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# **Model Curriculum**

**QP Name: Game Artist** 

QP Code: MES/Q0510

QP Version: 1.0

**NSQF Level: 5** 

**Model Curriculum Version: 1.0** 

Media & Entertainment Skills Council, 522-524, DLF Tower-A, Jasola, New Delhi - 110025

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# **Training Parameters**

Sector	Media and Entertainment
Sub-Sector	Animation, Gaming
Occupation	Game Development
Country	India
NSQF Level	5
Aligned to NCO/ISCO/ISIC Code	NCO-2015/2166.0501
Minimum Educational Qualification and Experience	Graduate with one year of relevant experience OR XII pass and Diploma with 3 years of relevant experience OR NSQF Level-4 Certification as Animator / Modeller / Texturing Artist / Rigging Artist with two year of relevant experience For Bachelor Studies: Pursuing Graduation (B. SC. / B.Voc. in Virtual & Augmented Reality) Minimum job entry age 21 years
Pre-Requisite License or Training	Acquaintance with any one High level Programming Language (Scripting languages)
Minimum Job Entry Age	18 years
Last Reviewed On	05/05/2021
Next Review Date	04/05/2025
NSQC Approval Date	30/12/ 2021
QP Version	1.0
Model Curriculum Creation Date	25/4/2020
Model Curriculum Valid Up to Date	04/05/2025

Model Curriculum Version	1.0
Minimum Duration of the Course	1050 hrs
Maximum Duration of the Course	1050 hrs

# **Program Overview**

This section summarizes the end objectives of the program along with its duration.

## **Training Outcomes**

At the end of the program, the learner should have acquired the listed knowledge and skills.

- Perform preproduction activities (Analyse Game Art)
- Create 2D / 3D asset
- Design characters
- Modelling
- Texturing & rigging applications
- Maintain workplace health and safety

## **Compulsory Modules**

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
MES/N2519— Preproduction (Analyse Game Art) NOS Version No. 1.0 NSQF Level 5	40:00	80:00			120:00
Analyse game art	40:00	80:00			120:00
MES/N0525- Create 2D/ 3D asset NOS Version No. 1.0 NSQF Level 5	50:00	90:00			140:00
create 2D and 3D art for the visual elements of a video game	50:00	90:00			140:00
MES/N0503 – Design Characters NOS Version No. 1.0 NSQF Level 5	30:00	90:00			120:00
Design Characters	30:00	90:00			120:00
MES/N0526 -Modelling NOS Version No. 1.0 NSQF Level 5	60:00	100:00			160:00
Modelling	60:00	100:00			50:00

MES/N0527- Texturing & rigging applications NOS Version No. 1.0NSQF Level 5	40:00	120:00		160:00
Texturing & rigging applications	40:00	120:00		60:00
MES/N0104 Maintain workplace health and safety NOS Version No. 1.0 NSQF Level 5	15:00	21:00		50:00
understanding the health, safety and security risks prevalent in the workplace	05:00	06:00		17:00
knowing the people responsible for health and safety and the resources available	04:00	05:00		14:00
identifying and reporting risks	03:00	05:00		13:00
complying with procedures in the event of an emergency	03:00	05:00		13:00
<b>Total Duration</b>	250:00	650:00	150:00	1020:00

# **Elective Modules**

The table lists the modules and their duration corresponding to the Elective NOS of the QP.

Option 1: 2D Game Art

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
MES/N0537- Create 2D Game Art NOS Version No. 1.0 NSQF Level 5	50:00	100:00			150:00
Create 2D Game Art	50:00	100:00			150:00

<b>Total Duration</b>	F0-00	100:00		150:00	
	50:00				

Option 2: 3D Game Art

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
MES/N0539- Create 3D Game Art NOS Version No. 1.0 NSQF Level 5	50:00	100:00			150:00
Create 3D Game Art	50:00	100:00			150:00
<b>Total Duration</b>	50:00	100:00			150:00

**Option 3:** Design VR applications

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
MES/N0538- Basic concept and application of virtual reality NOS Version No. 1.0 NSQF Level 5	10:00	30:00			40:00
Basic concept and application of virtual reality	10:00	30:00			40:00
MES/N0538- Design VR models NOS Version No. 1.0 NSQF Level 5	40:00	70:00			110:00
Design VR models	40:00	70:00			110:00
<b>Total Duration</b>	50:00	100:00			150:00

# **Module Details**

## Module 1: Preproduction (Analyse Game Art)

# Mapped to MES/N0000

## **Terminal Outcomes:**

- Discuss concept of Game Art
- Functions of game artist

After the successful completion of this Af	ractical – Key Learning Outcomes fter the successful completion of this odule, the Participant will be able to:
<ul> <li>Discuss the purpose, key component and rule for game</li> <li>Discuss the need of game design</li> <li>Interpret business value</li> <li>ensure that there is clear identification of the approach to be taken to create the asset as well as daily work completion targets</li> <li>Discuss how to collect adequate and appropriate references before commencing work.</li> <li>Discuss the importance of the asset conforming to specifications and directions received from the Client and the Lead.</li> <li>Explain the importance of artwork following the agreed project style.</li> <li>Respond positively to feedback from the art lead and suggest appropriate changes to the artwork produced.</li> <li>•</li> </ul>	Identify tools and software used in designing game.  create art assets as per client's specifications and quality requirements within the budgeted time and effort.  create high-quality artwork for a game, such as the texture, characters, environment or certain assets handle aspect of designing characters, game environment use texturing and rigging resource / applications.  Demonstrate use of modeling organic and/or inorganic surfaces  Demonstrate 2D and 3D game asset creation process  Show how to apply object-oriented concepts to implement code.  Show how to prepare for and contribute towards the production.  Show how to study the project briefs and plan the work schedule accordingly  Demonstrate how to Implement Interaction system for the Application.  Show how to implement application logics.  Perform reading and reusing existing code base.  Demonstrate the usage of development tools like Game engine and middle ware.  Show how to integrate Libraries and plugins with the application code.  Demonstrate how to use version control tools to maintain various versions of the

	code.
Classroom Aids:	
Laptop, whiteboard, marker, projector	
Tools, Equipment and Other Requirements	
HP Desktop Computer, Apple M1 Mac Mini Deskt accessories) - VR HMD, Television, Vuforia, AR SD Diary / Notebook, Pen,Marker, Applicable S/W	• • • • • • • • • • • • • • • • • • • •

# Module 3: Create 2D/3D asset Mapped to MES/N0000

#### **Terminal Outcomes:**

• Create background / assets for the game

<ul> <li>Identify suitable hardware requirements.</li> <li>Prepare the draft sketches / pictorials / photographs etc. related to the game.</li> <li>Create sequences of game.</li> <li>Demonstrate use of graphic tools more comfortable with concept.</li> </ul>
<ul> <li>Show how to create 2D platformer with 3D assets.</li> <li>Demonstrate the use of sprites to do a 2D game and defining characters.</li> <li>Show how to use text along with the concept image.</li> <li>Show how to handle models and textures to do 3D game and make 3D characters.</li> <li>Create 2D/3D concept art of an</li> </ul>
<ul> <li>environment or prop or character.</li> <li>Show how to create hires model.</li> <li>Create in-game mesh, texture and put it into engine</li> </ul>

## Classroom Aids:

Laptop, whiteboard, marker, projector

## **Tools, Equipment and Other Requirements**

HP Desktop Computer, Apple M1 Mac Mini Desktop, Apple IPad Pro Tab, Oculus Quest 2 (WIth accessories) - VR HMD, Television, Vuforia, AR SDK, AR Kit, ARCore, Wikitude, Kudan, Holo Toolkit, Diary / Notebook, Pen, Marker, Applicable S/W.

## **Module 3: Design Characters**

#### Mapped to

**Terminal Outcomes:** After the successful completion of this module, the Participant will be able to:

- Interpret the script/ brief/ storyboard
- Maintain continuity and consistency across scenes
- Gather visuals and prepare character pack

<b>Duration: 30</b> :00:	Duration: 90:00	
Theory – Key Learning Outcomes After the successful completion of this module, the Participant will be able to:	Practical – Key Learning Outcomes After the successful completion of this module, the Participant will be able to:	
<ul> <li>Discuss the goal of the script, brief or storyboard with respect to each character / theme.</li> <li>Describe design brief (appearance, complexion, dressing, moods, personalities, expressions etc.)</li> <li>List the requirements according to the scripts (number, types, duplicates etc.) based on the individual's role and its requirements.</li> </ul>	<ul> <li>Interpret background and other aspects (dimensions, operating parameters etc.) based on the individual's role and its requirements.</li> <li>Record continuity-related details e.g. position, placement, colour etc. as required</li> </ul>	
Classroom Aids:		

## **Classroom Aids:**

Laptop, whiteboard, marker, projector

## **Tools, Equipment and Other Requirements**

HP Desktop Computer, Apple M1 Mac Mini Desktop, Apple IPad Pro Tab, Oculus Quest 2 (WIth accessories) - VR HMD, Television, Vuforia, AR SDK, AR Kit, ARCore, Wikitude, Kudan, Holo Toolkit, Diary / Notebook, Pen, Marker, Applicable S/W

# **Module 4: Modelling** Mapped to MES/N0000

Terminal Outcomes: After the successful completion of this module, the Participant will be able to:

• Create computer generated 3D models

Duration: 60:00	<b>Duration</b> : 100:00		
Theory – Key Learning Outcomes After the successful completion of this module. The user will be able to:	Practical – Key Learning Outcomes After the successful completion of this module. The user will be able to:		
<ul> <li>Describe goal of the script, brief or storyboard with respect to each character / theme.</li> <li>Understand and explain the design / concept / character / environment for which model is to be created.</li> <li>Discuss the final display medium and adapt / suggest the model for its polycounts, mesh complexity, movement capability etc.</li> <li>Describe the importance of ensuring that the models will be able to perform properly once animated, are uniform and consistent and are delivered in appropriate formats that can be used by others.</li> <li>Describe how to work out any problems with the models that emerge during production or construction in collaboration with peers and under supervision of the art director</li> </ul>	<ul> <li>Identify necessary tools used to develop models.</li> <li>Show how to create environments and scenarios using a level editor and other tools.</li> <li>Prepare digital models according to the design brief, requirements, specifications and technical needs in line with game script.</li> <li>Create prototypes/pilots for testing.</li> <li>Conduct review of models with relevant people.</li> <li>Conduct testing the models to ensure that they meet the design specifications and production requirements and function as required.</li> </ul>		

# **Classroom Aids:**

Laptop, whiteboard, marker, projector

## **Tools, Equipment and Other Requirements**

HP Desktop Computer, Apple M1 Mac Mini Desktop, Apple IPad Pro Tab, Oculus Quest 2 (WIth accessories) - VR HMD, Television, Vuforia, AR SDK, AR Kit, ARCore, Wikitude, Kudan, Holo Toolkit, Diary / Notebook, Pen, Marker, Applicable S/W

## **Module 5: Texturing & rigging applications**

#### Mapped to MES/N0000

Terminal Outcomes: After the successful completion of this module the trainee will be able to:

- Creation of textures
- Creating rigs for models

# Duration: 40:00 Theory – Key Learning Outcomes

# After the successful completion of this module the participant will be able to:

- List the tools to be used for texturing and rigging purpose.
- Discuss the possibilities for adding textures to models to create photorealistic models/images.
- Define the final exhibition medium and adapt the textures accordingly.

#### Duration: 70:00

# Practical – Key Learning Outcomes After the successful completion of this module the trainee will be able to:

- Show how to develop and add textures to models in accordance to the design brief and concept art for different types of models under the supervision of the art director and character artist.
- Show how to manage quality of textures during the animation process and ensure uniformity and consistency in the final output.
- Create bones and controls including script for animation.
- Create user interfaces and controls for movements in the models according to the design brief (appearance, expressions, movements, dramatic poses etc.), and specifications (mobility, operating parameters, hierarchy of movement etc.) under supervision of the animator.
- Create prototypes/pilots for testing.
- Create rigs for final model which includes creating movements of characters {Bends,
   Stretches, Expressions}, Accessories, objects,
   props, sets, locations, bipeds, quadrupeds,
   Hair/fur simulation, Cloth simulation

#### **Classroom Aids:**

Laptop, whiteboard, marker, projector

## **Tools, Equipment and Other Requirements**

HP Desktop Computer, Apple M1 Mac Mini Desktop, Apple IPad Pro Tab, Oculus Quest 2 (WIth accessories) - VR HMD, Television, Vuforia, AR SDK, AR Kit, ARCore, Wikitude, Kudan, Holo Toolkit, Diary / Notebook, Pen, Marker, Applicable S/W

# Module 6: Maintain Workplace Health and Safety Mapped to MES/N0104

**Terminal Outcomes:** After the successful completion of this module, the Participant will be able to:

- Discuss the health, safety and security risks prevalent in the workplace and report health and safety issues to the person responsible for health and safety and the resources available.
- Comply with procedures in the event of an emergency
- Discuss the various safety precautions to be taken.

Duration: 15:00	<b>Duration</b> : 21:00			
Theory – Key Learning Outcomes  After the successful completion of this module, the Participant will be ableto:	Practical – Key Learning Outcomes  After the successful completion of this			
<ul> <li>Recall health, safety and security-related guidelines and identify the risks involved.</li> <li>Maintain correct posture while working and maintain and use the first aid kit whenever required.</li> <li>Dexcribe the benefits of reporting health and safety risks/ hazards to concerned personnel</li> <li>Recall people responsible for health and safety and able to contact in case of emergency</li> <li>Illustrate security signals and other safety and emergency signals</li> <li>Explain the process to identify and report risk.</li> <li>Enumerate and recommend opportunities for improving health, safety, and security to the designated person</li> </ul>	<ul> <li>Identify the different types of health and safety hazards in a workplace</li> <li>Practice safe working practices for own job role</li> <li>Perform evacuation procedures and other arrangements for handling risks</li> <li>Perform the reporting of hazard</li> <li>Identify and document potential risks like sitting postures while using the computer, eye fatigue and other hazards in the workplace</li> <li>Demonstrate the use of Personal Protective Equipment (PPE) appropriately.</li> <li>Demonstrate how to report any hazardsoutside the individual's authority tothe relevant person in line with organisational procedures and warnother people who may be affected</li> <li>Comply with procedures in the event of an emergency</li> <li>Show the impact of the violation of safety procedures with the help of a role play.</li> </ul>			

## **Classroom Aids:**

Laptop, whiteboard, marker, projector, Health and Safety Signs and policy

## **Tools, Equipment and Other Requirements**

Health and Safety Signs and policy

#### Module 7: Create 2D Game art

#### Mapped to MES/N0000

**Terminal Outcomes:** After the successful completion of this module, the Participant will be able to:

• Create 2D concept art of an environment or prop or character.

Duration: 15:00	Duration: 21:00		
Theory – Key Learning Outcomes  After the successful completion of this module, the Participant will be ableto:	Practical – Key Learning Outcomes After the successful completion of this module, the Participant will be able to:		
<ul> <li>Describe 2D game art and its application in designing game tools / dame engines.</li> <li>ensure artwork follows the agreed project style.</li> <li>Discuss the importance of working collaboratively with other game artists, as well as members of the wider team, such as designers, developers, animators, quality assurance testers, and those involved in management and marketing.</li> <li>Explain the importance of implementing feedback from the art lead by making appropriate changes to the artwork you've produced.</li> <li>Discuss the importance of working with deadlines to help the team to produce the game efficiently and in line with the required schedule.</li> <li>Understand and explain the importance of keeping skills set updated.</li> </ul>	<ul> <li>Identify various tools to create 2d design / game art.</li> <li>Create high-quality artwork for a game, such as the texture, characters, environment or certain assets.</li> <li>Design 2D art of each character / models desired as per game script.</li> <li>Show how to report progress to art director/lead artist on a regular basis.</li> </ul>		

#### **Classroom Aids:**

Laptop, whiteboard, marker, projector, Health and Safety Signs and policy

# **Tools, Equipment and Other Requirements**

HP Desktop Computer, Apple M1 Mac Mini Desktop, Apple IPad Pro Tab, Oculus Quest 2 (WIth accessories) - VR HMD, Television, Vuforia, AR SDK, AR Kit, ARCore, Wikitude, Kudan, Holo Toolkit, Diary / Notebook, Pen, Marker, Applicable S/W

# Module 8: Create 3D Game Art Mapped to MES/N0000

**Terminal Outcomes:** After the successful completion of this module, the Participant will be able to:

• Create three-dimensional elements for video games, 3D images, and 3D interactive movies.

Duration: 15:00	Duration: 21:00		
Theory – Key Learning Outcomes  After the successful completion of this module, the Participant will be ableto:	Practical – Key Learning Outcomes  After the successful completion of this module, the Participant will be able to:		
<ul> <li>Discuss the missions, challenges and puzzles that will be encountered in 3D game play.</li> <li>Discuss how to plan games using screenshot mockups, gameplay flowcharts and other visual devices.</li> <li>Discuss the importance of maintaining design level documentation, including mechanics, guidelines and mission outlines.</li> <li>scripting and design capabilities using software such as Blueprint Visual Scripting within Unreal Engine 4 (UE4)</li> <li>Discuss the importance of using motion-capture software to incorporate live-action actors into the video game</li> </ul>	<ul> <li>Demonstrate how to design games for a range of devices and platforms.</li> <li>Show how to create animations and graphics by using illustrations and computer programs.</li> <li>Show how to create 3D environment / background in motion.</li> <li>Demonstrate the use of modelling tools like 3DS Max and Blender to create of 3D models.</li> <li>Show how to make adjustments to the game design specifications to reflect developments as the project moves forward.</li> <li>Show how to create narrative features, such as story-lines, role-play mechanics and character bios.</li> <li>PC9. create 3D game design in final shape and test PC10. use 2D/3D computer animation software to mockup and animate game levels and worlds.</li> <li>Conduct periodic design reviews throughout the video game development timeline.</li> <li>Demonstrate the application of traditional art concepts and techniques, such as line, form and colour theory.</li> <li>Design the artwork for all visual game aspects, such as characters, weapons and vehicles.</li> </ul>		

## **Classroom Aids:**

Laptop, whiteboard, marker, projector, Health and Safety Signs and policy

**Tools, Equipment and Other Requirements** 

HP Desktop Computer, Apple M1 Mac Mini Desktop, Apple IPad Pro Tab,Oculus Quest 2 (WIth accessories) - VR HMD, Television, Vuforia, AR SDK,AR Kit , ARCore ,Wikitude , Kudan, Holo Toolkit, Diary / Notebook, Pen,Marker, Applicable S/W

#### **Module 9: Design VR applications**

#### Mapped to MES/N0000

**Terminal Outcomes:** After the successful completion of this module, the Participant will be able to:

- Prepare to create VR application from scratch, recreate an application, and make enhancements to an existing application.
- Discuss working with VR Platforms, the techniques and principles used in each VR Platform, in depth knowledge of SDKs specific to each VR platform and on creating a hybrid VR Application.
- Design VR models

#### Duration: 15:00 **Duration**: *21:00* **Theory – Key Learning Outcomes Practical – Key Learning Outcomes** After the successful completion of this After the successful completion of this module, the Participant will be ableto: module, the Participant will be able to: Describe object-oriented Show how to use of 3D data for creating virtual data in relation with story outline. programming concepts. Prepare flowcharts according to the Explain real time visualization and interaction within a virtual world. Programming requirements. Demonstrate the use of UML class Describe the importance of exploring structure diagrams. and manipulating three-dimensional (3-D) interactive environment. Show how to make necessary changes required for the target platform Describe Pseudo-codes/Algorithms. (combining it with AR). existing code Explain and its Carry out recreation of application using functionalities. the core logic from the existing Explain Type of VR (Immersive VR, application. Desktop VR, Projection VR and Show how to use an existing code and its Simulation VR) and its suitability as per functionalities. target design. Demonstrate how to overlay (image, 2D, Discuss visualization tools and define 3D) information on top of pre-existing target experience and the interaction data. of highlights. Show how to prepare theme of real and Discuss how to present problems in a virtual data. shared 3D environment that simulate real aspect of the real world Design and develop VR Application in line with existing features / story or Describe Virtual Reality principles and specifications / image recognition and basics and story specified to construct object recognition. VR model. Demonstrate working with pre-created Define VR catalogues. images and 3D models to create photorealistic experiences. facilitate data and visualize concepts conducts researching Conduct spike testing and rapid proofing developing pipeline solutions and of concepts around emerging

technologies.

Explain real world and interpret

techniques.

utilities around features.

- Discuss the production of VR/AR experiences viewable on mobile devices and VR headsets.
- Study different VR Platforms and develop application for each VR platform with their specific SDKs
- Discuss the importance of integration of assets into the application to demonstrate basic features
- Create rapid prototypes of systems in Unity, including asset integration into Unity.
- Demonstrate the building of user interfaces in Unity utilizing diegetic, meta and spatial elements.
- Conduct spike testing and rapid proofing of concepts around emerging technologies.
- Create a cross platform VR application

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#### **Classroom Aids:**

Laptop, whiteboard, marker, projector, Health and Safety Signs and policy

#### **Tools, Equipment and Other Requirements**

HP Desktop Computer, Apple M1 Mac Mini Desktop, Apple IPad Pro Tab,Oculus Quest 2 (WIth accessories) - VR HMD, Television, Vuforia, AR SDK,AR Kit , ARCore ,Wikitude , Kudan, Holo Toolkit, Diary / Notebook, Pen,Marker, Applicable S/W

#### **Mandatory Duration:** *150:00*

**Recommended Duration: 00:00** 

**Module Name: On-the-Job Training** 

Location: On Site
Terminal Outcomes

After the successful completion of On-the-Job Training the participant will be able to acquire skills to:

- Prepare model and complete the texture as per real-time engines requirement
- Test 3D models in the real-time/game environment
- Artificial intelligence & machine learning
- Deploy Internet of things (IoT)
- Enterprise block chain
- Maintain workplace health and safety

# **Annexure**

# **Trainer Requirements**

Trainer Prerequisites						
Minimum Educational	Specialization		Relevant Industry T Experience		ng Experience	Remarks
Qualification		Years	Specialization	Years	Specialization	
Graduate from any other polytechnic/	Technical artist - AR/VR	5	Working experience required in AR- VR development in the field of	NA	3	-

reputed institute in the core	Game development.	
subject		

Trainer Certification					
Domain Certification	Platform Certification				
Certified for Job Role: "Game artist" mapped to QP: "MES/Q0510", version 1.0. Minimum accepted score as per SSC guidelines is 80%.	Recommended that the Trainer is certified for the Job Role: "Trainer", mapped to the Qualification Pack: "MEP/Q2601, v1.0 Trainer" with the scoring of a minimum of 80%.				

# **Assessor Requirements**

Assessor Prerequisites						
Minimum Educational	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
Qualification		Years	Specialization	Years	Specialization	
Class XII	NA	6	Working experience required in in the field of Game development.	NA	3	-
OR						
Graduation	Game Developer	5	Working experience required in in the field of Game development.		3	

Assessor Certification						
Domain Certification Platform Certification						
Certified for Job Role: "Game artist" mapped to QP: "MES/Q0510", version 1.0. Minimum accepted score as per SSC guidelines is 80%.	Recommended that the Assessor is certified for the Job Role: "Assessor", mapped to the Qualification Pack: "MEP/Q2701, v1.0 Assessor" with the scoring of a minimum 80%.					

## **Assessment Strategy**

#### **Assessment system Overview:-**

Assessment will be carried out by MESC affiliated assessment partners. Based on the results of assessment, MESC certifies the learners. Candidates have to pass online theoretical assessment which is approved by MESC. The assessment will have both theory and practical components in 30:70 ratio. While theory assessment is summative and an online written exam; practical will involve demonstrations of applications and presentations of procedures and other components. Practical assessment will also be summative in nature.

#### **Testing Environment:-**

Training partner has to share the batch start date and end date, number of trainees and the job role. Assessment is fixed for a day after the end date of training. It could be next day or later. Assessment will be conducted at the training venue. Question bank of theory and practical will be prepared by assessment agency and approved by MESC. From this set of questions, assessment agency will prepare the question paper. Theory testing will include multiple choice questions, pictorial question, etc. which will test the trainee on theoretical knowledge of the subject. The theory and practical assessments will be carried out on same day. If there are candidates in large number, more assessors and venue will be organized on same day of the assessment.

Assessment						
Assessment Type	Formative or Summative	Strategies	Examples			
Theory	Summative	Written Examination	Knowledge of facts related to the job role and functions. Understanding of principles and concepts related to the job role and functions			
Practical	Summative	Structured tasks	Presentation			
Viva	Summative	Questioning and Probing	Mock interview on topics			

#### **Assessment Quality Assurance framework**

Only certified assessor can be assigned for conducting assessment. Provision of 100 % video recording with clear audio to be maintained and the same is to be submitted to MESC. The training partner will intimate the time of arrival of the assessor and time of leaving the venue.

#### Methods of Validation:-

Unless the trainee is registered, the person cannot undergo assessment. To further ensure that the person registered is the person appearing for assessment, id verification will be carried out. Aadhar card number is required of registering the candidate for training. This will form the basis of further verification during the assessment. Assessor conducts the assessment in accordance with the assessment guidelines and question bank as per the job role. The assessor carries tablet with the loaded questions. This tablet is geotagged and so it is monitored to check their arrival and completion of assessment. Video of the practical session is prepared and submitted to MESC.

Random spot checks/audit is conducted by MESC assigned persons to check the quality of assessment. Assessment agency will be responsible to put details in SIP. MESC will also validate the data and result received from the assessment agency.

#### Method of assessment documentation and access

The assessment agency will upload the result of assessment in the portal. The data will not be accessible for change by the assessment agency after the upload. The assessment data will be validated by MESC assessment team. After upload, only MESC can access this data. MESC approves the results within a week and uploads it.