# Project Report

## *Mobilization, Skill Development Training & Certification of Persons with Disability (PwDs) in Optical Fibre Splicer Course through CSCs*

### *Phase-I*

## About CSC SPV:-

CSC e-Governance Services India Limited is a Special Purpose Vehicle (SPV) incorporated as a Company under Companies Act 1956 with an object to provide a range of services to support the Common Service Centre , that are centres ,network, comprising of rural and urban Information Technology enabled delivery outlets which are established under CSC Scheme and Monitored by CSC SPV and are integrated service delivery channel for transmission of public and private services, information and knowledge to citizen and are ICT enabled delivery points for offering various e-services; and to do all incidental acts and things necessary for the attainment of the foregoing objects forming part of Digital India programme .These CSC are Owned and operated by Local Village level entrepreneur (VLE)

CSC SPV is delivering services through online portal named digital Seva portal, "digitalseva.csc.gov.in". There are presently more than 4 lakhs common service centres across India. The digital Sewa platform enables CSC SPV an Special Purpose Vehicle (SPV), to Monitor and Implement CSC Scheme that facilitates the progressive migration of services to an e-Governance platform and that enables delivery of services through the CSC network which are the front end service delivery points of Services.

Common Services Centers (CSCs) are a strategic cornerstone of the Digital India programme. CSCs are envisaged as assisted front end ICT (Information and Communication Technology) enabled centres for delivery of various G2C (Government to Citizen) and other B2C (Business to Citizen) services to the citizens. These are managed and operated by a local skilled enterpreneur. The service portfolio including G2C services enable a sustainable rural enterprise providing employment opportunities to local poplulation.

## About Commonwealth Educational Media Centre for Asia (CEMCA)

Commonwealth Educational Media Centre for Asia (CEMCA) a Regional Centre of Commonwealth of Learning (COL), Vancouver, Canada is engaged in Skill Development for better livelihood for youth through TVSD.

## CSC's COMPREHENSIVE SKILLING MODEL

CSC SPV gives stress on skilling ability of youth as better training and learning opportunities with the approach to holistic development (soft + technical) can help India become a truly skilled nation. CSC SPV addresses pressing needs of Skilling India's youth for employment, entrepreneurship, and community enterprise. It reaches into communities, develops skills of people from financially challenged backgrounds and acclimatizes them with the changing work environment. The core philosophy is to train candidates on courses that would help in creating and supplying trained manpower to the industrial spectrum as well as develop entrepreneurial talent.

CSC SPV has initiated Skill Development Courses with the following vision:
- Providing the skill training in rural areas, locally accessed by rural youth
- Getting them certified
- Making them eligible for suitable employment opportunities or to start livelihood in their locality itself

The CSC SPV supports in:
- Reaching out to potential candidates through their presence across the country
- Registration of Candidates followed by Scheme information dissemination
- Consume skill course: e-Skilling and Hybrid Model of Skilling
- Job opportunities, Self-employment, Placement Linkages

## About Optical Fibre Splicing

Optic fibre splicing is the process of joining two or more filers together. Whether you're deploying a new fibre optic network or expanding an existing network, you must ensure your fibers are properly spliced to avoid network disruptions. This process help the Telecom companies to properly managed optical fibre network. In the last five years, 1.5 lakh village panchayats have been connected with optical fibre network. And, in the next 1,000 days, all villages in the country will be connected with optical fibre network (According to TOI 15 Aug 2020).

Optical fibre splicer is responsible for ensuring efficient splicing of the optical fibre cables and supports in optical fibre installation and in carrying out fibre testing using OTDR and power meter.

## Objective of the course:

As CSC VLEs and their operators have been given responsibility for the maintenance and up keeping of BharatNet infrastructure in the villages. We propose for their training on the aspects like Wi-Fi access points, optical fibre splicing and maintenance through online mode across the country by the SSC certified trainers from the relevant industry. CSC VLEs and the operators shall be facilitated with Digital training content provided by SSC in a self-paced mode and also through live classes. Following the training, skill competency certificates shall also be provided by SSC after successful online assessment

## Need of the course:

National Optical Fibre Network (NOFN) will connect to Gram Panchayats wherever necessary. Dark fibre network thus created will be lit by appropriate technology thus creating sufficient bandwidth at the Gram Panchayats. Thus connectivity gap is filled. Non-discriminatory access to the NOFN will be provided to all the Service Providers. These

service providers like Telecom Service Providers (TSPs), ISPs, Cable TV operators and Content providers can launch various services in rural areas. It will ensure adequate availability of skilled manpower to boost growth and productivity in the Telecom sector in near future

## Course Outline:

1. Introduction:
   1.1 Explaining various types of Optical fiber and their applications
   1.2 Imparting knowledge of working principles of Optical fiber and Fiber optic communication system
   1.3 Making the candidate understand the main characteristics of Optical Fiber like attenuation and bending
   1.4 Acquiring the basic information on Splicing, types of splicing and splicing operation
   1.5 Understanding the importance of documenting the steps for splicing
   1.6 Learning to carry out route inspection, cable laying procedure, detailed checks

2. Key Learning:
   2.1 Acquiring the basic information on Splicing, types of splicing and splicing operation
   2.2 Understanding the importance of documenting the steps for splicing
   2.3 Learning to carry out route inspection, cable laying procedure, detailed checks

3. Employability and Entrepreneurship skills/ Soft Skills
   3.1 Understand the concept, importance and characteristics of entrepreneurship
   3.2 Benefits of effective leadership
   3.3 List down different parts of computer
   3.4 Understand the main applications of MS office.
   3.5 Understand about Internet and Network
   3.6 Practice how to type effectively
   3.7 List down the importance of listening skill
   3.8 Practice effective listening skills
   3.9 Use effective speaking skills in your role
   3.10 Demonstrate reading and keep yourself updated on latest news
   3.11 Practice effective writing skills
   3.12 Digital Literacy
   3.13 Learning the benefits of saving money

4. Undertake splicing of optical fiber
   4.1 Acquiring the basic information on Splicing, types of splicing and splicing operation
   4.2 Understanding the importance of documenting the steps for splicing
   4.3 Learning to carry out route inspection, cable laying procedure, detailed checks
   4.4 Educating the importance of safety guidelines and their compliance

4.5      Acquiring knowledge about personal protective equipment like safety Harness, helmet, gloves, goggles, earplugs, nose mask etc. and their application under different working conditions.

4.6      Understanding the testing effectiveness of the splice through OTDR and power meter tests

4.7      Learning about various testing tools and equipment, field tests

4.8      Understanding the importance of documenting testing procedure

4.9      Educating the importance of safety guidelines and their compliance

4.10      Acquiring knowledge about personal protective equipment like safety Harness, helmet, gloves, goggles, earplugs, nose mask etc. and their application under different working conditions.

5. Installation & Commissioning of Optical fiber cables (OFC)-
   5.1      Coordinating trenching cable laying, jointing and cable blowing activities.
   5.2      Perform preventive and corrective maintenance task on fibre link.
   5.3      Find fibre breakdowns, loss on joints, cable and connectors.
   5.4      Checking the duct joints
   5.5      Appropriate disposal of the cut fibers, sleeves and cable pieces.
   5.6      Measuring the distance, fiber attenuation (dB/km), event loss, link loss, and reflectance using OTDR.

6. Program Wrap-up
   6.1      Understand what is an interview
   6.2      Develop the skills to participate in an interview effectively
   6.3      Know commonly asked questions in an interview
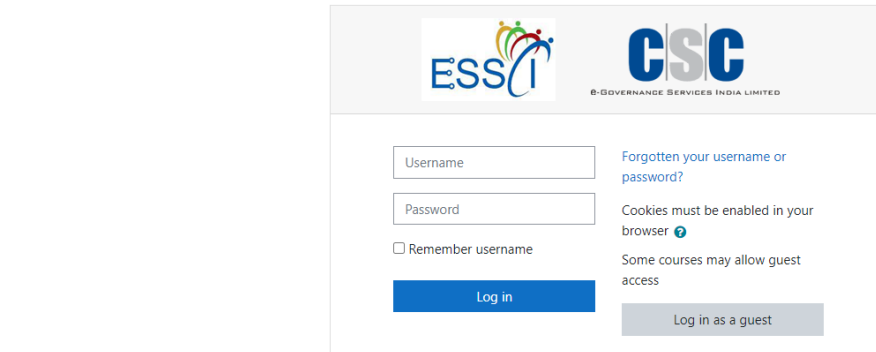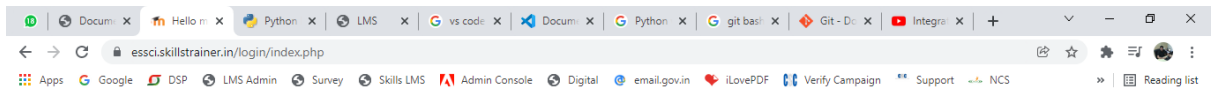   6.4      Revise and integrate learning's of the training program

## OFS Training Program – Delivery

The OFS Training Program will consist of the following:
- The OFS Training will be for 28 hours
- Self-Study through Digital content: 24 hours
- 4 hours Virtual Classroom sessions by trained faculty
- Practice Assessments after every module and two complete Practice Assessment at the end of the Training Program

# Assessment & Certification Process

- Candidates login with their respective credential on https://essci.skillstrainer.in
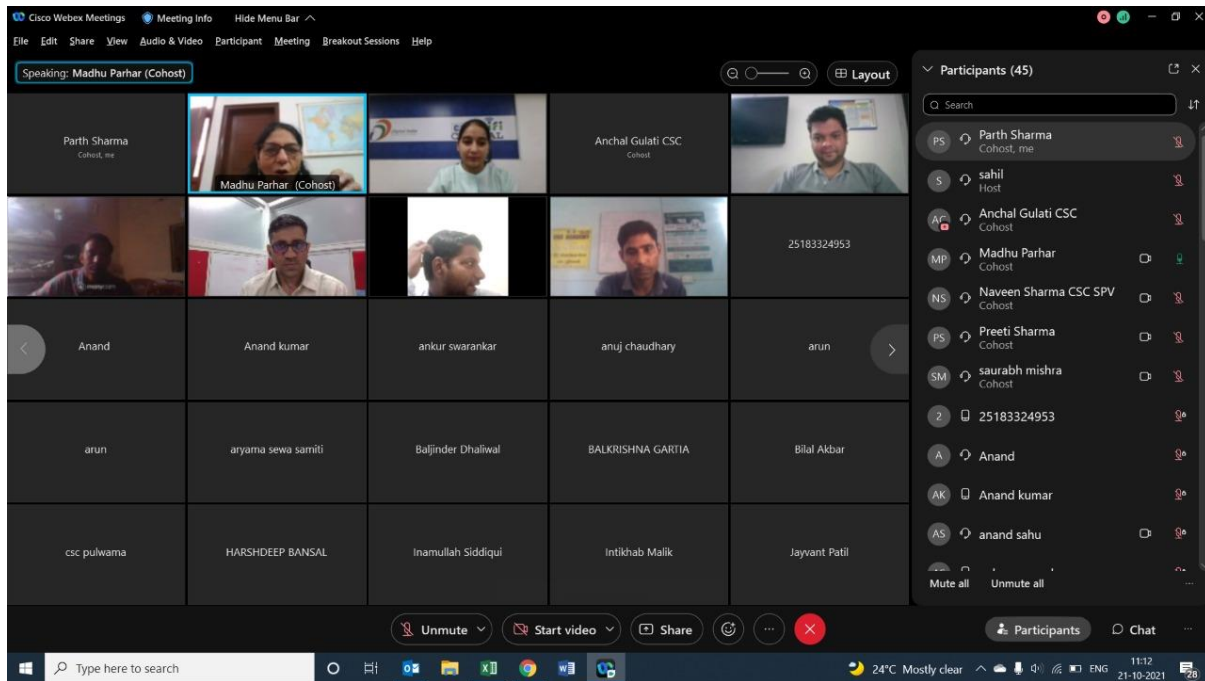


- Click on Final assessment
- Attempt all 30 questions and click on Submit
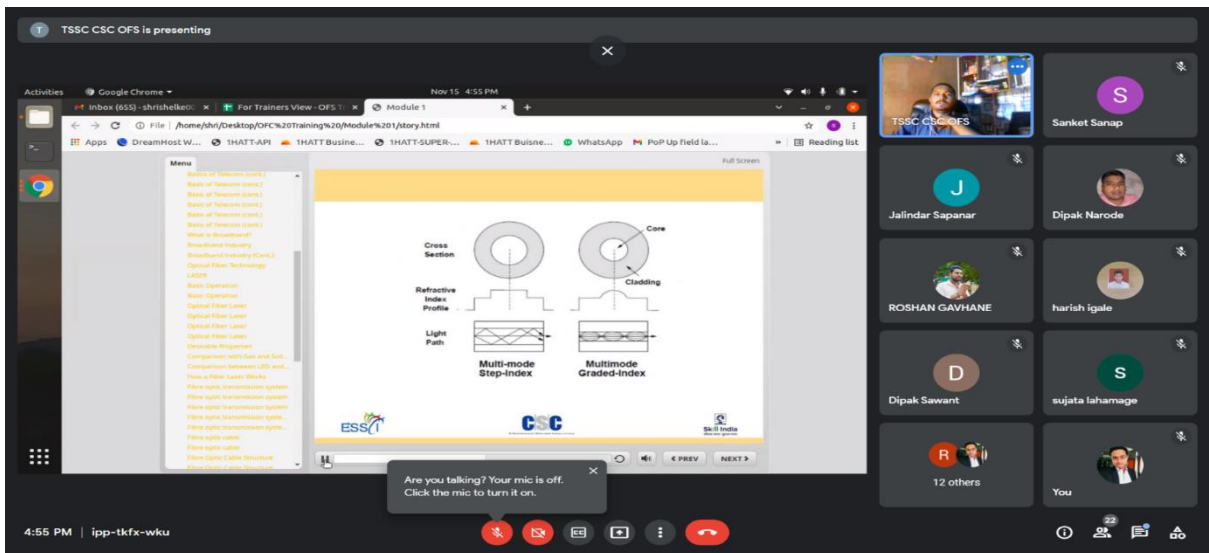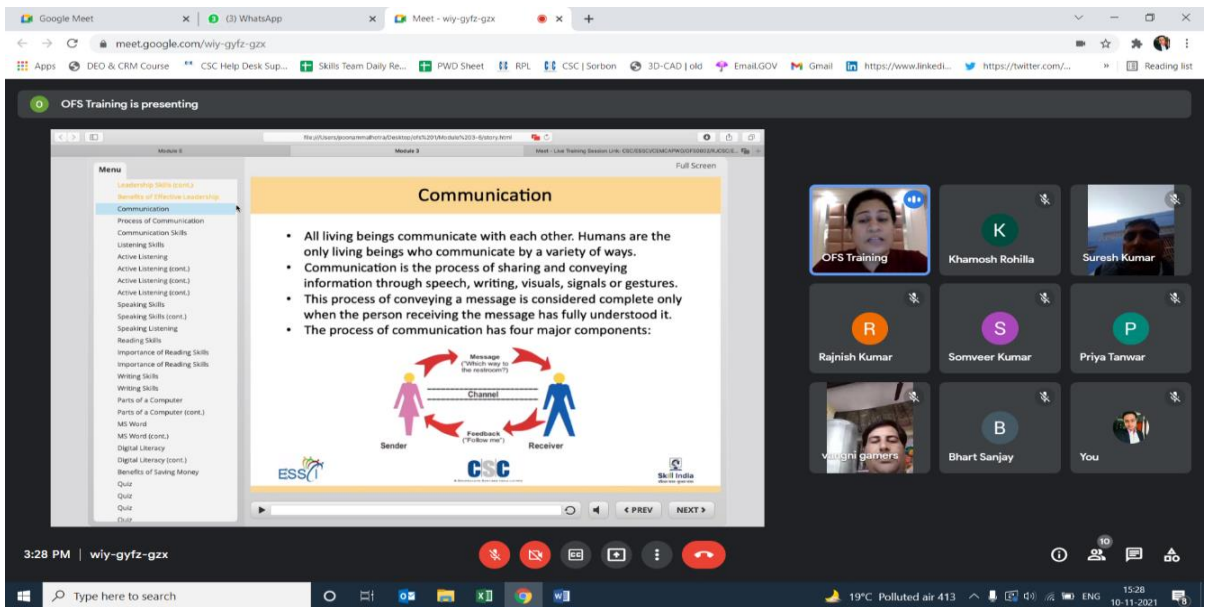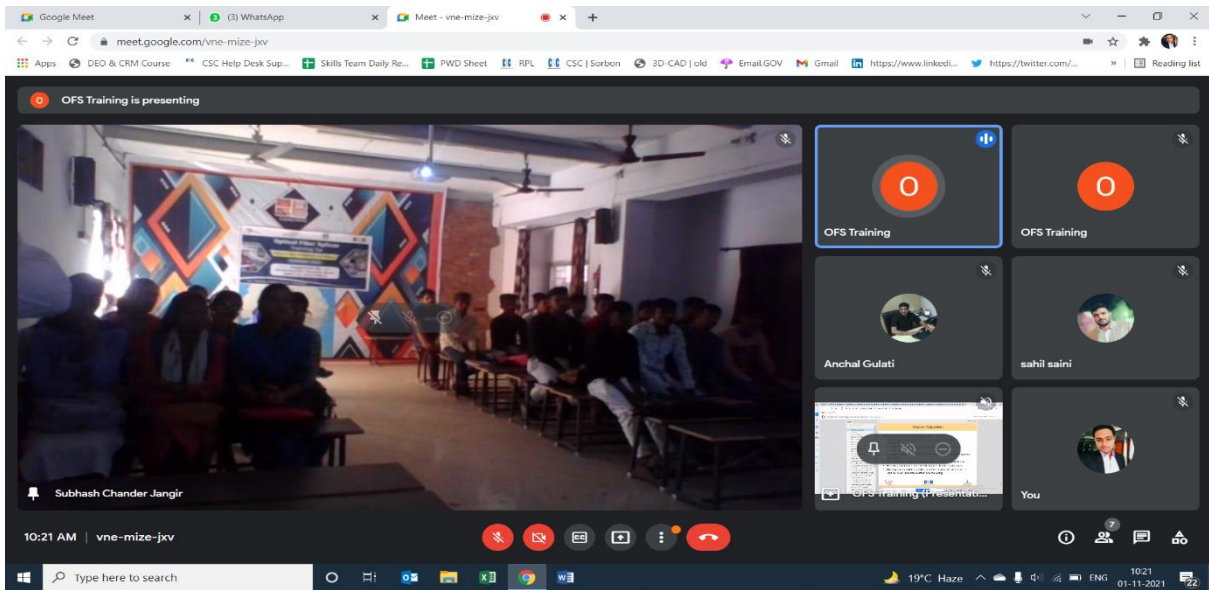- Certificate generated (candidate can download the certificate)

# Outcome/Benefit:

1. Maximize system performance and reliability by learning today's Splicing techniques.
2. Be aware of current industry standards, and become a trusted resource for your customer.
3. Gain customer confidence by ensuring the integrity of their fibre splicing abilities and support.
4. SSC Certificate remains on electronic record and can be confirmed and reissued at any time.
5. This Certification is Nationally Recognized.

*__Glimpse of the launch of Optical Fiber Splicer Program for PwDs & Women in support of Commonwealth Educational Media Centre for Asia (CEMCA)__*

## *Glimpse of the virtual OFS training:*
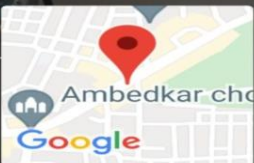
Prosthetic Foot

Bhadra, Rajasthan, India
454C+GM7, Bhadra, Rajasthan 335501, India
Lat 29.106316°
Long 75.171676°
02/11/21 12:54 PM

GPS Map Camera



Bhadra, Rajasthan, India
Daud Katla, Railway Road, Bhadra, Rajasthan 335501, India
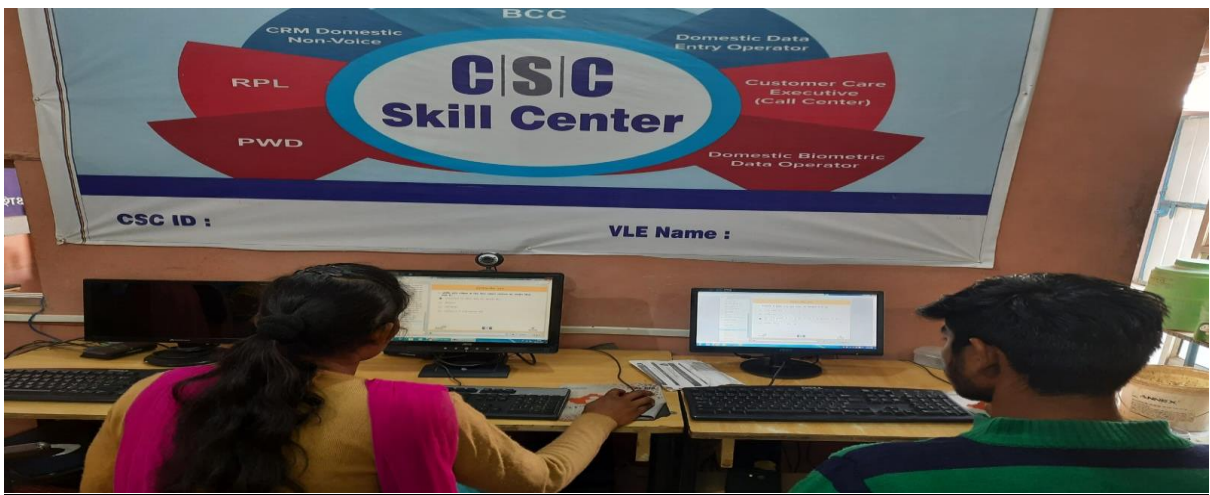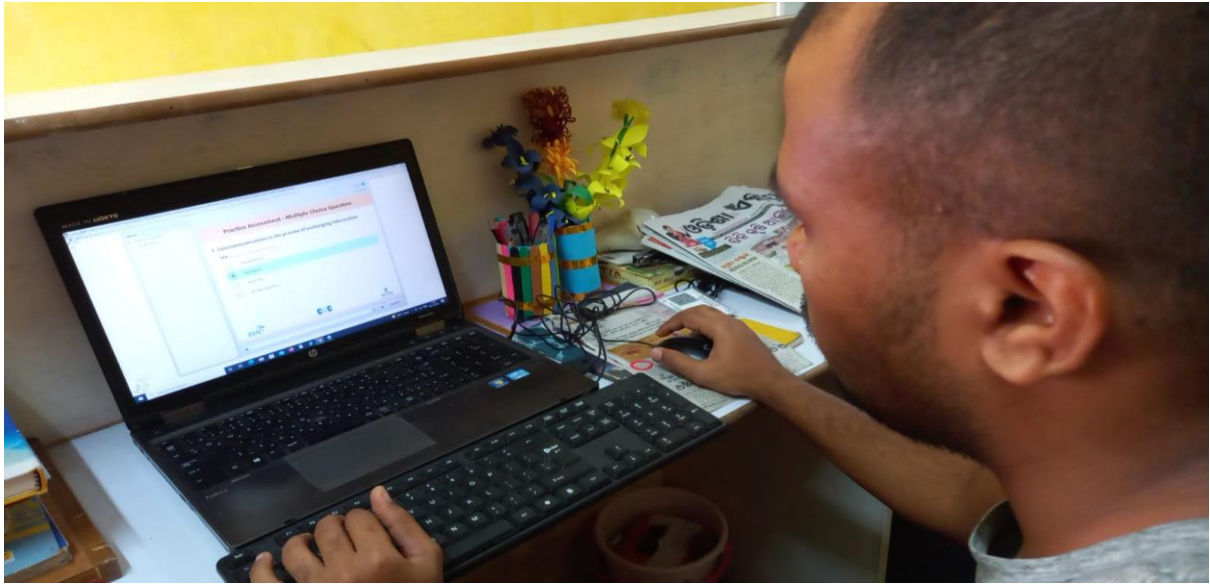Lat 29.106315°
Long 75.171689°
02/11/21 10:42 AM

GPS Map Camera



Bhadra, Rajasthan, India
454C+GM7, Bhadra, Rajasthan 335501, India
Lat 29.106292°
Long 75.171685°
02/11/21 01:04 PM

GPS Map Camera

*Glimpse of OFS Assessment:*

# Sample Certificates



Skill India

ESSCI

CSC ACADEMY

C·O·L CEMCA

## Certificate

This is to certify that

**Sunil Ramlagan**

has successfully completed the Training for the Job Role of

**Optical Fiber Splicer (ELE/TEL/Q6400) - Level 3**

**Issued by:** Electronics Sector Skills Council of India

**Date of Issue:** 25 November 2021

**Institution Name:** CSC e Governance Services India Limited

**Enrollment No.:** CSC/ESSCI/CEMCAPWD/OFS0033/UP/01390

**Mr. Piyush Chakraborty**
Officiating Head
Electronics Sector Skills Council of India



Skill India

ESSCI

CSC ACADEMY

C·O·L CEMCA

## Certificate

This is to certify that

**Maquosood Alam**

has successfully completed the Training for the Job Role of

**Optical Fiber Splicer (ELE/TEL/Q6400) - Level 3**

**Issued by:** Electronics Sector Skills Council of India

**Date of Issue:** 19 January 2022

**Institution Name:** CSC e Governance Services India Limited

**Enrollment No.:** CSC/ESSCI/CEMCAPWD/OFS0005/BR/00207

**Mr. Piyush Chakraborty**
Officiating Head
Electronics Sector Skills Council of India

# Certificate

This is to certify that

**Mrs. Asha**

has successfully completed the Training for the Job Role of

**Optical Fiber Splicer (ELE/TEL/Q6400) - Level 3**

Issued by: Electronics Sector Skills Council of India

Date of Issue: 19 January 2022

Institution Name: CSC e Governance Services India Limited

Enrollment No.: CSC/ESSCI/CEMCAPWD/OFS0042/UP/01842

**Mr. Piyush Chakraborty**
Officiating Head
Electronics Sector Skills Council of India

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# Certificate

This is to certify that

**Anjali Bhoi**

has successfully completed the Training for the Job Role of

**Optical Fiber Splicer (ELE/TEL/Q6400) - Level 3**

Issued by: Electronics Sector Skills Council of India

Date of Issue: 19 January 2022

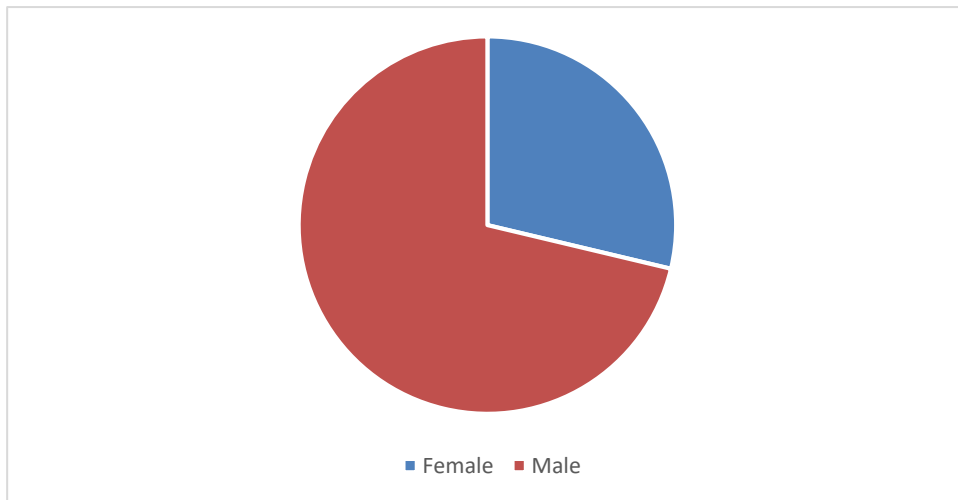Institution Name: CSC e Governance Services India Limited

Enrollment No.: CSC/ESSCI/CEMCAPWD/OFS0019/OD/00718

**Mr. Piyush Chakraborty**
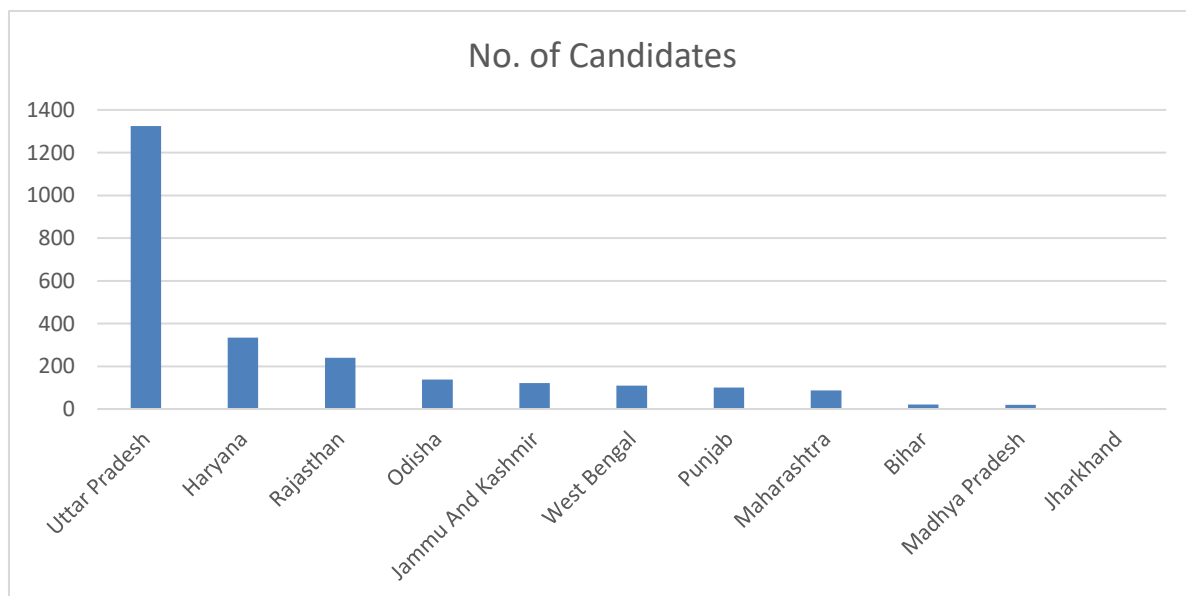Officiating Head
Electronics Sector Skills Council of India

**Total PwD Candidates enrolled Gender wise-**

| Gender | Count |
|---|---|
| Female | 718 |
| Male | 1782 |
| **Grand Total** | 2500 |



■ Female ■ Male

**Total Candidates Enrolled State wise-**

| State | No. of Candidates |
|---|---|
| Uttar Pradesh | 1325 |
| Haryana | 334 |
| Rajasthan | 240 |
| Odisha | 138 |
| Jammu And Kashmir | 122 |
| West Bengal | 109 |
| Punjab | 100 |
| Maharashtra | 87 |
| Bihar | 21 |
| Madhya Pradesh | 19 |
| Jharkhand | 5 |
| **Grand Total** | **2500** |

**Result:**

| Result | Count |
|--------|-------|
| Pass | 2500 |

**Percentage wise result:**

| Marks (%) | No. of Candidates |
|-----------|-------------------|
| 50-75% | 285 |
| 76-90% | 914 |
| 91-100% | 1301 |

Percentage wise
No. of Candidates

285

914

1301

■ 50-75%  ■ 76-90%  ■ 91-100%