

National Technical and Vocational Qualification Framework

NTVQF

**Competency Based Learning Materials
(CBLMs)**

**Use ICT to Facilitate Teaching and Learning
National Certificate in CBT&A Methodology
Trainers & Assessors, Level-4**



**Bangladesh Technical Education Board
Agargaoan, Sher-E-Bangla Nagar
Dhaka-1207**

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Copyright

This Competency Based Learning Materials on “Using ICT to Facilitate Teaching and Learning” under the CBT&A Methodology for Trainers & Assessors, Level-4 qualification is developed based on the national competency standard approved by Bangladesh Technical Education Board (BTEB).

This document is to be used as a key reference point by the competency-based learning materials developers, teachers/trainers/assessors as a base on which to build instructional activities.

This document is owned by Bangladesh Technical Education Board (BTEB), developed under the guidance of international expert (TVET and Skills Development Specialist) and National consultant), ILO Country Office for Bangladesh supported by Skills 21 – Empowering Citizens for Inclusive and Sustainable Growth Project, ILO, funded by European Union (EU).

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Preface

Education and training for productive employment is vital for economic and social development in Bangladesh. Technical and Vocational Education and Training (TVET) is a tool for productivity enhancement and poverty reduction. TVET sector ensures quality, relevance and access of skills training which meets industry demand and fulfill the requirements of individual for opting gainful and productive employment.

Competency-based learning materials on “Using ICT to Facilitate Teaching and Learning” provides overall course guidelines in relation to teaching and learning and act as the key instrument in supporting delivery of standardised formal, non-formal and informal training. It is expected that competency-based learning materials (CBLMs) will serve the purpose of training delivery of different courses maintaining quality as specified in the approved national competency standard for CBT&A Methodology for Trainers & Assessors, Level-4. As it is agreed that any reform in TVET system in Bangladesh should be in line with international trends so as to make graduates from the qualification nationally and internationally competent.

It will be worth noting that the initiatives for development of National Certificate in CBT&A Methodology, Level-4 & Level-5 through review and updating of existing competency standards of trainers & assessors, development of new competency standard for National Certificate for CBT&A Managers and implementers, Level-6 and Competency Based Curriculum development for the above mentioned courses by the Skills 21 – Empowering Citizens for Inclusive and Sustainable Growth Project, ILO. This document is developed by the Standards and Curriculum Development Committee of BTEB under the guidance of International Expert (TVET and Skills Development Specialist) and the National Consultant Skills 21 – Empowering Citizens for Inclusive and Sustainable Growth Project, ILO country Office for Bangladesh.

We appreciate Skills 21 – Empowering Citizens for Inclusive and Sustainable Growth Project, ILO, funded by European Union (EU) for developing competency-based learning materials on “Using ICT to Facilitate Teaching and Learning” of CBT&A Methodology for Trainers & Assessors, Level-4 qualification under National Technical and Vocational Qualification Framework (NTVQF).

Chairman

Bangladesh Technical Education Board

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Acronyms

BMET	Bureau of Manpower Employment and Training
BTEB	Bangladesh Technical Education Board
CAD	Course Accreditation Document
CBC	Competency Based Curriculum
CBLMs	Competency Based Learning Materials
CBT	Competency Based Training
CBT&A	Competency Based Training and Assessment
CS	Competency Standard
DTE	Directorate of Technical Education
EU	European Union
ILO	International Labour Organization
LCD	Liquid Cristal Display
MOE	Ministry of Education
MOEWOE	Ministry of Expatriate Welfare and Overseas Employment
MOLE	Ministry of Labour and Employment
NEP	National Education Policy
NGOs	Non-Government Organisations
NSDA	National Skills Development Authority
NSDC	National Skills Development Council
NSDP	National Skills Development Policy
NTVQF	National Technical and Vocational Qualification Framework
OSH	Occupational Safety and Health
PCs	Personal Computers
QAMS	Quality Assurance Manuals
RPL	Recognition of Prior Learning
SCDC	Standards and Curriculum Development Committee
TSC	Technical School and College
TTC	Technical Training Centre
TTTC	Technical Teachers Training College
TVET	Technical Vocational Education and Training
VET	Vocational Training Institute
VTTI	Vocational Teachers Training Institute

Overview of the Module

Use ICT to Facilitate Teaching and Learning:

This module comprises five elements (1 to 5), and five (5) learning outcomes derived from the unit of competency TVTENV407A1: Use ICT to Facilitate Teaching and Learning.

Upon completion of this module, the trainee must be able to:

1. Setup work environment
2. Utilize word processing application
3. Utilize presentation application
4. Utilize spreadsheet application
5. Use internet to communicate and collect Information

After completion of the training, the trainees will be required to demonstrate their competency through the following performance criteria:

- 1.1 Relevant **ergonomic requirements, PC and devices** requirements are checked and connected as required.
- 1.2 **Software requirements** are identified.
- 1.3 Folders and files are created, opened, moved, copied, renamed or deleted as per job requirements.
- 1.4 **Desktop appearance settings** are configured in-line with personal preference.
- 1.5 Connectivity to printer are checked and tested in accordance with equipment user guide.
- 1.6 **Naming and storing documents** are utilized.

- 2.1 Word processing documents are created using appropriate word processing software.
- 2.2 Document layout and formatting are applied in line with document formatting requirements.
- 2.3 Document is formatted using various software functions and page setup functions.
- 2.4 Application features are utilized to enhance productivity in line with application guide/ help instructions.
- 2.5 Documents are saved as per instructions.
- 2.6 Printing of documents is performed in line with workplace requirements.

- 3.1 Presentation slide is created as per job requirement.
- 3.2 Existing slides are edited and formatted.
- 3.3 Presentation layout, formatting and themes are applied in line with target audience requirements.

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- 3.4 Animation and slide transitions are applied to enhance viewing and interactivity experience.
- 3.5 Slide master is used as required.
- 3.6 Printing of presentation materials are performed in line with user requirements.

- 4.1 Spreadsheet is created using appropriate application.
- 4.2 Workbook and worksheet settings and formatting are applied in line with printing requirements.
- 4.3 Function, formula and conditional formatting are utilized.
- 4.4 Charts are utilized to enhance data presentation.
- 4.5 **Printing** of worksheet is performed in line with document layout.

- 5.1 Internet and ICT facilities are arranged.
- 5.2 E-mail facility is utilized to exchange information and resources.
- 5.3 Web is accessed to search and download required information.
- 5.4 **Cloud storage facilities** are used.

CONTENTS

This learning package includes the following:

1. Setup work environment
2. Utilize word processing application
3. Utilize presentation application
4. Utilize spreadsheet application
5. Use internet to communicate and collect Information

PRE-REQUISITE: N/A

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How to use this Competency-Based Learning Materials

Welcome to the module **Using ICT to Facilitate Teaching and Learning**. This module contains training materials and activities for you to complete a series of activities.

This unit of competency, “**Use ICT to Facilitate Teaching and Learning**”, is one of the competencies of CBT&A Methodology for Trainers & Assessors Level - 4, a course which comprises the knowledge, skills and attitudes required to become a trainer or assessor of level 4.

You are required to go through a series of learning activities in order to complete each learning outcome of the module. These activities may be completed as part of structured classroom activities or you may be required to work at your own pace. These activities will ask you to complete associated learning and practice activities in order to gain knowledge and skills you need to achieve the learning outcomes.

Refer to **Learning Activity Page** to know the sequence of learning tasks to undergo and the appropriate resources to use in each task. This page will serve as your road map towards the achievement of competence.

Read the **Information Sheets**. These will give you an understanding of the work, and why things are done the way they are. Once you have finished reading the Information sheets complete the questions in the Self-Check Sheets.

Self-Checks follow the Information Sheets in the learning guide. Completing the Self-checks will help you know how you are progressing. To know how you fared with the self-checks review the **Answer Key**.

Complete all activities as directed in the **Job Sheets and/or Activity sheets**. This is where you will apply your new knowledge while developing new skills.

When working through this module always be aware of safety requirements. If you have questions, do not hesitate to ask your facilitator for assistance.

When you have completed all the tasks required in this learning guide, an assessment event will be scheduled to evaluate if you have achieved competency in the specified learning outcomes and are ready for the next task.

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MODULE CONTENT

UNIT OF COMPETENCY: Use ICT to Facilitate Teaching and Learning.

MODULE TITLE: Using ICT to Facilitating Teaching and Learning.

MODULE DESCRIPTOR: This module discusses the aspects that must be given attention when Using ICT to Facilitating Teaching and Learning. It shows the requirements for performing Setup work environment, utilizing word processing application, utilizing presentation application, utilizing spreadsheet application and using internet to communicate and collect Information

NOMINAL DURATION: 40 Hours

LEARNING OUTCOMES:

After completing this module, trainee will be able to

1. Setup work environment
2. Utilize word processing application
3. Utilize presentation application
4. Utilize spreadsheet application
5. Use internet to communicate and collect Information

Assessment Criteria:

1. Relevant ergonomic requirements, PC and devices requirements are checked and connected as required.
2. Software requirements are identified.
3. Folders and files are created, opened, moved, copied, renamed or deleted as per job requirements.
4. Desktop appearance settings are configured in-line with personal preference.
5. Connectivity to printer are checked and tested in accordance with equipment user guide.
6. Naming and storing documents are utilized.
7. Word processing documents are created using appropriate word processing software.
8. Document layout and formatting are applied in line with document formatting requirements.
9. Document is formatted using various software functions and page setup functions.
10. Application features are utilized to enhance productivity inline with application guide/help instructions.
11. Documents are saved as per instructions.
12. Printing of documents is performed in line with workplace requirements.

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13. Presentation slide is created as per job requirement.
14. Existing slides are edited and formatted.
15. Presentation layout, formatting and themes are applied in line with target audience requirements.
16. Animation and slide transitions are applied to enhance viewing and interactivity experience.
17. Slide master is used as required.
18. Printing of presentation materials are performed in line with user requirements.
19. Spreadsheet is created using appropriate application.
20. Workbook and worksheet settings and formatting are
21. applied in line with printing requirements.
22. Function, formula and conditional formatting are utilised.
23. Charts are utilized to enhance data presentation.
24. Printing of worksheet is performed in line with document layout.
25. Internet and ICT facilities are arranged.
26. E-mail facility is utilised to exchange information and resources.
27. Web is accessed to search and download required information.
28. Cloud storage facilities are used.

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LEARNING OUTCOME 1: SETUP WORK ENVIRONMENT

ASSESSMENT CRITERIA

- 1.1 Relevant ergonomic requirements, PC and devices requirements are checked and connected as required.
- 1.2 Software requirements are identified.
- 1.3 Folders and files are created, opened, moved, copied, renamed or deleted as per job requirements.
- 1.4 Desktop appearance settings are configured in-line with personal preference.
- 1.5 Connectivity to printer are checked and tested in accordance with equipment user guide.
- 1.6 Naming and storing documents are utilized.

CONTENTS:

1. Check and connect relevant ergonomic, PC and devices requirements
2. Identify software requirements
3. Create, open, move, copy, rename and delete folders and files
4. Configure Desktop Appearance Settings
5. Check and test printer connectivity
6. Name and store documents

CONDITIONS:

Trainees must be provided with the following:

- Personal Computer
- Office Application Software

METHODOLOGIES:

- Lecture/discussion
- Demonstration/application
- Presentation

ASSESSMENT METHODS:

- Written test
- Demonstration
- Oral Questioning
- Observation with checklist
- Portfolio.

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Learning Experience 4.1-1

Learning Outcome 1:

CHECK AND CONNECT RELEVANT ERGONOMIC, PC AND DEVICES REQUIREMENTS

Learning Experience	Resource/Special Instructions
Check and connect relevant ergonomic, PC and devices requirements	• Read Information sheet 4.1.1 • Answer all Self-Checks 4.1.1 and compare answer key 4.1.1
Identify software requirements	• Read Information sheet 4.1.2 The competency assessment. • Answer Self-check 4.1.2, refer to answer key 4.1.2 to check if you have answered the questions correctly.

Information Sheet 4.1.1

Setup Work Environment

Learning Objective:

After reading this Information Sheet, you will be able to: Setup work environment

Understanding competency assessment is necessary for Setup work environment. It will give ideas on how to setup work environment.

Relevant ergonomic requirements:

- Many people spend hours a day in front of a computer without thinking about the impact on their bodies. They physically stress their bodies daily without realizing it by extending their wrists, slouching, sitting without foot support and straining to look at poorly placed monitors.
- These practices can lead to cumulative trauma disorders or repetitive stress injuries, which create a life-long impact on health. Symptoms may include pain, muscle fatigue, loss of sensation, tingling and reduced performance.
- Ergonomics is a field of study that attempts to reduce strain, fatigue, and injuries by improving product design and workspace arrangement. The goal is a comfortable, relaxed posture.

Adapt Laptops:

- Laptop computers are not ergonomically designed for prolonged use. The monitor and keyboard are so close together that they cannot both be in good positions at the same time. For prolonged use, it's best to add a separate monitor and keyboard. The laptop can be placed on books so the top of the screen is at eye level, then use an external keyboard so that your elbows can rest at 90° by your side.

Modify Your Body Mechanics:

- Do you wear eye glasses? Make sure they fit properly to avoid tilting your head. Type with light strokes, and try to keep your muscles relaxed. Sit "tall," aligning your ears, shoulders and hips. When you sit, think about making yourself an inch taller. Switch hands when using a mouse, if you are able. Completely rest your wrists during breaks, including taking your hands off the mouse.

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Adjust Your Work Patterns:

- Reduce prolonged computer time whenever possible. Break work into smaller segments and switch between tasks that use different motions. For example, alternate use of mouse with reading and searching the web.
- **Move!** Movement has many benefits: it relaxes tissues, lubricates joints and prevents stiffness, improves circulation, reduces fatigue, and builds stamina. One study showed that heavy computer users who successfully avoided computer-related pain moved every 7 minutes. At least every 10 minutes, take a short (10-20 second) break. Take your hands off the keyboard and move! Every 30-60 minutes, take a brief (2-5 minute) break to stretch and/or walk around.

Exercise at Your Computer:

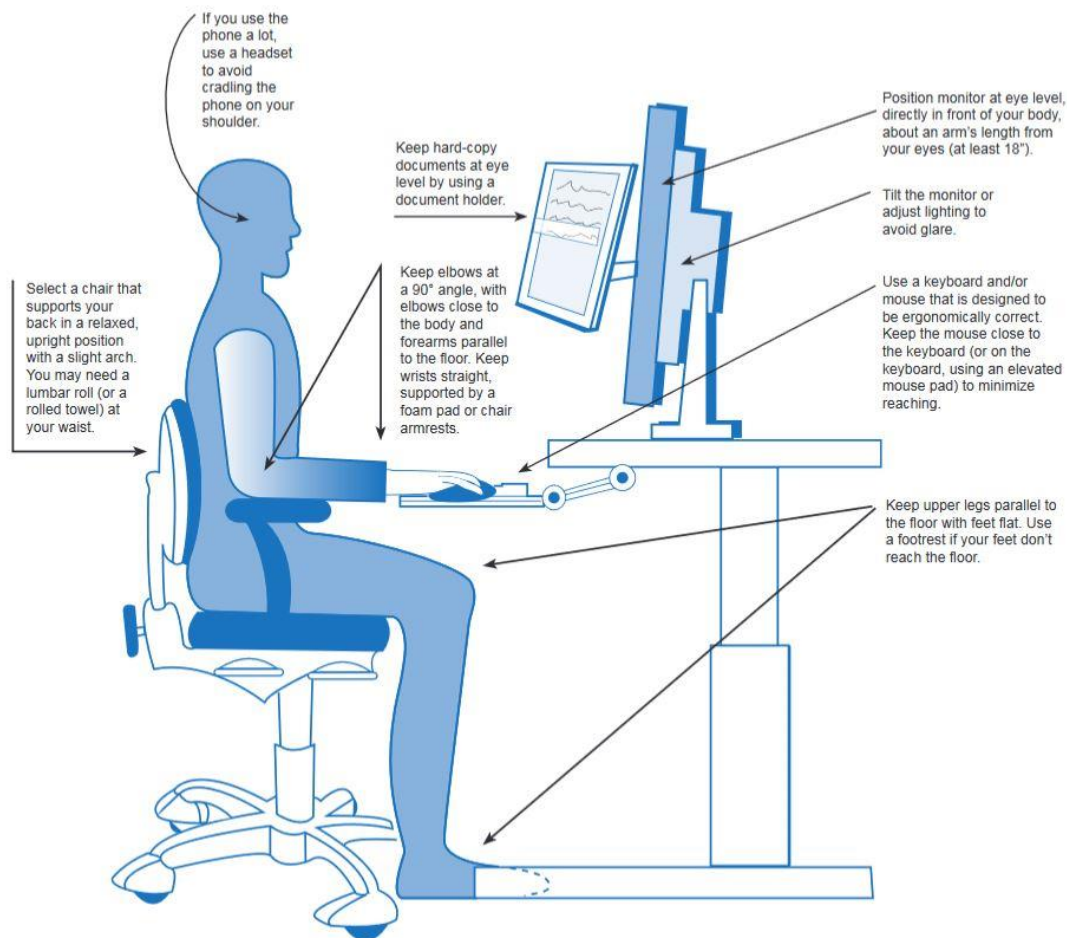
- **Neck Rotation:**
Slowly rotate your head as far as comfortable to the right, then left.
- **Shoulder Rotation:**
Circle your shoulders, then reverse directions.
- **Head Side to Side:**
Bend your neck so left ear approaches left shoulder, then repeat for right. Add a little resistance by pressing your hand against the side of your head.
- **Chin Tuck:**
Slide your chin inward, without bending your neck up or down. This is easiest to practice initially against a wall. Tuck chin in, attempting to touch back of neck to the wall while also maintaining head contact. Don't jam your chin down to your chest.
- **Shoulder Blade Retraction:** Pull your shoulders down and back.
Shrug: Slowly raise your shoulders toward ears and hold for a few seconds. Gradually bring shoulders down and relax.
Back: Shoulder Squeeze: Raise your arms in *front* of body, with elbows bent and thumbs up. Pull elbows back, squeezing shoulder blades together. Hold for a few seconds then release.
Stretch Up: Sit up straight and imagine a cable attached to the top of your head. Gradually stretch to be as tall as possible, hold for a few seconds, then relax.
- **Arm Relaxation:** Drop your arms and hands to your sides. Gently shake them for a few seconds.
- **Arm Rotation:** Raise your arms in front of your body. Rotate arms so palms face up, then rotate so backs of hands face each other.
- **Wrist Flex:** With your elbows on desk, gently use left hand to bend right hand back toward forearm. Hold for a few seconds, then relax. Repeat on other side.
- **Finger Fan:** Spread your fingers as far apart as possible, hold, then clench fists, then release.
- **Feet:**
Toe Curl: Flex toes up, then curl toes under. Release.
Foot Rotation: Circle foot slowly from the ankle, then reverse.
- **Eyes**
Eye Rolls: Roll your eyes clockwise then counterclockwise briefly.
Palm Eyes: Without touching your eyes, cup hands lightly over eyes for 30 seconds to rest them from light.

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Look Away: Exercise your eyes by periodically looking away from your computer to focus on distant objects.

Arrange Your Workstation:

Every time you work, take time to adjust workstations that aren't quite right in order to minimize awkward and frequently performed movements.



This is one example of an ergonomically correct workstation. Some people would be more comfortable with slight adjustments such as tilting the keyboard a bit or removing the armrests from the chair. But this picture shows many of the important pieces of a good workstation.

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Self-Check 4.1-1

Choose the correct answer:

1. What should the top of the screen never be above?
A. Eye level
B. Head
C. Shoulders
D. Chair
2. Instead of constantly sitting at the computer all day what should the employee do?
A. Watch the clock, to look away from the computer.
B. Do another piece of work needed without needing to move Head
C. Take a 5 to 10 minute break.
D. Do a couple spins in your chair
3. If the keyboard is too high, but not adjustable, what should you do to fix that?
A. Do the best they can with it.
B. Place pads underneath the wrists.
C. Move the keyboard to a lower place.
D. Move the keyboard to a higher location
4. When an employee's chair is not the correct height and the chair is not adjustable what should you suggest?
A. Tomake sure his/her feet touch the ground.
B. Keepthem on the edge of their seat.
C. Get a lower chair.
D. Ignorethe problem.

Fill in the blanks:

1. Ergonomics is a field of study that attempts to reduce _____, _____, and _____.
2. Laptop computers are not _____ designed for prolonged use.
3. Neck Rotation: Slowly rotate your head as far as _____ to the right, then left.
4. Eye Rolls: Roll your eyes _____ then _____ briefly.
5. Your feet should be flat on the ground and thighs _____ to the floor.
6. If you don't have a keyboard tray, raise your _____ to the correct height.
7. Sit _____ from the screen, adjust based on personal eyesight.

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Answer Key 4.1-1

Choose the correct answers

1. A
2. C
3. B
4. A

Fill in the blanks:

1. Ergonomics is a field of study that attempts to reduce strain, fatigue, and injuries.
2. Laptop computers are not ergonomically designed for prolonged use.
3. Neck Rotation: Slowly rotate your head as far as comfortable to the right, then left.
4. Eye Rolls: Roll your eyes clockwise then counterclockwise briefly.
5. Your feet should be flat on the ground and thighs parallel to the floor.
6. If you don't have a keyboard tray, raise your seat to the correct height.
7. Sit 18-30" from the screen, adjust based on personal eyesight.

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Information Sheet 4.1-2

Learning Objectives:

After reading this information sheet, you will be able to identify software requirements, create, open, move, copy, rename and delete folders and files and arrange desktop appearances.

Computer:

Computer is an advanced electronic device that takes raw data as input from the user and processes it under the control of set of instructions (called program), gives the result (output), and saves it for the future use.

Hardware:

Hardware represents the physical and tangible components of a computer i.e. the components that can be seen and touched.



Software:

Software is a set of programs, which is designed to perform a well-defined function

A program is a sequence of instructions written to solve a particular problem

There are two types of software

System Software

Application Software

Software:

To run a computer, you need to use software. Following software are used in common computers:

1. Operating System
2. Anti-virus Software
3. Application Software
 - Microsoft Office application
 - Open Office
 - Browser

System Software:

System software is a type of computer program that is designed to run a computer's hardware and application programs. If we think of the computer *system* as a layered model, the *system software* is the interface between the hardware and user applications. The OS manages all the other programs in a computer. example: Windows, Linux, Mac and android etc.

Application Software:

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An application is any program, or group of programs, that is designed for the end user. Applications software (also called end-user programs) include such things as database programs, word processors, Web browsers and spreadsheets.

Software requirements:

You need to purchase software to use with computers. You need to list out software according to your requirements and purchasing capacity.

It will be a good practice if you use a prescribed format while collecting software requirement from client. A sample format is given here – though you may use your custom format.

You must be updated with the price information for the software.

Client No#				Order Date
Client Name:		Contact:		Delivery Date
Sl#	Name of Software/OS	Validity	Unit	Amount (BDT)
Operating System				
1	Windows			
2	Linux			
3	Unix			
4	Ubuntu			
5	MacOS			
Driver, Security Software				
6	Motherboard driver			
7	Graphics driver			
8	Sound driver			
9	Printer driver			
10	Modem driver			
11	Antivirus			
12	Monitor driver			
Application Software				
13	MS Office			
14	VLC media player			
15	Google Chrome			
16	Firefox			
17	Skype			
Design Software				
18	Adobe Photoshop			
19	Adobe Illustrator			
20	InDesign			
21	GIMP			
22	Auto CAD			
23	3D home Architect			

Programming language, Database software				
24	Basic			
25	C, C++, C#			
26	Visual studio			
27	Java			
28	Oracle			
29	SQL			
Web development tools				
31	Sublime Text.			
32	Chrome Developer Tools.			
33	jQuery.			
34	GitHub.			
35	Twitter Bootstrap.			
	Angular.js.			
Others				
36	Games			
37	Antivirus			
38	Photo viewer			
39				
Total in BDT				

Work on Folders and files:

Here are the procedures to work with create, open, move, copy, rename and delete folders and files.

Create

1. Go to the area where you want to create the folder. The easiest example is your computer's desktop, but you can create a folder anywhere on your computer.
2. Right-click on a blank space. A drop-down menu will appear.
3. Select New.
4. Click Folder.
5. Type in a name for your folder and press ↵ Enter.

Open

1. To open an existing folder, select the folder,
2. Press right-button and
3. Select open
4. Or double click on the folder.
5. Or select the folder and press Enter

Move

1. Select the folder you want to move. You can move a folder anywhere on your computer.
2. Click on Right-button and select Cut (or press Ctrl+x)
3. Go to the area where you want to move the folder. you can move a folder anywhere on your computer.
4. Click Right-button and select paste (or press ctrl+v).

Copy

1. Select the folder you want to copy. You can copy a folder anywhere on your computer.
2. Right-click on a folder and select copy (or press Ctrl + C from keyboard)
3. Go to the area where you want to copy or move the folder and click Right-button of mouse and select paste (or press Ctrl + V from keyboard).

Rename

1. Right-click the file and click Rename in the context menu.
2. Select the file and then click it again.
3. Select the file and press F2.
4. Select the file, click the Tools button at the top of the dialog box, and choose Rename.

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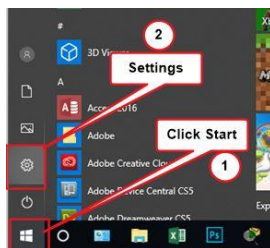
Delete a folder or file

1. Select the folder/file you want to delete.
2. Click on Right-button and click **Delete** Folder/file.
3. Click Yes to move the **folder/file** and its contents to the **recycle folder**. When you empty the **recycle folder**, everything in it — including any **folders** you've **deleted** — is permanently erased.
4. To delete permanently, after selection, press Shift+Delete

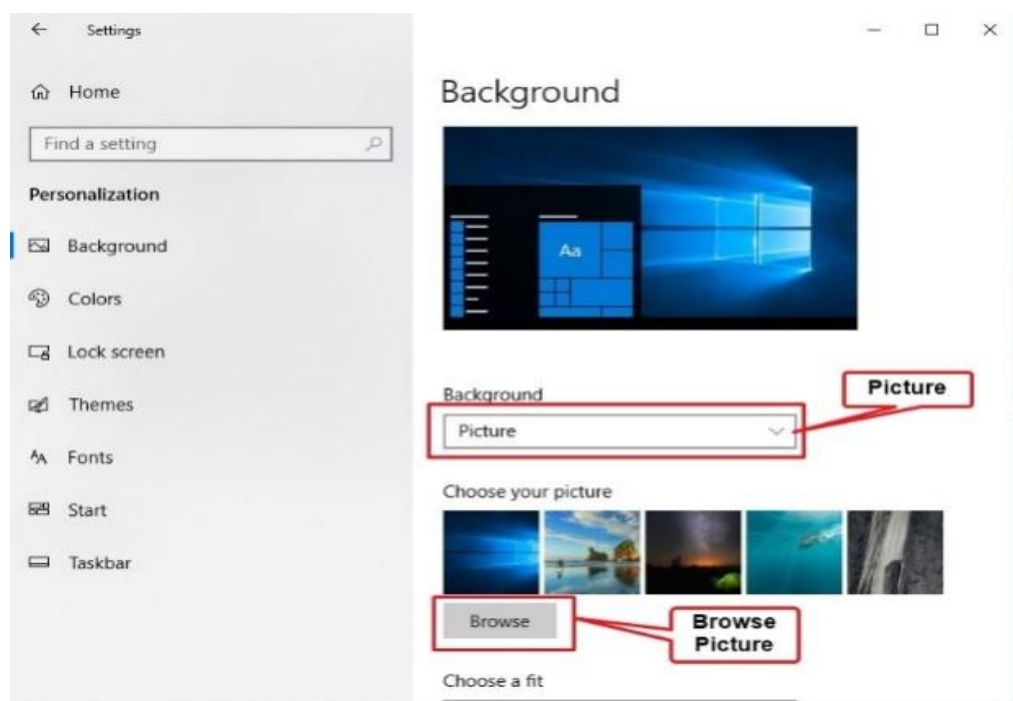
Desktop appearance:

You can change desktop's property. For thihs follow the following steps –

1. From start menu select **Settings**.



2. From setting window, choose **Personalization**. Following window will appear. You can change desktop appearance elemnt settings from this window.



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You can change settings for Background, Color, Theme, Fonts, Taskbar, start menu and taskbar.

Printer:

A printer is a device that accepts text and graphic output from a computer and transfers the information to paper, usually to standard size sheets of paper. Printers vary in size, speed, sophistication, and cost. In general, more expensive printers are used for higher-resolution color printing.

Following common types of printers are used widely –

- Dot matrix printer
- Ink jet printer
- Laser jet printer
- 3D printer

Printer setup:

How to set up a new printer

1. Attacch data cable to printer.
2. Connect the data cable (usually a USB cable) from the printer to the computer
3. Attach the power cable to printer.
4. Connect it to power source.
5. Turn on the Printer.
6. Your computer will detect the printer and ask for driver if not installed earlier. This indicates that the printer is correctly connected.

Store Document:

1. From the File menu, select Save or Save As
2. The Save As dialog box will display.
3. Choose a location on your computer to save your file.
4. Write a name for the document.
5. Click Save or press Enter.

You can store documents to other storage devices or folders by selecting them on Explorer and using copy – paste command t. the destination.

Name Document:

To name an existing document follow the following steps –

1. Select the document using windows explorer or on desktop.
2. Press right button of mouse.
3. Choose rename from the dropdown list.
4. Or press F2 key on keyboard
5. Write a name for the document and press Enter

Rules for naming and storing documents

You must take care of the followings during naming and storing documents –

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- Choose appropriate file type
- Set authorized access
- Choose file names according to organizational procedure e.g. Numbers rather than names
- Give file names which are easily identifiable in relation to the content
- Give file/directory names which identify the operator, author, section, date etc.
- Choose predefined filing locations
- Follow organizational policy for backing up files
- Follow organizational policy for filing hard copies of documents
- Maintain security for the stored documents.

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Self-Check 4.1.2

Write the answer of the following questions:

1. Name five software those are used in a computer.
2. What are the difference between application software and System software?
3. What is the keyboard shortcut command used to copy a file or folder?

Answer key: 4.1.2

1. Windows, Microsoft Office, photoshop, Chrome
2. *System software* is used for operating computer hardware. *Application software* is used by user to perform specific task. *System* softwares are installed on the computer when operating *system* is installed. In general, the user does not interact with *system software* because it works *in the* background.
3. Ctrl + C

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Task Sheet 4.1-2

- Each participant need to complete following tasks on computer
- Tasks:
 - a. Check and meet relevant ergonomic, PC and devices requirements
 - b. List software requirement for a training institute.
 - c. Create, open, move, copy, rename and delete folders and files
 - d. Change Desktop Appearance Settings
 - e. Make printer connection
 - f. Store a document
 - g. Name adocument or folder
- Your trainer will guide you to complete the activities.

LEARNING OUTCOME 2 UTILIZE WORD PROCESSING APPLICATION

ASSESSMENT CRITERIA:

1. Word processing documents are created using appropriate word processing software.
2. Document layout and formatting are applied in line with document formatting requirements.
3. Document is formatted using various software functions and page setup functions.
4. Application features are utilized to enhance productivity in line with application guide/help instructions.
5. Documents are saved as per instructions.
6. Printing of documents is performed in line with workplace requirements

CONTENTS:

- Create word processing documents.
- Apply document layout and formatting
- Format document
- Utilize application features
- Save documents.
- Print documents

CONDITIONS:

Trainees must be provided with the following:

- Handouts or reference materials/books on the above stated contents
- PCs/printers or laptops with internet access
- LCD/Digital Projector and Screen
- Microphones
- Bond paper
- Ball pens/pencils and other office supplies and materials
- Communication resources
- Workplace or simulated environment

METHODOLOGIES:

- Lecture/discussion
- Demonstration/application
- Presentation

ASSESSMENT METHODS:

- Written test
- Demonstration
- Oral Questioning
- Observation with checklist
- Portfolio.

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Learning Experience 4.2-1

Learning Outcome 2:

UTILIZE WORD PROCESSING APPLICATION

Learning Experience	Resource/Special Instructions
1. Create word processing documents	• Read Information sheet 4.2.1 • Answer all Self-Checks 4.2.1 and • compare answer key 4.2.1
2. Apply document layout and formatting	• Read Information sheet 4.2.2 • Answer all Self-Checks 4.2.2 and • compare answer key 4.2.2
3. Format document	• Read Information sheet 4.2.3 • Answer all Self-Checks 4.2.3 and • compare answer key 4.2.3
4. Utilize application features	• Read Information sheet 4.2.4 • Answer all Self-Checks 4.2.4 and • compare answer key 4.2.4
5. Save documents	• Read Information sheet 4.2.5 • Answer all Self-Checks 4.2.5 and • compare answer key 4.2.5
6. Print documents	• Read Information sheet 4.2.6 • Answer all Self-Checks 4.2.6 and • compare answer key 4.2.6
Job sheet 4.2.1	
Job sheet 4.2.2	
Job sheet 4.2.3	

Information Sheet 4.2 -1

Learning Objectives:

After reading this information sheet, trainee will be able to utilize word processing application

Introduction to Word processing application:

A word processor is a type of software application used for composing, editing, formatting and printing documents. Word processors have a variety of uses and applications within the business environment, at home and in educational contexts.

Some Popular Word Processor:

- **Microsoft Word:**

Microsoft Word (or simply **Word**) is a word processor developed by Microsoft. It was first released on October 25, 1983 under the name Multi-Tool Word for Xenix systems. Subsequent versions were later written for several other platforms including IBM PCs running DOS (1983), Apple Macintosh running the Classic Mac OS (1985), AT&T Unix PC (1985), Atari ST (1988), OS/2 (1989), Microsoft Windows (1989), SCO Unix (1994).

- **Google docx:**

Google Docs is a very powerful real-time collaboration and document authoring tool. Multiple users can edit a document at the same time, while seeing each others' changes instantaneously. Users can produce text documents, slide presentations, spreadsheets, drawings, and surveys.

- **Libreoffice:**

LibreOffice is a powerful and free office suite, used by millions of people around the world. Its clean interface and feature-rich tools help you unleash your creativity and enhance your productivity. LibreOffice includes several applications that make it the most versatile Free and Open Source office suite on the market: Writer (word processing), Calc (spreadsheets), Impress (presentations), Draw (vector graphics and flowcharts), Base (databases), and Math (formula editing).

- **OpenOfficeOrg (OOo):**

OpenOfficeOrg included a word processor (Writer), a spreadsheet (Calc), a presentation application (Impress), a drawing application (Draw), a formula editor (Math), and a database management application (Base). Its default file format was the OpenDocument Format (ODF), an ISO/IEC standard, which originated with OpenOffice.org. It could also read a wide variety of other file formats, with particular attention to those from Microsoft Office.

It is a common to use MS Word as the word processor in Bangladesh. The discussion will continue with this application. You will find options are very similar to other applications.

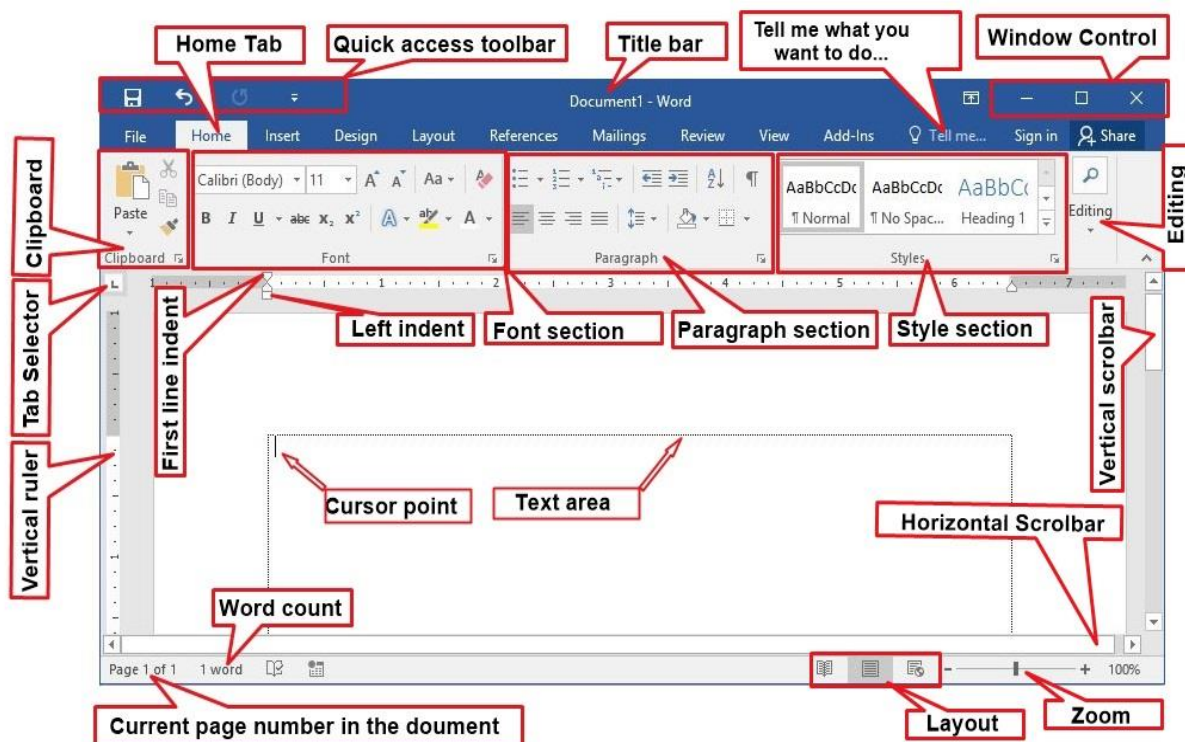
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Run Microsoft Word:

Run the application from the start menu, or clicking the Word icon



Following environment of MS Office will appear. You can create and format document here.



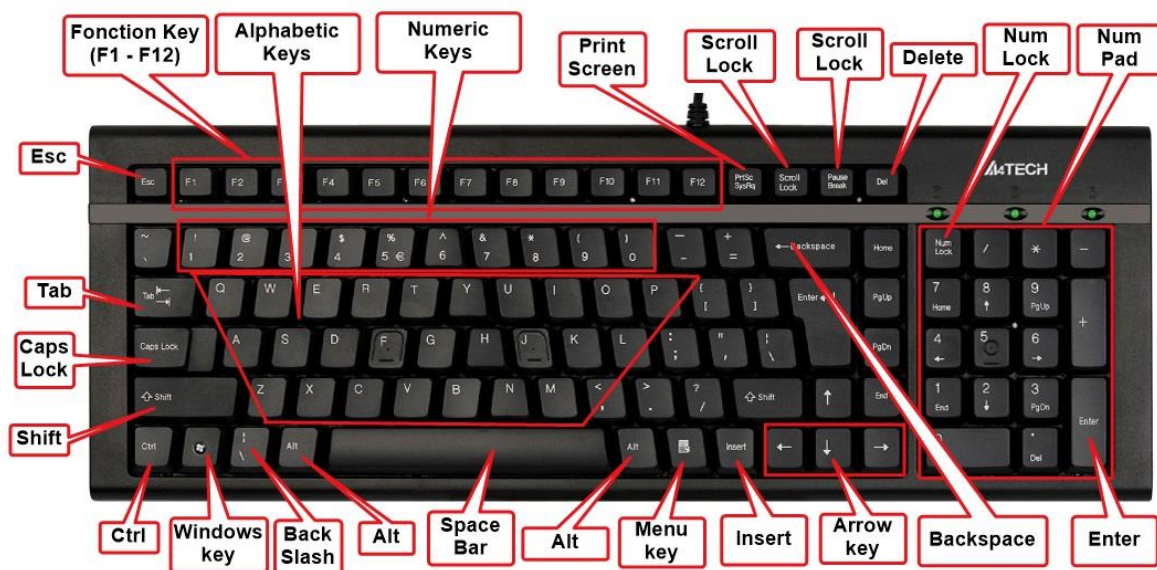
You can start creating document from the cursor point.

Keyboard Layout:

- It is important to know the use of Keyboard and its keys while you are creating documents.
- A keyboard layout is any specific mechanical, visual, or functional arrangement of the keys, legends, or key-meaning associations of a computer, typewriter, or other typographic keyboard. Mechanical layout is the placements and keys of a keyboard.
- Following figure oa aKeyboard is self explanatory.

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Figure:



Use of Function key:

- F1** Displays the Word Help window.
- F2** Rename file or folder
- F3** Building Block? Replaces an AutoText entry from the preceeding word
- F4** Repeats the last command or action.
- F5** Displays the GoTo dialog box.
- F6** Moves to the next pane in a document (if the window is split)
- F7** Displays the Spelling dialog box.
- F8** Toggles whether to extend a selection with the arrow keys
- F9** Updates all the field codes in the current selection
- F10** Toggles the display of the ribbon shortcut keys otherwise known as Access keys.
- F11** Moves to the next Field
- F12** Displays the Save As dialog box.

Shift + Function

- Shift + F1** Redundant see below.
- Shift + F3** Toggles between lowercase, mixedcase and uppercase on the selection
- Shift + F4** Repeats the last Find, the same as Find Next
- Shift + F5** Moves to the position of the insertion point when the document was last saved
- Shift + F6** Moves to the previous pane in a document (if the window is split)

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- Shift + F7 Displays the Thesaurus dialog box.
- Shift + F8 Shrink / reduce selection
- Shift + F9 Toggles between displaying field codes and field results
- Shift + F10 Displays the Shortcut menu for the selected item.
- Shift + F11 Moves to the previous Field
- Shift + F12 Saves, Displays the Save As dialog box if a new document

Ctrl + Function

- Ctrl + F1 Toggles the display of the Ribbon.
- Ctrl + F2 Displays the Print Options on the File tab.
- Ctrl + F3 Spike / cut to spike (multiple cuts to clipboard)
- Ctrl + F4 Closes the active document or window (saving first).
- Ctrl + F5 Restores the size of the active document or window
- Ctrl + F6 Moves to the next open document or window
- Ctrl + F7 Activates the Move window command
- Ctrl + F8 Activates the Resize window command
- Ctrl + F9 Inserts a blank Field containing two curly brackets
- Ctrl + F10 Toggles between maximising and restoring the size of the active document or window
- Ctrl + F12 Displays the Open dialog box.

Ctrl + Letters

- Ctrl + A** Selects all the text in the active document
- Ctrl + B** Toggles bold on the current selection
- Ctrl + C** Copies the current selection to the clipboard.
- Ctrl + D** Display the Font dialog box
- Ctrl + E** Centre aligns the current selection
- Ctrl + F** Displays the Navigation task pane.
- Ctrl + G** Displays the GoTo tab on the Find and Replace dialog box.
- Ctrl + H** Displays the Find and Replace dialog box with the Replace tab active.
- Ctrl + I** Toggles italics on the current selection
- Ctrl + J** Justifies the current selection / ie full paragraph justification
- Ctrl + K** Inserts a hyperlink (does is display dialog?)
- Ctrl + L** Left aligns the current selection
- Ctrl + M** Indents the paragraph. Increase indent
- Ctrl + N** Creates a new document based on Normal.dot template
- Ctrl + O** Displays the Open dialog box
- Ctrl + P** Displays the Print Options on the File tab.
- Ctrl + Q** Resets the formatting back to the original paragraph style (removes any manual character formatting)
- Ctrl + R** Right aligns the current selection
- Ctrl + S** Saves, Displays the Save As dialog if new document

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Ctrl + T	Increases the Hanging Indent of the current paragraph
Ctrl + U	Toggles underlining (continuous) on the current selection
Ctrl + V	Pastes the entry from the clipboard.
Ctrl + W	Closes the active document or window (saving first).
Ctrl + X	Cuts the current selection to the clipboard.
Ctrl + Y	Redo the last Word operation.
Ctrl + Z	Undo the last Word operation.

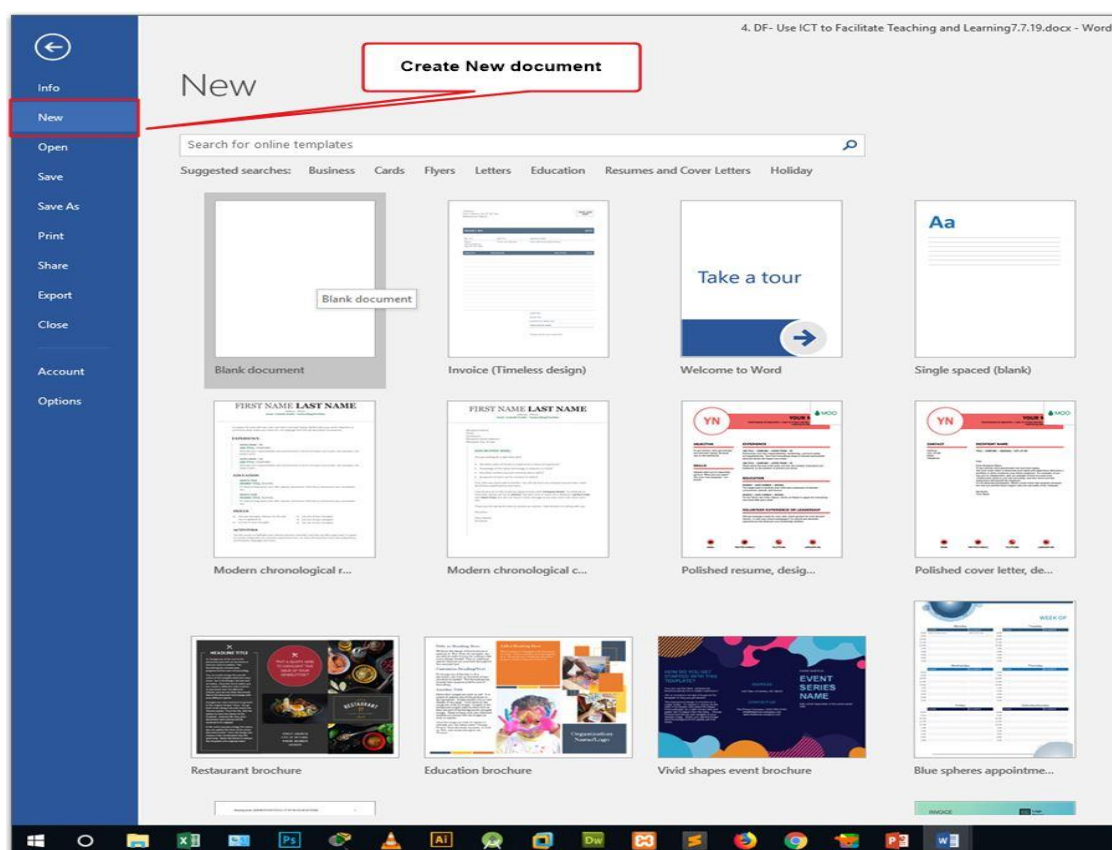
Formatting Data:

Ctrl +]	Increases the font size of the current selection by 1 point
Ctrl + [	Decreases the font size of the current selection by 1 point
Ctrl + Shift +]	Increases the font size of the current selection by 1 point
Ctrl + Shift + [	Decreases the font size of the current selection by 1 point
Ctrl + Shift + >	Increases the font size to the next size in the font drop-down list
Ctrl + Shift + <	Decreases the font size to the previous size in the font drop-down list
Ctrl + Shift + -	Inserts a non breaking hyphen (iegrammer note 2 hyphens = 1 dash)
Ctrl + =	Applies Subscript to the selection (automatic spacing ??)
Ctrl + Shift + =	Applies Superscript to the selection
Ctrl + Spacebar	Resets the formatting back to the original style (removes any manual formatting)
Alt + Shift + Right Arrow	Demotes the paragraph to the previous heading style
Alt + Shift + Left Arrow	Promotes the paragraph to the next heading style

Creating Document

- Geneally the writing space will appear when you open MS Word or any word processing application.
- If you Choose New from filemenu, a dialogue box will appear with default templets for your document.

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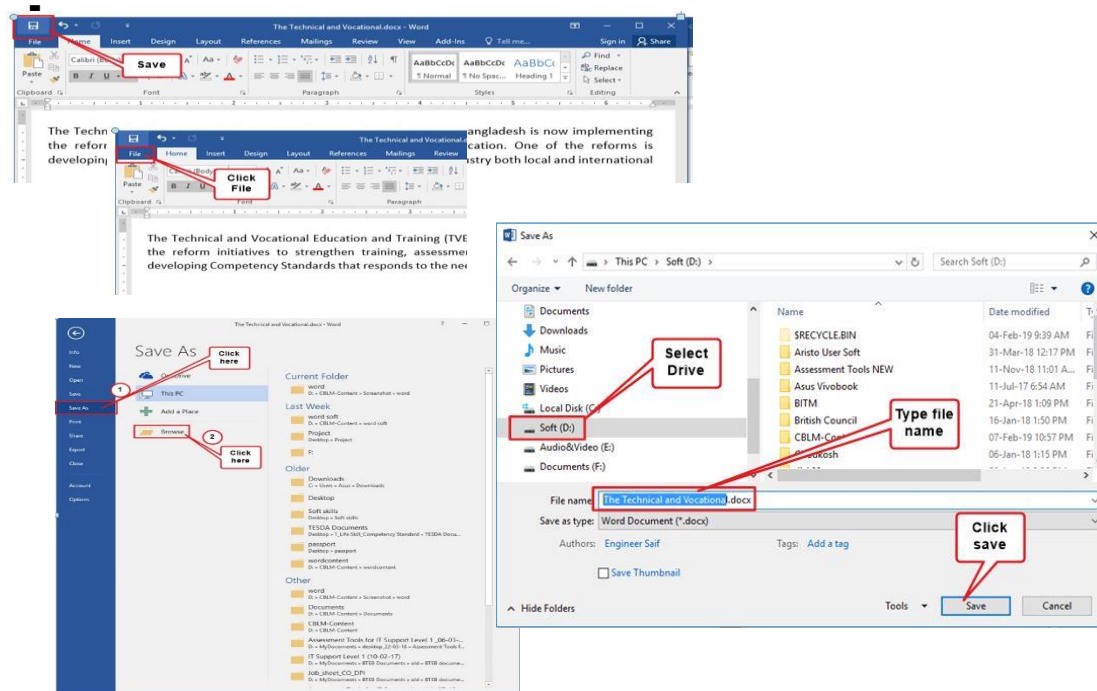


- Create document on the following topics –
 - Resume /Curriculum vitae.
 - Envelopes
 - Letters
 - Memos
 - Minutes
 - Short reports
 - Simple one-page flyers
- From File Tab choose Save or Save As
- A dialogue box will appear. Here –
 - Select a destination where the document will be saved. Default location is “Document” folder.
 - Put arelevant name for the document.
 - Click on the button marked “Save”.
- You can use this document for editing, store or sending to other.

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Save Document:

- You can save a file to a folder on your hard disk drive, a network location, the cloud, a DVD, the desktop, flash drive, or save as another file format such as RTF, CSV or PDF. While you must identify the target location, if it is different than the default folder, the saving process is the same regardless of what location you choose. By default, Office programs save files in the default working folder. To save the copy in a different location, click a different folder in the folder list.



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Self-Check 4.2-1

Write appropriate answers of the following questions:

1. What type of software MS word is?

Answer:

2. What is Microsoft word?

Answer:

3. Where does Libree office used?

Answer:

4. Write down the name of three word processors.

Answer:

Answer Key 4.2-1

1. Answer of question no 1: Word Processor is an application Software.
2. Answer of question no 2: Word Processor Software
3. Answer of question no 3: Linux operating system
4. Answer of question no 4: Microsoft word, Open office, Libreoffice.

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Information Sheet 4.2.2

Learning Objectives:

After reading this information sheet, trainee will be able to apply document layout and formatting.

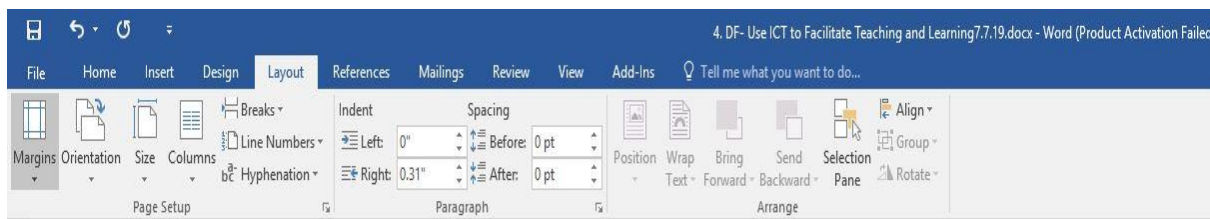
Document layout and formatting

Document layout and formatting includes followings –

- Page settings
- Font Settings
- Formatting styles
- Table utilization

Page setting

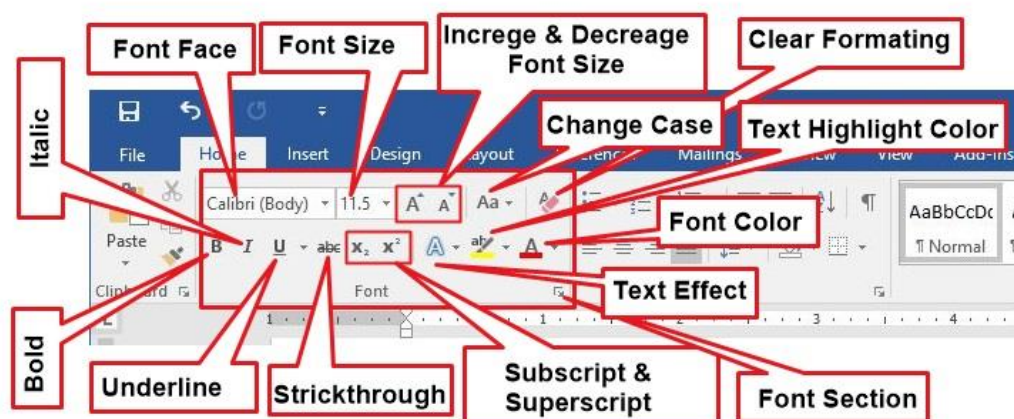
For page setting options press on the “Layout” tab and you will find options related to set up a document page.



Use the options to make your document pages attractive.

Font Settings

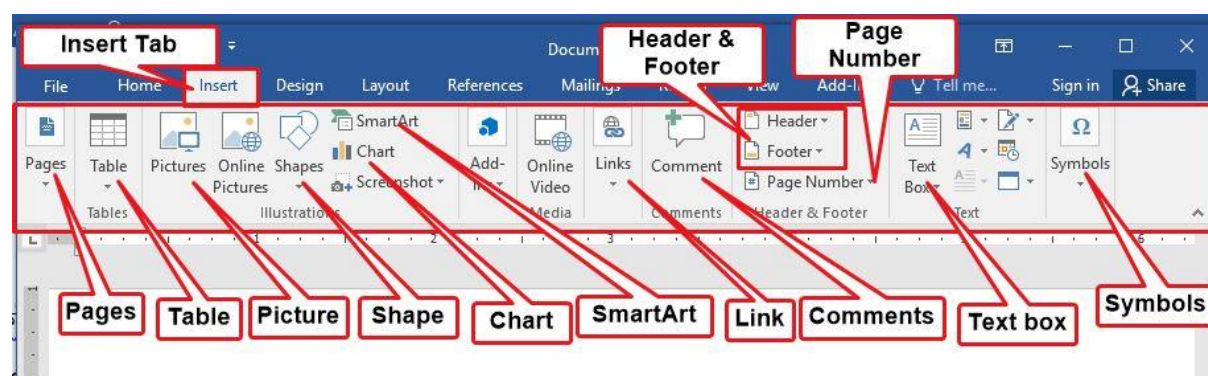
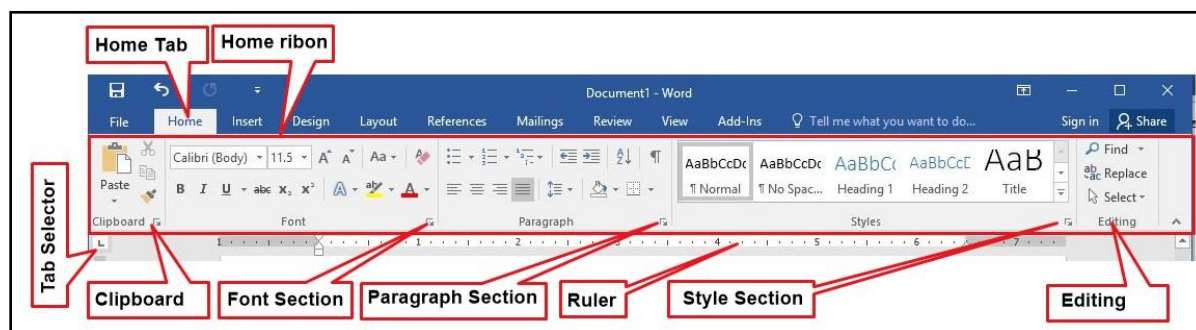
For choosing font and its attributes, you will find options on Home tab.



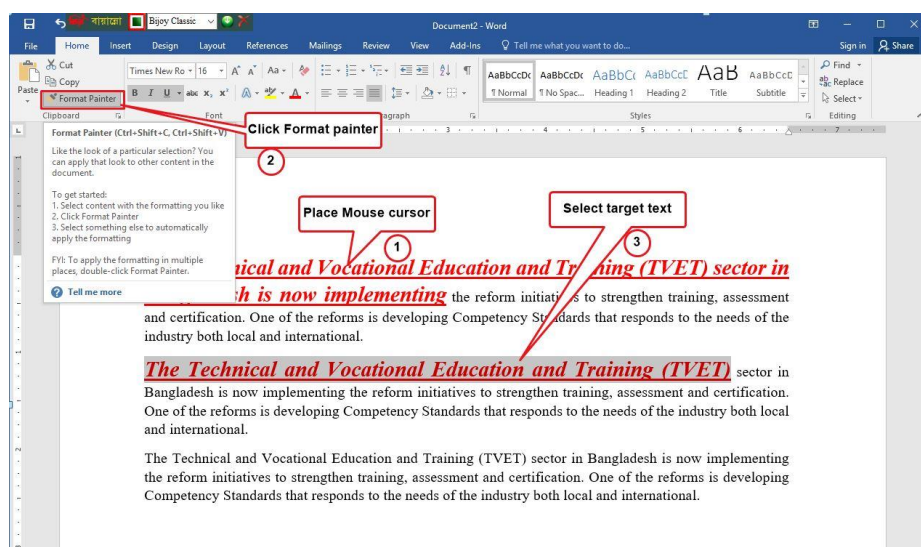
More options will be found by clicking on: Font section point.

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Formatting styles

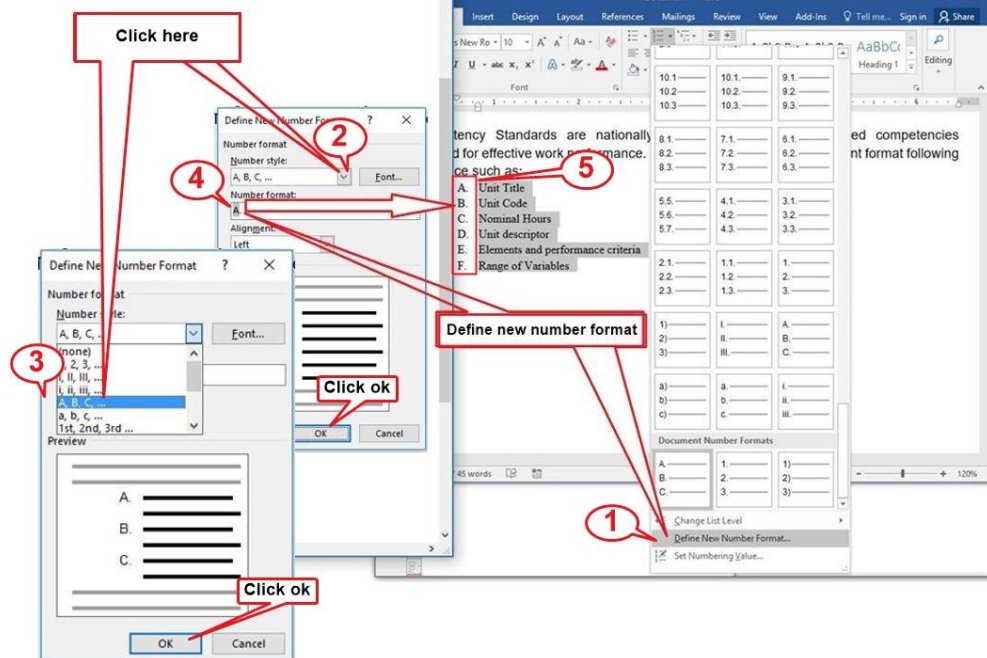
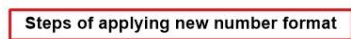


Format Painter:



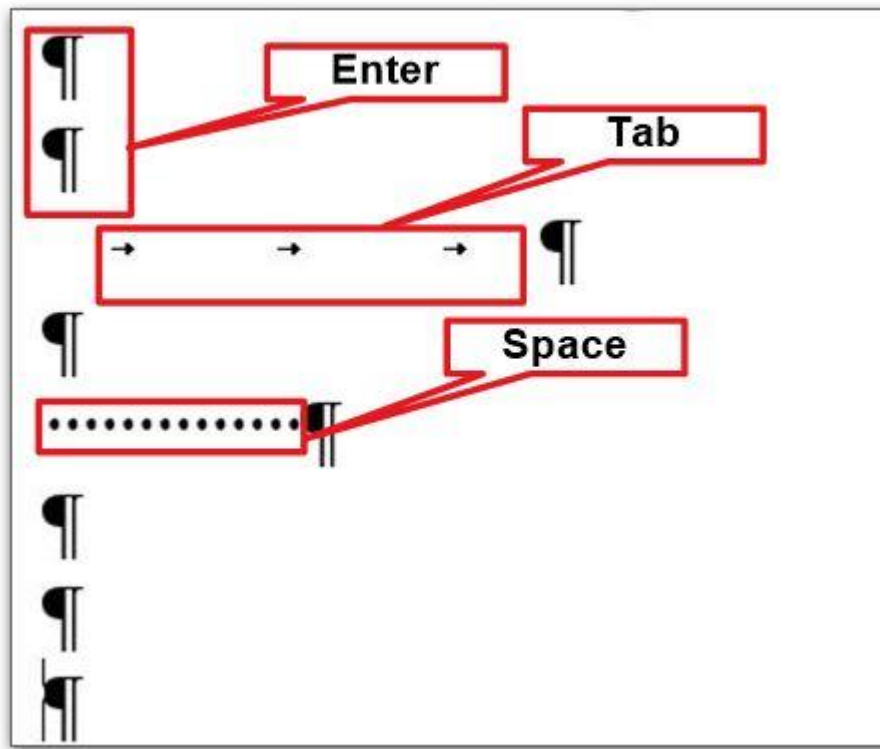
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Numbering referred to as an ordered list, number format, or number list, numbering is a list order done with numbers for checklists or a set of steps.



Shower Hide Formatting Mark:

Formatting marks The button for the 'Show/Hide Formatting Marks' command looks like *marks* (e.g., spaces, tabs, and paragraph breaks) in a Microsoft *Word* document.



- You will find formatting styles options at the right side of “Home” Tab.



- You will find all styles by clicking on the drop down arrow at the right side of the style icons.

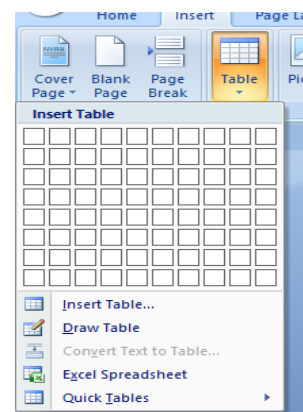
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- Select text on your document and apply styles from the list. Check the effects.

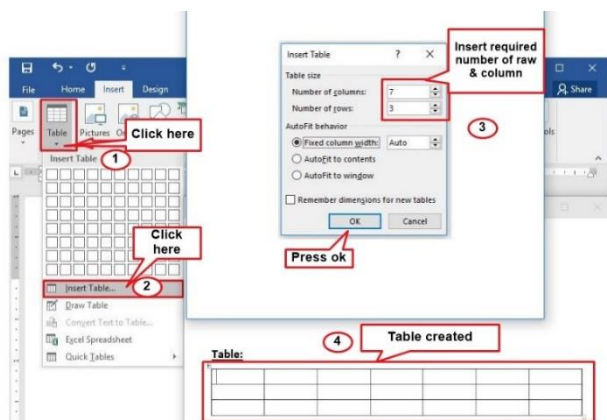
Table utilization

To work with table, you will find options on “Insert” Tab. Click on Table icon and following options will appear. Apply them to create or modify tables for your document.



Insert Table:

To insert a blank table, place your insertion point in the document where you want the table to appear. Select the Insert tab. Click the Table command. Hover your mouse over the diagram squares to select the number of columns and rows in the table. Click your mouse, and the table appears in the document.



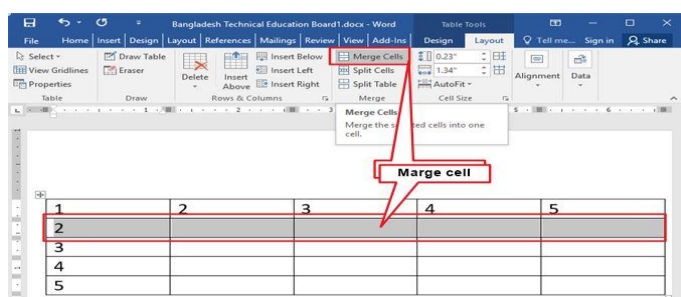
Here's how to make a table from the Insert Table dialogue box:

1. Click on Table from the insert tab. Select Insert table.
2. Enter the desired number of **rows** and columns.
3. Choose AutoFit behavior if you want the table's cells to automatically expand to fit the text inside them.
4. Click OK to insert your table.

Use of merge cell in table

Select the cells to be merged and press Alt + Enter key. It easily works in windows 2010. Select the cells or rows you want to merge and then press Alt + A and then press M (2 times).

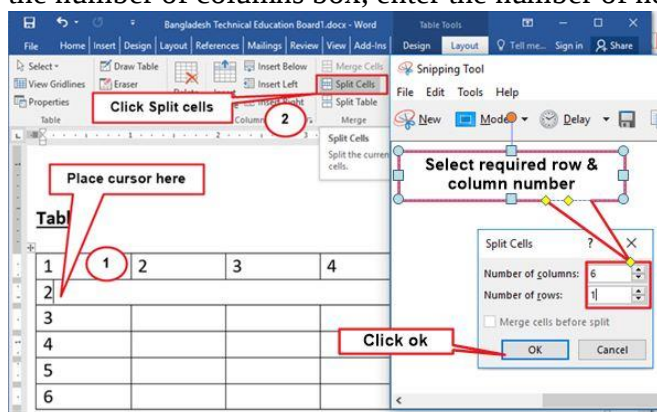
Figure:



1. All you need to do is select the cells you'd like to merge
2. right click inside the selected cells and select Merge cells.
3. You can also select Merge cells from the Table drop-down in the menu at the top of your screen.

Split Cell

Click the table cell that you want to split. Under table tools, on the layout tab, in the merge group, click split cells, and then do one or more of the following: To divide a cell vertically, in the number of columns box, enter the number of new cells that you want.



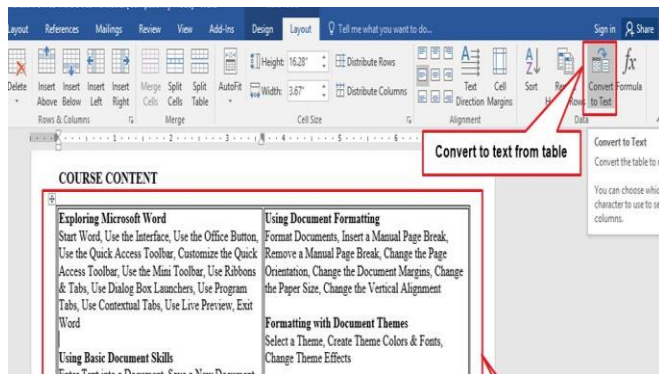
Split cells

1. Click in a cell, or select multiple cells that you want to split.
2. Under Table Tools, on the Layout tab, in the Merge group, click Split Cells.
3. Enter the number of columns or rows that you want to split the selected cells into.

Convert Text to Table:

To convert text to a table, select the text, and choose Format > Table > “Convert Text to Table.” When Pages encounters a paragraph return, it creates a new row. When Pages encounters a tab stop, it creates a new column. To convert a table to text, select the table, and choose Format > Table > “Convert Table to Text.”

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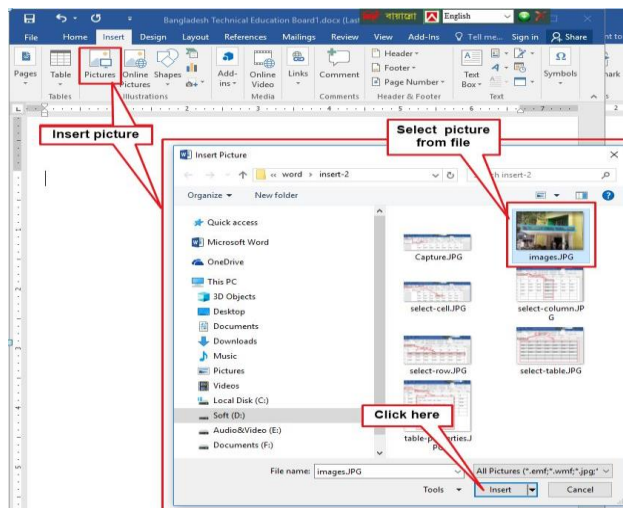
Convert text to a table

1. Insert separator characters such as commas or tabs to indicate where you want to divide the text into table columns.
2. Use paragraph marks to indicate where you want to begin a new table row.
3. Select the text you want to convert to a table.
4. On the Insert tab, click Table > Convert Text to Table.

Insert Picture:

To insert a picture from a file: Place your insertion point where you want the image to appear. Select the insert tab. Click the picture command in the illustrations group. The insert picture dialog box appears. Select the desired image file, then click Insert to add it to your document.

Selecting an image file.



To insert a picture from a file:

1. Place your insertion point where you want the image to appear.
2. Select the **Insert** tab.
3. Click the **Picture** command in the Illustrations group. The **Insert Picture** dialog box appears. ...
4. Select the desired image file, then click **Insert** to add it to your document. Selecting **an image** file.

Self Check 4.2.2

Answer the following questions –

1	Where will you find the page setting options?
	Ans:
2	Under which menu the font setting options are listed?
	Ans:
3	Where do the formatting styles stay?
	Ans:
4	Where does the table utilization menu stay?
	Ans:
5	Potrait, Landscape are-----

Answer key 4.2.2

Answer the following questions –

1	Where will you find the page setup options?
	Ans: At the Layout Tab
2	Under which Tab the font options are stay?
	Ans: Home Tab
3	Where do the formatting styles stay?
	Ans: at Home Tab
4	Where does the table utilization Tab stay?
	Ans: At Insert Tab.
5	Potrait, Landscape are-----
	Ans: Page Orientation

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Information Sheet 4.2.3

Learning Objectives:

After reading this information sheet, trainee will be able to format document using various software functions and page setup functions

Format document:

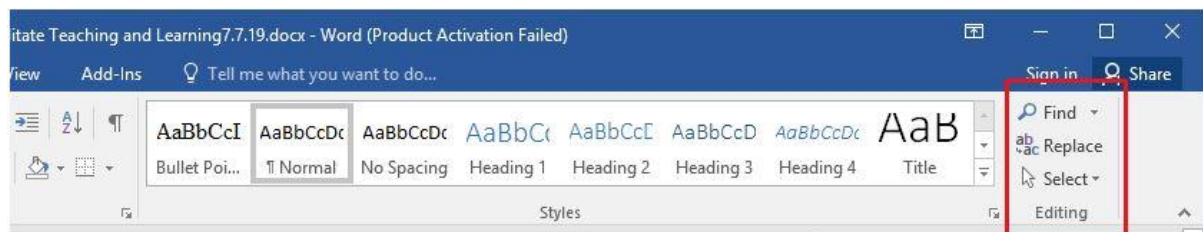
Formating document is the main purpose of using word processing applications. It starts from from the creating new blank page. Along with software functions, page setup functions includes

Default settings

- Headers/footers
- Indent
- Line spacing
- Page numbers
- Page set up
- Paragraph formatting
- Spell check
- Text formatting

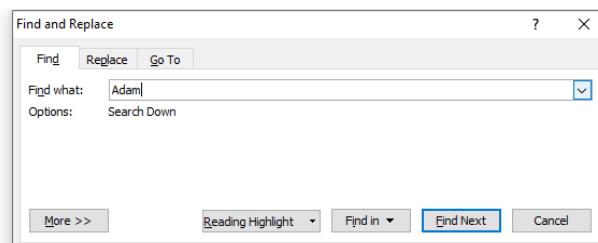
Some software functions

- At the right most corner of Home menu you will find options to find, replace and select text on your document.



Find

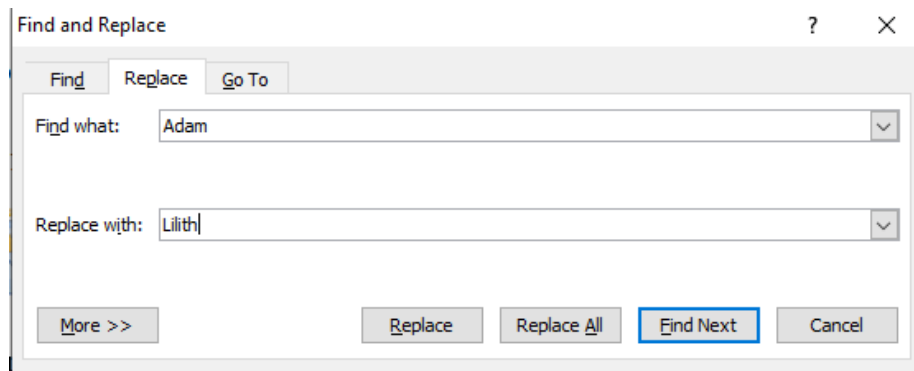
To find specific word(s) on your document you can use this function. If you click on “Find” icon or press ctrl+f, the find dialogue box will appear. Write desired word and click on “Find Next”. Use other options of this box.



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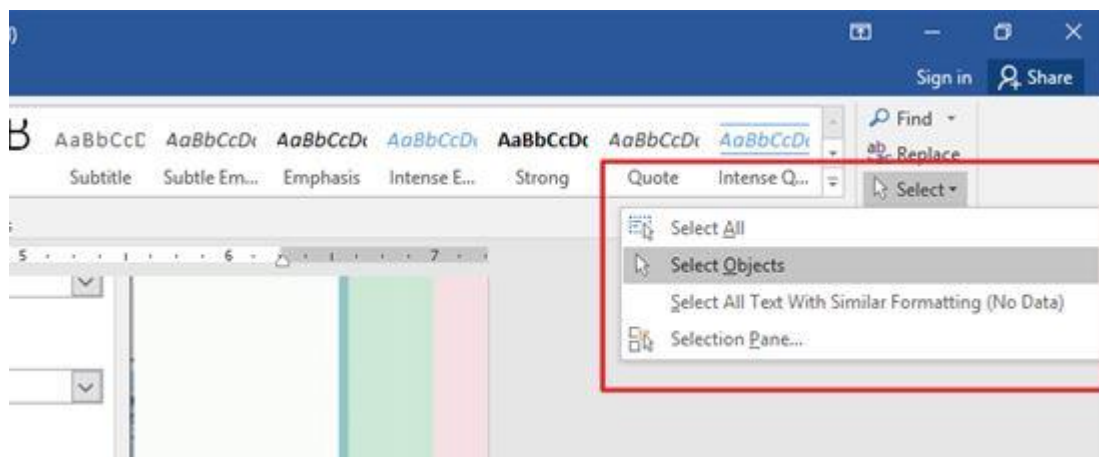
Replace

When you need to replace any word throughout the document, use replace function. Following figure is self explanatory.

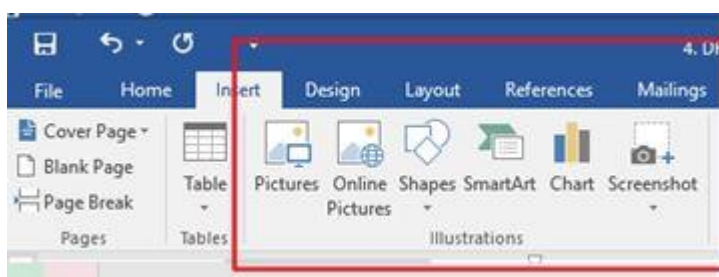


Select

Select options are –



- On insert tab, you will find options for “Illustration”. You can insert pictures, clip art, shapes, smart art and chart using functions of illustration.



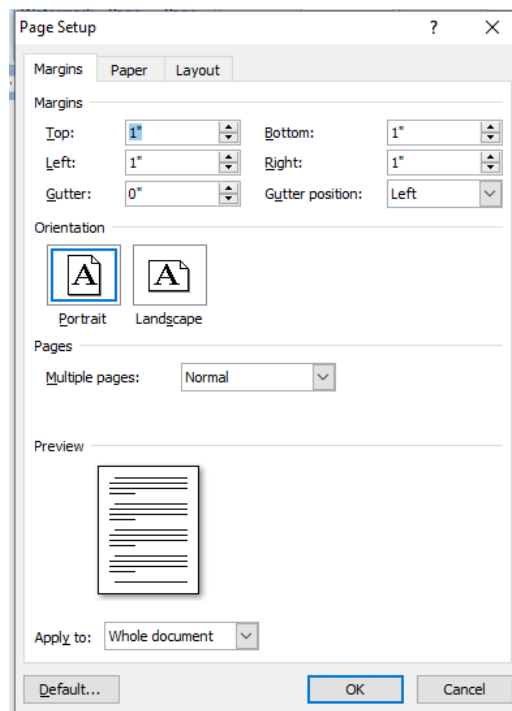
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Page setup functions

We will discuss some commonly used page setup functions here.

Default settings

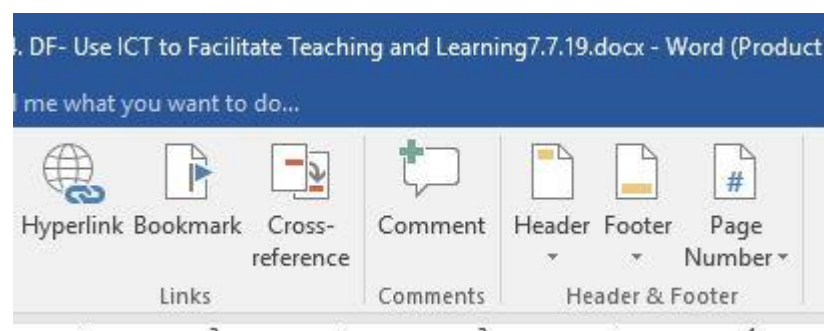
When you open a new document, it appears with some default settings. You can change these settings as you required and set as default. You will find default settings on the following figure –



You can set up your page layout from this window.

Headers, footers and page number

You will find the options for inserting headers, footers and page numbers on the “Insert” Tab.



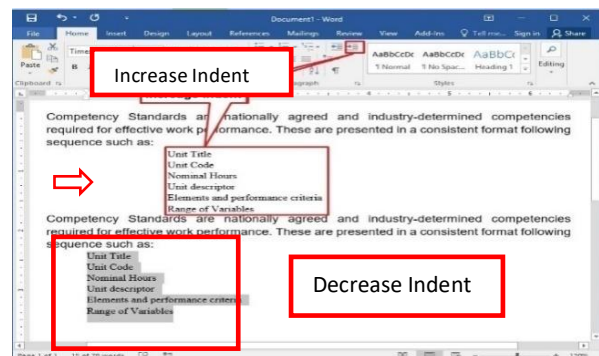
Click on the icons and follow the instructions for headers, footers and page numbers.

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Indent:

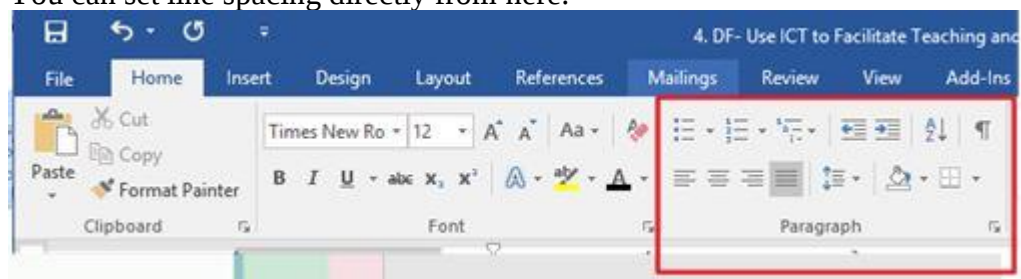
Increase/Decrease Indent. By pressing the 'Increase Indent' button on the Paragraph section, the indentation function is called: The distance is increased between the current paragraph (the selected one or the one where the cursor is placed) and the left page margin.

Increase or decrease the indentation of an entire paragraph. Select the paragraph that you want to change. On the home tab, in the Paragraph group, do one of the following: Click the Increase Indent button to increase the indentation of the paragraph and Click the decrease Indent button to decrease the indentation of the paragraph.



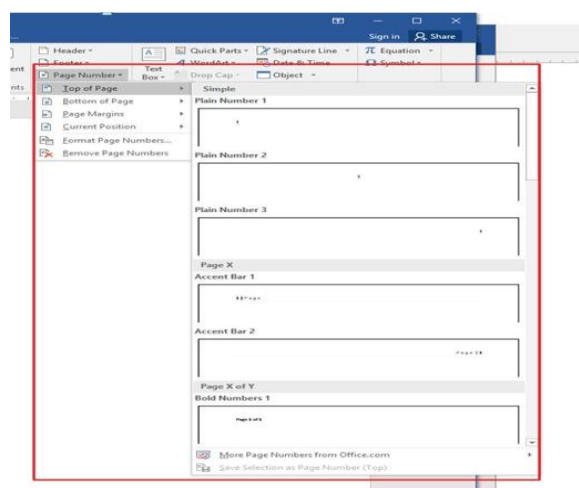
Line spacing

For line spacing, you need to go to “Paragraph” properties. It is included in “Home” Tab. You can set line spacing directly from here.



Page numbers

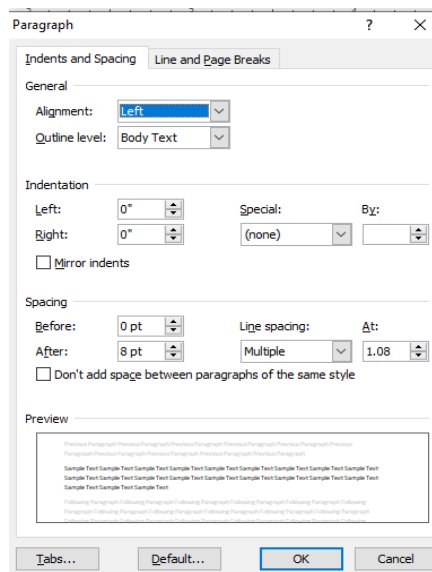
From insert Tab you will be able to insert page number to your document. Choose necessary options for your document. Following figure will show you the way.



Code: TVTENV407A1	Use ICT to Facilitate Teaching and Learning	Date of developed June 2019	Date of Revise 00-00-00	Page 49 of 125
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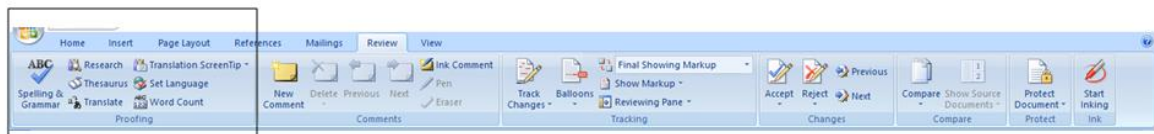
Paragraph formatting

The paragraph dialogue box will give you more options that is shown on the following figure –



Spell check

To check spelling and grammar of your document, you need to go to “Review” Tab.



Apply the options and check the results on your document.

Text formatting

Text formatting options will let you insert text box and other fascinating actions on your document. You will find the options on “Insert” Tab.

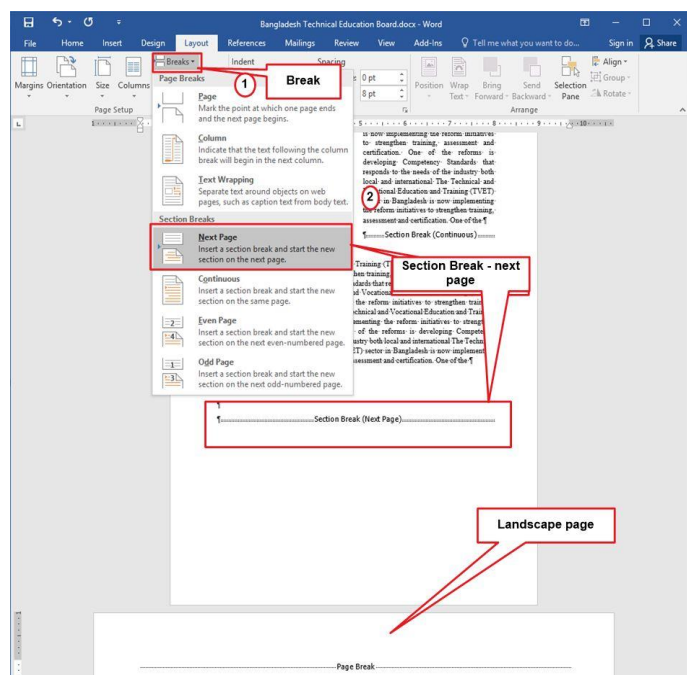


You will be able to insert text box, word art drop cap, signature line, date and time and objects from here.

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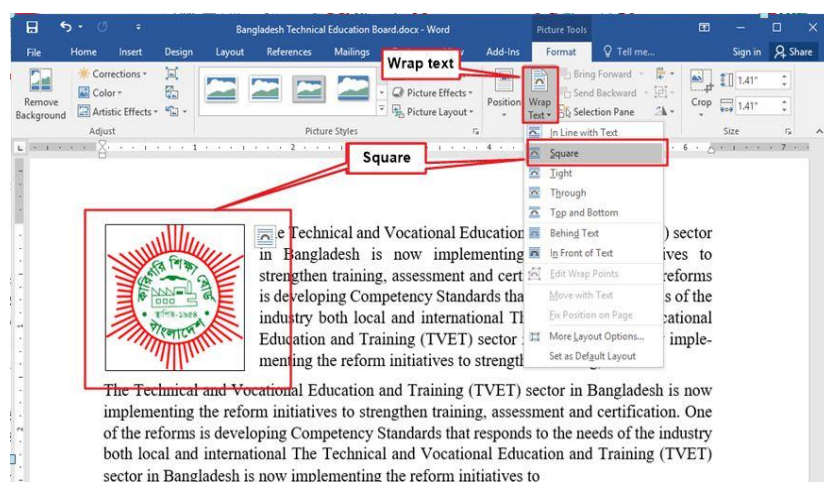
Use of Section break:

In a word processor, such as Microsoft Word, a section break splits your document's pages into sections that can have a different format or layout. For example, you could create pages that have different headers and footers.



Use of Wrap Text:

Word wrap is a **word** processing feature that forces all text to be confined within defined margins. When a line of text is filled, the **word** processor automatically moves the text to the next line, so the user doesn't have to press the return key after every line.



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Self Check 4.2.3

Answer the following questions –

1	On which menu do the options “Find”, “Replace” listed?
	Ans:
2	What is the keyboard combination for “Find”?
	Ans:
3	Which section of “Insert” menu contain tools for inserting Chart?
	Ans:
4	Which type of function indent, line spacing or paragraph formatting is?
	Ans:

Answer key 4.2.3

Answer the following questions –

1	On which menu do the options “Find”, “Replace” listed?
	Ans: Home
2	What is the keyboard combination for “Find”?
	Ans: Ctrl+f
3	Which section of “Insert” menu contain tools for inserting Chart?
	Ans: Illustration
4	Which type of function indent, line spacing or paragraph formatting is?
	Ans: Page setup functions

Information Sheet 4.2.4

Learning Objectives:

After reading this information sheet, you will be able to utilize application features.

Appication features

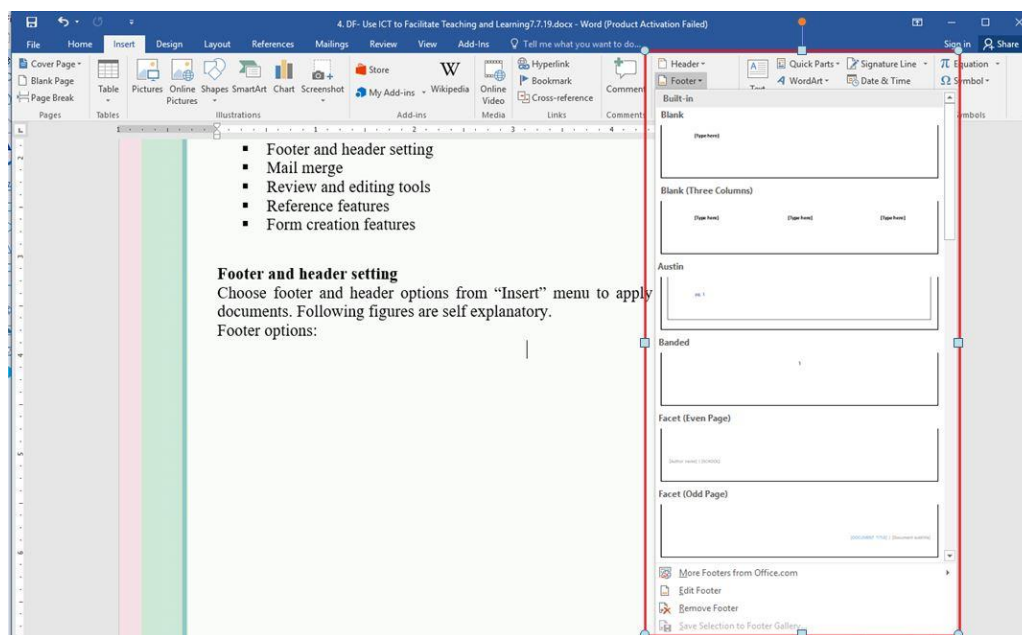
There are so many application features to make your document attacctive and useful. Here most commonly used features will be discussed and they are –

- Footer and header setting
- Mail merge
- Review and editing tools
- Reference features
- Form creation features

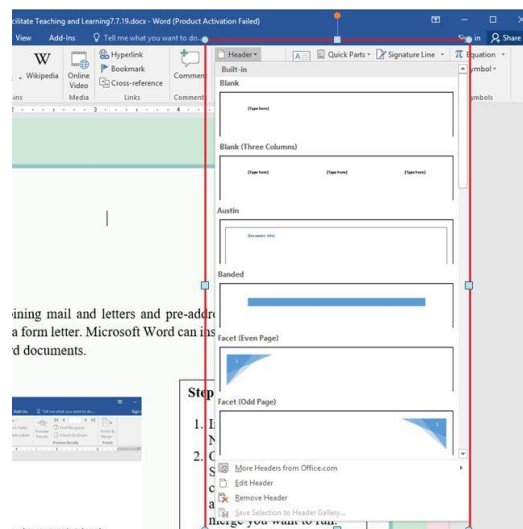
Footer and header setting

Choose footer and header options from “Insert” Tab to apply footer and header to your documents. Following figures are self explanatory.

Footer options:



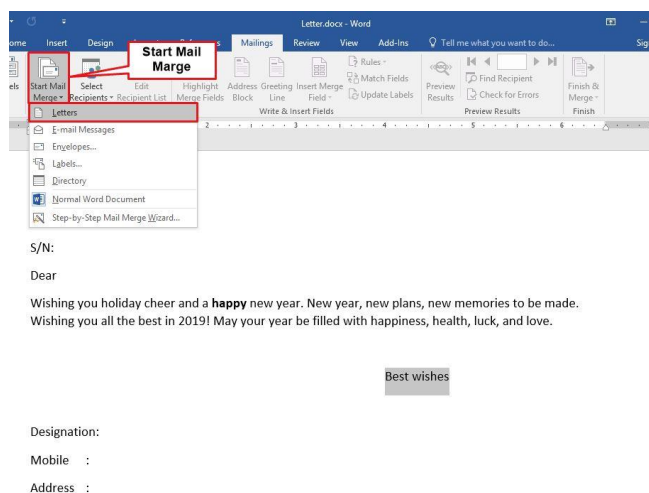
Header Options:



Mail merge

Mail merge consists in combining mail and letters and pre-addressed envelopes or mailing labels for mass mailings from a form letter. Microsoft Word can insert content from a database, spreadsheet, or table into Word documents.

Step 1

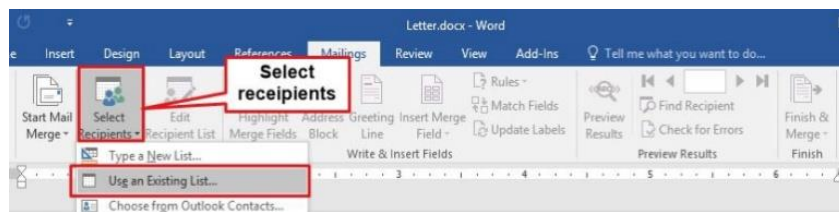


Steps: Start the mail merge

1. In Word, choose File > New > Blank document.
2. On the Mailings tab, in the Start Mail merge group, choose Start Mail Merge, and then choose the kind of merge you want to run.
3. Choose Select Recipients > Use an Existing List.
4. Browse to your Excel spreadsheet, and then choose Open.

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Step 2



S/N:

Dear

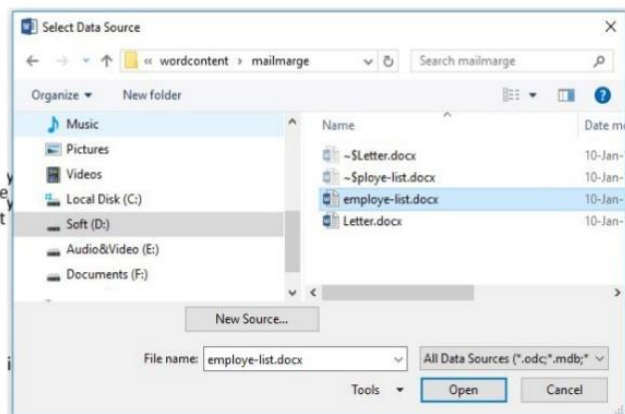
Wishing you holiday cheer

Wishing you all the best

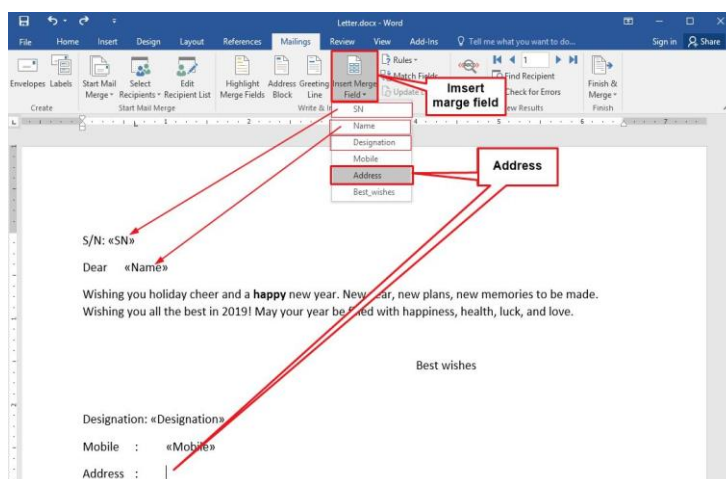
Designation:

Mobile :

Address :

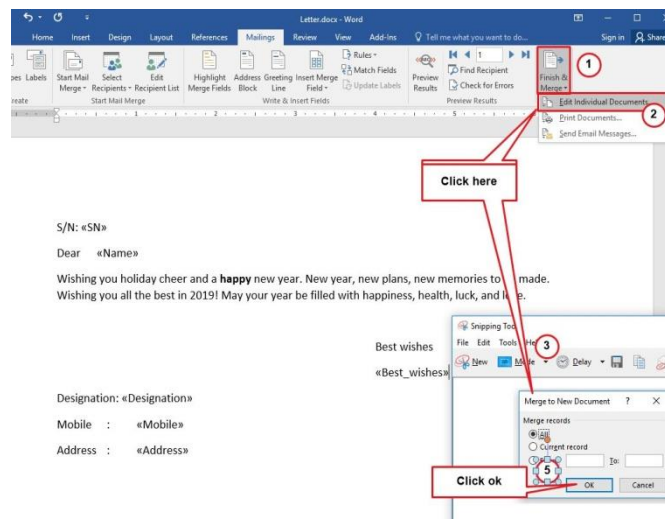


Step 3

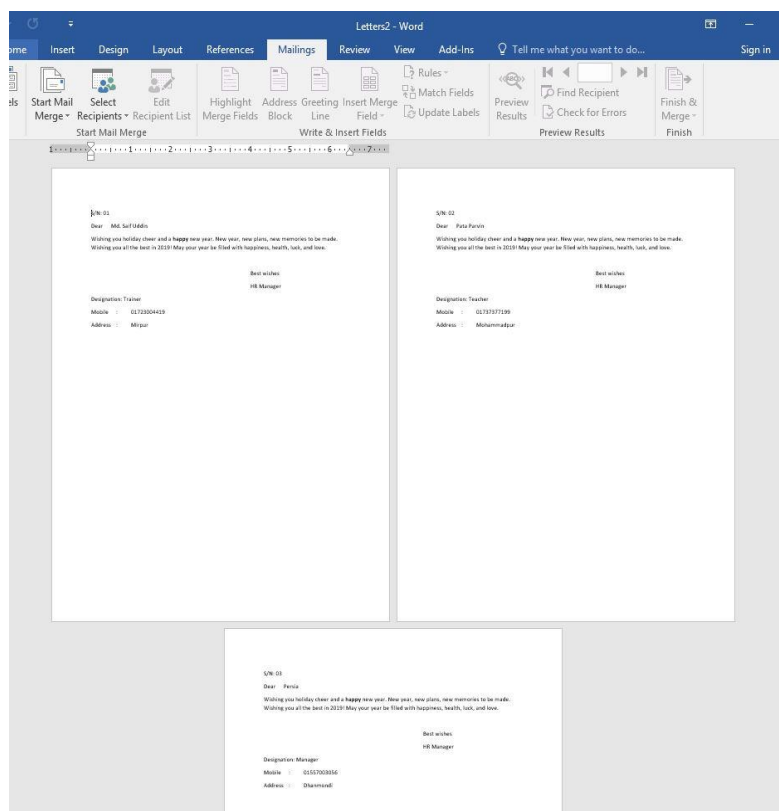


S/N	Name	Designation	Mobile	Address	Best wishes
01	Md. Saif Uddin	Trainer	01723004419	Mirpur	HR Manager
02	Pata Parvin	Teacher	01737377199	Mohammadpur	HR Manager
03	Persia	Manager	01557003056	Dhanmondi	HR Manager

Step 4



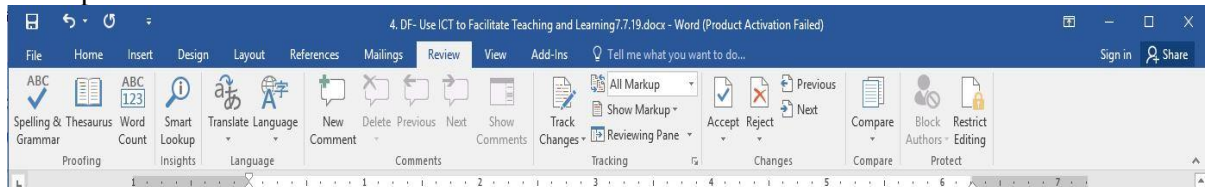
Step 5



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Review and editing tools

The review Tab content amazing editing tools. These will make your editing works smoother. The options are –



The proofing section contains spelling and grammar check, research, Thesaurus, translate, word count etc. options.

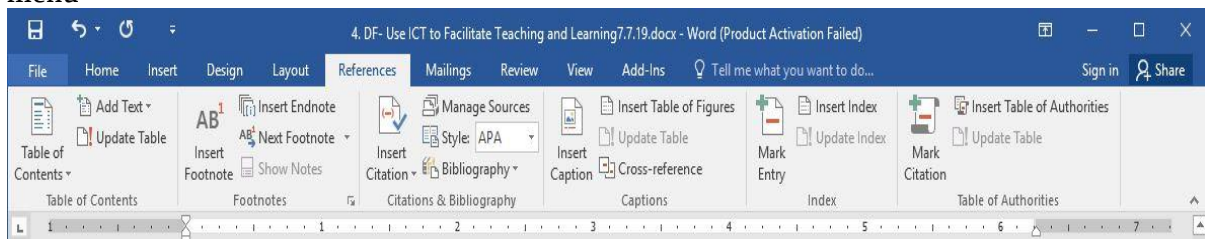
You can add comments using options on “Comment” section.

To track changes during editing, choose “Track Change” from tracking sections.

You can work with track change of document using options on “Changes” section.

Reference features

Reference features help you to decorate your document. Here are the features of “Reference” menu –



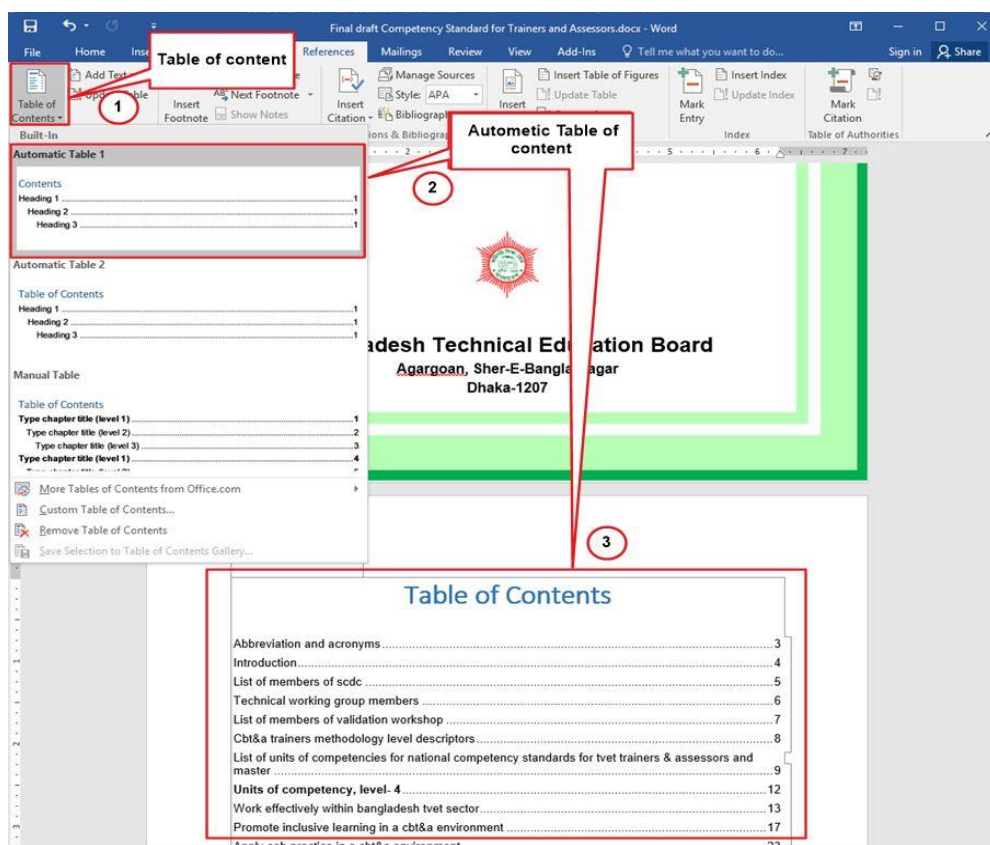
Features:

- You can add Table of content easily from here.
- You will be able to add footnotes.
- You can add citation and bibliography
- You can insert captions, index and table of Authority.

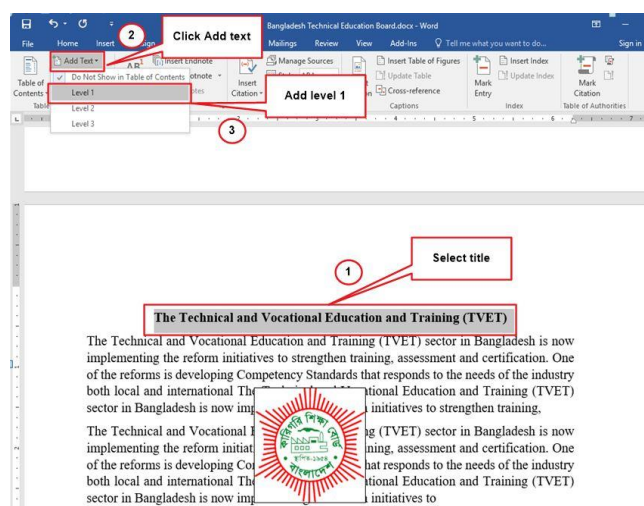
Table of Content:

A *table of contents*, usually headed simply Contents and abbreviated informally as TOC, is a list. Many popular *word* processors, such as Microsoft *Word*, WordPerfect, and StarWriter are capable of automatically generating a *table of contents*. Using a table of contents in your document makes it easier for the reader to navigate. In Word table of contents pages are helpful if your document is large.

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Manually Set Table of content:

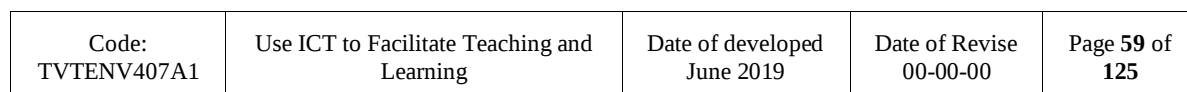


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A thesaurus is a software tool included with some word processors that provides synonyms for selected words on command. Users using Microsoft Word can open a thesaurus by highlighting the word they want to look up and pressing the shortcut key Shift+F7



Track Changes is a way for Microsoft Word to keep track of the changes you make to a document. You can then choose to accept or reject those changes. Let's say Bill creates a document and emails it to his colleague, Lee, for feedback. Lee can edit the document with Track Changes on.



Form creation features

Create a form

Step 1: Set up Word for creating forms

- 1 Click the **Microsoft Office Button** , and then click **Word Options**.
- 2 Click **Popular**.
- 3 Select the **Show Developer tab in the Ribbon** check box, and then click **OK**.

Step 2: Open a template or a document on which to base the form

1. Click the **Microsoft Office Button** , and then click **New**.
2. Under **Templates**, click **My templates**.
3. Double-click Normal, and then click Template or Document under Create New.
4. Click the Microsoft Office Button , and then click Save As.
5. In the Save As dialog box, give the new template or document a file name, and then click **Save**.

Step 3: Add content controls to the form

Design the form by sketching a layout first, or use an existing form as a guide. In your form, you can add content controls, tables, and other graphics elements.

On the **Developer** tab, in the **Controls** group, click **Design Mode**, and then click where you want to insert a control.



Do any of the following:

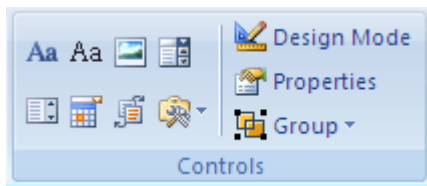
Insert a text control where users can enter text

1. On the **Developer** tab, in the **Controls** group, click the **Rich Text** control  or the **Text** control .

Insert a drop-down list that restricts available choices to those you specify

1. On the **Developer** tab, in the **Controls** group, click the **Drop-Down List** control .
2. Select the content control, and then on the **Developer** tab, in the **Controls** group, click **Properties**.

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3. To create a list of choices, under **Drop-Down List Properties**, click **Add**.
4. Type a choice in the **Display Name** box, such as **Yes**, **No**, or **Maybe**.

Repeat this step until all of the choices are in the drop-down list.

Step 4: Set or change properties for content controls

Each content control has properties that you can set or change. For example, the Date Picker control offers options for the format you want to use to display the date.

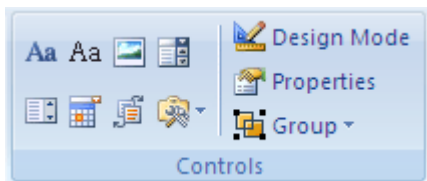
1. Right-click the content control that you want to change.
2. Click **Properties**, and change the properties that you want.

Step 5: Add instructional text to the form

Instructional text can enhance the usability of the form you create and distribute. You can change the default instructional text in content controls.

To customize the default instructional text for your form users, do the following:

1. On the **Developer** tab, in the **Controls** group, click **Design Mode**.



2. Click the content control where you want to revise the placeholder instructional text.
3. Edit the placeholder text and format it any way you want.
4. If you want the content control to disappear when someone types in their own content to replace your instructions in a Rich Text control or a Text control, click **Properties** in the **Controls** group, and then select the **Remove content control when contents are edited** check box.
5. On the **Developer** tab, in the **Controls** group, click **Design Mode** to turn off the design feature and save the instructional text.

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Self Check 4.2.4

Mark true or false (T/F) for the following statements:

Sl#	Statements	True or False (T/F)
1	Mail merge is an application feature.	
2	Choose footer tool from “Insert” Tab to apply footer to your documents.	
3	Mail merge is used for mass mailings.	
4	Track change is a Review tool.	
5	It is not possible to add citation and bibliography to a document.	

Answer key 4.2.4

Mark true or false (T/F) for the following statements:

Sl#	Statements	True or False (T/F)
1	Mail merge is an application feature.	T
2	Choose footer tool from “Insert” menu to apply footer to your documents.	T
3	Mail merge is used for mass mailings.	T
4	Track change is a Review tool.	T
5	It is not possible to add citation and bibliography to a document.	F

Information Sheet 4.2.5

Learning Objectives:

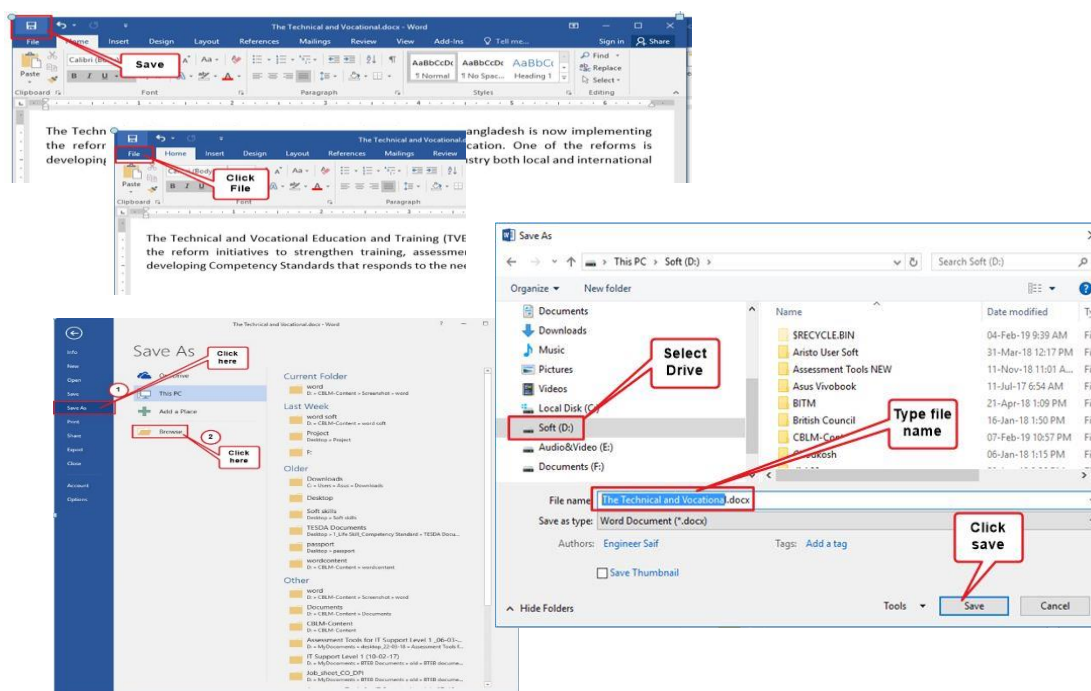
After reading this information sheet, you will be able to save documents.

Save Document

To save a document:

- Click save button on quick access bar.
- Or Choose “Save” or “Save As” from File Tab
- Or Press Ctrl+S from keyboard.

A save as dialogue box will appear. Choose file, type, location, name from here and click save to save the document. You can save the document directly to external drives, USB storage as well as any drive of your hard drive.



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Self Check 4.2.5

Mark true or false (T/F) for the following statements:

Sl#	Statements	True or False (T/F)
1	To save adocument keyboard shortcut is “Ctrl+s”	
2	You can save document directly to USB dive.	

Answer key 4.2.5

Mark true or false (T/F) for the following statements:

Sl#	Statements	True or False (T/F)
1	To save adocument keyboard shortcut is “Ctrl+s”	T
2	You can save document directly to USB dive.	T

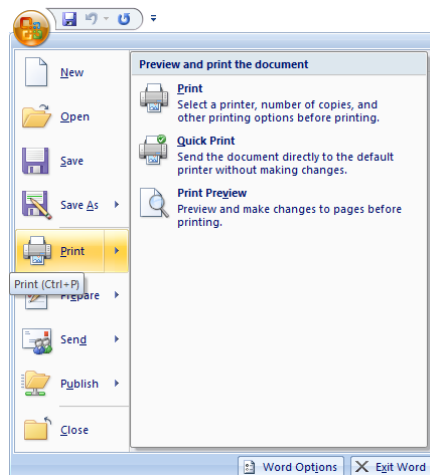
Information Sheet 4.2.6

Learning Objectives:

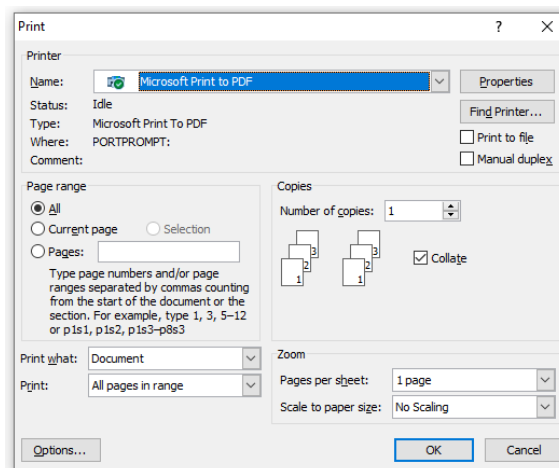
After reading this information sheet, trainee will be able to print documents.

Print Document

To print a document, choose option from “Print” of File Tab. Following figure is self explanatory.



If you press choose “Print” or press Ctrl+P from keyboard, following print dialogue box will be appeared.



Choose printer name that is connected with computer. Carefully check other options of the dialogue box and choose values as you required. Press OK to print the document.

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Self Check 4.2.6

Write short note of the following options of “Print”:

Print
Quick Print
Print Preview

Answer key 4.2.6

Write short note of the following options of “Print”:

Print
With this option we can select a printer, number of copies, and other printing options before printing.
Quick Print
This command sends the document directly to the default printer without making changes.
Print Preview
This will allow you to preview of the document, make changes to pages before printing.

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Job Sheet 4.2.1

Resume of

Md. Sujon Ali

Cell: 01736881536

E-mail: mdsujon36@gmail.com



Carrier Objectives

To serve in a responsible position at a well-structured organization and successfully apply acquired managerial and interpersonal skill to enhance organizational efficiencies for the further development of the organization.

Experience:

Duration & Position	Responsibility
01-Sep-2015 to 30-Nov-2015 As trainee Graphic Designer At CHOUKOSH	• Prepare contents and Graphics • Compose contents and Graphics • Setup document for Graphics Design • Taking draft print for Design output • Assist superior

Educational Qualification:

Certificate	Group	Institution	Board	GPA/Division	Passing Year
SSC	Science	Kayet para high school	Jessore	4.00	2004
HSC	Commerce	Alamdanga degree college	Jessore	4.50	2006
BBS	Management(Hon's)	Kushtia Govt college	National University	3.00	2010

Computer Literacy:

- Microsoft Office Applications
- Internet Browsing, E-mail

Inter-Personal Skill:

- Good communication skill
- Capable of adopting any types of Environment
- Quick learner
- Pro-active, Sincere and Responsible

Personal information

Father name : Md. Touz Uddin
 Date of Birth : October 20, 1988
 Religion : Islam
 Nationality : Bangladeshi
 Marital status : Unmarried
 Permanent Address : Village: Ramdia, Post Office: Ramdia Bazar, Thana: Alamdanga, District: Chuadanga.
 Present Address : Village: Ramdia, Post Office: Ramdia Bazar, Thana: Alamdanga, District: Chuadanga.

Reference

Md. Abdul Motin

Assistant professor,
 Department of management
 kushtia Govt College, kushtia.
 Cell: 01714935525

Kazi Mahfuzur Rahman (Misty)

Jordacy, Qc Manager
 Dhaka-1215
 Cell: 01723 122303

Md Sujon Ali

Date: 12/12/2016

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Specification Sheet 4.2.1

Name of The job: Create a sample CV

Open a new MS Word and type the above sample CV.

Specific Instructions:

1. Create sample CV and save your name.
2. Page size – A4
3. Margin Top, bottom, left, right -.5 inch.
4. Font size- all title 14 and body text 12.
5. Use Time new Roman font.

To complete the above task you will need to following equipment per Trainee.

S/N	Tools and equipment	Quantity
01	Personal Computer	1
02	Keyboard and Mouse	1
03	Monitor	1
04	Microsoft Office	1
05	Bangla typing software (Bijoy, Avro etc.)	1
06	Power supply	1

Raw Materials

1.
2.
3.

Required PPE

1.
2.
3.

Special Note

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Job Sheet 4.2.2

Name of The job: Create a sample Invoice

Procedure/Steps

- Follow OSH
- Wear PPE
- Check Connection and computer
- Start the Computer.
- Open Microsoft Word Program.
- Read the Specification Sheet.
- Type document according to Specification sheet.
- Save the document
- Print the document and Submit to the Trainer.
- Shutdown computer and clean your workplace

Follow the Sample Job

Bismillah General Store 31/3 Mohammadpur, Dhaka-1207 (Office copy)					Bismillah General Store 31/3 Mohammadpur, Dhaka-1207 (Customer copy)				
Customer ID : _____					Customer ID : _____				
Customer Name : _____					Customer Name : _____				
Mobile no : _____					Mobile no : _____				
Address : _____					Address : _____				
S/N	Product Name	Unit Price	Quantity	Total	S/N	Product Name	Unit Price	Quantity	Total
Net Amount					Net Amount				
Customer Signature					Customer Signature				
Authorize Signature					Authorize Signature				

Specification Sheet 4.2.2

Name of The job: Create a sample invoice

Open a new MS Word and type the above sample invoice.

Specific Instructions:

1. Create a Folder by your name.
2. Save the document as “Competency”.
3. Change the layout of the page as given below:
 - Page size: A4 (8.27” x 11.69”)
 - Page orientation: Potrait.
4. Format the text as given below:
 - Font Size: 12
 - Font Style: Bold and Italic for title only.
5. Save your work and close Microsoft word.

To complete the above task you will need to following equipment per Trainee.

S/N	Tools and equipment	Quantity
01	Personal Computer	1
02	Keyboard and Mouse	1
03	Monitor	1
04	Microsoft Office	1
05	Bangla typing software (Bijoy, Avro etc.)	1
06	Power supply	1

Raw Materials

1.
2.
3.

Required PPE

1.
2.
3.

Special Note

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Job Sheet 4.2.3

Name of The job: Type documents in Bangla and English

Procedure/Steps

- Follow OSH
- Wear PPE
- Check Connection and computer
- Start the Computer.
- Open Microsoft Word Program.
- Read the Specification Sheet.
- Use correct fingering to type document.
- Type document according to Specification sheet.
- Save the document
- Print the document and Submit to the Trainer.
- Shutdown computer and clean your workplace.

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Sample job:

- Bangladesh

- 1. Division

- 1.1 Khulna

- 1.2 Borishal

- 1.3 Dhaka

- 2. Division

- 2.1 Sylhet

- 2.2 Chottogram

- 2.3 Mymensingh

You can customize keyboard shortcuts by assigning keyboard shortcuts (or shortcut keys) to a command, macro, font, style, or frequently used symbol. You can also remove keyboard shortcuts

- 3. Division

- 3.1 Comilla

- 3.2 Rajshahi

- 3.3 Rangpur

- India

- [1]. Kolkata

- [2]. Dilhi

- [3]. Bombay

Specification Sheet 4.2.3

Name of The job: Using Multilevel list create the sample document

Open a new MS Word and type the above sample documrnt.

Specific Instructions:

1. Create a Folder by your name.
2. Save the document as “Competency”.
3. Change the layout of the page as given below:
 - Page size: A4 (8.27” x 11.69”)
 - Page orientation: Potrait.
4. Format the text as given below:
 - Font Size: 12
 - Font Style: Bold and Italic for title only.
5. Save your work and close Microsoft word.
6. Use Time New Roman font.
7. Use number and bullet list according to sample.
8. Set page border
9. Set border width 3pt

To complete the above task you will need to following equipment per Trainee.

S/N	Tools and equipment	Quantity
01	Personal Computer	1 no
02	Keyboard and Mouse	1 no
03	Monitor	1 no
04	Microsoft Office	1 no
05	Bangla typing software (Bijoy, Avro etc.)	1 no
06	Power supply	1 no

Raw Materials

1.
2.
3.

Required PPE

1.
2.
3.

Special Note

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LEARNING OUTCOME 3: UTILIZE PRESENTATION APPLICATION

ASSESSMENT CRITERIA:

1. Presentation slide is created as per job requirement.
2. Existing slides are edited and formatted.
3. Presentation layout, formatting and themes are applied in line with target audience requirements.
4. Animation and slide transitions are applied to enhance viewing and interactivity experience.
5. Slide master is used as required.
6. Printing of presentation materials are performed in line with user requirements.

CONTENTS:

- Create Presentation slides
- Edit and format existing slides
- Apply presentation layout, formatting and themes
- Apply animation and slide transitions
- Use slide master
- Print presentation materials

CONDITIONS:

Trainees must be provided with the following:

- Handouts or reference materials/books on the above stated contents
- PCs/printers or laptops with internet access
- LCD/Digital Projector and Screen
- Microphones
- Bond paper
- Ball pens/pencils and other office supplies and materials
- Communication resources
- Workplace or simulated environment

METHODOLOGIES:

- Lecture/discussion
- Demonstration/application
- Presentation

ASSESSMENT METHODS:

- Written test
- Demonstration
- Oral Questioning
- Observation with checklist
- Portfolio.

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Learning Experience 4.3-1

Learning Outcome 3:

UTILIZE PRESENTATION APPLICATION

Learning Experience	Resource/Special Instructions
1. Utilize presentation application (This includes Create Presentation slides, Edit and format existing slides, Apply presentation layout, formatting and themes, Apply animation and slide transitions, Use slide master, and Print presentation materials)	• Read Information sheet 4.3.1 • Answer all Self-Checks 4.3.1 and compare answer key 4.3.1
Perform Job Sheet 4.3.1	
Perform Job Sheet 4.3.2	
Perform Job Sheet 4.3.3	

Information Sheet 4.3.1

Utilize presentation application

Learning Objectives:

After reading this information sheet, trainee will be able to utilize presentation application.

Introduction to Presentation application:

A presentation package is a software program that provides the resources necessary to give a professional presentation for meetings, lectures, speeches or other similar situations.

The most prominent example of presentation software is Microsoft PowerPoint. Other examples include Apple Keynote, OpenOffice Impress, Corel Presentations, Adobe Persuasion, Flowboard, Kingsoft Presentation and Prezi.

Here we discuss about Microsoft PowerPoint-

PowerPoint is computer application created by Microsoft which allows the user to create slides with recordings, narrations, transitions and other features in order to present information. PowerPoint is a presentation software made by Microsoft.

A PowerPoint presentation is a presentation created using Microsoft PowerPoint software. The presentation is a collection of individual slides that contain information on a topic. PowerPoint presentations are commonly used in business meetings and for training and educational purposes.

Run PowerPoint



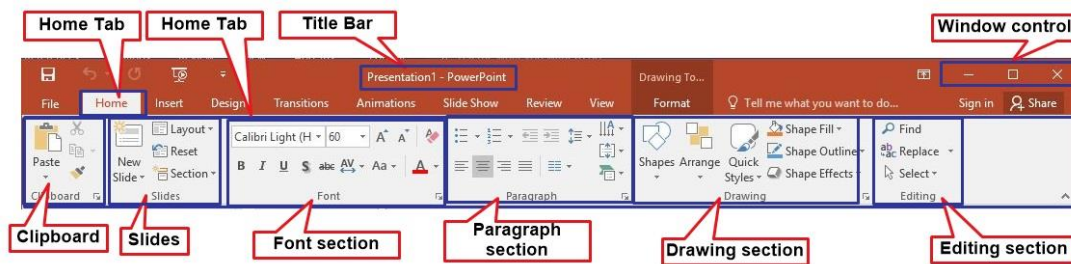
Way 1 – From Start Menu

Step 1 – The most common way to open PowerPoint is with the help of the Start menu. Click on the **Start** button which is in the leftmost corner of the taskbar.

Step 2 – Locate Microsoft Office in the M alphabet section and click on it to expand.

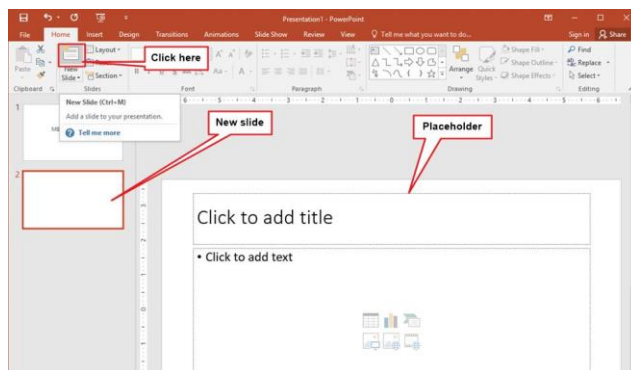
Step 3 – Find PowerPoint in the list and then click on it.

PowerPoint Layout:



Insert New Slide:

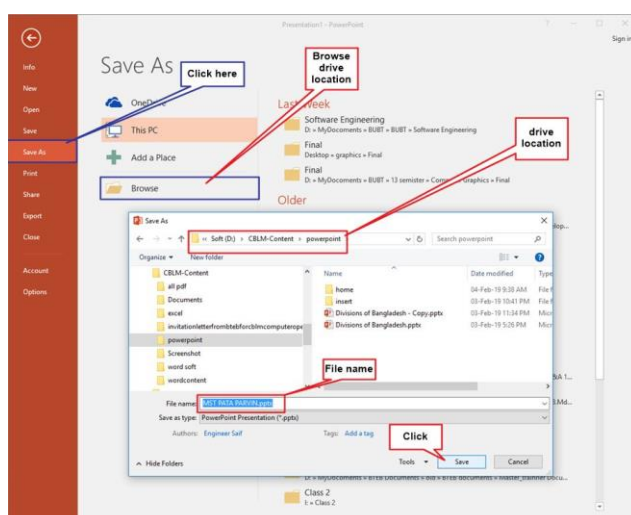
Here you will learn how to insert a new slide in PowerPoint. When you create a new presentation, PowerPoint gives you one default slide that contains a “Title Slide” layout. You can click into the placeholders shown in the title slide. Then click the “New Slide” button in the “Slides” button group.



Insert a New Slide in PowerPoint:

1. To insert a new slide that contains a “Title and Content” slide layout, click the “Home” tab in the Ribbon.
2. Then click the “New Slide” button in the “Slides” button group

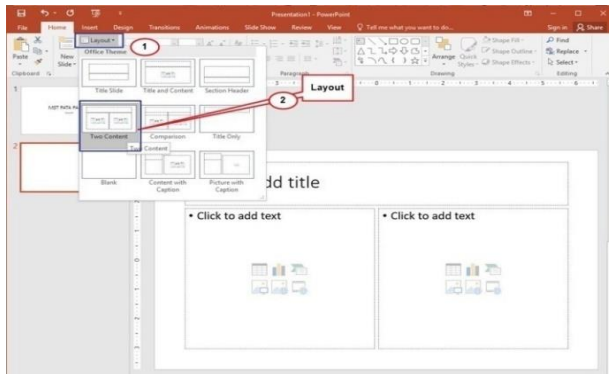
Save Presentation File:



1. Select File > Save as (or Save a Copy).
2. Click browse options.
3. Browse to the folder where you want to save your presentation.
4. In the File name box, type a name for your presentation.
5. Under Save as type, select PowerPoint Presentation (pptx).
6. Click save button

Insert Layout in Slide:

Apply a slide layout. You choose a layout from a menu in PowerPoint, then insert your words and graphics. The predefined layouts include a Title slide to begin with, a general Title and Content layout, a side-by-side Comparison layout, and a Picture-with-Caption layout.

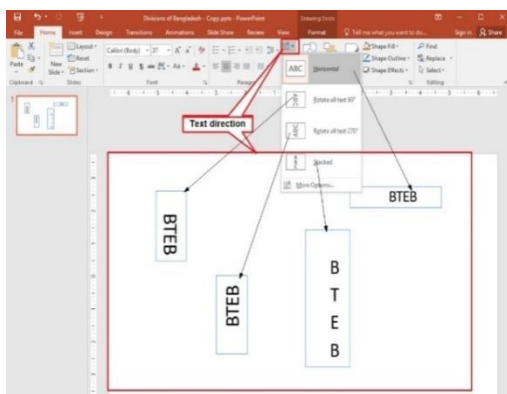


Insert a Slide layout in PowerPoint:

1. To insert a slide layout that contains layout button, click the “Home” tab in the Ribbon.
2. Then click the “layout” button in the “Slides” button group
3. Select required layout.

Text Direction:

You can change the direction of text in a shape or a text box between **horizontal** (left to right) and vertical (from the **top** to the **bottom** or from the **bottom** to the **top**). Double-click the shape or text box to select it and open the home tab. On the home tab, in the paragraph group, click Text Direction.

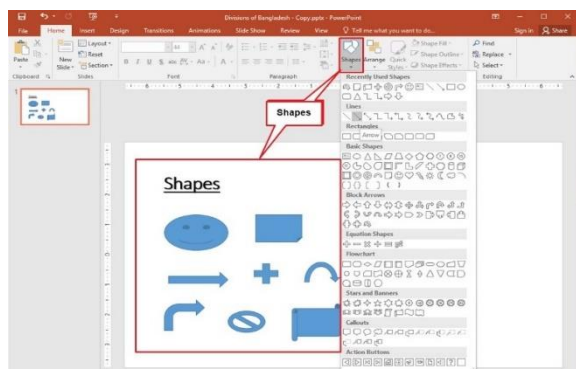


To change text orientation, follow these steps:

1. Select the AutoShape, text box, or table cell that contains the text whose orientation you want to change.
2. Choose the Text Direction option from the Format menu. Word displays the Text Direction dialog box.
3. Choose an orientation from those offered.
4. Click on OK.

Use of Shape:

PowerPoint has many useful shapes ready to insert into your slides. Basic shapes such as lines, bubbles, curves, and more can add a necessary visual element to your document.

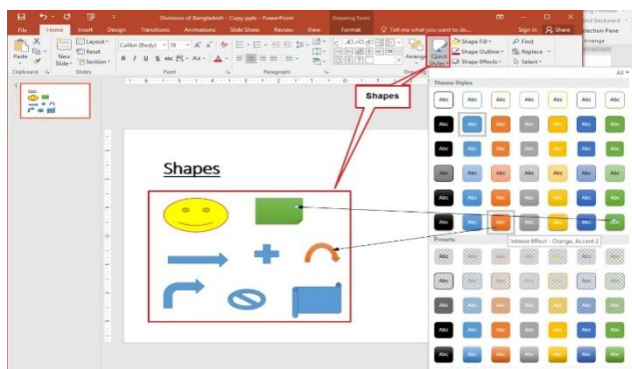


To insert a shape:

1. Select the Insert tab.
2. Click the Shape command.
3. Left-click a shape from the menu.
Your cursor is now a cross shape.
4. Left-click your mouse and while holding it down, drag your mouse until the shape is the desired size.
5. Release the mouse button.

Use of Quick Style:

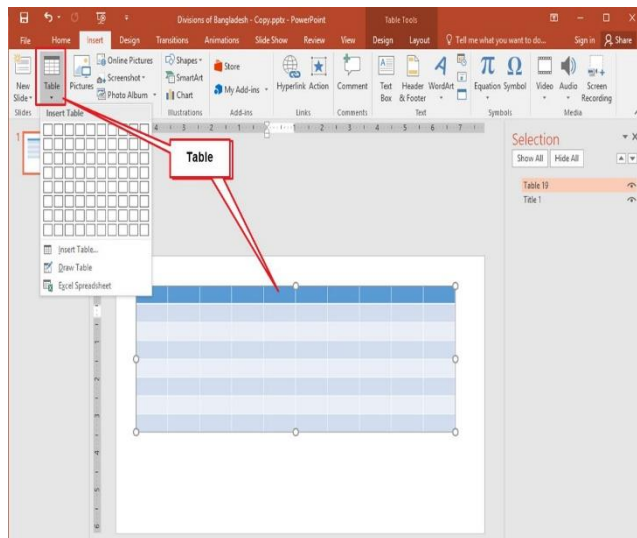
A Quick Style set contains the basic styles that you need to build a document. However, you may want to add a custom style. Select the text that you want to format as a new style. For example, perhaps you want text that contains certain information about your business to always appear as bold and red in your document.



1. Apply or change a Quick Style set. On the home tab, click the quick part bottom
2. Then choose a style set such as Basic or Casual. On the Home tab, the options in the Styles group change to reflect the Quick Style set that you clicked.

Use of Table in Slide:

When presenting ideas that include references to data, it can be helpful to make the point using a table. These visual methods can make the point much stronger than simply describing the data.

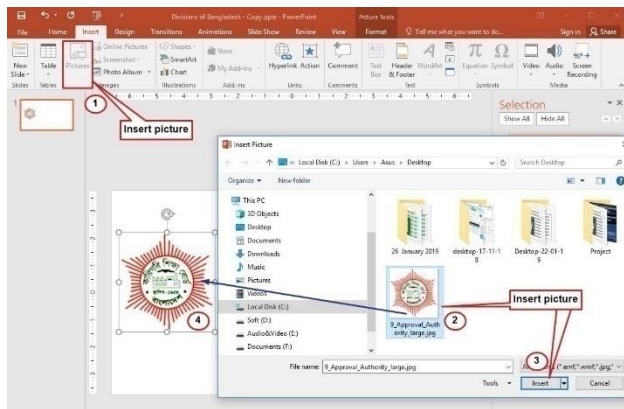


Create and format a table in PowerPoint

1. Select the slide that you want to add a table to.
2. On the Insert tab, select Table.
3. In the Insert Table dialog box, do one of the following: Use the mouse to select the number of rows and columns that you want.
4. To add text to the table cells, click a cell, and then enter your text.

Insert Picture:

Adding pictures can make your presentations more interesting and engaging. You can insert a picture from a file on your computer onto any slide. PowerPoint even includes tools for finding online pictures and adding screenshots to your presentation.

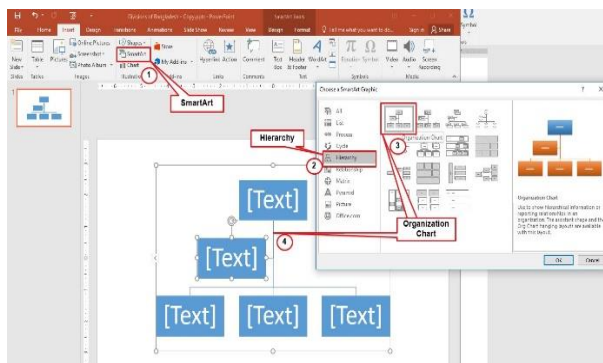


To insert a picture from a file:

1. Place your insertion point where you want the image to appear.
2. Select the Insert tab.
3. Click the Picture command in the Illustrations group. The Insert Picture dialog box appears.
4. Select the desired image file, then click Insert to add it to your document. Selecting an image file.

Use of SmartArt:

A SmartArt graphic is a visual representation of information and ideas, and a chart is a visual illustration of numeric values or data. Basically, SmartArt graphics are designed for text and charts are designed for numbers. Use the information below to decide when to use a SmartArt graphic and when to use a chart.

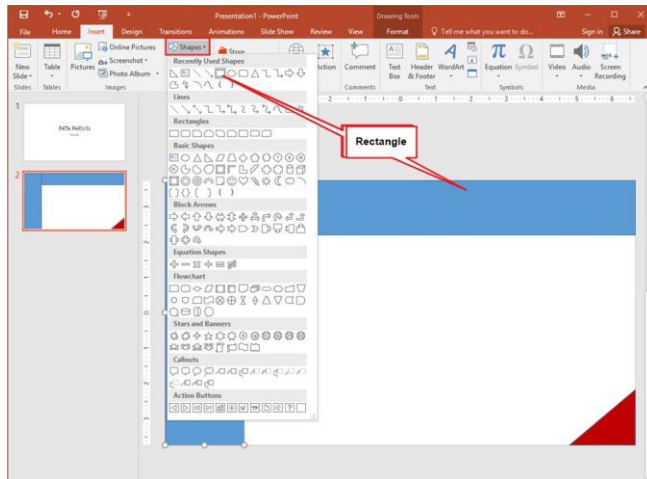


To insert a SmartArt graphic:

1. Select the slide where you want the SmartArt graphic to appear.
2. From the Insert tab, select the SmartArt command in the Illustrations group. Clicking the SmartArt command.
3. A dialog box will appear.
4. The SmartArt graphic will appear on the current slide.

Use of Rectangle:

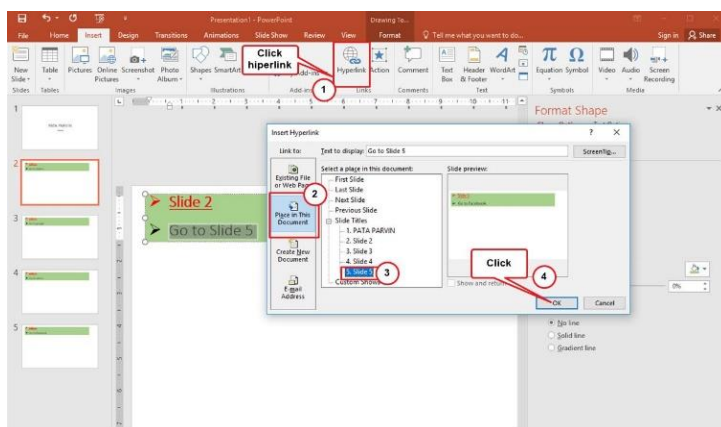
Select the Insert tab, then click the Shapes command in the Illustrations group. A drop-down menu of shapes will appear. Select the rectangle shape. Click and drag in the desired location to add the shape to the slide.



1. Select Insert tab.
2. Click rectangle from shapes command.
3. Click and drag in the desired location to add the shape to the slide.

Use of hyperlink:

In PowerPoint 2016, a hyperlink is simply a bit of text or a graphic image that you can click when viewing a slide to summon another slide, another presentation.

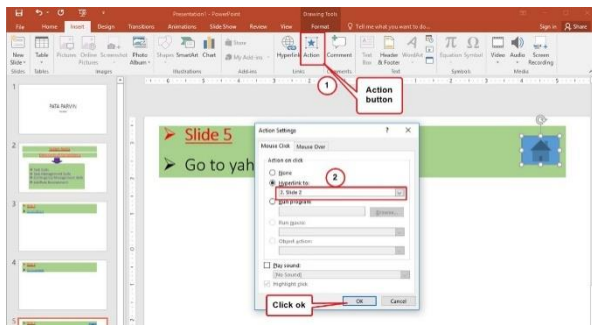


To insert a hyperlink to another slide:

1. Right-click the selected text or image, then click Hyperlink.
2. The Insert Hyperlink dialog box will appear.
3. On the left side of the dialog box, click Place in this Document.
4. A list of other slides in your presentation will appear.
5. Click OK

Use of Action Button:

Action buttons are built-in shapes you can add to a presentation and set to link to another slide, play a sound, or perform a similar action. When someone clicks or hovers over the button, the selected action will occur. Action buttons can do many of the same things as hyperlinks.

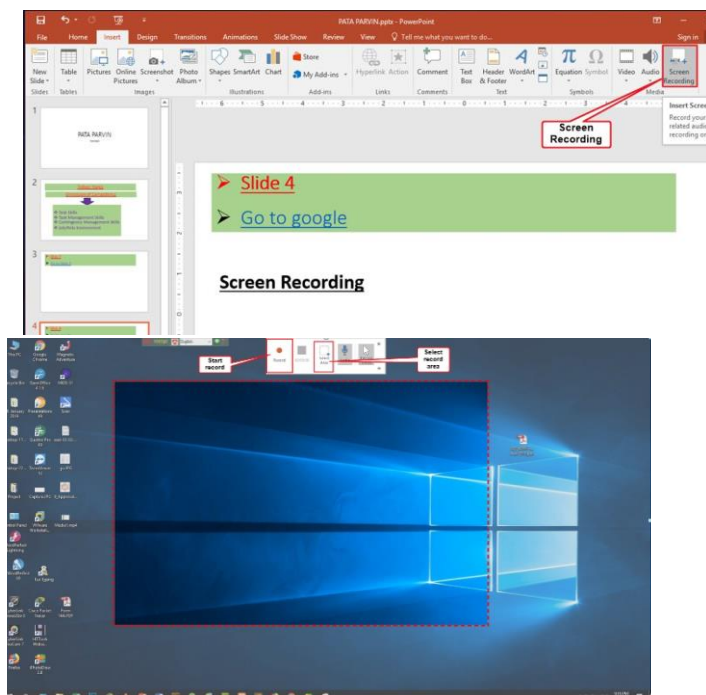


To insert an action button on one slide:

1. Click the Insert tab.
2. Click the Shapes command in the Illustrations group.
3. Select the desired action button.
4. Insert the button onto the slide by clicking the desired location.
5. Select the Mouse Click or Mouse Over tab.

Use of Recording Option:

The Recording tab introduced in PowerPoint 2016 gives you this ability and goes even further with more interactive elements—like quizzes—to include in a presentation. Your interactive video can contain: Audio narration.

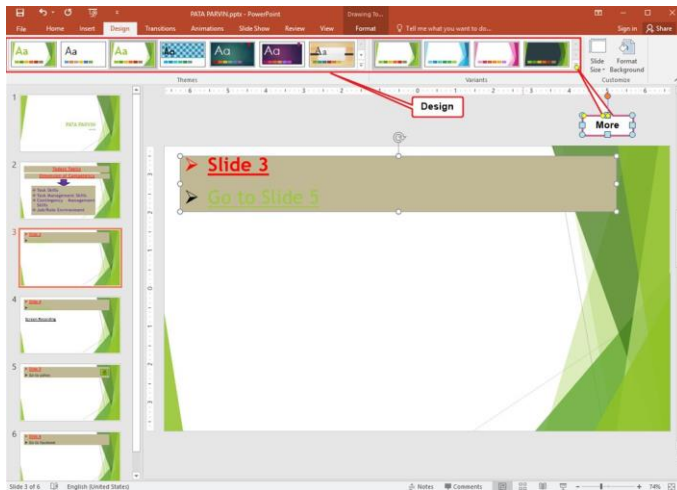


Take a screen recording

1. As for screen capture.
2. Choose Insert, Screen Recording from the Media group.
3. To record part of the screen, click the Select Area button and drag across the area you want to record.
4. Click Record.
5. Press Windows button + Shift + Q and the video appears on your current slide

Use of Built-in Slide Template:

A PowerPoint template is a pattern or blueprint of a slide or group of slides that you save as a .potx file. Templates can contain layouts, colors, fonts, effects, background styles, and even content. You can create your own custom templates and store them, reuse them, and share them with others

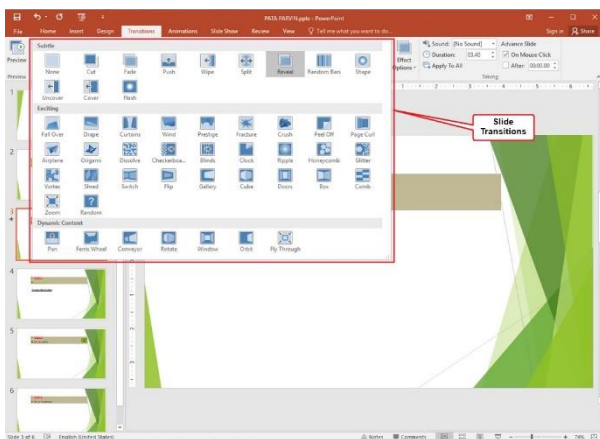


Applying themes

1. Select the Design tab on the Ribbon, then locate the Themes group. Each image represents a theme.
2. Click the More drop-down arrow to see all available themes.
3. Select the desired theme.
4. The theme will be applied to the entire presentation. To apply a different theme, simply select it from the Design tab.

Use of Slide Transition:

Slide transitions are the effects that take place when one slide gives way to the next one in the presentation, like Roll down from top or Fly in from left. They add dynamic flair to a slideshow, smoothing the transition between slides. You can add transitions while in Slide Sorter view or in Normal view.

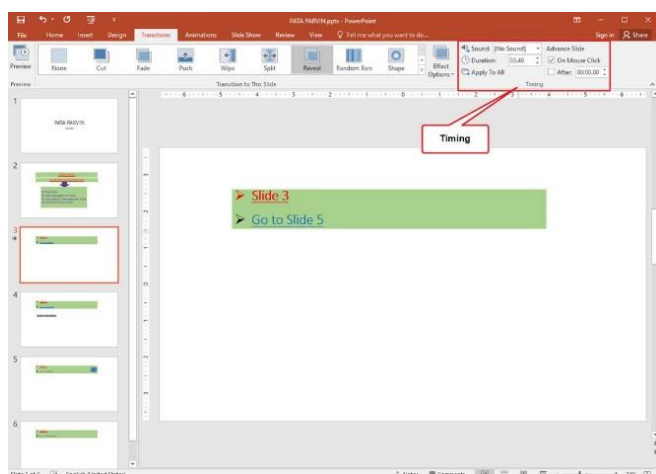


To apply a transition:

1. Select the desired slide from the Slide Navigation pane.
2. Click the Transitions tab, then locate the Transition to This Slide group.
3. Click the More drop-down arrow to display all transitions.
4. Click a transition to apply it to the selected slide.

Set Timing in Slide:

Specify a time to advance to the next slide. Select the slide that you want to *set* the timing for. On the Transitions tab, in the *Timing* group, under Advance Slide, do one of the following: To make the slide advance to the next slide when you click the mouse, select the On Mouse Click check box.

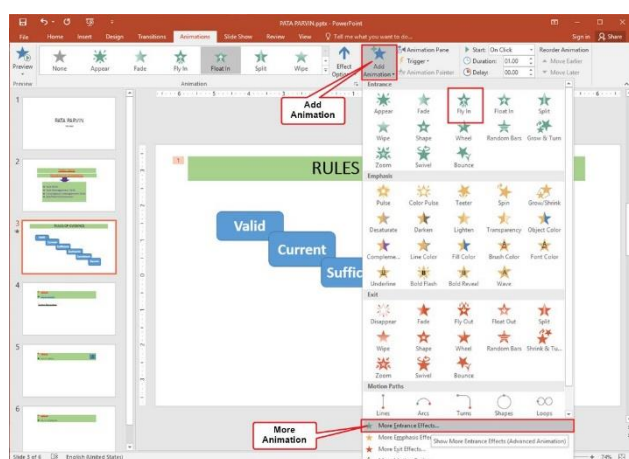


Specify a time to advance to the next slide

1. Select the slide that you want to set the timing for.
2. On the Transitions tab, in the Timing group, under Advance Slide, do one of the following: To make the slide advance to the next slide when you click the mouse, select the On Mouse Click check box.

Set Animation in Slide:

PowerPoint animation is a form of animation which uses Microsoft PowerPoint and similar programs to create a game or movie. The artwork is generally created using PowerPoint's AutoShape features, and then animated slide-by-slide or by using Custom Animation

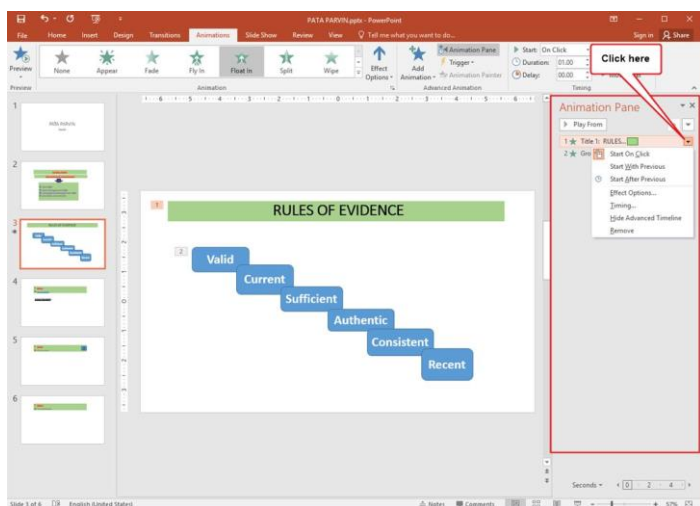


To apply a custom animation effect in Office PowerPoint, do the following:

1. Select the text or object that you want to animate.
2. On the Animations tab, in the Animations group, click Custom Animation.
3. In the Custom Animation task pane, click Add Effect, and then do one or more.

Control Animation:

Slide transition animation in PowerPoint is the animation that occurs when you advance from slide to slide within the presentation. You have many options for controlling the effects of the slide transition animation in PowerPoint.

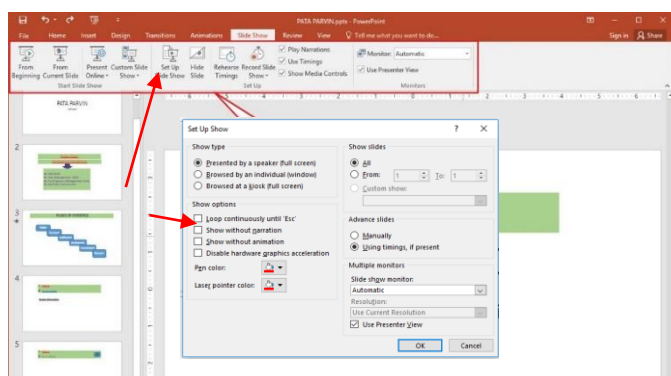


Open the Animation Pane

1. Select the object on the slide that you want to animate.
2. On the Animations tab, click Animation Pane.
3. Click Add Animation, and pick an animation effect.
4. To apply additional animation effects to the same object, select it, click Add Animation and pick another animation effect.

Use of Slide Show:

A slide show is a presentation of a series of still images on a projection screen or electronic display device, typically in a prearranged sequence. The changes may be automatic and at regular intervals or they may be manually controlled by a presenter or the viewer.

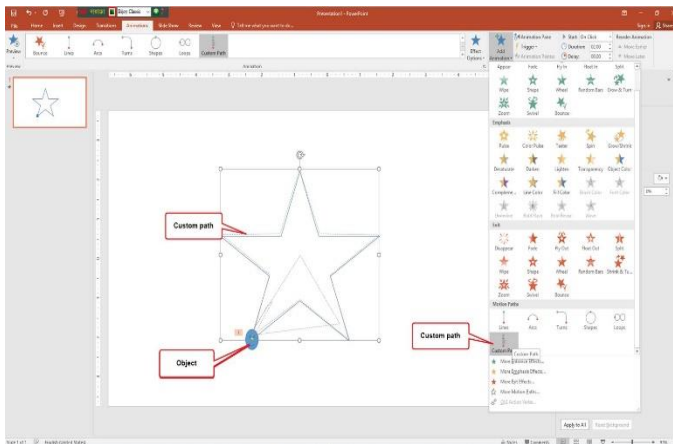


To set up a PowerPoint presentation to run automatically, do the following:

1. On the Slide Show tab, click Set Up Slide Show.
2. Under Show type, pick one of the following: To allow the people watching your slide show to have control over when they advance the slides, select Presented by a speaker
3. To allow automatically play slide show, select loop continuously until Esc.

Motion Paths.

A motion path moves an item, like a picture, on a line you specify. So, you use a motion path to move something in a very specific way on a slide. You can also combine motion paths with other effects.

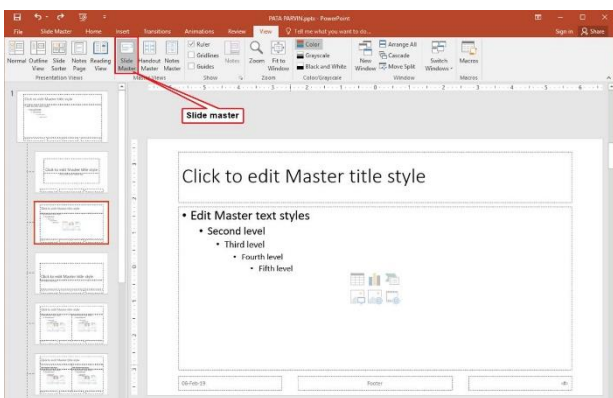


Add a motion path to an object

1. Click the object you want to animate.
2. On the Animations tab, click Add Animation.
3. Scroll down to Motion Paths, and pick one. Tip: If you choose the Custom path option, you will draw the path that you want the object to take. To stop drawing a custom path, press Esc.

Use of Slide Master:

In Microsoft PowerPoint, the Slide Master is the top slide that controls all information about the theme, layout, background, color, fonts, and positioning of all slides. Using the Slide Master can be an easy way to adjust the look of an existing theme or make overall changes to all slides in your presentation.



1. Select the View tab, then click the Slide Master command.
2. The presentation will switch to Slide Master view, and the Slide Master tab will be selected on the Ribbon.
3. In the left navigation pane, scroll up and select the slide. This is the slide master.

Self Check 4.3.1

- 1 Which file format is used in powerpoint?
 - A. .jpg
 - B. .gif
 - C. .wav
 - D. .pptx
- 2 Which file format can be added to a PowerPoint show?
 - A. .jpg
 - B. .gif
 - C. .wav
 - D. All of the above
- 3 Which of the following is the default page setup orientation of slide in PowerPoint
 - A. Vertical
 - B. Landscape
 - C. Portrait
 - D. None of above
- 4 Want your logo in the same position on every slide, automatically? Insert it on the
 - A. Handout master
 - B. Notes master
 - C. Slide master
 - D. All of the above
- 5 Which of the following section does not exist in a slide layout?
 - A. Titles
 - B. Animations
 - C. Lists
 - D. Charts
- 6 Which of the following method can insert a new slide in current presentation?
 - A. Right click on the Slide panel and choose New Slide
 - B. From Insert menu choose New Slide
 - C. Click on New Slide button on toolbar
 - D. All of above
- 7 Which of the following should be used with the mouse when you want to draw a perfect shape?
 - A. The spacebar
 - B. The alt key
 - C. The ctrl key
 - D. The shift key

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Answer Key 4.3.1

1. Answer: D
2. Answer: D
3. Answer: B
4. Answer: C
5. Answer: B
6. Answer: D
7. Answer: D

Job Sheet 4.3.1

Name of The job: Create a Presentation Slide

Procedure/Steps

- Follow OSH
- Wear PPE
- Check Connection and computer
- Start the Computer.
- Open Microsoft Powerpoint Presentation.
- Read the Specification Sheet.
- Create sample slide according to Specification sheet.
- Save the presentation slide.
- Print the document and Submit to the Trainer.
- Shutdown computer and clean your workplace

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Sample Design:

	THE PRESENTATION ON
	STORE MANAGEMENT SYSTEM
<u>PRESENTED BY-</u> Md. Saif Uddin ID: 14151203027	<u>SUBMITTED TO-</u> MD. SOHEL AHAMMED LECTURER, DEPARTMENT OF CSE BANGLADESH UNIVERSITY OF BUSINESS AND TECHNOLOGY (BUBT)

Specification Sheet 4.3.1

Create and save a presentation file with the name: Mypresentation. Please note the following:

1. Make a presentation slide with your name on the first Slide (use sample design).
2. Use Time New Roman font's, size 28 for all headings or titles and size 20 for body text.
3. Insert Title ®BTEB® in second slide - Use Calibrifonts and size 72.
4. Insert a picture about building below title.

S/N	Tools and equipment	Quantity
01	Personal Computer	1
02	Keyboard and Mouse	1
03	Monitor	1
04	Microsoft Office	1
05	Bangla typing software (Bijoy, Avro etc.)	1
06	Power supply	1

Raw Materials

1.
2.
3.

Required PPE

1.
2.
3.

Special Note:

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Job Sheet 4.3.2

Name of The job: Create a Presentation Slide

Procedure/Steps

- Follow OSH
- Wear PPE
- Check Connection and computer
- Start the Computer.
- Open Microsoft Powerpoint Presentation.
- Read the Specification Sheet.
- Create sample slide according to Specification sheet.
- Save the presentation slide.
- Print the document and Submit to the Trainer.
- Shutdown computer and clean your workplace

Sample Design:

Computer Operation				
S. No	Unit Code and Title		UoC Level	Nominal Duration (Hours)
Generic – Compulsory (2 UoCs required)				30
01	GN1002A1	Apply OSH practices in the workplace	1	
Sector Specific – Compulsory (5 UoCs required)				160
02	ITSS1010A1	Operate a Computer and allied devices	1	
03	ITSS1008A1	Type Text and Documents in English and Bangla	1	
04	ITSS1007A1	Use Internet	1	
Occupation Specific – Compulsory (7 UoCs required)				230
05	ITCO1011A1	Operate Word Processing Application	1	100
06	ITCO1012A1	Operate Spreadsheet Application	1	70
07	ITCO1013A1	Operate Presentation Application	1	60

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Specification Sheet 4.3.2

1. Create table using above sample
2. Use Time New Roman font
3. Use font size 12
4. Format table as above sample.

S/N	Tools and equipment	Quantity
01	Personal Computer	1
02	Keyboard and Mouse	1
03	Monitor	1
04	Microsoft Office	1
05	Bangla typing software (Bijoy, Avro etc.)	1
06	Power supply	1

Raw Materials

1.
2.
3.

Required PPE

1.
2.
3.

Special Note:

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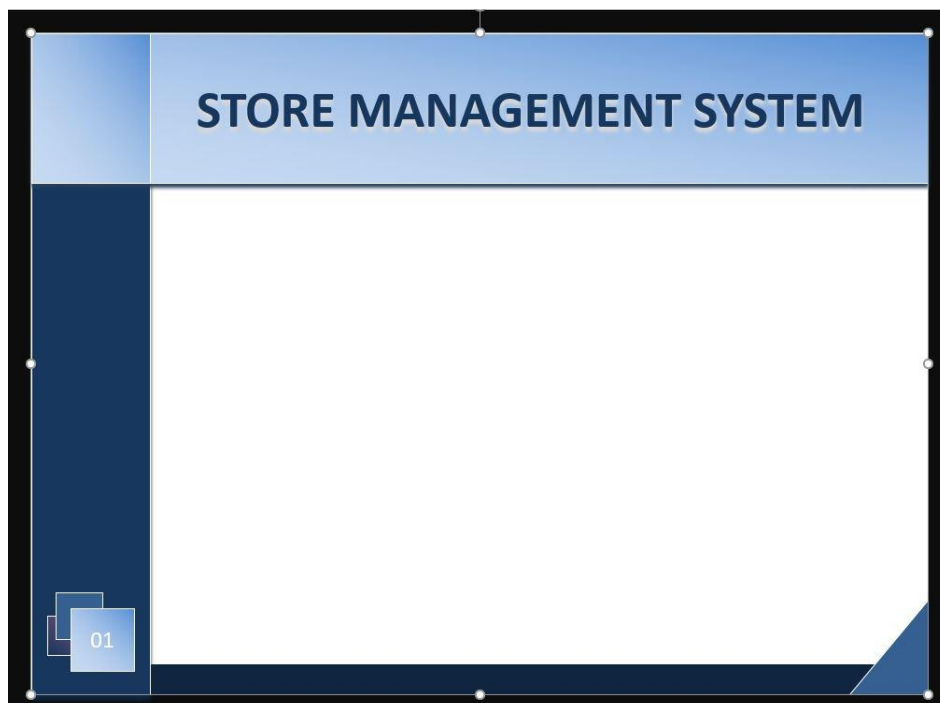
Job Sheet 4.3.3

Name of The job: Create a Presentation Slide

Procedure/Steps

- Follow OSH
- Wear PPE
- Check Connection and computer
- Start the Computer.
- Open Microsoft Powerpoint Presentation.
- Read the Specification Sheet.
- Create sample slide according to Specification sheet.
- Save the presentation slide.
- Print the document and Submit to the Trainer.
- Shutdown computer and clean your workplace

Sample Design:



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Specification Sheet 4.3.3

1. Use Slide Master to design the above sample template
2. Use Time New Roman font.
3. Insert slide number from from system.

S/N	Tools and equipment	Quantity
01	Personal Computer	1
02	Keyboard and Mouse	1
03	Monitor	1
04	Microsoft Office	1
05	Bangla typing software (Bijoy, Avro etc.)	1
06	Power supply	1

Raw Materials

1.
2.
3.

Required PPE

1.
2.
3.

Special Note:

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LEARNING OUTCOME 4: UTILIZE SPREADSHEET APPLICATION

ASSESSMENT CRITERIA:

- 4.1 Spreadsheet is created using appropriate application.
- 4.2 Workbook and worksheet settings and formatting are
- 4.3 Applied in line with printing requirements.
- 4.4 Function, formula and conditional formatting are utilized.
- 4.5 Charts are utilized to enhance data presentation.
- 4.6 Printing of worksheet is performed in line with document layout

CONTENTS:

- Create Spreadsheet
- Apply workbook and worksheet settings and formatting
- Utilize function, formula and conditional formatting
- Utilize charts to enhance data presentation.
- Print worksheets

CONDITIONS:

Trainees must be provided with the following:

- Handouts or reference materials/books on the above stated contents
- PCs/printers or laptops with internet access
- LCD/Digital Projector and Screen
- Microphones
- Bond paper
- Ball pens/pencils and other office supplies and materials
- Communication resources
- Workplace or simulated environment

METHODOLOGIES:

- Lecture/discussion
- Demonstration/application
- Presentation

ASSESSMENT METHODS:

- Written test
- Demonstration
- Oral Questioning
- Observation with checklist
- Portfolio.

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Learning Experience 4.4-1

Learning Outcome 4:

UTILIZE SPREADSHEET APPLICATION

Learning Experience	Resource/Special Instructions
Utilize spreadsheet application Create Spreadsheet. (This includes Apply workbook and worksheet settings and formatting, Utilize function, formula and conditional formatting, Utilize charts to enhance data presentation, and Print worksheets)	• Read Information sheet 4.4.1 • Answer all Self-Checks 4.4.1 and compare answer key 4.4.1
Perform Job Sheet 4.4.1	
Perform Job Sheet 4.4.2	

Information Sheet 4.4.1

Utilize spreadsheet application

Learning Objectives:

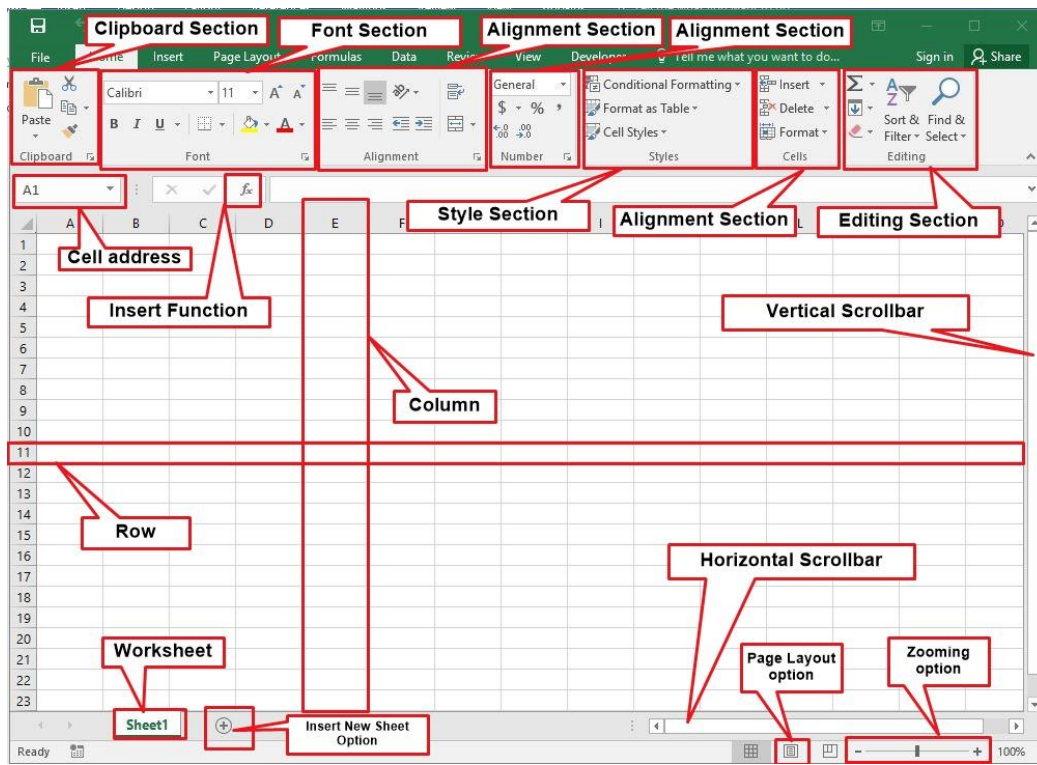
After reading this information sheet, trainee will be able to utilize spreadsheet application

The developers identify and select appropriate method of assessment taking into account the requirements of the competency, priority of competency, criteria and parameters of assessing the competency, assessment tool, learning method, availability of time and purpose of assessment.

Introduction to spreadsheet application:

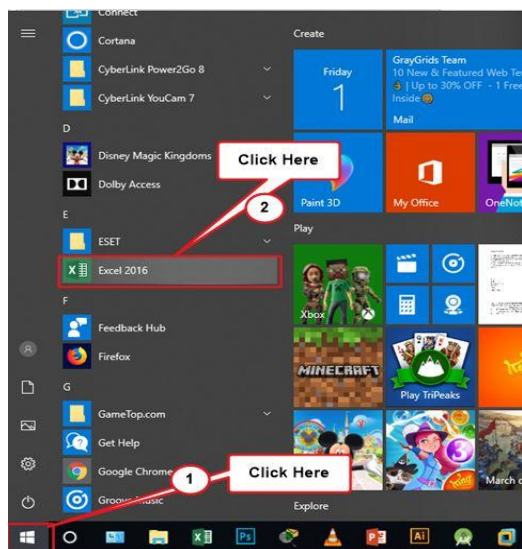
Spreadsheets are computer applications used to store, analyze, organize and manipulate data in the rows and columns of a grid. The program operates by taking in data, which can be numbers or text, into the cells of tables.

Layout:



A spreadsheet is a sheet of paper that shows accounting or other data in rows and columns; a spreadsheet is also a computer application program that simulates a physical spreadsheet by capturing, displaying, and manipulating data arranged in rows and columns.

Run Microsoft Excel:



Way 1 – From Start Menu

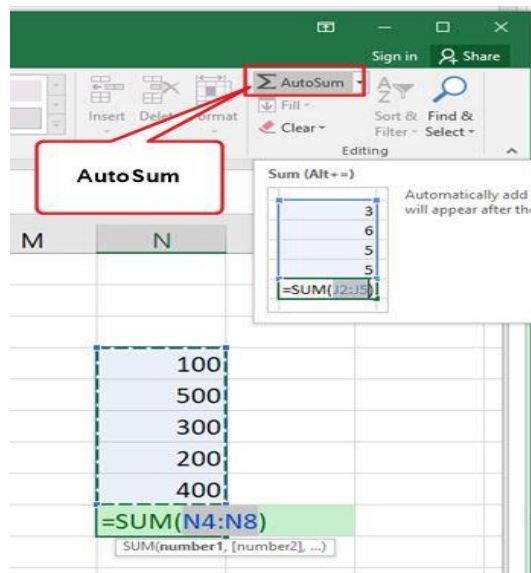
Step 1 – The most common way to open MS word is with the help of the Start menu. So, click on the **Start** button which is in the leftmost corner of the taskbar.

Step 2 – Here you will find all the applications arranged in the alphabetical order. Locate Microsoft Office in the M alphabet section and click on it to expand.

Step 3 – Find Excel in the list and then click on the same.

Use of SUM:

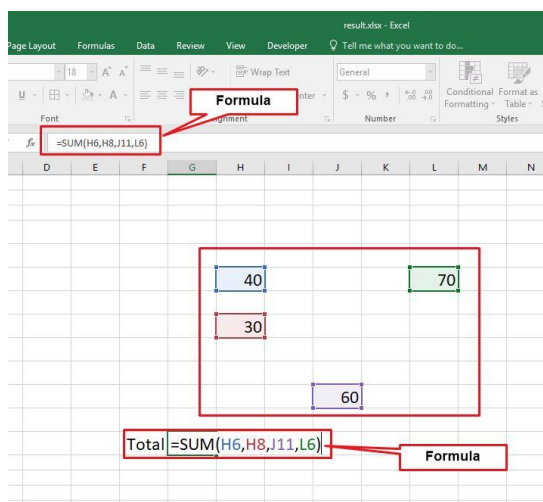
If you need to sum a column or row of numbers, let Excel do the math for you. Select a cell next to the numbers you want to sum, click AutoSum on the Home tab, press Enter, and you're done. When you click AutoSum, Excel automatically enters a formula (that uses the SUM function) to sum the numbers. Here's an example.



Enter the SUM function manually to sum a column In Excel

1. Click on the cell in your table where you want to see the total of the selected cells.
2. Enter =sum (to this selected cell).
3. Now select the range with the numbers you want to total and press Enter on your keyboard.

Calculate SUM from different cell:

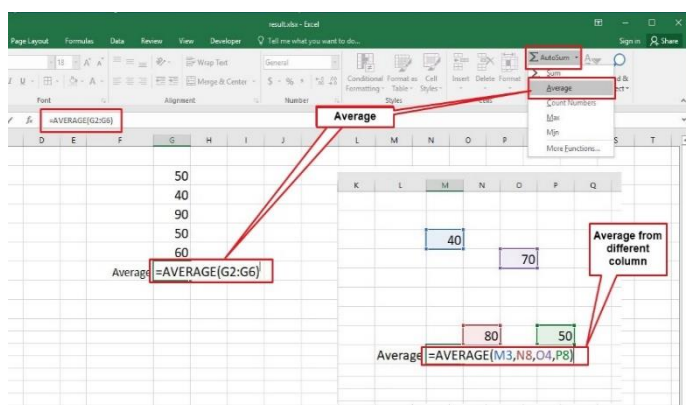


Enter the SUM function manually to sum a column in Excel:

1. Click on the cell in your table where you want to see the total of the selected cells.
2. Enter =sum (type cell address and separate using ,).
3. after typing the cell address which contain with the numbers you want to total and press Enter on your keyboard.

Calculate Average from different cell location:

The Excel AVERAGE function returns the average of values supplied as multiple arguments. AVERAGE can handle up to 255 individual arguments, which can include numbers, cell references, ranges, arrays, and constants. number1 - A number or cell reference that refers to numeric values.



Enter the Average function manually to Average a column in Excel:

1. Click on the cell in your table where you want to see the total of the selected cells.
2. Enter =AVERAGE (type cell address and separate using ,).
3. After typing the cell address which contain with the numbers you want to average and press Enter on your keyboard.

Use of COUNT Function:

The COUNT function counts the number of numbers in supplied values. Values can be items, cell references, or ranges. For example COUNT(A1:A10) will count the number of numeric values in the range A1:A10.

S/N	Branch	Date of sale	Products	COUNT	COUNTA	COUNTIF	COUNTIFS
1	Mirpur	12-Dec-18	Monitor	=COUNT(H4:I4)			
2	Bonani	13-Dec-18	RAM				
3	Dhanmondi	14-Dec-18	Hard disk				
4	Firmgare	15-Dec-18	Pendrive				
5	Mirpur	16-Dec-18	Motherboard				
6	Bonani	17-Dec-18	Processor				
7	Dhanmondi	18-Dec-18	Monitor				
8	Firmgare	19-Dec-18	RAM				
9	Mirpur	20-Dec-18	Hard disk				
10	Bonani	21-Dec-18	Pendrive				

Steps:

1. Enter the sample data on your worksheet.
2. In cell, enter an COUNT formula, to count the numbers in column.
3. Press the Enter key, to complete the formula.
4. The result will be the number of cells that contain numbers.

Use of MAXIMUM Function:

The Excel MAX function returns the largest value from a supplied set of numeric values. The syntax of the function is: MAX(number1, [number2], ...) where the number arguments are one or more numeric values (or arrays of numeric values), that you want to return the largest value.

The screenshot shows an Excel spreadsheet with a table of student data. The formula bar at the top displays `=MAX(K5:K14)`. A red box highlights the formula bar, and another red box highlights the cell K14, which contains the result of the MAX function. A callout points to the cell K14 with the text "Maximum".

S/N	Name	Bangla	English	Mathematics	Physics	Computer	Total	Average	Maximum	Minimum	Grade	GPA
1	Rakib	65	85	Absent	70	73	293	307.30	=MAX(K5:K14)			
2	Babul	60	55	70	60	65	310	308.89				
3	Sultana	55	30	65	50	67	267	308.75				
4	Rony	58	50	75	40	80	303	314.71				
5	Milon	65	70	Absent	35	73	243	316.67				
6	Faruk	63	55	55	60	65	298	331.40				
7	Ratan	70	78	45	76	55	324	339.75				
8	Rehana	80	65	85	70	65	365	345.00				
9	Persia	85	80	82	68	60	375	335.00				
10	Habib	45	55	60	70	65	295	295.00				

Steps:

1. Just enter the formula `=Max (A1:F12)` in a blank cell
2. Then press Enter key to get the largest number in the range.

Use of MINIMUM Function:

The Excel MIN function returns the smallest value from a supplied set of numeric values. The syntax of the function is: MIN (number1, [number2], ...) where the number arguments are one or more numeric values (or arrays of numeric values), that you want to return the smallest value

The screenshot shows the same Excel spreadsheet as above. The formula bar at the top displays `=MIN(K5:K14)`. A red box highlights the formula bar, and another red box highlights the cell K14, which contains the result of the MIN function. A callout points to the cell K14 with the text "Minimum".

S/N	Name	Bangla	English	Mathematics	Physics	Computer	Total	Average	Max	um	Minimum	G
1	Rakib	65	85	Absent	70	73	293	58.60				
2	Babul	60	55	70	60	65	310	62.00				
3	Sultana	55	30	65	50	67	267	53.40				
4	Rony	58	50	75	40	80	303	60.60				
5	Milon	65	70	Absent	35	73	243	48.60				
6	Faruk	63	55	55	60	65	298	59.60				
7	Ratan	70	78	45	76	55	324	64.80				
8	Rehana	20	65	85	70	65	305	61.00				
9	Persia	85	80	82	68	75	390	78.00				
10	Habib	45	55	60	70	65	295	59.00				

Steps:

1. Just enter the formula like `=MIN (A1:F12)` in a blank cell
2. Then press Enter key to get the smallest number in the range.

Use of RANK function:

Excel RANK Function. The Excel RANK function returns the rank of a numeric value when compared to a list of other numeric values. RANK can rank values from largest to smallest (i.e. top sales) as well as smallest to largest values, using an optional order argument.

S/N	NAME	BANGLA	ENGLISH	MATHEMATICS	PHYSICS	COMPUTER	TOTAL	AVERAGE	MAXIMUM	MINIMUM	RANK	GRADE	GP
1	Rakib	65	85	Absent	70	73	298	58.60			1		
2	Babul	60	55	70	60	65	310	62.00			2		
3	Sultana	55	30	65	50	67	267	53.40			3		
4	Rony	58	50	75	40	80	303	60.60			4		
5	Milon	65	70	Absent	35	73	243	48.60			5		
6	Faruk	63	55	55	60	65	298	59.60			6		
7	Ratan	70	78	45	76	55	324	64.80			7		
8	Rehana	20	65	85	70	65	305	61.00			8		
9	Persia	85	80	82	68	75	390	78.00			9		
10	Habib	45	55	60	70	65	295	59.00			10		

Steps:

1. Just enter the formula like `=RANK(B2,($C$5:$C$10),0)` in a blank cell
2. Use zero, or leave this argument empty, to find the rank in the list in descending order.
3. For ascending order, type a 1.

Use of IF Function:

The Microsoft Excel IF function returns one value if the condition is TRUE, or another value if the condition is FALSE. The IF function is a built-in function in Excel that is categorized as a Logical Function. It can be used as a worksheet function (WS) in Excel.

Id No	Name	Hours	Rate	Payment
2578	Anis	40	15	15
1258	Rafiq	48	15.25	
9532	Asad	44	14.35	
7852	Mizan	24	13.75	
3258	Nasir	36	13.25	
6589	Palas	42	15	
1235	Roman	43	14	

Steps:

1. Just enter the formula like `=IF(logical_test, [value_if_true],[value_if_false])` in a blank cell
2. After entering all condition press enter from keyboard.

Calculate Grading system:

To assign letter grade for each student based on their scores may be a common task for a teacher, for example, we have a grading scale defined where the score $A^+ = 4$, $A = 3.75$, $A^- = 3.5$, $B^+ = 3.25$, $B = 3$, $B^- = 2.75$, $C^+ = 2.5$, $C = 2.25$, $D = 2$, $F = 0$.

Bangladesh University of Business & Technology
CSE 19th Intake (Evening)

ID No	Name	Result	GPA	Conditions
1	Anis	A ⁺		
2	plabon	A		
3	Suion	A ⁻		
4	Saif	B ⁺		
5	Chandon	B		
6	Raju	B ⁻		
7	Roman	C ⁺		
8	Rakib	C		
9	Parsia	D		
10	Pata	F		

Conditions	Result
Result=A ⁺	4
Result=A	3.75
Result=A ⁻	3.5
Result= B ⁺	3.25
Result=B	3
Result=B ⁻	2.75
Result=C ⁺	2.5
Result=C	2.25
Result=D	2
Result=F	0

Steps:

1. Just enter the formula like `=IF(logical_test,[value_if_true],[value_if_false])` in a blank cell
2. After entering all condition press enter from keyboard.

Use of OR Function:

The Microsoft Excel OR function returns TRUE if any of the conditions are TRUE. Otherwise, it returns FALSE. The OR function is a built-in function in Excel that is categorized as a Logical Function. As a worksheet function, the OR function can be entered as part of a formula in a cell of a worksheet.

The screenshot shows the Excel interface with the formula bar displaying `=OR(C5>=40,D5>=40,E5>=40)`. A red box highlights the formula bar, and a red arrow points to the cell F5 in the table below, which contains the result `TRUE`. The table is titled "Student Table" and has columns for S/N, Name, English, Bangla, Computer, AND Function, OR Function, and NOT Function.

S/N	Name	English	Bangla	Computer	AND Function	OR Function	NOT Function
1	Raju	50	80	60	TRUE	<code>=OR(C5>=40,D5>=40,E5>=40)</code>	
2	Roman	40	85	50	TRUE		
3	Rakib	30	39	35	FALSE	FALSE	
4	Odhora	60	85	80	TRUE	TRUE	
5	Pata	70	30	60	FALSE	TRUE	

Steps:

1. Just enter the formula like `=OR(logical1, [logical2],[logical3] ...)` in a blank cell
2. After entering all condition press enter from keyboard.

Use of NOT Function:

The Excel NOT function returns the opposite of a given logical or boolean value. When given TRUE, NOT returns FALSE. When given FALSE, NOT returns TRUE. Use the NOT function to reverse a logical value

The screenshot shows the Excel interface with the formula bar displaying `=NOT(E5>=40)`. A red box highlights the formula bar, and a red arrow points to the cell H5 in the table below, which contains the result `TRUE`. The table is titled "Student Table" and has columns for S/N, Name, English, Bangla, Computer, AND Function, OR Function, and NOT Function.

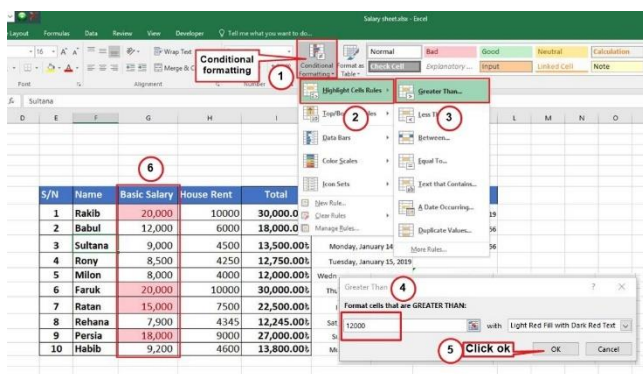
S/N	Name	English	Bangla	Computer	AND Function	OR Function	NOT Function
1	Raju	50	80	60	TRUE	TRUE	<code>=NOT(E5>=40)</code>
2	Roman	40	85	20	FALSE	TRUE	TRUE
3	Rakib	30	39	35	FALSE	FALSE	TRUE
4	Odhora	60	85	80	TRUE	TRUE	FALSE
5	Pata	70	30	60	FALSE	TRUE	FALSE

Steps:

1. Just enter the formula like `=NOT(logical)` in a blank cell
2. After entering all condition press enter from keyboard.

Use of Conditional formatting:

Select the range of cells, the table, or the whole sheet that you want to apply conditional formatting to. On the Home tab, click Conditional Formatting, point to Highlight Cells Rules, and then click Duplicate Values.

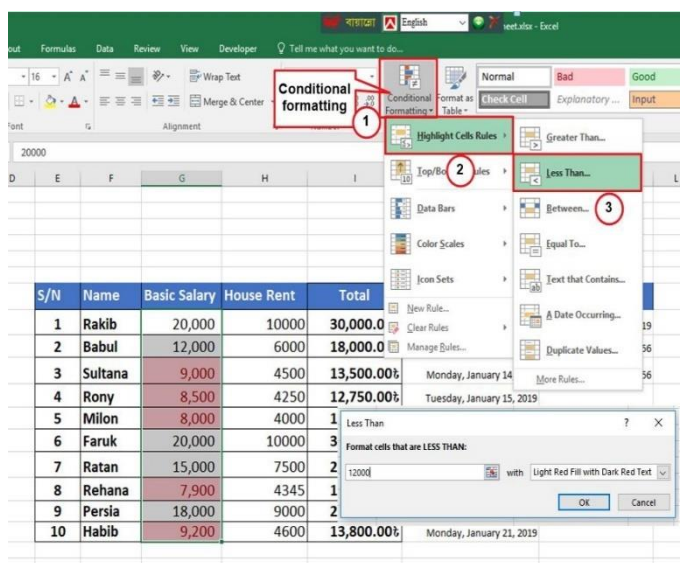


To create a conditional formatting rule:

1. Select the desired cells for the conditional formatting rule.
2. From the Home tab, click the Conditional Formatting command.
3. Hover the mouse over the desired conditional formatting type, then select the desired rule from the menu that appears.
4. A dialog box will appear.
5. Then select greater than option.

Less Than:

Conditional formatting makes it easy to highlight certain values or make particular cells easy to identify. This changes the appearance of a cell range based on a condition (or criteria). You can use conditional formatting to highlight cells that contain values which meet a certain condition. Or you can format a whole cell range and vary the exact format as the value of each cell varies.

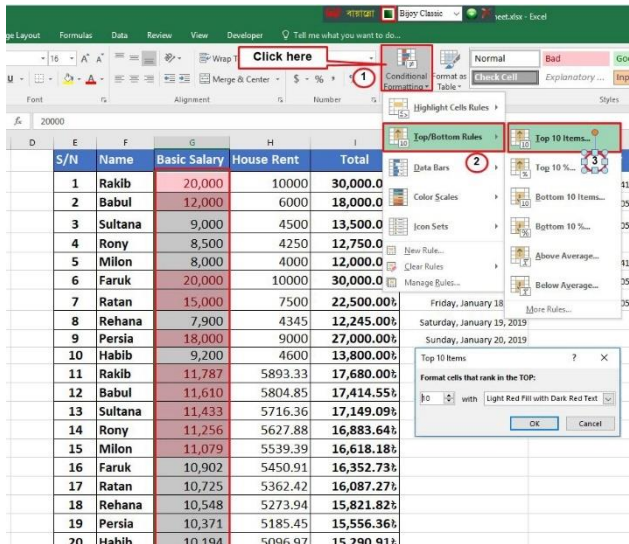


To create a conditional formatting rule:

1. Select the desired cells for the conditional formatting rule.
2. From the Home tab, click the Conditional Formatting command.
3. Hover the mouse over the desired conditional formatting type, then select the desired rule from the menu that appears.
4. A dialog box will appear.
5. Then select less than option.

Top Ten Rules:

You can use conditional formatting to highlight cells that contain values that. Excel for Office 365 for Mac Excel 2019 for Mac Excel 2016 for Mac Excel for Mac 2011 More. conditional formatting applied that shows *top* 10% and bottom 10% values. Point to Highlight Cells Rules or Top/Bottom Rules, and then click on the rules

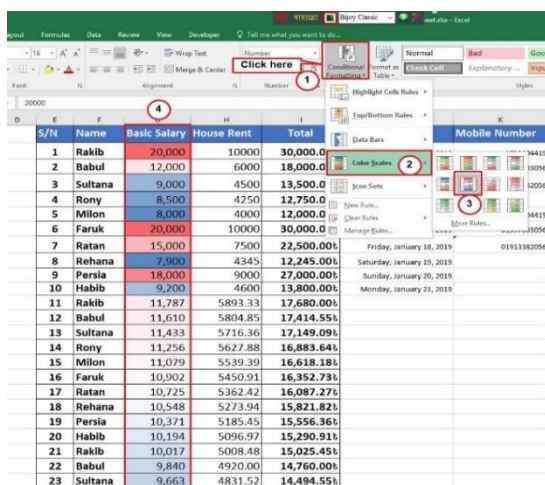


To create a conditional formatting rule:

1. Select the desired cells for the conditional formatting rule.
2. From the Home tab, click the Conditional Formatting command.
3. Hover the mouse over the desired conditional formatting type, then select the desired rule from the menu that appears.
4. A dialog box will appeared

Use of Conditional color scale:

Format cells by using color scales. Cells are shaded with gradations of two or three colors that correspond to minimum, midpoint, and maximum thresholds. Select the range of cells, the table, or the whole sheet that you want to apply conditional formatting to. On the Home tab, under Format, click Conditional Formatting

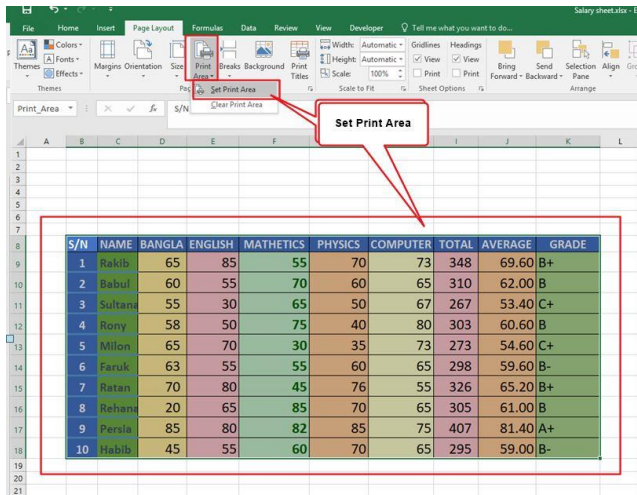


To create a conditional formatting rule:

1. Select the desired cells for the conditional formatting rule.
2. From the Home tab, click the Conditional Formatting command.
3. Hover the mouse over the desired conditional formatting type, then select the desired rule from the menu that appears.
4. A dialog box will appear

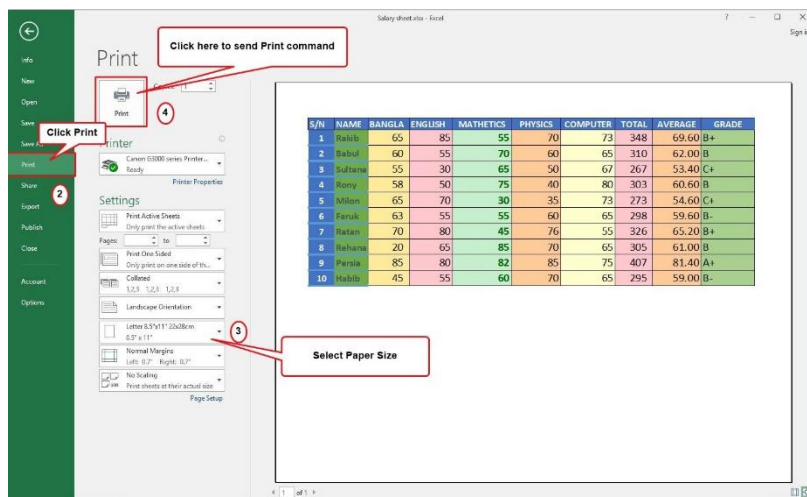
Print worksheet:

When you're finished creating the worksheets in your workbook, you may want to print them out. Printing in MS Excel is very easy. Excel makes it that way. To print your workbooks and worksheets, click the File tab to get to the Backstage area. Print a sheet on just one page to reduce the amount of paper needed to print a large amount of information. You can also print a sheet.



Print all or part of a worksheet

1. Click the worksheet, and then select the range of data that you want to print.
2. Click File, and then click Print.
3. Under Settings, click the arrow next to Print Active Sheets and select the appropriate option.
4. Set print area
5. Click Print.



Self-Check 4.4.1

Questions:

1. Which one is not a Function in MS Excel?
 - A. SUM
 - B. AVG
 - C. MAX
 - D. MIN
2. Functions in MS Excel must begin with ___
 - A. An () sign
 - B. An Equal Sign
 - C. A Plus Sign
 - D. A > Sign
3. Which function in Excel checks whether a condition is true or not?
 - A. SUM
 - B. COUNT
 - C. IF
 - D. AVERAGE
4. In Excel, Columns are labelled as ____
 - A. A, B, C, etc
 - B. 1,2,3 etc
 - C. A1, A2, etc.
 - D. \$A\$1, \$A\$2, etc
5. The Greater Than sign (>) is an example of _____ operator.
 - A. Arithmetic
 - B. Logical
 - C. Conditional
 - D. Greater
6. The process of arranging the items of a column in some sequence or order is known as:
 - A. Arranging
 - B. Autofill
 - C. Sorting
 - D. Filtering

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Answer Key 4.4.1

1. Answer: B
2. Answer: B
3. Answer: C
4. Answer: A
5. Answer: B
6. Answer: C

Task Sheet 4.4.1

Name of The job: Make the sample salary sheet

Procedure/Steps

- Follow OSH
- Wear PPE
- Check Connection and computer
- Start the Computer.
- Open Microsoft Excel Program.
- Read the Specification Sheet.
- Type Text according to Specification sheet.
- Save the excel sheet
- Print the sheet and Submit to the Trainer.
- Shutdown computer and clean your workplace.

Sample job:

MIR SAMSUL ISLAM POLYTECHNIC INSTITUTE																
No.	S/	Name	Basic Salary	House Rent	City Allowance	Dearness Allowance	Medical	Provident Fund	Benevolent fund	Tax	Loan Deduction	Total Salary	Total Deduction	Net Salary	Min	Max
	1	Rakib	20000													
	2	Babul	12000													
	3	Sultana	90000													
	4	Rony	8500													
	5	Milon	8000													
	6	Faruk	20000													
	7	Ratan	15000													
	8	Rehana	7900													
	9	Persia	18000													
	10	Habib	9200													

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Specification Sheet 4.4.1

- 1 Open an excel file design as above sample.
- 2 Enter data according to sample data.
- 3 Calculate following condition.
- 4 House rent (HR) : 45% of basic if basic is greater than or equal to 12000, 40% of basic if basic is greater than or equal to 8000, 50% of basic if basic is less than 8000.
- 5 Medical allowances (MA): Fix 700
- 6 City allowances: 20% of basic
- 7 Dearness allowances: 10% of basic
- 8 Provident fund: 10% of basic pay
- 9 Income Tax (IT): 500 tk if basic is greater than or equal to 15000, 400 tk if basic is greater than or equal to 9000, otherwise 0 tk.
- 10 Benevolent fund: Fix 50 tk
- 11 Calculate total using SUM function.
- 12 calculate Maximum & Minimum using Total.
- 13 Total salary = House Rent + City Allowance + Dearness Allowances + Medical Allowances.
- 14 Deduction = Tax + Provident fund
- 15 Net salary = Total salary – Deduction

S/N	Tools and equipment	Quantity
01	Personal Computer	1
02	Keyboard and Mouse	1
03	Monitor	1
04	Microsoft Office	1
05	Bangla typing software (Bijoy, Avro etc.)	1
06	Power supply	1

Raw Materials

1.
2.
3.

Required PPE

1.
2.
3.

Special Note:

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Job Sheet 4.4.2

Name of The job: Calculate the sample grading system

Procedure/Steps

- Follow OSH
- Wear PPE
- Check Connection and computer
- Start the Computer.
- Open Microsoft Excel Program.
- Read the Specification Sheet.
- Type Text according to Specification sheet.
- Save the excel sheet
- Print the sheet and Submit to the Trainer.
- Shutdown computer and clean your workplace.

Sample job:

S/N	NAME	BANGLA	ENGLISH	MATHEMATICS	PHYSICS	COMPUTER	TOTAL	AVERAGE	GRADE	MAXIMUM	MINIMUM	RANK
1	Rakib	65	85	Absent	70	73						
2	Babul	60	55	70	60	65						
3	Sultana	55	70	50	50	67						
4	Rony	58	30	75	40	80						
5	Milon	65	70	Absent	50	73						
6	Faruk	63	55	55	60	65						
7	Ratan	70	78	45	76	55						
8	Rehana	20	65	85	70	65						
9	Persia	85	80	82	85	75						
10	Habib	45	55	60	70	65						

Specification Sheet 4.4.2

1. Calculate Total Using Formula.
2. Calculate Average using necessary function. Average will have to calculate against total
3. Calculate Letter Grade using average. If any student obtains marks below 40 in any subjects, then letter grade will be F.and AB will be absent.
4. Use necessary Function to Calculate Maximum and Minimum. Maximum and Minimum Calculate against Total
5. Use necessary Function to Calculate RANK. Calculate against Total

S/N	Tools and equipment	Quantity
01	Personal Computer	1
02	Keyboard and Mouse	1
03	Monitor	1
04	Microsoft Office	1
05	Bangla typing software (Bijoy, Avro etc.)	1
06	Power supply	1

Raw Materials

1.
2.
3.

Required PPE

1.
2.
3.

Special Note:

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LEARNING OUTCOME 5: USE INTERNET TO COMMUNICATE AND COLLECT INFORMATION

ASSESSMENT CRITERIA:

- 5.1 Internet and ICT facilities are arranged.
- 5.2 E-mail facility is utilized to exchange information and resources.
- 5.3 Web is accessed to search and download required information.
- 5.4 **Cloud storage facilities** are used.

CONTENTS:

- Arrange internet and ICT facilities
- Utilize e-mail facility
- Access web to search and download required information.
- Used cloud storage facilities

CONDITIONS:

Trainees must be provided with the following:

- Handouts or reference materials/books on the above stated contents
- PCs/printers or laptops with internet access
- LCD/Digital Projector and Screen
- Microphones
- Bond paper
- Ball pens/pencils and other office supplies and materials
- Communication resources
- Workplace or simulated environment

METHODOLOGIES:

- Lecture/discussion
- Demonstration/application
- Presentation

ASSESSMENT METHODS:

- Written test
- Demonstration
- Oral Questioning
- Observation with checklist
- Portfolio.

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Learning Experience

Learning Outcome 5:

USE INTERNET TO COMMUNICATE AND COLLECT INFORMATION

Learning Experience	Resource/Special Instructions
Use internet to communicate and collect Information. (This includes Arrange internet and ICT facilities, Utilize e-mail facility, Access web to search and download required information, and Use cloud storage facilities)	• Read Information sheet 4.5.1 • Answer all Self-Checks 4.5.1 and compare answer key 4.5.1
Perform Task Sheet 4.5.1	

Information Sheet 4.5.-1

Learning Objectives:

After reading this information sheet, trainee will be able to use internet to communicate and collect Information.

Introduction to internet:

Internet

- Internet is a world-wide / global system of interconnected computer networks
- A network of networks is called an inter-network, or simply the internet
- It is the largest network in existence on this planet
- The internet hugely connects all CAN/LAN/MAN

Arrangement of internet

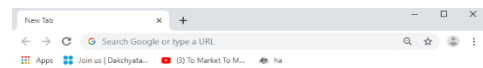
Internet is a world wide network. To access internet you need a connection to internet with your devices. These connections could be –

- Broad band connection with router for computers and Smart phones.
- Modem through related telecom service providers for computers.
- Directly with Telecom through smart phones.

Use of internet

Once connected, you need “Browsers” to explore on internet. Common browsers are –

- Internet Explorer
- Google Chrome
- Firefox
- Opera



Following figure shows a view of Chrome browser:



Webpage:

A web page is a document that is suitable to act as a web resource on the World Wide Web. When accessed by a web browser it may be displayed as a web page on a monitor or mobile device. The term *web page* usually refers to what is visible, but may also refer to the contents of the computer file itself, which is usually a text file containing hypertext written in HTML or a comparable markup language.

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Website:

A website is a collection of related network web resources, such as web pages, multimedia content, which are typically identified with a common domain name, and published on at least one web server. Notable examples are wikipedia.org, google.com, and amazon.com. Websites can be accessed via a public Internet Protocol (IP) network, such as the Internet, or a private local area network (LAN), by a uniform resource locator (URL) that identifies the site.

Email:

Electronic mail (email or e-mail) is a method of exchanging messages ("mail") between people using electronic devices. Invented by Ray Tomlinson, email first entered limited use in the 1960s and by the mid-1970s had taken the form now recognized as email. Email operates across computer networks, which today is primarily the Internet.

Popular email service providers are –

- aol.com
- Yahoo mail
- Gmail
- Live mail, etc.

Gmail:

Gmail (pronounced Gee-mail) is a free Web-based e-mail service currently being tested at Google that provides users with a gigabyte of storage for messages and provides the ability to search for specific messages. The **Gmail** program also automatically organizes successively related messages into a conversational thread.

Visit www.gmail.com to open or access to existing email accounts on Gmail.

Cloud Storage:

Cloud storage is a cloud computing model in which data is stored on remote servers accessed from the internet, or "cloud." It is maintained, operated and managed by a cloud storage service provider on a storage server that are built on virtualization techniques.

A cloud storage service is a business that maintains and manages its customers' data and makes that data accessible over a network, usually the internet. Most of these types of services are based on a utility storage model.

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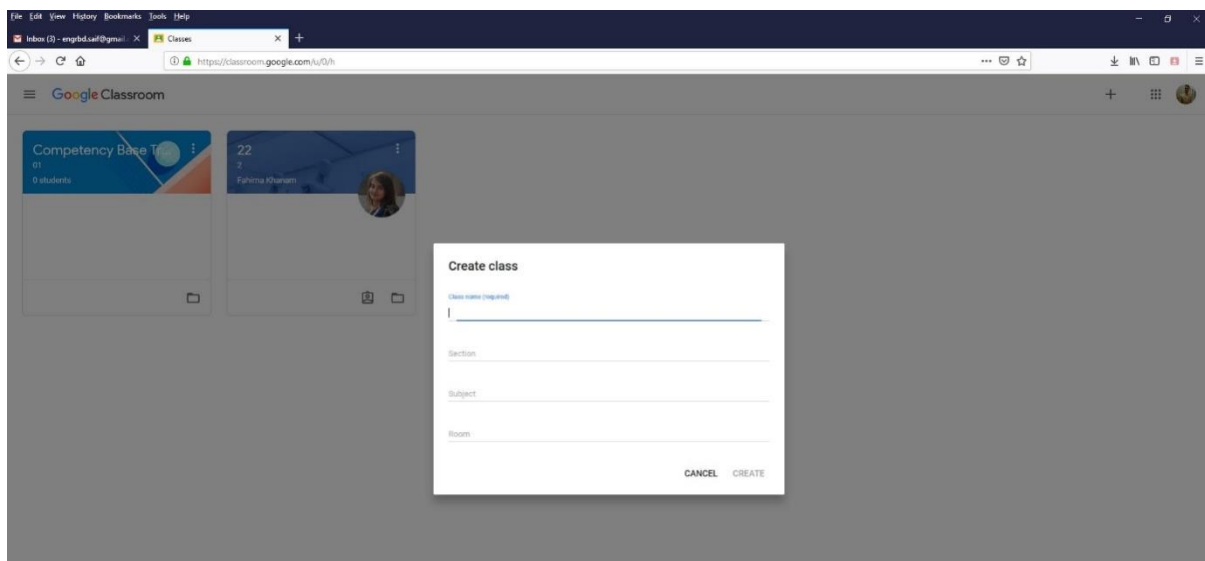
Cloud storage services:

1. pCloud.
2. Mega.
3. OneDrive.
4. iCloud. Apple's competitively priced cloud storage locker.
5. Google Drive. A smart option for Google fans and G Suite users.
6. Box. Well-known service with some powerful business options.
7. NextCloud. DIY cloud storage solution.
8. SpiderOak. A 'zero knowledge' cloud storage provider.

Google Classroom:

Google Classroom's purpose is to facilitate paperless communication between teachers and students and streamline educational workflow. Classroom allows teachers to create classes, post assignments, organize folders, and view work in real-time.

Create Class from google classroom:



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Create Classwork for student:

Stream

Classwork

People

+ Create

📄 Assignment

📄 Quiz assignment

❓ Question

📄 Material

↺ Reuse post

📖 Topic

your class here

and questions

ze classwork into modules or units

you want students to see it

📅 Google Calendar

📁 Class Drive folder

Self-Check 4.5.1

Write short note on the followings:

Website
Email
Cloud storage

Answer Key 4.5.1

Write short note on the followings:

Website
A website is a collection of related network web resources, such as web pages, multimedia content, which are typically identified with a common domain name, and published on at least one web server. Notable examples are wikipedia.org, google.com.
Email
Electronic mail (email or e-mail) is a method of exchanging messages ("mail") between people using electronic devices. Invented by Ray Tomlinson, email first entered limited use in the 1960s and by the mid-1970s had taken the form now recognized as email. Email operates across computer networks, which today is primarily the Internet.
Cloud storage
Cloud storage is a cloud computing model in which data is stored on remote servers accessed from the internet, or "cloud." It is maintained, operated and managed by a cloud storage service provider.

Task sheet 4.5.1

Complete the following activities:

- Open /access to an email account on gmail.com. Send an email to your trainer.
- Save and retrieve a document on Google Drive.

Your trainer will guide you to complete the activities.

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