



**TR S Forms & Services Private Limited**



# **Digital Certificates**

**with**

**eSekure**

*Ultimate Document Security*

**White Paper on Document Security**

*Prepared by TRS Forms & Services Private Limited, India*

[www.trsforms.com](http://www.trsforms.com)

9 August 2018

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**Corporate Office:**

**23, Chakrapani Street, West Mambalam, Chennai 600 033. Phone 044-23725453**

**Branch Offices:**

**Bangalore : +91-80-23509300**

**New Delhi : +91-11-45086339.**



## Digital Certificate & Document Security

### Current Status of Certificates

- Certificates printed on paper with security features
- These are visible security features easily duplicated
- Easier to take away the blank originals by some means and prepare the certificate.
- The variable data is not secured against tampering or malpractice
- Verification of the certificate is time consuming
- Huge amount is being spent on security feature

### Recent improvements tried for Documents Security

- Using tear-resistant papers
- Adding more visible security features and make the media more secured.
- Verification is still the same old pattern which is time consuming
- Huge amount is being spent on security feature

### eSekure - TRS Solution for Document Security

- Secures the variable data through encryption and stores it on the document itself.
- Generation of this encryption is done once and in a much secured environment.
- Document verification is easy on the move or across the table.
- The verification process does not access any database so no dilution of data security.
- Does not require any secured media hence economical
- It is so effective that it can completely remove tampering and misrepresentation.

***eSekure is impossible to counterfeit but easier to authenticate***

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## eSekure - Sample Document

Government of  Karnataka  
Office of the Commissioner for Public Instruction, Bengaluru  
Karnataka Teachers Eligibility Test (KARTET) - 2011

**ELIGIBILITY CERTIFICATE** S.No. **B 237829**

This is to certify that the candidate mentioned below is qualified in Teachers Eligibility Test with the following details:

Register No: **200063**      Month/Year: **September 2011**      Category: **ST**

Candidate Name: **SAJATHAMMA B** 



Date of Birth: **16/06/1991**      Differentiated: **No**

Mother Name: **HANIAMMA B**

Father Name/Husband Name: **YAGANTAPPA B**

Paper-I ( For Classes I to V)			Paper-II (For Classes VI to VIII)		
Subject	Maximum Marks	Marks Obtained	Subject	Maximum Marks	Marks Obtained
Language I - Kannada	31	23	Language I - NA -	31	NA -
Language II - English	31	19	Language II - NA -	31	NA -
Child Development & Pedagogy	31	19	Child Development & Pedagogy	31	NA -
Mathematics & Environmental Science	60	31	NA -	60	NA -
<b>Total</b>	<b>150</b>	<b>92</b>	<b>Total</b>	<b>60</b>	<b>NA -</b>

Result: **QUALIFIED**      Result: **NOT APPLICABLE**

 Candidate Signature       **eSekure**

Special Officer  
Unassisted Admission Cell  
Bengaluru

Variable Data

eSekure

Document Security has been more about security to the media. However secured the media is we have found that tampering or misrepresentation has been happening even today. It has become easier with the improvements in technology. If the variable data is not secured then the document is an open secret. TRS R&D was given the task of getting a solution for a real document security system. First and foremost decision taken was that securing media is not going to prevent tampering. Then it was decided that the variable data is what can be tampered and if we are able to secure the variable data then media is of least significance. Also it was decided that we need to provide an easy verification process which should be done instantly as well as done without compromising on the data security. To achieve that it was decided that we should not access any of the secured database for verification. Thus came the product eSekure. This helps in securing the variable data as well as makes verification fast and without accessing any source database. eSekure can be embedded in physical document as well as digital document.



## eSekure - Sample Document

Result....	
Registration No	2000063
Year	Sept – 2015
Name	SUJATHAMMA B
Mother's Name	HAMPAMMA B
Father's Name/Husband's Name	YAGANTTAPPA B
Date of Birth	16-06-1991
Category	ST
Differently Abled	No
Paper I – Max Marks	150
Paper I - Obt Marks	92
Paper I - Status	QUALIFIED
Paper II – Max Marks	150
Paper II - Obt Marks	-NA-
Paper II - Status	NOT APPLICABLE
Subjects	-NA-

Government of Karnataka  
Office of the Commissioner for Public Instruction, Bengaluru  
Karnataka Teachers Eligibility Test (KARTEL) - 2015

ELIGIBILITY CERTIFICATE

REGISTRATION NO: 2000063  
MONTH/YEAR: September 2015  
CATEGORY: ST

Candidate Name: SUJATHAMMA B

Date of Birth: 16/06/1991

Mother Name: HAMPAMMA B

Father Name/Husband Name: YAGANTTAPPA B

Paper-I (For Classes I to V)			Paper-II (For Classes VI to VII)		
Subject	Maximum Marks	Marks Obtained	Subject	Maximum Marks	Marks Obtained
Language I - Kannada	30	23	Language I - NA	0	-NA-
Language II - English	30	19	Language II - NA	0	-NA-
Child Development & Pedagogy	30	19	Child Development & Pedagogy	0	-NA-
Mathematics & Environmental Science	60	31	- NA -	0	-NA-
<b>Total</b>	<b>150</b>	<b>92</b>	<b>Total</b>	<b>00</b>	<b>-NA-</b>

Result: **QUALIFIED**      Result: **NOT APPLICABLE**

Barcode and QR code for verification.

eSekure verification is provided in Mobile as free app. Similarly a separate URL has been provided to verify the document in desktops or laptops. When the eSekure mark is read using the app your will find the display on the Mobile or desktop screen as above. You will find that the variable data in the document have been listed out by extracting the data from the eSekure mark. Now when this data is found to be matching with the data on the image of the certificate or on the original certificate then it can be certified as genuine document. If there is any mismatch found then the document can be suspected as tampered.



PIERCE FENNER SMITH  
100 SPIN BLDG  
GOVERNMENT OF INDIA  
NEW DELHI

**Pioneer, Delhi**  
Sat, 10 Sep 2016, Page 5  
Width: 24.84 cms, Height: 20.49 cms, a3r, Ref: 29-2016-09-10-58

## HRD Ministry working towards digital degrees, certificates

**New Delhi:** The HRD Ministry is working to ensure that degrees and certificates are given to students in digital format from the 2017 academic session onwards.

"There is a need to take pledge and that pledge is by 2017, all degrees and board certificates, everything will go in digital format," HRD Minister Prakash Javadekar said.

He was speaking at the national conference for awareness on National Academic Depository here.

Javadekar said that Prime Minister Narendra Modi has launched Digital India campaign and wants to make the whole apparatus as digital.

He said apart from giving



away certificates in digital format, every student will also get an opportunity to upload their other certificates and awards.

"Every student will also get an opportunity to put other awards which he has won earlier on it after proper authentication. So his profile is available in one click," Javadekar said.

According to reports, the HRD Ministry has fast-tracked work on setting up a virtual database under which all academic records will be available in digital format, to curb the menace of fake educational degrees and marksheets.

The creation of a digital database will benefit recruiters who want to get the credentials of applicants and will also eliminate the need to physically approach the university.

Noting that there is a need to prepare the mindset to change, Javadekar said that the problem today was that although change is taking place at a fast pace in the world, minds are not changing with that pace. **PTI**

## Digital Certificate From TRS

In line with the Digital India initiative from the Government of India, **TRS** has the solution for generating **digital Certificate / Mark statement**.

### USP:

- Easy to generate and upload to the server
- Dual level security – PDF with digital signature and eSekure
- Students can download the Mark statements / Certificates using unique username and passwords
- Students can submit the certificate for further studies or job as soft copy or take a print out and give it as hard copy
- Both ways it is fully secured and tamper proof
- Also since the student submits it for some purpose it has his permission to verify the document

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## Digital Certificate with eSekure Sample Document

Subramanian Narayanswamy  
2016.07.17.20:06  
I attest to the accuracy and  
integrity of this document  
Chennai

Digital Signature

Government of Karnataka  
Office of the Commissioner for Public Instruction, Bengaluru  
Karnataka Teachers Eligibility Test (KARTET) - 2015

ELIGIBILITY CERTIFICATE S.No. B - 239829

This is to certify that the candidate mentioned below is qualified in Teachers Eligibility Test with the following details:

Register No.: 2001001 Month/Year : September 2015 Category: 3A

Candidate Name : PUSHPAVATHI V

Date of Birth : 04/06/1981

Mother Name : NARAYANAMMA V

Father Name/Husband Name : MAHABALESHWARAPPA V

Paper-I ( For Classes I to V)			Paper-II (For Classes VI to VIII)		
Subject	Maximum Marks	Marks Obtained	Subject	Maximum Marks	Marks Obtained
Language I - NA -	30	- NA -	Language I Kannada	30	25
Language II - NA -	30	- NA -	Language II English	30	18
Child Development & Pedagogy	30	- NA -	Child Development & Pedagogy	30	20
- NA -	60	- NA -	Social Science	60	40
Total	150	- NA -	Total	150	103

Result : NOT APPLICABLE Result : QUALIFIED

1) ಇದರ ಮೇಲೆ ದಯೆ ಮಾಡಿ ನೋಡಿ ಮತ್ತು ದೃಢೀಕರಿಸಿ. 2) ಇದರ ಮೇಲೆ ದಯೆ ಮಾಡಿ ದೃಢೀಕರಿಸಿ ಮತ್ತು ದೃಢೀಕರಿಸಿ. 3) ಇದರ ಮೇಲೆ ದಯೆ ಮಾಡಿ ದೃಢೀಕರಿಸಿ ಮತ್ತು ದೃಢೀಕರಿಸಿ. 4) ಇದರ ಮೇಲೆ ದಯೆ ಮಾಡಿ ದೃಢೀಕರಿಸಿ ಮತ್ತು ದೃಢೀಕರಿಸಿ. 5) ಇದರ ಮೇಲೆ ದಯೆ ಮಾಡಿ ದೃಢೀಕರಿಸಿ ಮತ್ತು ದೃಢೀಕರಿಸಿ. 6) ಇದರ ಮೇಲೆ ದಯೆ ಮಾಡಿ ದೃಢೀಕರಿಸಿ ಮತ್ತು ದೃಢೀಕರಿಸಿ.

Candidate Signature visit - www.esekure.in for verification

Special Officer  
Centralised Admission Cell  
Bengaluru

When a digital signature is used on the PDF image it looks like the one shown above. The digital signature it will show the details of the owner and the attestation for the accuracy and integrity of the document.

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Government of Karnataka  
Office of the Commissioner for Public Instruction, Bengaluru  
Karnataka Teachers Eligibility Test (KARTET) - 2015

ELIGIBILITY CERTIFICATE S.No. B - 239829

This is to certify that the candidate mentioned below is qualified in Teachers Eligibility Test with the following details:

Register No.: 2001001 Month/Year : September 2015 Category: 3A

**Signature Validation Status**

Signature is VALID, signed by Subramanian Narayanswamy  
<subu@trsforms.com>.

- The document has not been modified since this signature was applied.
- The signer's identity is valid.

Signature Properties... Close

Category	Score	Category	Score	Score
- NA -	00	- NA -	Social Science	40
Total	150	- NA -	Total	103

Result : NOT APPLICABLE Result : QUALIFIED

Candidate Signature visit - www.esekure.in for verification

Special Officer  
Controlled Admission Cell  
Bengaluru

Subramanian Narayanswamy  
2016.07.17.20:06  
I attest to the accuracy and  
integrity of this document  
Chennai

When you double click on the digital signature it looks like the one shown above. The digital signature will show the details of the owner and the validity of the signer's identity and also attestation for the accuracy and integrity of the document.

**Note. :** Document security is a global issue and everybody is talking about hi-fi technology solutions. These solutions are very costly and are not feasible to be introduced for all documents. eSekure is the only solution which is simple, economical and very powerful. eSekure can be introduced in both paper based documents as well as for digital documents.