENNAI

IFS Code :IDIB000D050

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SB 479135159

AC No. खा.स.

CBS Code: 01636

PAYABLE AT PAR AT ALL OUR BRANCHES

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AUTHORISED SIGNATORY

FOR MEMBER SECRETARY TN STATE COUNCIL SCIENCE & TE

Please sign above

Sponsored by : Tamilnadu State Council For Science And Technology Government of Tamilnadu





National Council for Science & Technology Communication Government of India







TECH TREND 2020

(Technology Dissemination and Awareness)

for School Students

Teams can select problems of their choice related to Agriculture, Industry, Society, Schools, Colleges, etc., and develop a project

Online Project Submission deadline: 16.11.2020 • Semi Finals: 18.11.2020
Final Demonstration and Prize Distribution: 20.11.2020

Team Size: Maximum 3 Students and one Faculty mentor

PRIZES TO BE WON BY JUNIOR CATEGORY (7th, 8th & 9th Std Students)

1st ₹ 3000/-

2nd ₹ 2000/-

3° ₹ 1000/-

Consolation
Prizes (2 Nos) ₹ 500/-

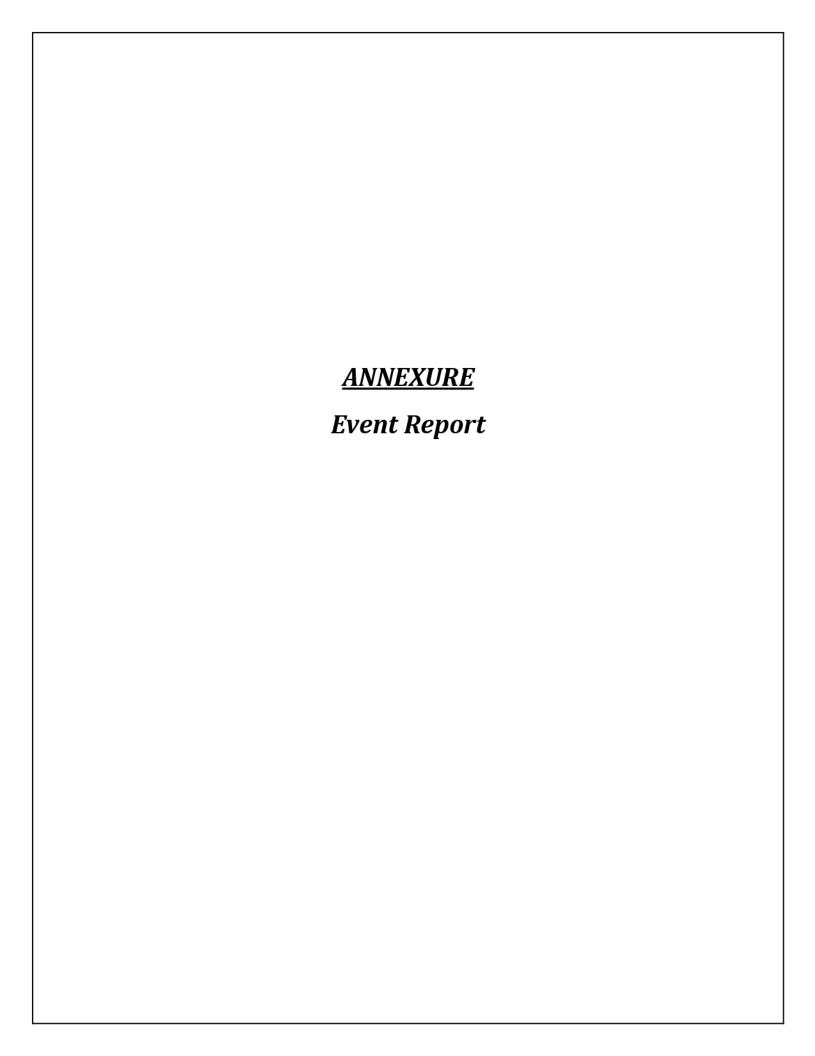
PRIZES TO BE WON BY SENIOR CATEGORY (10", 11" & 12" Std Students)







Consolation
Prizes (2 Nos) ₹ 500/-





TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

Government of Tamilnadu

DOTE Campus, Chennai – 600 025

Coimbatore 23.11.2020

1. Title of the Programme : **Tech Trend – 2020** (Technology Dissemination and

Awareness) for Government School Students

2. Name of the Institution : Sri Eshwar College of Engineering,

Kondampatti(PO), Vadasithur(VIA),

Kinathukadavu(TK), Coimbatore – 641 202

3. Name of the Grantee / : Mr. P. Anbarasu, Assistant Professor,

Organizer Department of Electrical and Electronics Engineering,

Sri Eshwar College of Engineering,

Coimbatore(DT), Tamilnadu.

4. Tamilnadu State council : TNSCST/POP.SCI./AR/35/2019-20/12638

for Science and **Dt: 29.09.2020**

Technology Sanction no., Amount: Rs. 20,000 /-

date & amount

Event Report

1. Introduction:

TNSCST (Tamilnadu State council for Science and Technology) on second week of October 2020, sanctioned sum of Rs. 20,000 for organizing Tech Trend – 2020 for school students. Due to COVID 19 pandemic situation in Tamilnadu all schools and colleges remain closed. During pandemic situation Sri Eshwar College of Engineering successfully conducted 80 online webinars covering 75,000 students, with this experience we have decided to conduct Tech Trend 2020 (Project Dissemination and Awareness) in online mode by considering student's safety.

We released Tech Trend 2020 poster to all government, government aided, private school students and teachers on 24.10.2020. There are two categories senior and Junior. In Junior category student's studying in 7th, 8th and 9th can participate. In Senior Category Students studying in 10th, 11th and 12th can participate. Project guidelines were released to students in



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order to avoid mistakes in online mode. Rs. 14,500 /- is announced as a cash prize for both junior and senior categories. Prize split-up is given below

First Prize – Rs. 3,000 /-

Second Prize – Rs. 2,000 /-

Third Prize - Rs. 1,000 /-

Consolation Prize (3 Numbers) – Rs. 500/-

We received huge response from student's and after many rounds (Semi Final on 18.11.2020) we shortlisted 7 teams from senior category and 5 teams from Junior category to Finals. In finals winners are selected based on 50 % online voting by public and 50 % by Jury decisions. Finals were conducted and prize was announced on 20.11.2020 04.00 pm in webinar jam online platform, nearly 100 participants watched the event online.

Online Voting and other communications were done to students regularly through phone and social media. Details of online voting Link and YouTube Link for both Junior and Senior category is given below

1.1 Senior Category polling/voting Link:

TechTrend2020(Technology Dissemination and Awareness) for school students Sponsored by TNSCST

Sri Eshwar College of Engineering (An Autonomous Institution), Department of EEE organizes TechTrend2020

Total Prize Money: Rs. 15,000 /-

Grand Finale on 20.11.2020

Polling/Voting Link for Senior Category:

xoyondo.com/ap/biTn4fqEC6qcaxD

List of Senior Category Teams selected for Finals

TNSCST Sponsored "Tech Trend – 2020 for School Students" at SECE, Coimbatore



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- 1. KKR https://youtu.be/9IaDT46t30k
- 2. Awaiton https://youtu.be/0-dj wv qsQ
- 3. Technical Kings https://youtu.be/Oz0p9PrB8vQ
- 4. Dronerz https://youtu.be/duwb_hckISY
- 5. Techno Titans https://youtu.be/SassQhdhPEI
- 6. Twinkling star https://youtu.be/P8yJWGsfGmY
- 7. The Team https://youtu.be/ulls_rc0WPk

1.2 Junior Category polling/voting Link

TechTrend2020(Technology Dissemination and Awareness) for school students Sponsored by TNSCST

Sri Eshwar College of Engineering (An Autonomous Institution), Department of EEE organizes TechTrend2020

Total Prize Money: Rs. 15,000/-

Grand Finale on 20.11.2020

Polling/Voting Link for Junior Category:

xoyondo.com/ap/mvDm5rhnmrD5H7O

List of Junior Category Teams selected for Finals

- 1. Young Scientist https://youtu.be/salf3CnbQJk
- 2. Kathiravan https://youtu.be/z4mEIEKs7Pk
- 3. Smart Innovators https://youtu.be/RMXAeOjDpbA
- 4. JV https://youtu.be/RJcw7Tr1N14
- 5. Sparkling Star https://youtu.be/cgrYJzgM64w

Prize winners list for both Junior and Senior Category is attached in separate sheet.



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2. Project Description

Project description of each team is given below

2.1 Smart car for CORONA VIRUS

| Project Title | : | Smart car for CORONA VIRUS |
|---------------|---|----------------------------|
| Team Name | : | Kathiravan |
| Category | : | Junior category |
| Student Name | : | DIVYANANDH J |

Project Description:

The world of control is an exciting field that has exploded with new technologies where the internet of things IoT vision becomes reality. Now-a-days our peoples, including doctors were highly affected by the corona virus, the working personnel in hospital maintain aseptic condition in the working environment is a big problem, the idea of smart vehicle is highly effective, efficient, cost effective, ecological friendly, reduce personnel problem in working environment, this project is a kind of multipurpose robotic car include three sensor aid for monitor the corona patient activities, and keep aseptic conditions of working environment, which can be controlled by Arduino Nano 3.0 based on IoT, motor driver L298, Arduino nano.

2.2 Multi Safety Eco Vehicle

| Project Title | : | Multi Safety Eco Vehicle |
|---------------|---|--------------------------|
| Team Name | : | Young Scientist |
| Category | : | Junior category |
| Student Name | : | PRINCEDANIEL. N |

Project Description:

There are many road accidents in India and Tamil Nadu. To prevent this, the government is trying to legislate with various laws to reduce accidents. Many laws are in place but accidents are still happening. Even today tamilnadu is imposing heavy fines for road violators. People violate the law because it is the only law to prevent an accident. But since I am a law- abiding device to prevent an accident people must not adhere to vehicles unless they must comply. this tool can be used to prevent various types of accidents in one vehicle and then next I have incorporated a



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variety of devices to product the environment and save on conventional energy e by using alternative fuels for generation. We will discuss about each of the devices in this tool.

2.3Privacy Guard

| Project Title | : | Privacy Guard |
|---------------|---|---------------------|
| Team Name | : | Technical Kings |
| Category | : | Senior category |
| Student Name | : | DHARSHAN S, GOKUL V |

Project Description:

The main problem faced by android users is privacy threat. Hackers can easily inject payloads to mobile devices and gain access to camera and microphone. To save people from hacking we made an app called privacy guard which will notify the user when a camera or microphone is accessed in foreground or in background. Thus the user is safe from the hackers. Also we provide multiple ways to notify the user like colored dots on screen, notification popup and vibration. User can also customize the colors, size and position of the colored dots.

2.4 Regenerative Braking System

| Project Title | : | Regenerative Braking System |
|---------------|---|--|
| Team Name | : | Techno Titans |
| Category | : | Senior Category |
| Student Name | : | PRADOSH.G, MOHAMMED SANFAR.S, SWAMYNATHAN. B |

Project Description:

Regenerative braking is an energy recovery mechanism that slows down a moving vehicle or object by converting its kinetic energy into a form that can be either used immediately or stored until needed. In this mechanism, the electric traction motor uses the vehicle's momentum to recover energy that would otherwise be lost to the brake discs as heat. This contrasts with conventional braking systems, where the excess kinetic energy is converted to unwanted and wasted heat due to friction in the brakes, or with dynamic brakes, where the energy is recovered by using electric motors as generators but is immediately dissipated as heat in resistors. In addition to improving the overall efficiency of the vehicle, regeneration can significantly extend



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the life of the braking system as the mechanical parts will not wear out very quickly. The most common form of regenerative brake involves an electric motor functioning as an electric generator. In electric railways, the electricity generated is fed back into the traction power supply. In battery electric and hybrid electric vehicles, the energy is stored chemically in a battery, electrically in a bank of capacitors, or mechanically in a rotating flywheel. Hydraulic hybrid vehicles use hydraulic motors to store energy in the form of compressed air. In a hydrogen fuel cell powered vehicle, the electrical energy generated by the motor is used to break waste water down into oxygen and hydrogen which is recycled back into the fuel cell for later Energy be neither created destroyed reuse can nor Conservation of energy.

2.5 Smart Irrigation System

| Project Title | : | Smart Irrigation System |
|---------------|---|-------------------------------------|
| Team Name | : | Smart Innovators |
| Category | : | Junior Category |
| Student Name | : | NAVANEETH RAM.V, NARESH LAKSHMAN. V |

Project Description:

The project "Smart Irrigation" aims to help formers to manage their irrigation to the crops automatically. The "Smart Irrigation" has been designed such a way to sense the moisture level of the soil and irrigate automatically. The project has two major modules – one which will take care of automatic irrigation is called Auto mode and second one is Manual mode for irrigating the farm whenever excess water is required. When the project is in Manual mode, it will display the moisture level of the soil the in mobile app. This project has the components such as moisture sensors, driver board - variation L298N, 12/5 Volt DC charger, WIFI receiver, AMPLIFIRE, Mobile App, Electrical water motor and electrical cables. It helps to save formers time and manage their irrigation remotely.



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2.6 Accented

| Project Title | : | Accented |
|---------------|---|----------------------|
| Team Name | : | Awaiton |
| Category | : | Senior Category |
| Student Name | : | ASWIN.L, THRESHANT.G |

Project Description:

Accented is a microblogging and petition raising platform where anyone can share their ideas, visions and creatives in the form of a micro-blog, this application solves the issues of lack of impact on a social cause and infotainment. https://play.google.com/store/apps/details?id=com.freakon.accented&hl=en IN

2.7 Corona Destroyer

| Project Title | : | Corona Destroyer |
|---------------|---|------------------|
| Team Name | : | JV |
| Category | : | Junior Category |
| Student Name | : | JAYVIKRAM D |

Project Description:

It helps doctors, nurse and frontline workers.

2.8 Automatic Indoor Seed Germination Identifier

| Project Title | : | Automatic Indoor Seed Germination Identifier |
|---------------|---|--|
| Team Name | : | Sparkling Star |
| Category | : | Junior Category |
| Student Name | : | SRINITHI R |

Project Description:

It's about smart indicator to prevent accident in verge roads.



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2.9 AI in Human Life

| Project Title | : | AI in Human Life |
|---------------|---|----------------------------------|
| Team Name | : | KKR |
| Category | : | Senior Category |
| Student Name | : | KARTHIKESH .J.G, ABDUL RASHEED.M |

Project Description:

My Innovation is to solve Technical Problems in Industries like Carry Heavy Loads and transport to another place with the Help of Humans. In Domestic Use My Innovation Words like a Servant for Old Peoples who Suffering alone for their Medical issues and it will Take Care of them like their Children. In Armies it work for Soldiers to Attack Enemies, so that Our Soldiers are not todied in War. We can Save our Soldiers Life by Using My Robot in Military areas. In Fire Stations It will Work Automatically to against the Fire and Off the Fire by Using Water. (Fire Fighting Robot). In Future My Innovation is Upgraded like Humans to solve various life Problems and to help humans by their orders in a Good Manner. It will helps in To Construct Buildings and Doing Household works like Cleaning, Washing and Various works. Also in Future My Innovation is used in All over the world, Because I sell my Innovation to all Who suffering in their work @ Low Cost . The Name of My Innovation is The Robot "Humanoid Robot". It has Various Features like Domestic, Fire Fighting, Military Robot, GSM, WIFI, Bluetooth controlled, survillence

2.10 AI Drone

| Project Title | : | AI Drone |
|---------------|---|----------------------------------|
| Team Name | : | Dronerz |
| Category | : | Senior Category |
| Student Name | : | KARTHIKESH .J.G, ABDUL RASHEED.M |

Project Description:

Al Drone is a Virtual Drone which helps in the field of Fire Emergency it had inbuilt water Carrier which Fight Against the Fire and Saves Human Life. It had a Special Feature which it can be Controlled both by



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Manual & Automatic. We Designed this Drone with 4 High-Speed Motors and a Water proofing & Fire proof chasis

2.11 Wireless Electricity Transmitter

| Project Title | : | Wireless Electricity Transmitter |
|---------------|---|----------------------------------|
| Team Name | : | The Team |
| Category | : | Senior Category |
| Student Name | : | MANOJ.A |

Project Description:

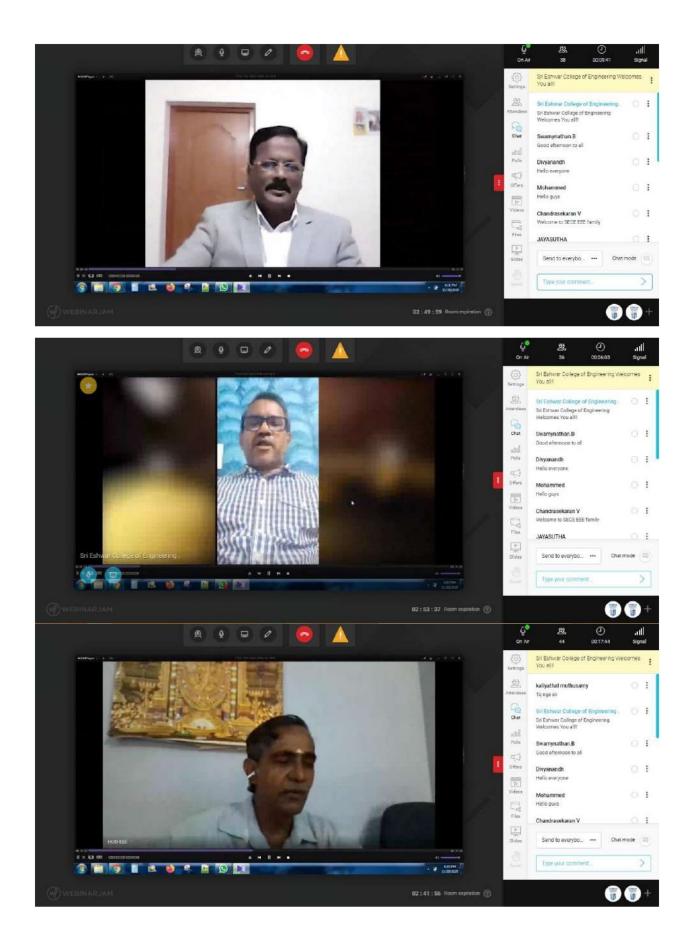
This is a project of wireless electricity transmitter where electricity can be sent through electromagnetic induction all over the world

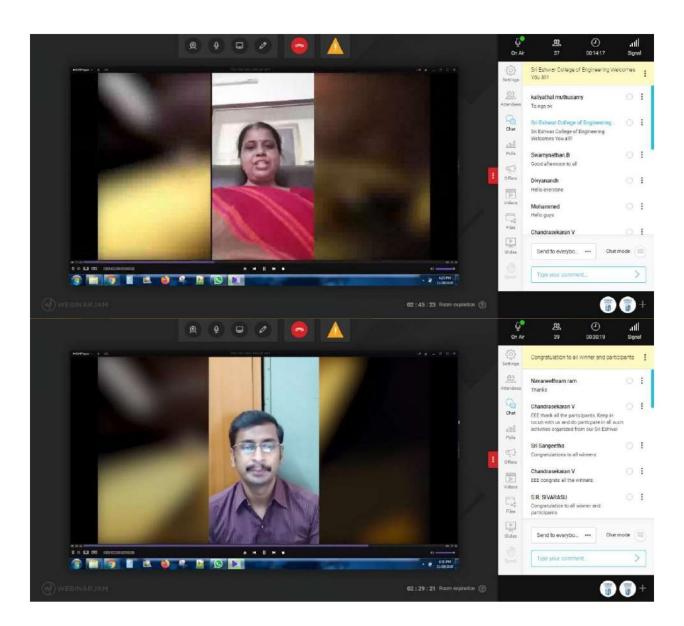
2.12 Life Science

| Project Title | : | Life Science |
|---------------|---|-----------------|
| Team Name | : | Twinkling star |
| Category | : | Senior Category |
| Student Name | : | SWATHI.N |

Project Description:

Life Science







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Government of Tamilnadu

DOTE Campus, Chennai - 600 025

Coimbatore 23.11.2020

1 Name of Host Institution:

Sri Eshwar College of Engineering

(An Autonomous Institution)

Kondampatti(Po), Vadasithur(Via), Kinathukadavu, Cbe

2 Name of Coordinator:

Mr. P. Anbarasu, Assistant Professor,

Department of Electrical and Electronics Engineering

3 Sanction Letter/Order No

TNSCST/POP.SC1/AR/35/2019-20/12638

and date of sanctioning

the proposal:

Dt: 29.09.2020

4 Total Sanctioned Amount:

Rs. 20,000

STATEMENT OF EXPENDITURE

| S.No | Sanctioned Heads | Total in Rs |
|------|--|-------------|
| 1 | Cash prize to Junior Group(7th, 8th & 9th Standard Class Student) | 7,000/- |
| 2 | Cash prize to Senior Group(10th, 11th & 12th Standard Class Student) | 7,500/- |
| 3 | Honorarium to Jury | 3,500/- |
| 4 | Contingency | 1,500/- |
| 5 | Miscellaneous | 500/- |
| | Total | 20,000/- |

Signature of the Coordinator

P. ANBARIASU

College or college or

Signature of Head of

the Institution with Seal

PRINCIPAL

Sri Eshwar College of Engineering Kondampatti (Po), Vadasithur (Via) Linathukadavu. Colmbatore - 641 202

TNSCST Sponsored "Tech Trend - 2020 for School Students" at SECE, Colmbatore

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TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

Government of Tamilnadu

DOTE Campus, Chennai - 600 025

Coimbatore

23.11.2020

1. Title of the Programme

: Tech Trend - 2020 (Technology Dissemination and

Awareness) for Government School Students

2. Name of the Institution

: Sri Eshwar College of Engineering,

Kondampatti(PO), Vadasithur(VIA),

Kinathukadavu(TK), Coimbatore - 641 202

3. Name of the Grantee /

: Mr. P. Anbarasu, Assistant Professor,

Organizer

Department of Electrical and Electronics Engineering,

Sri Eshwar College of Engineering,

Coimbatore(DT), Tamilnadu.

4. Tamilnadu State council

TNSCST/POP.SCI./AR/35/2019-20/12638

for Science and

Dt: 29.09.2020

Technology Sanction no.,

Amount: Rs. 20,000 /-

date & amount

5. Head of the account

: Part I Scheme (2019-2020)

Certified that Rs. 20,000 /- of grants-in-aid sanctioned for the year 2019-2020 in favour of Mr. P. Anbarasu, under the council letter no TNSCST/POP.SCI./AR/35/2019-20/12638

Dt:29.09.2020 has been utilized for the purpose of conducting "Tech Trend – 2020 (Technology Dissemination and Awareness) for Government School Students and Private School Students" for which it was sanctioned and the conditions of the grant are fulfilled / being fulfilled.

Signature of the Coordinator

Mr.P. ANBARIASU

College or Coimbatore 641 202. In Sulfing Sulf

Signature of Head of

the Institution with Seal

PRINCIPAL

Sri Eshwar College of Engineering Kondampatti (Po), Vadasithur (Via) Sinathukadavu, Combatore - 641 202