

#### **ABSTRACT**

Information Technology Department – Tamil Virtual Academy (TVA) - Creation of a separate wing for Tamil Computing in TVA at a cost of Rs.50 lakh per annum - Orders – Issued.

# Information Technology (Admn.2) Department

G.O.(D).No. 2

Dated: 02.01.2020 விகாரி, மார்கழி – 17 திருவள்ளுவர் ஆண்டு–2050

### Read:

From the Joint Director (FAC), Tamil Virtual Academy, Letter No. 190830/TC/2019, dated 02.08.2019 and 09.09.2019.

## ORDER:

During the Budget Session 2019-20, the Hon'ble Minister for Information Technology on 10.07.2019 made the following announcement on the floor of the Tamil Nadu Legislative Assembly:-

"தமிழ் இணையக் கல்விக்கழகத்தின் முக்கிய செயல்பாடு இணைய வாயிலாக தமிழ்மொழியை உலகெங்கும் கற்பிப்பது ஆகும். தமிழ் இணையக் கல்விக்கழகம் 7 நிரந்தரப் பணியாளர்களைக் கொண்டு தனது கணினிச் சேவையை 19 ஆண்டுகாலமாகத் தொடர்ந்து செய்து வருகிறது. கணினித்தமிழ் சார்ந்த பெரிய திட்டங்களைப் புறப்பணியாளர்களைக் (Outsourced staff) கொண்டு தமிழ் இணையக் கல்விக்கழகம் செய்து வருகிறது. மாண்புமிகு இதயதெய்வம் புரட்சித்தலைவி அம்மா அவர்களின் நல்லாசிபுடன் இந்நிறுவனத்தைப் பலப்படுத்தும் வகையில் போதுமான பணியாளர்களுடன் கணினித் தமிழ்ப் பிரிவு உருவாக்கப்படும். இதற்கான தொடா செலவினம் ஆண்டொன்றுக்கு ரூ.0.50 கோடியாகும்."

2. Accordingly, the Joint Director (FAC), Tamil Virtual Academy (TVA) in the letter read above has sent the following proposal for creation of a separate wing for Tamil Computing in TVA at a cost of Rs.50 lakh per annum:-

TVA has been offering Tamil courses through Internet and also promoting Tamil Computing. In order to organize Tamil Computing wing, the wing shall be divided into four sections to be headed by Assistant Directors / Co-ordinator.

The details are follows:

- I. Tamil Computing propagation section
- II. Image processing and Optical Character Recognition (OCR) section
- III. Use cases and tools development section
- IV. Computational Linguistics section

The following activities shall be taken up for creation of the above sections:

- I. Tamil Computing propagation section shall be headed by Assistant Director (Web Administration) with following personnel:
  - a) Resource person -
  - b) Programmer -
  - c) Data Entry Operator 1

### **Activities**

- i. Kani Tamil peravai activities
- ii. Mega encyclopedia development
- iii. Starting of Kani tamil monthly e-Magazine
- iv. Conversion of Educational videos into Tamil language
- v. Creative Commons activities
- vi. Tamil Computing Out-reach Social Media
- vii. On-line website activities
- II. Image processing and OCR section shall be headed by Assistant Director (Controller of Examination) with following personnel:
  - a) Resource person
  - b) Programmer -
  - c) Data Entry Operator -

### **Activities**

- Optical Character Recognition (OCR) to be done for 1000 Tamil books OCR Tamil contents are to be indexed – separate the domain specific words.
- ii. Implement the Tamil inscription reader project.
- iii. OCR shall be done for Tamil palm-leaves.
- iv. Image search system for Tamil inscriptions and Tamil cultural paintings shall be done.
- III. Use cases and tools development section shall be headed by Assistant Director (Academic) with following personnel:
  - a) Resource person -
  - b) Programmer -
  - c) Data Entry Operator 1

#### Activities

- i. Writing the lessons for Tamil Computing web enabling the lessons Uploading the lessons in TVA's website.
- ii. Identifying the use cases (use case is a list of actions or event steps typically defining the interactions between a role and a system to achieve a goal) for Tamil computing chatbots
  - Use case for TVA's lessons.
  - 2. Use case for Digital library books

- IV. Computational Linguistics section shall be headed by Co-ordinator with following personnel:
  - a) Resource person

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b) Programmer

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c) Data Entry Operator

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### Activities

- i. 200 million words corpus (Modern Tamil) is to be annotated.
- ii. Annotate all the important early to modern Tamil literatures (100).
- iii. Develop 100 indexes and concordances for early to modern Tamil literatures.
- iv. Computational grammar is to be developed.
- v. Graph Database for Artificial Intelligence.
- vi. TVA's in-house products are to be put into one suite.
- vii. Parts Of Speech (POS) tag chunk annotation (Noun Phrase (NP) Verb Phrase (VP)) named entity word sense anaphora co-reference dependency tauging etc. tools are to be developed.
- viii. Tokenizer sentence splitter word boundary identifier lemmatizer morphological analyser etc. tools are to be developed.
- ix. Unicode fraction & symbol Unicode fonts development Tamil All Character Encoding (TACE) Vattezuththu development other Unicode activities.
- x. Apps development for:
  - a. Technical glossary
  - b. Part II schemes
  - c. Tamil Nadu Innovation Initiatives (TANII) projects

# Expenditure for one year (approx.)

1.	Development of Tamil Computing tools Software, content etc.	Rs. 47.50 lakh
2.	Hardware and Software	Rs. 1.50 lakh
3.	Stationeries	Rs. 0.50 lakh
4.	Miscellaneous (expert meeting, travel etc.)	Rs. 0.50 lakh
	Total	Rs.50.00 lakh

V. The Pay Matrix, Qualification etc. of the personnel to be recruited are detailed as below:-

Designation	Pay Matrix	Qualification	Tenure	Method
Resource Person	Rs.27,500 Consolidated	Doctorate in Linguistics/ Tamil	One Year	Outsourcing
				9:

Programmer	Rs.22,000 Consolidated	B.E. / MCA	One Year	Outsourcing
Data Entry	Rs.13,200	12 <sup>th</sup> / Higher	One	Outsourcing
Operator	Consolidated	Grade with Tamil /	Year	
		English Typing		

- 3. The Joint Director (FAC), TVA, has therefore requested the Government to approve the above proposal and sanction a sum of Rs. 50 Lakh annually for creation of a separate wing for Tamil Computing in TVA.
- 4. The Government after careful examination hereby approve the proposal of TVA as stated in para 2 above and sanction and release a sum of Rs.50.00 Lakh per annum to the Tamil Virtual Academy (TVA) for the Creation of a separate wing for Tamil Computing in Tamil Virtual Academy.
- 5. The expenditure sanctioned on para 4 above shall be debited to the following Head of Account:-

\*\*2202. General Education – 03. University and Higher Education – 102. Assistance to Universities State's Expenditure - BK. Tamil Virtual Academy - 309 Grants-in-Aid – 03 Grants for Specific Scheme". IFHRMS (DPC 2202 03 102 BK 309 03) Old (DPC 2202 03 102 BK 0931)

- 6. The Section Officer (Bills), Information Technology Department is authorized to draw and disburse the amount sanctioned in paragraph 4 above to the Director (FAC), Tamil Virtual Academy through ECS to the Current Account of Tamil Virtual Academy (Account No.955548440) held in the Indian Bank, Kotturpuram Branch with Branch Code: 00T117 and IFS Code: IDIB000T117.
- 7. The Director (FAC), Tamil Virtual Academy is directed to furnish the Utilization Certificate along with detailed expenditure statement to Government.
- 8. Necessary additional funds of Rs.50,00,000/- (Fifty Lakhs only) shall constitute an item of "New Instrument of Service" and the approval of the Legislature shall be obtained in due course of time by an inclusion in the Supplementary Estimates for the year 2019-2020. Pending approval of the legislature, the expenditure will be initially met by drawal of an advance from the Contingency Fund. The Section Officer (Bills), Information Technology Department is directed to calculate the actual amount required for the period up to next Supplementary Estimates and apply for sanction of the same as advance from the Contingency Fund to Finance (BG.I) Department directly in Form "A" appended to the Contingency Fund Rules, 1963 along with a copy of this order. Orders for sanction of an advance from the Contingency Fund will be issued from Finance (BG.I) Department. The Joint Secretary to Government, Information Technology Department shall also send necessary draft explanatory note for inclusion of this expenditure in the Supplementary Estimate 2019-2020 to Government in Finance (Ind. / BG.II) Department at the appropriate time without fail.

9. This order issues with the concurrence of Finance (Ind) Department vide it's U.O.No.61836/Fin(Ind.)/2019 dated 27.12.2019 and ASL No.2632 (Two thousand six hundred and thirty two).

# (By Order of the Governor)

# SANTHOSH BABU, Principal Secretary to Government.

To

The Director (FAC),

Anna University Campus,

Gandhi Mandapam Road, Kottur, Chennai - 600 025.

The Accountant General, Chennai - 18/35/9

The Pay and Accounts Officer, Chennai - 600 009.

The Section Officer (Bills), Information Technology Department, Secretariat, Chennai – 600 009.

Copy To:

The Senior Private Secretary to Principal Secretary II to Hon'ble Chief Minister, Secretariat, Chennai – 600 009.

The Special Personal Assistant to the Hon'ble Deputy Chief Minister, Secretariat, Chennai – 600 009.

The Special Personal Assistant to the Hon'ble Minister for Revenue and Disaster Management & Information Technology, Secretariat, Chennai – 600 009.

The Private Secretary to Principal Secretary to Government,

Finance Department, Secretariat, Chennai-9.

The Principal Private Secretary to Principal Secretary to Government, Information Technology Department, Secretariat, Chennai – 600 009.

The Finance (Industries/BG.II) Department, Secretariat, Chennai - 600 009.

The Resident Audit Officer, Secretariat, Chennai - 600 009.

The Content Creator (CMS)/ Moderator (CMS) / Nodal Officer (CMS), Information Technology Department, Secretariat, Chennai – 600 009 (with a request to host the Government Order in the Government website) Sf/Sc.

// Forwarded / By Order //

ا ۱) Section Officer