CURRICULUM

FOR THE TRADE OF

Executive (Computer Science)

UNDER

APPRENTICESHIP TRAINING SCHEME

सत्यमेव जयते

GOVERNMENT OF INDIA

MINISTRY OF SKILL DEVELOPMENT AND ENTREPRENEURSHIP

DIRECTORATE GENERAL OF TRAINING

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1. BACKGROUND

1.1 Apprenticeship Training Scheme under Apprentice Act 1961

The Apprentices Act, 1961 was enacted with the objective of regulating the programme of training of apprentices in the industry by utilizing the facilities available therein for imparting on-the-job training. The Act makes it obligatory for employers in specified industries to engage apprentices in designated trades to impart Apprenticeship Training on the job in industry to school leavers and person having National Trade Certificate (ITI pass-outs) issued by National Council for Vocational Training (NCVT) to develop skilled manpower for the industry. There are five categories of apprentices namely; **trade apprentice, optional trade apprentice, graduate, technician and technician (vocational) apprentices.**

Qualifications and period of apprenticeship training of trade apprentices and optional trade apprentices vary from trade to trade. The apprenticeship training consists of basic training followed by practical training. At the end of the training, the apprentices are required to appear in a trade test conducted by NCVT and those successful in the trade tests are awarded the National Apprenticeship Certificate.

The period of apprenticeship training for graduate (engineers), technician (diploma holders and technician (vocational) apprentices is one year. Certificates are awarded on completion of training by the Department of Education, Ministry of Human Resource Development.

1.2 Changes in Industrial Scenario

Recently we have seen huge changes in the Indian industry. The Indian Industry registered an impressive growth during the last decade and half. The number of industries in India have increased manifold in the last fifteen years especially in services and manufacturing sectors. It has been realized that India would become a prosperous and a modern state by raising skill levels, including by engaging a larger

proportion of apprentices, will be critical to success; as will stronger collaboration between industry and the trainees to ensure the supply of skilled workforce and drive development through employment. Various initiatives to build up an adequate infrastructure for rapid industrialization and improve the industrial scenario in India have been taken.

1.3 **Reformation**

The Apprentices Act, 1961 has been amended and brought into effect from 22nd December, 2014 to make it more responsive to industry and youth. Key amendments are as given below:

☐ Prescription of number of apprentices to be engaged at establishment level instead of trade-wise.

☐ Establishment can also engage apprentices in optional trades which are not designated, with the discretion of entry level qualification and syllabus.

☐ Scope has been extended also to non-engineering occupations.

☐ Establishments have been permitted to outsource basic training in an institute of their choice.

☐ The burden of compliance on industry has been reduced significantly.

2. RATIONALE

(Need for Apprenticeship in **Executive (Computer Science)**

1. It will enhance the ability to understand the Computer Science/BIS/ IT functions of industrial organization.

2. It will enhance the ability to understand and perform Computer Science/BIS/ IT related works etc.

3. It will enhance the ability to understand the software being used in various activities in Computer Science/BIS/ IT.

4. It will enhance the interpersonal skill required in handling various activities in Computer Science/BIS/ IT.

5. It will also provide outline knowledge of being used in day to day activities in Computer Science/BIS/ IT.

3. JOB ROLES:

Brief description of job roles:

Executive (Computer Science)

The individual shall learn/ perform basics of Computer Science /BIS/IT activities and report to BIS Incharge. The apprentice will learn on the job by assisting in:

i. Installation and configuration of computer hardware operating systems and applications
ii. Monitoring and maintain computer systems and networks
iii. Coordination with staff or clients through a series of actions, either face-to-face or over the phone, to help set up systems or resolve issues
iv. Troubleshooting of system and network problems, diagnosing and solving hardware or software faults, replace parts as required
v. Setting up of new users' accounts and profiles and deal with password issues
vi. Responding within agreed time limits to call-outs
vii. Network support to identify and take care of network bugs, and design network expansions
viii. Support the SAP and ORACLE system and work closely with the development team to create new mobile apps as needed
ix. Offer technical support to the executive staff for Executive Apprenticeal network functions and any Executive Apprenticeet-enabled applications

4. <u>GENERAL INFORMATION</u>

1. Name of the Trade : **Executive (Computer Science)**

2. Duration of Apprenticeship Training : **12 Months**

   (i) Basic Training : Nil
   (ii) Practical Training : 12 Months

3. Entry Qualification :

   MCA (3 years full time Course)

4. Selection of Apprentices : The apprentices will be selected as per the Apprentices Act amended time to time

5. Trainer/Instructor Qualification : **Middle Management / Senior Management Level Executives having Post Graduate Qualification in the field of Computer Science / Information Technology, with on the job experience as Head of the Department, Business Information System / Information Technology at Factory/Offices, for more than 5 years.**

5. COURSE STRUCTURE

Training duration details: -

Components of Training ⬇	Duration of Training in Months ➡											
	1	2	3	4	5	6	7	8	9	10	11	12
Practical Training												

6. BROAD SKILL COMPONENT TO BE COVERED DURING ON-JOB TRAINING

Name of the trade: **Executive (Computer Science)**

Duration: 12 months

(A) **Basic training components**
    (i) Basic numeracy related to course/trade: Not required
    (ii) Theory: Not required
    (iii) Practical: On the job training in the field of Computer Science
    (iv) Engineering drawing and Science related to course/trade (If required): Not Required

(B) **Practical Training/On-the job training (Please mention the expected learning outcomes).**

Duration : 12 months (52 weeks)	
Sl. No.	**Practical skills to be covered during on the job training**
1	Installation and configuration of computer hardware operating systems and applications
2	Network support
3	Troubleshooting of system and network problems
4	Programming
5	Testing of software
6	Creation of new mobile apps
7	Web designing
8	Managing data on company website and portals
9	Management Information System

Note: * The basic training may not be required as it is expected that candidates with such educational / technical background are having sufficient knowledge to enable them to undertake OJT. However, an employer can provide the same, if felt necessary.

    ** It is expected that candidates with such educational/technical background are having sufficient knowledge to enable them to undertake OJT, without any basic training.

<u>**INFRASTRUCTURE FOR ON-JOB TRAINING**</u>

Trade : **Executive Apprentice - Computer Science**

Actual training will depend on the existing facilities available in the company/establishments. However, the industry should ensure that the broad skills defined against On-Job Training part (i.e. 12 months) are imparted.