

Competency Based Education, Training and Assessment (CBET&A)

**For the Students of
B. Sc. In Computer Science and Engineering (CSE)
School of Engineering and Technology**



SKILL STANDARDS OF CSES-101: CBET&A (LEVEL-1)

**SKILL STANDARD INSTITUTE (SSI)
University of Global Village (UGV), Barishal.**

ইউনিভার্সিটি অব গ্লোবাল ভিলেজ (ইউজিভি), বরিশাল-এ 'দক্ষতা ভিত্তিক উচ্চ শিক্ষা পদ্ধতির প্রবর্তন'

বিভিন্ন গবেষণার নির্দেশনা মোতাবেক বাংলাদেশের উচ্চ শিক্ষা পদ্ধতিতে পরিবর্তন এখন অতীব জরুরি। বর্তমানে এই ব্যবস্থা পুরোপুরিই তাত্ত্বিক নির্ভর যেখানে শিক্ষার্থীদের বই এবং নোট মুখস্ত করে যেনতেনভাবে সনদ গ্রহণই মূল্য উদ্দেশ্যে পরিণত হয়েছে। অথচ উচ্চ শিক্ষা পদ্ধতি হওয়া উচিত জ্ঞান, গবেষণা ও দক্ষতা ভিত্তিক। এই পদ্ধতি হবে সামাজিক/পরিবেশগত প্রয়োজন বা বাস্তব চাহিদার বিপরীতে বাস্তব ভিত্তিক প্রকল্প বাস্তবায়নের জন্য জ্ঞান অর্জনের নিয়ামক। উচ্চ শিক্ষা একজন শিক্ষার্থীকে সৃষ্টিশীল এবং রাষ্ট্রের চাহিদার বিপরীতে দক্ষ করে গড়ে তুলবে। কিন্তু এখানে লক্ষ্যণীয় যে, বাংলাদেশে উচ্চ শিক্ষা ধীরে ধীরে সম্পূর্ণভাবে সনদায়নের দিকে ঝুঁকে পড়েছে। উচ্চ শিক্ষার প্রয়োজনীয়তা সম্পর্কে একজন শিক্ষার্থীকে মাধ্যমিক ও উচ্চ মাধ্যমিক স্তরেই জ্ঞান অর্জন করা দরকার।

বাংলাদেশ বিপুল জনসংখ্যার ছোট্ট একটি দেশ। এখানে ১৮-২৫ বছর বয়সের তিন কোটি যুবক-যুবতী যাদের মধ্যে ৪০ লক্ষ্য অনেক স্বপ্ন এবং সম্ভাবনা নিয়ে উচ্চ শিক্ষা গ্রহণ করে। এদের অধিকাংশই জাতীয় বিশ্ববিদ্যালয়ের মাধ্যমে প্রত্যাপ্ত গ্রামাঞ্চলে বসেই বিভিন্ন কলেজের মাধ্যমে উচ্চ শিক্ষার সনদ অর্জন করে যেখানে শিক্ষা পদ্ধতি বাংলা হওয়ায় এবং দক্ষ শিক্ষকের সংখ্যা অপ্রতুল হওয়ায় শিক্ষার্থীদের মধ্যে দক্ষতার অভাব থেকে যায়। শিক্ষার্থীদের আন্তর্জাতিক ভাষার দক্ষতা না থাকায় দেশি এবং আন্তর্জাতিক বাজারে প্রবেশের পথ খোলা থাকে না। যে উচ্চ শিক্ষা একজন শিক্ষার্থীকে তার রাষ্ট্রে, সমাজে, পরিবারে কিংবা নিজের উন্নয়নে কোন ভূমিকা রাখতে দেয় না, সে উচ্চ শিক্ষা শুধুমাত্র সনদায়ন ছাড়া আর কি হতে পারে?

ইউনিভার্সিটি অব গ্লোবাল ভিলেজ (ইউজিভি) বরিশাল বর্তমান উচ্চ শিক্ষা পদ্ধতিকে দক্ষতা ভিত্তিক উচ্চ শিক্ষা পদ্ধতিতে প্রবর্তনের লক্ষ্যে দীর্ঘদিন যাবৎ গবেষণা ও বিভিন্ন ওয়ার্কসপ/সেমিনারের মাধ্যমে Competency Based Education, Training & Assessment (CBET&A) পদ্ধতির উদ্ভাবন করেছে। এ পদ্ধতি প্রবর্তনের লক্ষ্যে আন্ডারগ্রাজুয়েট লেভেলের শিক্ষার্থীদের জন্য ইতিমধ্যেই Competency Based Standard তৈরি করা হয়েছে। CBET&A পদ্ধতিতে একজন শিক্ষার্থী প্রত্যেক সেমিস্টারে একটি Level এর Skill test/Assessment প্রক্রিয়ায় অংশগ্রহণ করবে। একটি Level এ কম্পিটেন্ট হওয়ার পর পরবর্তী Level এর Assessment এ অংশগ্রহণ করতে পারবে। প্রতিটি Level এর skill Standard দুইভাবে বিভক্ত করা হয়েছে : Technical Skill (TS) এবং Communication Skill (CS)। এই Assessment প্রক্রিয়ার Competent = Pass (A+) এবং Not Competent = Fail (0) পদ্ধতি অনুসরণ করা হবে। ইউনিভার্সিটি অব গ্লোবাল ভিলেজে CBET&A পদ্ধতির বাস্তবায়নের জন্য Skill Standard Institute (SSI) প্রতিষ্ঠা করা হয়েছে। SSI অত্র বিশ্ববিদ্যালয়ে CBET&A পদ্ধতির বাস্তবায়ন, Industry'র চাহিদা মোতাবেক বিভিন্ন Level এর Skill Standard তৈরি করবে। পাশাপাশি Assessment প্রক্রিয়া ও Assessor তৈরি কার্যক্রম ও Skill Standard অনুযায়ী Level এর Skill সমূহের Learning Material প্রস্তুত ও শিক্ষার্থীদের ট্রেনিং এর ব্যবস্থা করবে।

স্কিল স্ট্যান্ডার্ড ইনস্টিটিউট,
ইউজিভি, বরিশাল।

Introducing skill based education system at UGV

Different studies indicate that the present higher education system in Bangladesh needs serious reforms. This system is usually based on the theoretical approach using textbooks, reference material, course outlines etc. Under this system, a certificate becomes the main purpose among the students where to acquire the knowledge, skills and attitudes are being neglected. Most of the academic institutions have become factory of certificate only. However, each student in the higher education who are the future professional should have the knowledge, skills, and attitudes. Therefore, they will be able to recognize and solve problems in social, environmental needs and national demands. Higher education will make the student creative, skilled and knowledgeable.

Bangladesh is most densely populated country with small area. As per the available reports it is estimated that, in Bangladesh, currently about 4 million of the 30 million youth between the ages of 18 and 25 are enrolled in higher education with great energy, dreams and goals, and potential for productive employment. Most of these enrollments for the higher education are in the National University through different colleges in the rural areas where the instructions and examinations are in Bangla. Therefore, most of the higher educated populations in Bangladesh have lack of communication skills internationally due the lack of English. This vast number of higher educated populations can not enter into the national and the international job markets because of their lack of international language.

Bangladesh's vision 2021 gives highest importance to building skilled manpower to accomplish a poverty-free middle-income country. But we do not see any long term plan based on higher education system. However, the University of Global Village (UGV) has, since its inception in 2016, recognized the importance of greater diversity of higher education. In supporting this work, it has been recognized that there are many key considerations in developing and delivering higher education provision in university. In July, 2019, UGV introduced a new Competency Based Education, Training & Assessment (CBET&A) under a new institute, known as Skill Standard Institute (SSI), which defines a comprehensive set of competency requirements that all graduates are expected to attain. The students entering in July, 2019 and thereafter are required to demonstrate technical and communication skills in different abilities as well as a comprehensive knowledge base as a requirement for graduation. Faculty, known as Assessor, use performance-based methods to determine if students have attained competence.

In CBET&A method, a student will participate in an assessment process in every semester that we call "Level's Skill Test". After becoming competent at the "Level", the student will be allowed to participate in the next assessment "Level". The skill standard of each level is divided into two parts: "Technical Skill (TS)" and "Communication Skill (CS)". The assessment process will be "PASS (=competent)" or FAIL (=not competent). The implementation of CBET&A methodology, time to time creation of different skill standard "Levels" based on the demand of the industries, Assessment process, Assessor preparation and provide training to the students will be under the SSI.

Skill Standard Institute
UGV, Barishal.

Abstract

There are some parameters that reflect the growth of a country which includes per capita income, GDP, Unemployment rate, poverty rate, import and export rates, import for industrial productions etc. As well as there are three figures to look at, to be a developed country which includes GDP per capita nominal, GDP per capita PPP and Human Development Index(HDI). According to these parameters Norway is one of the developed countries in the world. In 2019, the HDI of Norway is 0.953 which is the highest among all other developed countries which supports the skill based learning system from the very beginning of any students.

A nation's growth agenda is aligned with the skill level of its manpower. Singapore, a developed country which was one of the poorest one from its independence as it is an area with only 721.5 square kilometres and lack of natural resources. Though it has small space and almost zero natural resources, it earns a huge development for its superior education system which is fully based on skill based learning. In 2015, the Organization for Economic Cooperation and Development(OECD) rated Singapore as having the best education system in the world as the system focused on teaching the students specific problem solving skills and subjects where the curriculum is focused on teaching students, practical skills that will help them solve problems in the real world. As like as Singapore, to make poverty a story of past and to reach the goal of high HDI to become a developed country within 2041, government of Bangladesh has vision 2041 which included a principal vision, increasing the productive capacity and building an innovating knowledge. And to make this vision successful there is no alternative to investing in human capital development by raising educational quality and deepening skill development programmes to support innovation-driven knowledge society of future.

To achieve the vision of 2041 University of Global Village (UGV) has made an initial step by designing a curriculum for its skilled based program such as Competency Based Education, Training & Assessment (CBET&A) that can be regarded as an intermediate step to industrial works. Nowadays industries are struggling to map the right set of skill sets to the jobs on hand. CBET&A sets to bridge the gap between academia and industry by identifying the required practical skills and paving a way to the students to acquire them.

To cope up with the new technological era the department of Computer Science and Engineering (CSE) of UGV has prepared a CBET&A syllabus for student of CSE which is split into 8 levels. Shifting from one level to another will involve a tougher but worthwhile skill completion. These skill sets formed with different technical skills included Microsoft office, programming, networking, information security, machine learning etc. After completing graduation from UGV an CSE engineer can engage themselves in developing any automation system, networking or any other research projects.

Skill Standard Institute (SSI)
University of Global Village (UGV), Barishal.
Course Structure for
Skill Standard Certificate
Program: Competency Based Education, Training & Assessment (CBET&A)
CSES-101 (Level-1)

<u>Part-A (Technical Skills-TS)</u>					<u>Part-B (Communicative Skills-CS)</u>				
Sl. No.	Unit Code	Skill Title	Level	Nominal Duration (Hours)	Sl. No.	Unit Code	Skill Title	Level	Nominal Duration (Hours)
1	CSES-101TS-1	English Typing meaningful word 30 per minute	1	120hrs.	1	ENGS-101CS-1	Greetings (The art of greeting in English, necessary for communicating with people)	1	10 hrs
2	CSES-101TS-2	Bangla Typing meaningful word 30 per minute	1	120 hrs.	2	ENGS-101CS-2	How to ask, grant or refuse permission in English, necessary for communicating with people	1	10 hrs
3	CSES-101TS-3	Adding table in MS word, Font management, font style management in MS word, watermark, page footer, header in MS word, Symbol, margin, page color in MS word	1	20 hrs.	3	ENGS-101CS-3	Basic writing (Basic writing skill in English for the elementary level learners)	1	20 hrs

4	CSES-101TS-4	Insert equation, insert page number, insert picture, insert hyperlink in MS word.	1	20 hrs.		4	ENGS-101CS-4	Basic Vocabulary (Basic vocabulary for Bengali learners)	1	20 hrs
5	CSES-101TS-5	Computer Assembling and Dis-assembling	1	10 hrs.		5	ENGS-101CS-5	Translation (Everyday use sentences which is required for communicating in English)	1	10 hrs
6	CSES-101TS-6	Operating system setup, Windows, Linux	1	20 hrs.		6	ENGS-101CS-6	Dialogue (Practice dialogue session for a better communicative session	1	30 hrs
7	CSES-101TS-7	Utility software installation-Uninstallation	1	20 hrs.		7	ENGS-101CS-7	Listening (Practice listening sessions for a better communicative competence understanding)	1	20 hrs
8	CSES-101TS-8	Email and Google drive	1	20 hrs.						
9	CSES-101TS-9	LAN Setup and Connecting Devices	1	25 hrs.						
10	CSES-101TS-10	Router Setup	1	10 hrs.						
11	CSES-101TS-11	Printer Setup, sharing	1	10 hrs.						
12	CSES-101TS-12	Scanner setup	1	05 hrs.						
13	CSES-101TS-13	TeamViewer	1	05 hrs.						
14	CSES-101TS-14	Skype	1	05 hrs.						

15	CSES-101TS-15	Youtube video Download and Channel Management	1	10 hrs.						
16	CSES-101TS-16	20 Problem Solving Using C Program	1	60 hrs.						
17	CSES-101TS-17	Soldering and De-soldering	1	20 hrs.						
Total Nominal Learning Hours				<u>500hrs</u>		<u>Total Nominal Hours</u>				<u>120hrs</u>

Note: Detail courses of Part- A&B are attached here.

Part-A

Technical Skill (TS)

**CSES – 101 TS – 1: English typing meaningful 30 words per minute.
Nominal Duration (Hours) 120 hrs.**

Objective:

As in recent times every paper work is computer oriented and English is an international language as well as it is very much important in programming and other tasks, so typing words in English is very much essential task to cope up with the modern world. If anyone can write 30 meaningful words in a minute, s/he can easily complete any task in shortest possible time and it can save his/her time effectively. 30 words per minute is a standard time duration for typing.

Task:

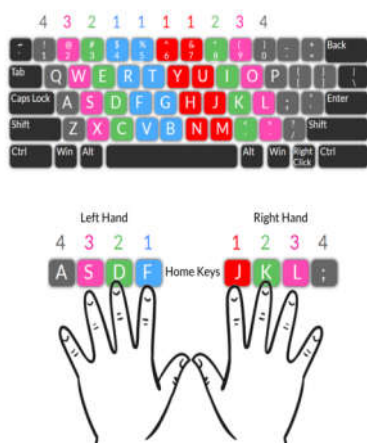
Continue Practicing to write a page of meaningful English words around 1 hour every day.

Outcome:

1. Be competent for writing any English words in a standard time duration.
2. Be competent for writing any English words by stenography.

Skills/Requirement	Physical Appearance	Procedure	Useful Links
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Laptop/
Keyboard



Do not rush when you just started learning. Speed up only when your fingers hit the right keys out of habit. Take your time when typing to avoid mistakes. The speed will pick up as you progress. Always scan the text a word or two in advance.

<https://www.learntyping.org/beginner-typing-lesson-1a>

<https://www.ratatype.com/typing-test/test/>

**CSES – 101 TS – 2: Bangla typing meaningful 30 words per minute.
Nominal Duration (Hours) 120 hrs.**

Objective:

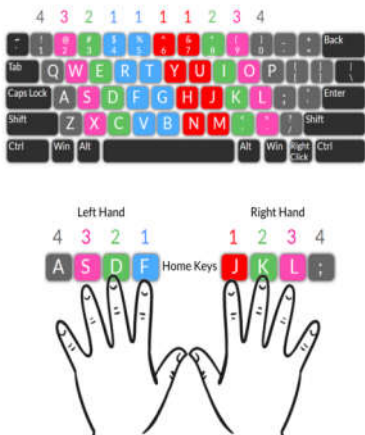
As in recent times every paper work is computer oriented and Bengali is our mother tongue as well as it is our official language, so typing words in Bengali is very much essential task to cope up with the modern world. If anyone can write 30 meaningful words in a minute, s/he can easily complete any task in shortest possible time and it can save his/her time effectively. 30 words per minute is a standard time duration for typing.

Task:

Continue Practicing to write a page of meaningful Bengali words around 1 hour every day.

Outcome:

1. Be competent for writing any Bengali words in a standard time duration.
2. Be competent for writing any Bengali words by dictation.

Skills/Requirement	Physical Appearance	Procedure	Useful Links
Laptop/Keyboard		<p>Do not rush when you just started learning. Speed up only when your fingers hit the right keys out of habit. Take your time when typing to avoid mistakes. The speed will pick up as you progress. Always scan the text a word or two in advance.</p>	<p>https://www.learntyping.org/beginner-typing-lesson-1a</p> <p>https://www.ratatype.com/typing-test/test/</p>

CSES-101 TS-3 & CSES-101 TS-4:MS Word Skill

Nominal Duration **40 hrs.**
(Hours)

Objective:


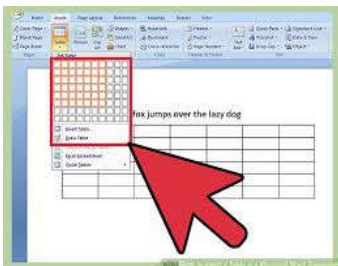
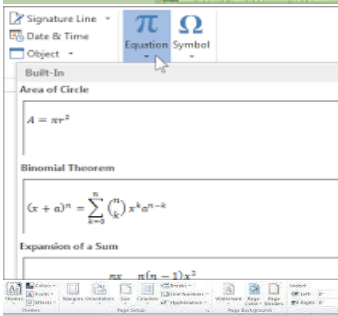

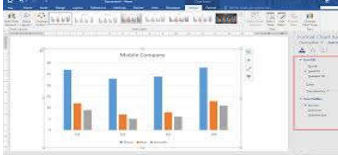
Microsoft Word is the ultimate tool for better documentation in different purposes. The target of this software is to represent any documents in the best possible way by maintaining official presentation and appearance.

Task:

Students will learn about creating any kinds of documents properly such as curriculum vitae, formal applications, official letters, research papers etc.

Outcome:

1. Will be able to create any documents with proper text and image formats.
2. Will get knowledge about making tables, equations, graphs etc.
3. Knowledge about the diversifications of user-friendly text editors.
4. Will get knowledge about font management in MS word.
5. Will get knowledge about adding watermark, page footer, page header etc.
6. Will get knowledge about inserting equation, page number, hyperlink etc.

Skill/Requirements	Physical Appearance	Procedure	Links
MS Word		Install MS office on your PC, Laptop etc. learn by practicing. Learn Bangla, English Typing. Adding table, font management, style	https://www.javatpoint.com/ms-word-tutorial
Adding Table in MS		management, watermark, page footer, header, symbol, margin, page color, insert equation, insert page number, insert picture, insert hyperlink etc.	
Inserting Equation			
Adding Watermarks			
Adding Graphs			

CSES-101TS-5:Computer Assembling and Dis-assembling.

Nominal Duration **10 hrs.**
(Hours)

Objective:






Introduction to Computer Assembling and Dis-assembling and their uses in day to day task of a Computer Engineer.

Task:

Students will learn how to assemble and dis-assemble a computer for any kind of office using computer.

Outcome:

- Familiarization with basic parts of a modern computer.
- Knowledge about RAM, ROM etc.
- Knowledge about Hard Disk.
- Knowledge about Monitor.
- Knowledge about PCB mother board.

Skill/Requirements	Physical Appearance	Working Principal	Links
Computer Monitor		<p>Modern computers become more affordable when users supplement their monetary investment with a few hours of effort. This computer build will be very basic and will be the minimum hardware necessary to have a functional system. After you have all of the parts and materials needed, it will take between 2 and 4 hours to assemble your computer and you will need to be able to use simple hand tools, such as a screwdriver and a pair of pliers.</p> <p>Since some of hardware is very sensitive so you have to be careful while assembling or dis-assembling</p>	https://www.instructables.com/id/ow-To-Assemble-A-Basic-Desktop-PC/
RAM			
Hard Disk			
Mother Board			
Processor			
Safety measurement			

CSES-101TS-6:Operating System Setup, Windows, Linux.


Nominal Duration **20 hrs.**
(Hours)

Objective:

Introducing studentshow to set up operating system in Laptops, Desktops etc. We will install Windows and Linux Operating System.

Outcome:

1. Will be able to set up operating system in a new or used pc.
2. Will be able to set up Linux and Windows.

Skill/Requirement	Physical Appearance	Procedure	Links
Some of Operating Systems		Follow the instructions given in the link below and try it by yourself	Windows: https://www.windowscentral.com/how-do-clean-installation-windows-10

Windows
Operating System

Linux Operating
System



on your computer.

Linux:
<https://www.inf.uva.es/en/instalacion-del-sistema-operativo-linux/>

CSES-101TS-7:Utility Software Installation- Uninstallation. Nominal Duration 10 hrs. (Hours)

Objective:

Introducing students how to install utility software like adobe, Avro, media player etc.

Outcome:

1. Will be able to Install utility software in Computer.
2. Will be able to Uninstall utility software from computer.

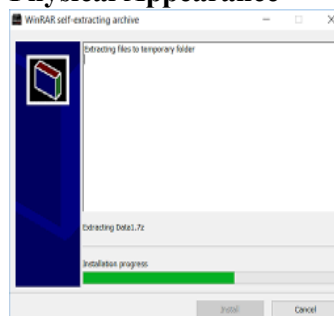
Skill/Requirement

Physical Appearance

Procedure

Links

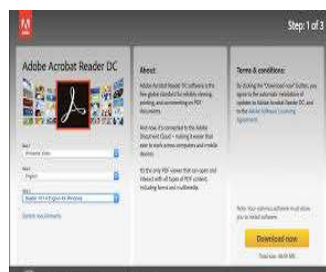
Installing Utility
software.



Software other than system software is called utility software. There are so many utility software. Installation process of them are almost same. So I have added an example of installation process: Please follow the link.

Installation:
<https://www.computerhope.com/issues/ch000561.htm>
Un-installation:
<https://www.softwarehow.com/uninstall-programs-windows/>

Installing Adobe



CSES-101TS-8:Email and Google Drive Usage.

Nominal Duration **20 hrs.**
(Hours)


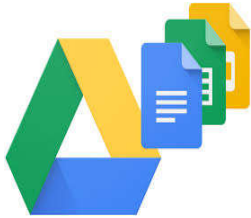
Objective:

Introducing student how to use email account and google drive.

Task:Students have to learn usage of Email and Google Drive.

Outcome:

- 1.Opening E-mail account.
2. Sending and receiving email with appropriate subject and notations.
3. Uploading file into google drive.
4. Downloading file from google drive.
5. Managing google drive and email.

Skill/Requirement	Physical Appearance	Procedure	Links
Electronic Mail		Email (electronic mail) is a way to send and receive messages across the Internet. Managing E-mail please follow the link below.	E-mail: https://support.google.com/a/users/answer/9259846#1.4
Google Drive			Google Drive: https://support.google.com/drive/answer/2424384?co=GENIE.Platform%3DDesktop&hl=en

CSES-101TS-9: LAN Setup and Connecting Devices.

Nominal Duration **25 hrs.**
(Hours)

Objective:

Introducing Students how to install LAN and Connection setup with devices.

Task:

Students will learn about Installing LAN and Managing files with connected devices.

Outcome:

1. Will be able to setup switch or router.
2. Will be able to share file locally.
3. Will be able to setup wireless LAN.

Material:

Skill/Requirement

Physical Appearance

Procedure

Links

Local Area Network (LAN)



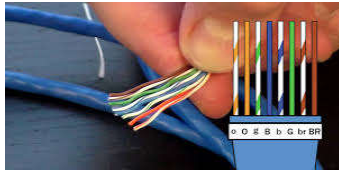
A LAN, or a local area network, is a bit like the internet only a lot, lot smaller. That is, it only consists of a few devices that are all connected to each other. You may want a LAN so you can share files, send pictures and music to other computers, connect to a printer easily, or have a good old fashioned LAN party to play games with some pals.

<https://www.broadbandchoices.co.uk/how-to/how-to-set-up-a-local-area-network>

Network switch - or a router



Ethernet Cables for wired LAN.



CSES-101TS-10: Setting Up Internet Router.

Nominal Duration **10 hrs.**
(Hours)

Objective:

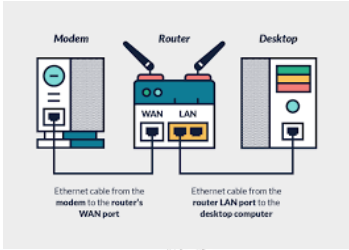
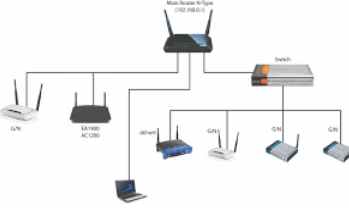

To make students able of setting a router and configuring with devices.

Task:

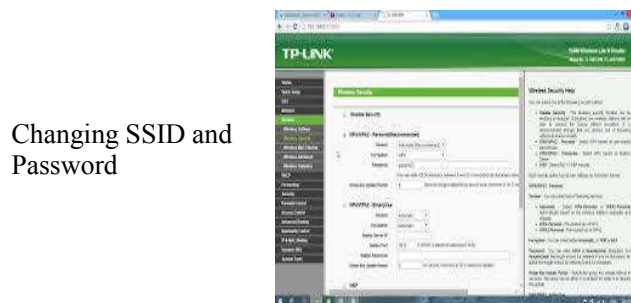
Student will setup router with a source of internet and configure with devices.

Outcome:

1. Students will be able to set up a new router or configure old router.
2. Setting up WIFI.
3. Changing network SSID and password.
4. Changing Admin password router management.
5. Using a third-party router.
6. Channel connection.
7. DHCP Setup.

Skill/Requirement	Physical Appearance	Procedure	Links
Router		As more and more devices are able to connect to wireless networks, setting up a wireless router has become a crucial step for virtually any home networks. Setting up a wireless network will allow your devices to connect to the internet from practically anywhere in the house, without the need for messy wires.	https://www.wikihow.com/Set-Up-a-Wireless-Router
Connecting Devices to Router			
Setting WIFI			

Setting WIFI



Changing SSID and Password

CSES-101TS-11Setting Up Printer and Sharing with more than one device.

Nominal Duration 10 hrs.
(Hours)

Objective:

Introducing students how to setup a printer and share with more than one device.


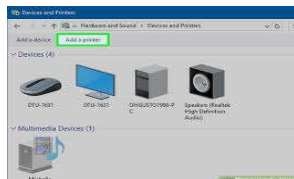


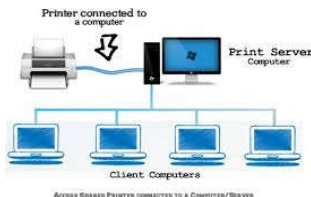
Task:

Student will learn setting up printer and be able to share it with devices.

Outcome:

1. Students will be able to Setting up a new printer with PC.
2. Students will be able to Setting up wireless printer, Bluetooth printer.

- Students will be able to Sharing printer with devices.

Skill/Requirement	Physical Appearance	Procedure	Links
Printer		Here are the basic steps you'll follow to set up almost any printer.	https://support.microsoft.com/en-us/help/17420/windows-printer-problems
Install Local Printer			
Install Wireless Printer			
Install Bluetooth Printer			
Sharing a printer in a Home Group			

CSES-101TS-12: Setting up Scanner.

Nominal Duration **05 hrs.**
(Hours)

Objective:


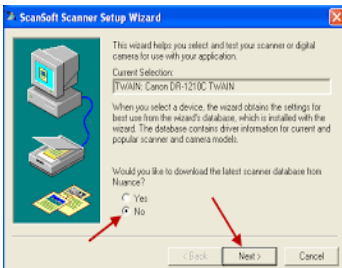
To learn how to install and configure scanner with devices through wired as well as wireless Connection.

Task:

Students will learn to install and configure any kind of scanner by himself.

Outcome:

- Students will be able to install a new scanner into PC.
- Will be able to configure scanner.
- Will be able to configure wireless scanner.
- Will be able to sharing scanner with more than one device.

Skill/Requirement	Physical Appearance	Procedure	Links
Wireless Scanner		When you connect a scanner to your device or add a new scanner to your home network, you can usually start scanning pictures and documents right away. If your scanner doesn't automatically install, follow these steps to try to get things working.	https://support.microsoft.com/en-us/help/14088/windows-10-install-and-use-a-scanner
Scanner Setup Wizard			

CSES-101TS-13:Setting up and Using TeamViewer.

Nominal Duration 05 hrs.
(Hours)

Objective:


Introducing students how to setup and usage of it.

Task:

Students will learn how to setup and use of TeamViewer.

Outcome:

1. Will be able to Installing TeamViewer software.
2. Will be able to Remotely Connecting to PC.
3. Will be able to Remotely Connecting to Server.
4. Will be able to control a remote PC as if you were sitting in front of it.

Skill/Requirement	Physical Appearance	Procedure	Links
Setting up TeamViewer		TeamViewer is a popular piece of software used for Internet-based remote access and	https://www.wikihow.com/Use-TeamViewer

TeamViewer
with mobile
phone



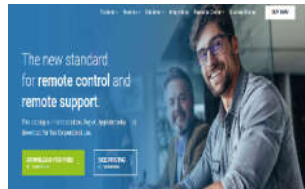
support.

TeamViewer software can connect to any PC or server, so you can remote control your partner's PC as if you were sitting right in front of it. For the remote session to work the partner has to start a small application, which does not require installation or administrative rights.

TeamViewer
File Sharing



TeamViewer
Control PC
Remotely



CSES-101TS-14: Setting up and Using Skype.

Nominal Duration **05 hrs.**
(Hours)

Objective:

Introducing students how to setup and use Skype.

Task:

Students will learn how to use Skype.

Outcome:

1. Students will be able to video and audio calling with anyone having skype account.
2. Students will be able for smart messaging.
3. Student will be able for private conversation.
4. Student will be able for screen sharing.
5. Student will be able to send files.
6. Student will be able to send voice mail through skype.

Skills/Require
ment

Physical Appearance

Procedure

Links

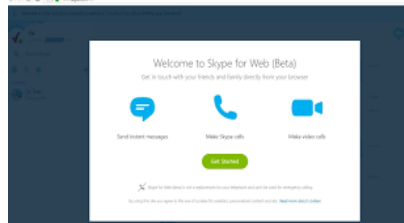
Skype video Conferencing



Skype is a telecommunication application that specializes in providing video chat and voice calls between computers, tablets, mobile devices, the Xbox One console, and smart watches via the Internet.

<https://support.skype.com/en/faq/FA11098/how-do-i-get-started-with-skype>

Skype Video, Audio Calling.



Skype also provides instant messaging services. Users may transmit text, video, audio and images. Skype allows video conference calls.

Skype Messaging



CSES-101TS-15: YouTube Video Download and Channel Management.

Nominal Duration 10 hrs.
(Hours)

Objective:




YouTube is a video sharing website. Introducing students how to download videos from YouTube. Managing YouTube channels.

Task:

Students will learn how to download YouTube videos. They will manage their own YouTube channel.

Outcome:

1. Students will be able to download video from YouTube.
2. Students will be able to create a YouTube channel.
3. Students will be able to upload videos into channel.
4. Student will be able to subscribe another channel.
5. Student will be able to report any videos that seems irritating to him/her.
6. Student will be able to stream a live video with other users.
7. Student will be able to upload 3D videos into him/her channel.

Skills/Requirement	Physical Appearance	Procedure	Links
YouTube video sharing		Downloading Video: You can download YouTube videos using software or online tools. Online tools is very easy to use. Search “KeepVid” or “Genyoutube”. Then paste the youtube video link that you want to download and proceed.	https://buffer.com/library/create-a-youtube-channel
Download YouTube video		Managing Channel: YouTube, the Google-owned video network, boasts over a billion users — almost one-third of all people on the Internet — and every day people watch hundreds of millions of hours on YouTube and generate billions of views.	
Creating YouTube Video Channel			

CSES-101TS-16:Twenty problem solving using C programming Language.

Nominal Duration **60 hrs.**
(Hours)

Objective:

Some of the feedback I hear from beginners working on a programming problem revolves around uncertainty of where to start. You understand the problem, the logic, basics of the syntax, etc. If you see someone else’s code or have someone to guide you, you can follow along. But maybe you feel uncertain about doing it yourself and have trouble turning your thoughts into code at first even though you understand the syntax or logic. So, you have to practice hardly. To make students efficient in solving any programming problems.

Task:

Students will solve these problems by practicing using C program.

Outcome:

1. Students will be able to learn Basic syntax of C program.
2. Students will be able to Learn C program operators, variables, data types.
3. Students will be able to Learn C program conditional statements.
4. Student will be able to learn loop statements, Functions, Recursions in C.
5. Student will be able to learn data structures in C.
6. Student will be able to learn pointers in C.
7. Student will be able to learn strings in C.
8. Student will be able to learn file management, Dynamic Memory allocation in C.

Skills/Requirement	Physical Appearance	Procedure	Links
Elementary Programming Problems	<ol style="list-style-type: none"> 1. Write a program that asks the user for a number n and prints the sum of the numbers 1 to n. 2. Modify the previous program such that only multiples of three or five are considered in the sum, e.g. 3, 5, 6, 9, 10, 12, 15 for n=17 3. Write a program that prints a multiplication table for numbers up to 12. 4. Write a program that prints the next 20 leap years. 5. Write a guessing game where the user has to guess a secret number. After every guess the program tells the user whether their number was too large or too small. At the end the number of tries needed should be printed. It counts only as one try if they input the same number multiple times consecutively 	<p>Problem Solving Using C</p> <p>program: Problem solving is the meta-skill.</p> <p>We all have problems.</p> <p>Big and small. How we deal with them is sometimes, well...pretty random.</p> <p>Unless you have a system, this is probably how you "solve" problems (which is what I did when I started coding):</p> <ol style="list-style-type: none"> 1. Try a solution. 2. If that doesn't work, try another one. 3. If that doesn't work, repeat step 2 until you luck out. 	<p>https://www.hackerrank.com/</p> <p>https://uva.onlinejudge.org/</p>
Lists, Strings	<ol style="list-style-type: none"> 1. Write a function that returns the largest element in a list. 2. Write function that reverses a list, preferably in place. 3. Write a function that checks whether an element occurs in a list. 4. Write a function that returns the elements on odd positions in a list. 5. Write a function that computes the running total of a list. 6. Write a function that tests whether a string is a palindrome. 7. Write three functions that compute the sum of the numbers in a list: using a for-loop, a while-loop and recursion. (Subject to availability of these constructs in your language of choice.) 8. Write a function that concatenates two lists. [a,b,c], [1,2,3] → [a,b,c,1,2,3] 9. Write a function that merges two sorted lists into a new sorted list. [1,4,6],[2,3,5] → [1,2,3,4,5,6]. You can do this quicker than concatenating them followed by a sort. 10. Write a function that computes the list of the first 100 Fibonacci numbers. The first two Fibonacci 		
Lists, Strings			

numbers are 1 and 1. The $n+1$ -st Fibonacci number can be computed by adding the n -th and the $n-1$ -th Fibonacci number. The first few are therefore 1, 1, $1+1=2$, $1+2=3$, $2+3=5$, $3+5=8$.

Intermediate
, Advanced
Problems

1. Write a program that outputs all possibilities to put + or - or nothing between the numbers 1,2,...,9 (in this order) such that the result is 100. For example, $1 + 2 + 3 - 4 + 5 + 6 + 78 + 9 = 100$.
2. Write a program that takes the duration of a year (in fractional days) for an imaginary planet as an input and produces a leap-year rule that minimizes the difference to the planet's solar year.
3. Write a program that automatically converts English text to Morse code and vice versa.
4. Write a program that finds the longest palindromic substring of a given string. Try to be as efficient as possible!
5. Given two strings, write a program that efficiently finds the longest common subsequence.

CSES-101TS-17:Soldering and De-soldering.

Nominal Duration **20 hrs.**
(Hours)

Objective:

A soldering iron is composed of a heated metal tip and an insulated handle. To Introduce students how to soldering and De-soldering.

Task:

Students will learn how to solder and De-solder of metal component or chip.

Outcome:

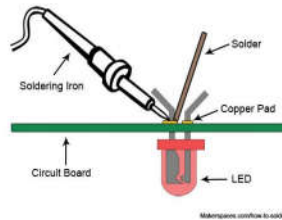
1. Students will be able to solder any component.
2. Students will be able to De-solder any component.

Skill/Requirements **Physical Appearance**

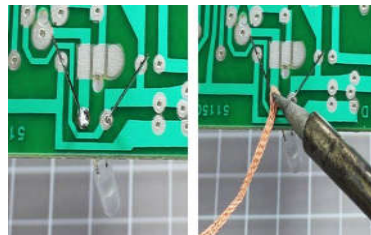
Soldering Iron and
soldering wire



Soldering an LED
in the circuit
board.

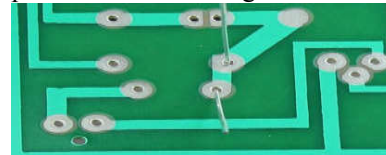


De-soldering



Procedure

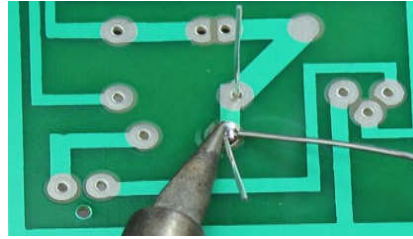
Step 1: Mount The Component – Begin by inserting the leads of the LED into the holes of the circuit board. Flip the board over and bend the leads outward at a 45° angle. This will help the component make a better connection with the copper pad and prevent it from falling out while soldering.



Step 2: Heat The Joint – Turn your soldering iron on and if it has an adjustable heat control, set it to 400°C. At this point, touch the tip of the iron to the copper pad and the resistor lead at the same time. You need to hold the soldering iron in place for 3-4 seconds in order to heat the pad and the lead.

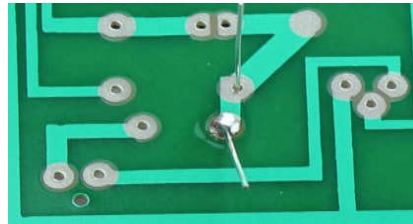


Step 3: Apply Solder To Joint – Continue holding the soldering iron on the copper pad and the lead and touch your solder to the joint. **IMPORTANT** – Don't touch the solder directly to the tip of the iron. You want the joint to be hot enough to melt the solder when it's touched. If the joint is too cold, it will form a bad connection.



Step 4: Snip The Leads – Remove the soldering iron and let the solder cool down naturally. Don't blow on the solder as this will cause a bad joint. Once cool, you can snip the extra wire from leads.

A proper solder joint is smooth, shiny and looks like a volcano or cone shape. You want just enough solder to cover the entire joint but not too much so it becomes a ball or spills to a nearby lead or joint.



De-soldering



Step 1 – Place a piece of the DE soldering braid on top of the joint/solder you want removed.

Step 2 – Heat your soldering iron and touch the tip to the top of the braid. This will heat the solder below which will then be absorbed into the DE soldering braid.

You can now remove the braid to see the solder has been extracted and removed. Be careful touching the braid when you are heating it because it will get hot.

Part-B

Communicative Skill (CS)

ENGS-101 CS-1: Greetings (The art of greetings in English, necessary for communicating with people.)

English Greetings for Professional/Formal Situations:

There are many situations in which we may need more formal or business professional language in English. Some common examples include:

- ✓ Business meetings & negotiations (ব্যবসায়িক মিটিং এর ক্ষেত্রে)
- ✓ At a job interview (চাকুরির ইন্টারভিউ এর ক্ষেত্রে)
- ✓ Communicating with high-level management (উচ্চ পদস্থ ব্যক্তিবর্গের সাথে কথাপোকথন) Saying hello to the company president or CEO (কোম্পানির বসের সাথে সাক্ষাতে)
- ✓ Showing respect to elderly individuals or people we do not know well (বয়োজ্যেষ্ঠদের সম্মান জানানোর ক্ষেত্রে)
- ✓ Meeting new business colleagues (নতুন ব্যবসায়িক সঙ্গীর সাথে মিটিংএ)
- ✓ Communicating with new clients, high-level clients, angry clients (ক্লাইন্ট এর সাথে কথাপোকথন)

Good morning / Good afternoon / Good Evening

Good morning, everyone. I hope you are doing well this morning.

Hello. How do you do?

This is not really a “*How are you?*” question. It is really a simple greeting and has a similar meaning to “*Nice to meet you.*”

Nice to meet you. / pleased to meet you.

A: “*Good morning. How do you do? I’m Josef Rammas with X Company.*”

B: “*Pleased to meet you Mr. Rammas.*”

How have you been doing? / How have you been?

It is a respectful way to ask “*How have you been?*” with someone you have not seen in a long time or someone you do not see every day.

English Greetings for Informal Situations:

Example situations include:

- ✓ In the office with your team and colleagues (অফিসে কলিগদের সাথে)
- ✓ Meeting or a lunch with a regular client (ক্লাইন্ট এর সাথে দুপুরের খাবারের সময় অথবা মিটিং এ)
- ✓ Networking events (নেটওয়ার্কিং ইভেন্টে)

- ✓ Trade show or job fair (চাকরীর ইভেন্ট এ)
- ✓ Conferences (কনফারেন্স এ)
- ✓ Greeting neighbors (প্রতিবেশীর সাথে আলাপচারিতায়)

Hello / Hi / Hey

Lara: Hello, Susan.

Susan: Hi, Lara.

How are you? / How are you doing? / How is it going?

Lara: Fine, thanks. and you?

Susan :Great! you?

Lara :Hi, Susan – good thanks. How about you?

Susan :Doing well. And how have you been?

Lara :Not bad. And you? How are you?

*Susan :Hello, Lara. How are you?**

Good to see you. / It's great to see you. / Nice to see you.

Lara: Hello, Susan. It's good to see you!

Susan :well, it was great to see you. I have to get going. Have a good day. Goodbye.

Long-time, no see. / It's been awhile. / When was the last time we saw each other?

How have you been? / How have things been going (since I last saw you)? / What have you been up to?

A: “Long-time, no see” or “It's been awhile.”

B: Great thanks. Did you hear we are moving to California next month?

A: Doing well. We've just returned from our summer vacation. And how about you?

B: Nothing to complain about! The family is good and work is fine. Just the same old, same old. What about you?

ENG-101 CS-2: How to Ask for, Grant and Refuse Permission (The art of ask, grant or refuse permission in English, necessary for communicating with people.)

How to Ask for Permission in English

Can I + verb (very informal)

Can I go out tonight?

Can he have dinner with us?

May I + verb

May I have another piece of pie?

May we go out with our friends tonight?

Could I please + verb

Could I please go with Tom to the movie?

Could we please go on trip this weekend?

Do you think I could + verb

Do you think I could use your cell phone?

Do you think I could borrow your car?

Would it be possible for me + infinitive

Would it be possible for me to use your computer for a few minutes?

Would it be possible for to study in this room?

Would you mind if I + verb in past

Would you mind if I stayed a few more minutes?

Would you mind if I took a five minute break?

Would you mind my + verb + ing + your + object

Would you mind my using your cellphone?

Would you mind my playing your piano?

How to Grant Permission in English

- Sure.
- No problem.
- Go right ahead.
- Please feel free + infinitive

How to Politely Refuse a Favor/Deny Permission

- I'm afraid I'd prefer if you didn't / don't. (আমি দুঃক্ষিত, আমি চাইবো যাত তুমি এটা না করো)
- Sorry, but I'd rather you not do that. (দুঃক্ষিত, এটা না করলেই ভাল)
- Unfortunately, I need to say no. (দুঃক্ষিত যে আমাকে না বলতে হচ্ছে)
- I'm afraid that's not possible. (দুঃক্ষিত, এটা সম্ভব নয়)
- I'm afraid I can't let you borrow my car, but I could drive you instead. (দুঃক্ষিত আমি তোমাকে আমার গাড়িটি ধার দিতে পারছি না, কিন্তু তোমাকে পৌছে দিয়ে আসতে পারি)
- I wish I could help out; maybe another time. (ইশ, আমি যদি তোমাকে সহায়তা করতে পারতাম, হয়তো বা অন্য কোন এক সময়)

ENGS-101 CS-3: Basic Writing (Basic writing skill in English for the elementary level learners.)

Topics to write about with an example

Farmer

Bangladesh is an agricultural country. Most of the people live in villages and are farmers. They grow cereals, pulses, vegetables and fruits. The farmers lead a tough life. They get up early in the morning and go to the fields. They stay and work on the farm late till evening. The farmers usually live in huts. Though, they work hard they remain poor. Farmers eat simple food; wear simple clothes and rear animals like cows, buffaloes and oxen. Without them there would be no cereals for us to eat. They play an important role in the growth and economy of a country.

অনুবাদ : বাংলাদেশ একটি কৃষি প্রধান দেশ। অধিকাংশ লোক গ্রামে বসবাস করে এবং তারা কৃষক। তারা শস্য, ডাল, শাক-সবজি এবং ফল চাষ করেন। কৃষকদের জীবন খুব কঠিন। তারা ভোর বেলা ঘুম থেকে উঠে মাঠে যান এবং সন্ধ্যা অবধি কাজ করতে থাকেন। কৃষকেরা সাধারণত কুঁড়ে ঘরে বসবাস করে। কঠোর পরিশ্রম করা স্বত্বেও তাদের অভাব মেটেনা। কৃষকেরা সাধারণ খাবার খায়, সাধারণ পোশাক পরিধান করে এবং বিভিন্ন ধরনের প্রাণি, যেমন গরু, মহিষ এবং ষাঁড়, লালন-পালন করে থাকে। তাদের ছাড়া আমরা কোনো খাদ্য শস্য পেতাম না। দেশের সমৃদ্ধি এবং অর্থনীতিতে তারা গুরুত্বপূর্ণ ভূমিকা পালন করেন।

Hawker

A hawker is a person who moves from one place to another and sell their goods, by shouting on the streets. They work hard throughout the day. They move on the street on their bicycle and sometimes on foot and sell their products. We can see hawkers everywhere. They move everywhere selling their goods without caring about the weather. There is a hawker who sells vegetables on his bicycle in our locality. His name is Monir. He brings fresh vegetables at a very reasonable price. He is a nice and an honest hawker.

অনুবাদ : ফেরিওয়ালা এমন একজন ব্যক্তি যিনি এক জায়গা থেকে আরেক জায়গায় যান এবং রাস্তায় ডেকে ডেকে তার জিনিসপত্র বিক্রি করেন। তিনি সারাদিন কঠোর পরিশ্রম করেন। তিনি কখনো সাইকেলে করে আবার কখনো পায়ে হেঁটে যাতায়াত করেন এবং তার জিনিসপত্র বিক্রি করেন। আমরা ফেরিওয়ালাদের সব জায়গায় দেখতে পাই। আবহাওয়ার তোয়াক্কা না করে তারা সবজায়গায় ঘুরে ঘুরে তাদের জিনিসপত্র বিক্রি করেন। আমাদের এলাকায় একজন ফেরিওয়ালা আছেন। যিনি তার সাইকেলে করে শাক-সবলি বিক্রি করেন। তার নাম মনির। তিনি ন্যায্য মূল্যে শাক-সবজি বিক্রি করেন। তিনি একজন ভালো এবং সৎ ফেরিওয়ালা।

Doctor

The doctor is a person who looks after the sick people and prescribes medicines so that the patient recovers fast. In order to become a doctor, a person has to study medicine. Doctors lead a hard life. Their life is very busy. They get up early in the morning and go to the hospital. They work without taking a break. They always remain polite so that patients feel comfortable with them. Since doctors work so hard we must realize their value.

অনুবাদ : চিকিৎসক এমন একজন ব্যক্তি যিনি অসুস্থ লোকদের তত্ত্বাবধান করেন এবং তাদের গুরুত্বপূর্ণ নির্দেশ না দেন যাতে করে তারা দ্রুত সুস্থ হয়ে ওঠে। চিকিৎসক হওয়ার জন্য একজন ব্যক্তিকে মেডিসিন বিষয়ে অধ্যয়ন করতে হয়। চিকিৎসকেরা ব্যস্ত জীবন যাপন করেন। তারা সকাল বেলা ঘুম থেকে ওঠেন এবং হাসপাতালে চলে যান। তারা বিরতিহীনভাবে কাজ করে থাকেন। চিকিৎসকেরা সব সময়ই রোগীদের সাথে মার্জিত আচরণ করেন যাতে করে তারা স্বাচ্ছন্দ্যবোধ করে। চিকিৎসকেরা যেহেতু কঠোর পরিশ্রম করেন, সেহেতু আমাদের উচিত তাদের মূল্য উপলব্ধি করা।

Street Beggar

A street beggar can be seen everywhere; at the bus stop, railway stations, religious places, markets etc. Some beggars are crippled, lame and some are blind. They are unable to earn their livelihood. Whereas some of them are healthy and they do not deserve our sympathy. We should see that they take up some profession. They should not be allowed to beg. On my way to school I see a beggar daily. He wears old rags. He is partially blind. I feel pity seeing him but I can't help it I can only pray to God to help him to earn his livelihood.

অনুবাদ : একজন ভিক্ষুককে প্রায় সব জায়গায় দেখতে পাওয়া যায়, বাসস্টপে, রেলস্টেশনে, ধর্মীয়স্থানে, বাজারে এবং আরও অনেক জায়গায়। কিছু কিছু ভিক্ষুক বিকলাঙ্গ আবার কিছু কিছু ভিক্ষুক অন্ধ। তারা তাদের জীবিকা নির্বাহ করতে অক্ষম। তাদের মধ্যে কেউ কেউ আবার সুস্থ্য এবং তারা আমাদের সহানুভূতির যোগ্য নয়। আমাদের উচিত তাদের জন্য কাজের ব্যবস্থা করে দেয়া। তাদের শিক্ষা করতে দেয়া উচিত নয়। প্রতিদিন স্কুলে যাওয়ার পথে আমি একজন ভিক্ষুককে দেখতে পাই। তিনি পুরোনো ছেঁড়া কপড় পরে থাকেন। তিনি আংশিক অন্ধ। তাকে দেখে আমার দয়া হয় কিন্তু আমি তাকে সাহায্য করতে পারি না। আমি শুধু শ্রষ্টার কাছে প্রার্থনা জানাতে পারি যাতে করে সে নিজের জীবিকা নির্বাহ করতে পারে।

Solar System

The Solar System consists of the Sun Moon and Planets. It also consists of comets, meteoroids and asteroids. The Sun is the largest member of the Solar System. In order of distance from the Sun, the planets are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune and Pluto; the dwarf planet. The Sun is at the center of the Solar System and the planets, asteroids, comets and meteoroids revolve around it.

অনুবাদ : সূর্য, চন্দ্র এবং অন্যান্য গ্রহ নিয়ে সৌর জগত গঠিত। এখানে ধুমকেতু এবং গ্রহাণু বিদ্যমান। সৌর জগতের সবচেয়ে বড় সদস্য সূর্য। সূর্য থেকে দূরত্বের ক্রম অনুসারে গ্রহ গুলো হল বুধ, শুক্র, পৃথিবী, মঙ্গল, বৃহস্পতি, শনি, ইউরেনাস, নেপচুন এবং প্লুটো (যেটি আসলে একটি বামন গ্রহ)। সৌর জগতের কেন্দ্রে রয়েছে সূর্য এবং অন্যান্য গ্রহ, গ্রহাণু এবং ধুমকেতু একে কেন্দ্র করে পরিভ্রমণ করছে।

Moon

The Moon is a barren, rocky world without air and water. It has dark lava plain on its surface. The Moon is filled with craters. It has no light of its own. It gets its light from the Sun. The Moon keeps changing its shape as it moves round the Earth. It spins on its axis in 27.3 days stars were named after the Edwin Aldrin were the first ones to set their foot on the Moon on 21 July 1969 They reached the Moon in their space craft named Apollo II.

অনুবাদ : চাঁদ একটি অনূর্বও, পাথুরে গ্রহ যেখানে বায়ু এবং পানি অনুপস্থিত। এটি পৃথিবীর একমাত্র উপগ্রহ। এর সমতল পৃষ্ঠ দেশ কালো লাভার তৈরি। চন্দ্র পৃষ্ঠ অসংখ্য গর্তে পরিপূর্ণ। এর নিজস্ব কোনো আলো নেই। এটি সূর্য থেকে আলো পায়। পৃথিবীর চার দিকে ঘোরার সাথে সাথে চাঁদ এর নিজের আকৃতি পরিবর্তন করতে থাকে। নিল আর্মস্ট্রং এবং বাজ অলড্রিন ১৯৬৯ সালের ২১শে জুলাই সর্ব প্রথম চাঁদেও বুকে পা রাখেন। অ্যাপোলো ১১ নামের একটি মহাকাশ যানে করে তারা দাঁদে পৌঁছে ছিলেন।

Stars

The stars are tiny points of light in the space. On a clear night we can see around 2,000 to 3,000 stars without using a telescope. Stars look tiny in the sky because they are far away from the Earth. In ancient times the sky watchers found patterns of stars in the sky. These astronauts Neil Armstrong and patterns of people and the creatures from the myths and the legends. As the Earth spins from east to west the stars also appear to cross from east to west. The stars are made up of gases.

অনুবাদ : তারা (নক্ষত্র) হলো মহাকাশে অবস্থিত ক্ষুদ্র ক্ষুদ্র আলোক বিন্দু। রাতের বেলা পরিষ্কার আকাশে আমরা দূরবীক্ষণ যন্ত্র ছাড়াই প্রায় ২০০০ থেকে ৩০০০ তারা দেখতে পাই। পৃথিবী থেকে বেশ দূরে হওয়ায় তারাদের খুব ছোট দেখায়। প্রাচীনকালে আকাশ পর্যবেক্ষকরা আকাশে তারাদেও নকশা খুঁজে পেয়েছিলেন এবং তারা পৌরাণিক বিভিন্ন কিংবদন্তি এবং প্রাণির নকশা খুঁজে পেয়েছিলেন। পৃথিবী যেহেতু এর নিজ অক্ষে পশ্চিম থেকে পূর্বদিকে আবর্তন করে, তারাদেরও দেখলে মনে হয় এরা পশ্চিম থেকে পূর্বদিকে অতিক্রম করছে। তারাগুলো গ্যাসের তৈরি অতি কায়বল।

ENGS-101 CS-4: Basic Vocabulary (Basic vocabulary for the Bengali learners.)

Part-1

Awry = আঁকা-বাঁকা
Abject = শোচনীয় অবস্থা
Abash = লজ্জা দেওয়া
Abscond = পালিয়ে থাকা
Aberration = বিপথগমন
Acidulous = হালকা টকো
Actuate = প্রভাবিত করা
Addendum = অতিরিক্ত সংযোজন
Adroit = দক্ষ
Adorn = সাজানো / সুন্দর করা
Agape = মুখ হা করে আছে এমন
Agility = দক্ষতা
Allure = প্রলোভিত করা
Amorphous = আকারহীন
Ample = প্রচুর / পর্যাপ্ত
Amass = জমা করা / পুঞ্জীভূত করা
Antipathy = বিরাগ / তীব্র ঘৃণা

Part-2

Antithesis = সরাসরি বিপরীত কাজ
Analgesic = বেদনানাশক
Anathema = অভিশাপ
Anodyne = বেদনানাশক ঔষধ
Appliance = যন্ত্রপাতি
Ardor = আবেগের তীব্রতা
Appellation = নাম / খেতাব
Aperture = ছিদ্রে
Append = শেষে যুক্ত করা
Apposite = সঠিক / যথোপযুক্ত
Appurtenance = অনুষঙ্গিক জিনিস
Apparition = ভূত / অপছায়া
Apprehend = গ্রেফতার করা
Aquatic = জলীয়
Aquiline = বাঁকানো
Articulate = স্পষ্টভাবে উচ্চারণ করা
Ascendancy = ক্ষমতা / প্রাধান্য / প্রতিপত্তি
Assimilate = শোষণ করে নেওয়া
Apostate = স্বধর্মত্যাগী / ধর্মত্যাগী

Part-3

Archaic - Archeology = প্রত্নতত্ত্ব/পুরাতন বা প্রাচীন
Artifice-Artificial = নকলকাজ
Artifice = অর্থ ধূর্ততা বা চালাক
Artisan = কারিগর
Artist = শিল্পী / কারিগর
Asunder = পরস্পর বিচ্ছিন্ন হওয়া
Assurance = নিশ্চয়তা / প্রতিশ্রুতি / অঙ্গীকার
Asteroid = উপগ্রহ
Attrition = ধীরে ধীরে ক্ষয় বা হ্রাস
Atone = প্রায়শ্চিত্ত করা বা ক্ষতিপূরণ করা
Atrocity = বর্বর কাজ
Atrophy = ক্ষয়ে যাওয়া
Awkward = বেমানান / বিশ্রী
Avarice = অর্থ লিপ্সা / লোভী
Anomaly = অনিয়ম / বিশৃঙ্খলা
Anguish = তীব্র যন্ত্রণা
Babble = আবোল তাবোল বকা
Bestow = পুরস্কার প্রদান
Behemoth = বিশালাকার প্রাণী / জলহস্তী
Bovine = বোকা / নিরোঁধ
Blowhard = বাচাল
Burgeon = দ্রুত বেড়ে ওঠা
Baroque = অতিরিক্ত সজ্জিত
Barefaced = মুখোশহীন / অনাবৃত
Ban = নিষিদ্ধ
Bane = সর্বনাশ / দুঃখটনার হেতু / বিষ

Part 4

Bilk = ফাঁকি দেওয়া / প্রতারণা করা
Bevy = বড় দল
Bedraggle = সম্পূর্ণরূপে ভিজে যাওয়া
Belie = মিথ্যা ধারণা দেওয়া
Baritone = পুরুষকণ্ঠ বিশিষ্ট স্বর
Bereaved = দুঃখিত, বঞ্চিত, শোকাচ্ছন্ন, বিচ্ছিন্ন
Beset = অত্যাচার করা, সমস্যাক্রান্ত হওয়া
Boorish = অনুভূতিহীন
Beatitude = স্বর্গসুখ, পরম সুখ, চরম সুখ
Blemish = দোষ, ত্রুটি, কলঙ্ক, খুঁত

Bravado = সাহসের সাথে কাজ করা বা সহস প্রদর্শন করা
Burnish = ঘষে চকচকে করা বা পরিষ্কার করা
Bulwark = কঠিন প্রাচীর
Baffle = ব্যর্থ হওয়া
Belabor = উত্তম মধ্যম দেওয়া, প্রহার করা, মারা
Baleful = ভয় প্রদর্শনকারী
Belittle = ছোট করা
Belated = বিলম্ব/দেরি
Camaraderie = সহকর্মীদের মাঝে সহমর্মিতা ও পরস্পরের প্রতি আস্থা
Candor = স্পষ্টবাদিতা

Part 5

Comestible = খাবার উপযোগী দ্রব্য
Calamity = চরম বিপর্যয় / দুঃখ দুর্দশা
Cavalier = শিষ্টাচার বর্জিত
Collaborate = একত্রে কাজ করা
Commonplace = গতানুগতিক
Complement = পরিপূর্ণ করা
Complacent = আত্মতৃপ্ত
Colossus = বিশাল প্রতিমূর্তি
Concave = গর্তযুক্ত / অবতল
Cohorts = সশস্ত্র সৈন্যদল
Curtail = কমানো/হ্রাস করা
Compress = সংকুচিত করা
Conception = ধারণার সূত্রপাত
Condone = এড়িয়ে চলা
Consign = আনুষ্ঠানিকভাবে হস্তান্তর করা
Concession = অনুমোদন
Compute = গণনা করা / হিসাব করা
Cajole = প্রতারণা করা / মিষ্টি কথায় মন ভোলানো
Correlation = পারস্পরিক সম্পর্ক

Part 6

Cow = ভয় প্রদর্শন করা
Connivance = সম্মতি আদায় করা
Choleric = খিট খিটে / বদ মেজাজি
Centripetal = কেন্দ্রের দিকে অভিমুখ
Continuum = একটানা
Clarify = ব্যাখ্যা করা
Crass = অমার্জিত

Credence = বিশ্বাস/আস্থা
Calligraphy = সুন্দর লেখা
Careen = আঁকা-বাঁকা / তির্যক
Comatose = অবচেতন/নিদ্রামগ্ন
Contraband = অবৈধ ব্যবসা
Concise = সংক্ষিপ্ত
Cacophonous = শব্দিকটু
Deviate = পথভ্রষ্ট হওয়া
Defrock = অপসারণ করা
Dichotomy = দুই ভাগে বিভক্ত
Debris = ধ্বংসস্তূপ
Deliberate = গভীরভাবে চিন্তা করা
Dogma = অন্ধবিশ্বাস
Duplicity = কপটতা/ছলনা
Dolor = মন খারাপ
Dismantle = বিচ্ছিন্ন করা / চূর্ণ করা

Part 7

Deplore = অনুশোচনা করা
Dilettante = কোনো ব্যাপারে অমনোযোগী
Debate = সম্পূর্ণ পতন, ধ্বংস
Despondent = মনমরা, হতাশাগ্রস্ত
Dormant = ঘুমন্ত/অলস/অসাড়
Diminutive = ছোট
Dire = ভয়াবহ/ভীষণ
Dowdy = নোংরা, অপরিচ্ছন্ন
Dishearten = নিরুৎসাহ করা
Diva = গীতিনাট্যের গায়িকা
Dispatch = দ্রুততা/দ্রুত সম্পাদন
Disdain = ঘৃণা/ তাচ্ছিল্যের চোখে দেখা
Distract = অমনোযোগী
Disparity = অসমতা/তারতম্য/প্রভেদ
Dyspeptic = বদহজম
Disclaim = দাবি ত্যাগ করা
Debonair = প্রফুল্ল / খোশমেজাজি
Deadlock = অচল অবস্থা সৃষ্টি করা/নিশ্চলতা
Dote = ভালবাসায় অন্ধা হওয়া

Part 8

Decelerate = গাত্ৰহাস কৰা
Dulcet = সুমধুৰ
Embargo = নিষেধ কৰা
Effrontery = মুখে মুখে তৰ্ক কৰা
Endearment = স্নেহ/আদৰ/ভালবাসা
Effeminate = মেয়েলি বৈশিষ্টপূৰ্ণ
Exemplify = উদাহৰণ সহকাৰে ব্যাখ্যা কৰা
Estrangement = বিচ্ছেদ
Elated = অতিশয় আনন্দিত/পৰম উল্লাসিত
Eerie = রহস্যজনক/আতঙ্কজনক
Elite = অভিজাত
Entomology = পতঙ্গবিজ্ঞান
Ecologist = পৰিবেশৰ সৈতে প্ৰাণীৰ সম্পৰ্ক বিষয়ে বিশেষজ্ঞ
Effete = দুৰ্বল / অক্ষম / জীৰ্ণ
Elucidate = বিশদভাবে ব্যাখ্যা কৰা / স্পষ্ট কৰা
Emanate = নিৰ্গত হওয়া
Empathy = সহানুভূতি
Enormous = প্ৰচুৰ
Enlighten = জ্ঞান দান কৰা
Emotive = আবেগতড়িত
Encroach = সীমা লংঘন কৰা
Economize = ব্যয় সংকোচ কৰা
Enamored = প্ৰেমমুগ্ধ/ প্ৰেম আসক্ত

Part 09

Endanger = উৎপাদন কৰা / প্ৰসব কৰা
Elusory = ছলনাকামী
Exalt = প্ৰশংসা কৰা
Exposition = ব্যাখ্যা কৰণ
Exigency = জুৰণি অবস্থা
Extenuate = হাস কৰা / প্ৰশমিত কৰা
Engage = অঙ্গীকাৰ কৰা
Entreat = আন্তৰিকতাৰ সৈতে চাওয়া
Empirical = অভিজ্ঞতালব্ধ
Elation = অত্যাধিক সুখ / আনন্দৰ অনুভূতি
Entrée = প্ৰবেশ / প্ৰবেশপথ
Encomium = প্ৰশংসা
Ennui = বিরক্ত
Eclectic = বাছাইকৃত
Egoism = অহমিকা / আত্মবাদ

Encompass = ঘেরাও করা
Exculpate = দোষ দেয়া
Emaciate = পাতলা ও দুর্বল
Embellish = সজ্জিত করা / সাজান / অলঙ্কৃত করা
Facsimile = অবিকল প্রতিলিপ / অনুলিপি
Engaging = আকর্ষক / মনোরম
Fiscal = অর্থ সংক্রান্ত/টাকা-পয়সা/ধন-সম্পদ সম্পর্কিত
Fallacy = ভুল / মিথ্যা বিশ্বাস

Part 10

Fervent = গরম / তপ্ত
Forsake = ত্যাগ করা
Frigid = শীতল / নিষ্প্রাণ
Fraudulent = প্রতারণাপূর্ণ
Flora = উদ্ভিদকূল / উদ্ভিদ সম্পদ
Finesse = কৌশলের দক্ষতা
Fracas = হৈ চৈ / হুটগোল
Feasible = যা বাস্তবে পরিণত করা যায়
Flamboyant = জাঁকানো / বর্ণাঢ্য
Figurine = ক্ষুদ্রাকৃতি
Fulsome = অতিরিক্ত
Forge = অগ্নিকুন্ড
Gibberish = দ্রুত উচ্চারিত / বাঁচাল
Gainsay = অস্বীকার করা
Gait = হাটার ধরণ / চলন ভঙ্গি
Gambit = যে কোনো প্রাথমিক পদক্ষেপ
Gastronomy = সুখাদ্য / ভোজন বিদ্যা
Glamorous = মোহনীয় / আকর্ষণীয়
Genre = নীতি / ধারা / প্রকার
Ghastly = ভয়ানক / বিরাটকার

ENG-101 CS-5: Translation (Everyday use sentences which is required for communicating in English.)

01. Present Tense

1.1 Present Simple Tense

- A. I rise early in the morning. (আমি সকাল বেলা ঘুম থেকে উঠি)
- B. He is a scientist. (তিনি একজন বিজ্ঞানী)
- C. The sun sets in the west. (সূর্য পশ্চিমে অস্ত যায়)
- D. She does not like to dance. (তিনি নাচতে পছন্দ করেন না)
- E. Does he want a cup of tea? (তিনি কি এক কাপ চা চান?)

1.2 Present Continuous Tense

- A. I am going to school. (আমি স্কুলে যাচ্ছি)
- B. They are playing football. (তারা ফুটবল খেলছে)
- C. He is not running to and fro. (সে এদিক-ওদিক দৌড়াচ্ছে না)
- D. It is not raining now. (এখন বৃষ্টি হচ্ছে না)
- E. Are you talking over phone? (তুমি কি ফোনে কথা বলছো)

1.3 Present Perfect Tense

- A. He has done the work. (সে কাজটি করেছে)
- B. They have eaten mangoes. (তারা আমগুলো খেয়েছে)
- C. He has reached England. (সে ইংল্যান্ডে পৌঁছেছে)
- D. Tipu has not worked hard. (টিপু কঠোর পরিশ্রম করেনি)
- E. Have you ever gone to Cox's Bazar? (তুমি কি কখনো কক্সবাজার গিয়েছো)

1.4 Present Perfect Continuous Tense

- A. I have been walking for two hours. (আমি দু'ঘণ্টা যাবৎ হাঁটছি)
- B. He has been working in this office for five years. (সে এই অফিসে পাঁচ বছর যাবৎ কাজ করছে)
- C. She has been suffering from fever since Tuesday. (সে মঙ্গলবার থেকে জ্বরে ভুগছে)
- D. It has not been raining for five days. (পাঁচ দিন ধরে বৃষ্টি হচ্ছে না)
- E. Have you been watching videos on YouTube since morning? (তুমি কি সকাল বেলা থেকে ইউটিউবে ভিডিও দেখছ?)

02. Past Tense

2.1 Past Simple Tense

- A. I went to the market. (আমি বাজারে গিয়েছিলাম)
- B. He ate rice. (সে ভাত খেলো)
- C. He was a scientist. (তিনি একজন বিজ্ঞানী ছিলেন)
- D. Soyeb did not buy the books. (সোয়েব বইগুলো কেনে নি)
- E. Did you go to university yesterday? (তুমি কি গতকাল বিশ্ববিদ্যালয়ে গিয়েছিলে)

2.2 Past Continuous Tense

- A. He was reading the book. (সে বইটি পড়ছিলেন)
- B. They were playing football. (তারা ফুটবল খেলছিলেন)
- C. We were playing hide and seek. (আমরা লুকোচুরি খেলছিলাম)
- D. She was not singing a song. (সে গান গাইছিলেন না)
- E. Were the students making a noise in the classroom? (ছাত্র/ছাত্রীরা কি শ্রেণী কক্ষে গেলামাল করছিল?)

2.3 Past Perfect Tense

- A. I had reached there before he came. (সে আসার আগেই আমি সেখানে পৌঁছেছিলাম)
- B. He came home after I had gone to school. (আমি স্কুলে যাওয়ার পর সে বাসায় এসেছিল)
- C. The train had left before I reached. (আমি পৌঁছানোর পূর্বেই ট্রেনটি ছেড়ে দিয়েছিলো)
- D. Mother shut the door after I had got into the bed. (আমি বিছানায় শোয়ার পরম ৷ দরজাটা বন্ধ করেছিলেন)
- E. They had reached the station before the bell rang. (ঘণ্টা পড়ার পূর্বে তারা স্টেশনে পৌঁছালো)

বিশেষ দ্রষ্টব্য : ইংরেজি ভাষায় Past Perfect Tense-এর Negative Form এবং Interrogative Form কদাচিৎ ব্যবহৃত হয় । এর পরিবর্তে সাধারণত Past Simple Tense- এর Negative Form এবং Interrogative Form ব্যবহৃত হয় ।

2.4 Past Perfect Continuous Tense

- A. I had been reading a letter before you called. (তুমি কল করার পূর্বে আমি একটি চিঠি পড়ছিলাম)
- B. She had been watching the Television when I came to meet her. (আমি যখন তার সাথে দেখা করতে আসলাম তখন সে টেলিভিশন দেখছিলেন)
- C. We had been gossiping before the bell rang. (ঘণ্টা পড়ার পূর্বে আমরা গল্পগুজব করছিলাম)
- D. I had been eating rice when he came. (সে যখন আসল তখন আমি ভাত খাচ্ছিলাম)

বিশেষ দ্রষ্টব্য : ইংরেজি ভাষায় বর্তমানে Past Perfect Continuous-এর ব্যবহার নেই বললেই চলে ।

03. Future Tense

3.1 Future Simple Tense

- A. I shall go to the varsity. (আমি বিশ্ববিদ্যালয়ে যাবো)
- B. She will sing the song. (সে গানটি গাইবে)
- C. Arif will help you. (আরিফ তোমাকে সাহায্য করবে)
- D. They will not go shopping. (তারা কেনাকাটা করতে যাবে না)
- E. Shall we wait for Shaon? (আমরা কিশাওনের জন্য অপেক্ষা করবো?)

বিশেষ দ্রষ্টব্য : যদিও বর্তমানে shall বা will ব্যবহারের ক্ষেত্রে বাঁধা ধরা কোনো নিয়ম নেই, তবে মনের ভাব জোরালোভাবে প্রকাশ করার জন্য shall ব্যবহার করা উত্তম।

3.2 Future Continuous Tense

- A. Shuvra will be studying. (শুভ্রা পড়াশোনা করতে থাকবে)
- B. You will be doing the work. (তুমি কাজটি করতে থাকবে)
- C. They will be shopping. (তারা কেনাকাটা করতে থাকবে)
- D. We will be watching "Avengers: Endgame". (আমরা অ্যাভেঞ্জার্স: এন্ড গেইম দেখতে থাকবো)
- E. Will she be waiting for us? (তিনি কি আমাদেরও জন্য অপেক্ষা করতে থাকবেন?)

3.3 Future Perfect Tense

- A. I will have written the poem. (আমি কবিতাটি লিখে থাকবো)
- B. By the time you reach, we will have started our journey. (তুমি এসে পৌঁছোতে পৌঁছোতে আমরা আমাদের যাত্রা শুরু করে ফেলবো)
- C. He will have helped you. (সে তোমাকে সাহায্য করে থাকবে)
- D. I shall have finished reading the book by 4 PM. (আমি বিকেল চারটার মধ্যে বইটি পড়ে থাকবো)
- E. Will Shuvo have done the work by the next week? (শুভ কি আগামী সপ্তাহের মধ্যে কাজটি করে রাখবে)

3.4 Future Perfect Continuous Tense

- A. I will have been doing the work until you return. (তুমি ফিও না আসা পর্যন্ত আমি কাজটি করতে থাকবো)
- B. The students will have been doing the class until the bell rings. (ঘণ্টা না বাজা পর্যন্ত ছাত্ররা ক্লাস করতে থাকবে)
- C. We shall have been waiting for you until you come back. (তুমি ফিও না আসা পর্যন্ত আমরা তোমার জন্য অপেক্ষা করতে থাকবো)
- D. Arin will have been studying at University of Global Village for four years before she gets the degree. (অরিন ডিগ্রি পাওয়ার পূর্বে চার বছর ইউনিভার্সিটি অব গ্লোবাল ভিলেজে পড়তে থাকবে)

বিশেষ দ্রষ্টব্য : বর্তমানে ইংরেজী ভাষায় Future Perfect Continuous এর ব্যবহার নেই বললেই চলে।

ENGS-101 CS-6: Dialogue (Practice dialogue sessions for a better communicative competence understanding.)

Dialogue 1-1: Formal Greetings

JAMES: Good morning, Professor Austin, how are you doing?

PROFESSOR AUSTIN: Good morning, James. I am doing well. And you?

JAMES: I'm great, thank you. This is my friend Emma. She is thinking about applying to this college. She has a few questions. Would you mind telling us about the process, please?

PROFESSOR AUSTIN: Hello, Emma! It's a pleasure to meet you. I'm more than happy to speak with you. Please stop by my office next week.

EMMA: It's a pleasure to meet you, professor. Thank you so much for helping us.

PROFESSOR AUSTIN: Don't mention it. Hopefully, I will be able to answer your questions!

Dialogue 1-2: Informal Greetings and Farewells

JANE: Hi, Helen! How's it going?

HELEN: Fine, thanks — and you?

JANE: Just fine. Where are you off to?

HELEN: To the library. I've got a history exam next week and need to start studying. Ugh.

JANE: Oh, no. Well, I'll see you later then. Good luck!

HELEN: Thanks. See you later.

Dialogue 1-3: Formal Introductions

MARGARET: Mr. Wilson, I'd like you to meet Dr. Edward Smith.

MR. WILSON: It's nice to meet you, Dr. Smith.

DR. SMITH: Pleasure to meet you, too.

MARGARET: Dr. Smith is an economist. He just finished writing a book on international trade.

MR. WILSON: Oh? That's my field, too. I work for the United Nations.

DR. SMITH: In the Development Program, by any chance?

MR. WILSON: Yes. How did you guess?

DR. SMITH: I've read your articles on technical assistance. They're excellent.

Dialogue 1-4: Informal Introductions

JIM: Who's the tall woman next to Barbara?

CHARLES: That's her friend Mary. Didn't you meet her at Steve's party?

JIM: No, I wasn't at Steve's party.

CHARLES: Oh! Then let me introduce you to her now. Mary, this is my friend Jim.

MARY: Hi, Jim. Nice to meet you.

JIM: You, too. Would you like a drink?

MARY: Sure, let's go get one

Dialogue 1.5: What Time Is It?

NATASHA: What time is it? We're going to be late!

TONY: It's a quarter after seven. We're on time. Don't panic.

NATASHA: But I thought we had to be at the restaurant by 7:30 for the surprise party. We'll never make it there with all this evening traffic.

TONY: Sure we will. Rush hour is almost over. Anyway, the party starts at 8:00. But I do need help with directions. Can you call the restaurant and ask them where we park our car?

Dialogue 1-6: A Telephone Call

JOHN: Hi, Alice, it's John. How are you?

ALICE: Oh, hi, John! I was just thinking about you.

JOHN: That's nice. I was wondering if you'd like to go to a movie tonight.

ALICE: Sure, I'd love to! What's playing?

JOHN: I was thinking about that new comedy Lights Out. What do you think?

ALICE: Sounds great!

JOHN: OK, I'll pick you up around 7:30. The movie starts at 8:00.

ALICE: See you then. Bye!

Dialogue 1-7: Can You Say That Again?

LUKE: Hello? Hi, Stephanie, how are things at the office?

STEPHANIE: Hi, Luke! How are you? Can you please stop and pick up extra paper for the computer printer?

LUKE: What did you say? Can you repeat that, please? Did you say to pick up ink for the printer? Sorry, the phone is cutting out.

STEPHANIE: Can you hear me now? No, I need more computer paper. Listen, I'll text you exactly what I need. Thanks, Luke. Talk to you later.

LUKE: Thanks, Stephanie. Sorry, my phone has really bad reception here.

Dialogue 1-8: Coincidences

MEG: Well, hello there, Julia! Long time no see!

JULIA: Meg! Hi! What a coincidence! I haven't seen you in ages! What are you doing here?

MEG: I just got a new job in the city, so I'm shopping for some clothes. Hey, what do you think of this shirt?

JULIA: Hmmm ... well, you know how much I love blue. See? I've got the same shirt! **MEG:** You always did have good taste! What a small world.

Dialogue 1-9: Weather Report

JENNIFER: It's freezing outside! What happened to the weather report? I thought this cold front was supposed to pass.

GABRIELA: Yeah, I thought so too. That's what I read online this morning.

JENNIFER: I guess the wind chill is really driving down the temperature.

GABRIELA: Can we go inside? I feel like my toes are starting to go numb.

ENG-101 CS-7: Listening (Practice listening sessions for a better communicative competence understanding)

What is active listening?

Whether you're in a group or speaking with someone one-on-one, the best way to process verbal communication is to listen actively.

This simply involves being able to repeat back to someone what they've told you, in your own words.

You don't have to **agree** with what they've said; you're just proving that you **understand** what they've said.

How do I become an active listener?

Active listening is a habit--once you've gained the skill, you'll utilize it without even knowing it! That said, it takes a lot of practice to become an effective active listener.



What do I need to work on to become an active listener?

There are 5 basic elements to active listening:

1. Pay attention
2. Prove you are listening
3. Ask questions (if you need to)
4. Don't be judgmental
5. Respond

Students can visit these website to improve their listening skill:

1. <https://www.youtube.com/watch?v=tBvw05SiUuQ>
2. <https://www.wiziq.com/tutorials/ielts-listening>

***** Students may practise in listening from the videos contained in attached CD.**
