DIRECTORATE GENERAL OF TRAINING (DGT)

ALL INDIA TRADE TEST, MAINS AUG 2026

CRAFTSMEN TRAINING SCHEME (CTS)

TRADE PRACTICAL EXAMINATION

TRADE: COMPUTER OPERATOR AND PROGRAMMING ASSISTANT (NSQF) **Date: 17/06/2026**
SUBJECT: TRADE PRACTICAL **Time: 8 Hrs**
TRADE CODE: 421 **Max. Marks: 250**
PAPER CODE: 26/08/C/A-1/1 **Min. Marks: 150**

Note: Attempt all questions.

1) Type the following text in Microsoft Word and perform the specified formatting tasks. **(30 Marks)**
Write the procedure for formatting the paragraph and save the file as **<your roll number>.docx**. Also, insert a Process SmartArt diagram as instructed.

Email Communication

Email is a method of sending and receiving messages electronically through the internet. It enables fast and efficient communication across the world. An email usually contains a recipient's address, subject, message body, and attachments. It is widely used for personal, educational, and professional purposes due to its speed and convenience.

Email is especially important in workplaces for formal communication such as job applications, sending reports, and sharing important information. It also helps in maintaining a written record of communication, which can be referred to later. With features like attachments and easy accessibility, email has become an essential communication tool.

Key Features of Email

- Fast and instant communication
- Easy to send documents and attachments
- Cost-effective method
- Provides written record for future reference
- Accessible anytime and anywhere
- Widely used for professional communication

Apply the following formatting.

1. Page Setup
    a. Set page size to A4
    b. Margins: 1 inch on all sides
    c. Orientation: Portrait
2. Set the document font to **Calibri**, size **12**
3. Type the heading in **Bold**, **16 pt**, and **Center aligned**
4. Apply **Justify alignment** for all paragraphs
5. Use **1.5 line spacing** for the document
6. Insert **bullets** for the features/points section
7. Process SmartArt diagram using the following steps:
    - Open Email App
    - Click Compose
    - Enter Recipient
    - Add Subject
    - Type Message
    - Attach Files
    - Review Email
    - Click Send

2) Create a worksheet as shown below. Write the procedure for creating the worksheet and performing the operations. Save the file as **<your roll number>.xlsx** **(50 Marks)**

Sl.No	Name	Qualification	Trade	Age
1	Rahul Sharma	Dip	D/Civil	21
2	Amit Verma	NTC	MMV	24
3	Vikas Singh	PT-Dip	MMV	26
4	Rajesh Kumar	NTC	Fitter	32
5	Sandeep Yadav	Dip	MMV	21
6	Pankaj Gupta	NTC	Turner	28
7	Ankit Mishra	Dip	MMV	20
8	Deepak Tiwari	NTC	Elec	31
9	Sunil Chauhan	NTC	Turner	30
10	Mahesh Yadav	NTC	Fitter	30
11	Rohit Singh	NTC	Turner	33
12	Arvind Sharma	NTC	Turner	30
13	Manoj Kumar	Dip	Turner	22
14	Pooja Verma	Dip	MRTV	21
15	Rakesh Singh	NTC	Elec	32

Create a Pivot Table to display the

i. Count of students in each Trade.
ii. Number of students under each Qualification.
iii. Average Age for each Trade.
iv. Total number of students by Age
v. Trade-wise and Qualification-wise student count.

3) Create a database **DB_EXAM.** Create a table named **COURSES** with the following fields. Write the procedure for creating the table and executing the queries. **(50 Marks)**

Column Name	Data Type	Constraints
Course_ID	INT	PRIMARY KEY
Course_Name	VARCHAR(50)	NOT NULL
Duration	VARCHAR(20)	NOT NULL
Fees	DECIMAL(8,2)	NOT NULL

Write SQL queries for the following:

i. Insert the following records into the COURSES table

Course_ID	Course_Name	Duration	Fees
1	Python Programming	3 Months	6000
2	Data Science	6 Months	25000
3	Web Development	4 Months	15000
4	R Programming	2 Months	8000
5	Excel Basics	1 Month	900

ii. Display all course details
iii. Display courses where Fees is greater than 5000
iv. Display courses where Course_Name starts with 'R'
v. Sort courses by Fees in descending order
vi. Display courses where Fees is between 1000 and 30000
vii. Count the total number of courses
viii. Display courses whose Fees is greater than the average Fees
ix. Update the Fees by increasing it by 10% for all courses
x. Delete records where Fees is less than 1000

4) Create an HTML page as shown below. Write the procedure for creating the webpage. Save the file as **<YOUR ROLL NUMBER>.html** **(60 Marks)**

HTML

HTML stands for **HyperText Markup Language** and is used to create *web pages* that are displayed in a browser. It provides a structure for content using various tags. You can make text underlined, **important**, or *emphasized*. HTML also allows highlighting of key information and supports smaller text as well as larger text for better presentation.

In science and mathematics, HTML helps display formulas clearly. For example, Einstein's famous equation is written as $E = mc^2$, and the chemical formula for water is H_2O. You can show removed content using ~~old values~~ and newly added content using updated values. HTML also supports ~~double strikethrough text~~ to represent canceled or invalid information.

HTML is widely used to display computer-related content. You can show code snippets like `<html>`, display output such as `Hello World`, and represent keyboard input like `Ctrl + V`. Variables in programming can be written as *x*, *y*, or *z*. These tags help make technical content more readable and meaningful.

Overall, HTML is the foundation of web development. It helps organize content in a structured way and makes it easy for users to understand information. By combining different formatting tags, developers can create visually appealing and informative web pages. HTML works together with other technologies to build modern and interactive websites used around the world.

Sample Image

5) **a)** Write a Java program to demonstrate method overloading using a class **Area.** The class should contain overloaded member functions calculateArea() to calculate the area of a circle, rectangle, and square using different parameters. **(60 Marks)**

[Area of Circle = π × r × r
Area of Rectangle = length × breadth
Area of Square = side × side]

Write the procedure for creating the program and display the output. Save the file as **<YOUR ROLL NUMBER>.java**

(OR)

b) Write a Python program to input a list and find the sum and average of elements in the list using a loop. Write the procedure for creating the program and display the output. Save the file as **<YOUR ROLL NUMBER>.py**