

**MAHARASHTRA STATE COUNCIL OF
EXAMINATIONS, PUNE.**

**Government Certificate in
Computer Typing Basic Course**

GCC - TBC

(English/Marathi/Hindi 30 wpm)

For

**Govt. Recognized Typewriting
Institutes in Maharashtra and Goa**

Government Certificate in Computer Typing Basic Course **(GCC – TBC)**

English/Marathi/Hindi 30 w.p.m.

❖ Objective:

- To merge Typing and latest Computer course so that student can work in highly competitive world.
- To design the course and exam in such way that student will get deep understanding on typing and latest computer software's and technology which has been using in government and private organization.

❖ Syllabus:

Basic course is designed to cover latest technology and software in the market which will help student to work in any environment.

The proposed course designed such that the basic subjects of computer are covered precisely. In the proposed course entire MS-OFFICE 2010 has covered in detail. This course has detail practical session which will increase the confidence of the student. The syllabus of this course as follows

**Basic Course in Computer Typing English/ Marathi/Hindi 30 w.p.m.
(GCC-TBC)**

❖ **Content of Syllabus**

<u>1.0 GCC-TBC Typing syllabus</u>	<u>Duration</u>	<u>Marks</u>	<u>Passing Marks</u>
1.1 Keyboard Awareness Like Typewriter	15 Days		10 Marks
1.1.1 Practice Of Typing Words Drill for 30 W.P.M.		07 Marks	
1.1.2 Sentence Writing /Typing Practice For 30 W.P.M.		07 Marks	
1.1.3 Passage Typing Practice For 30 W.P.M. Speed		06 Marks	
Total (1.1.1+1.1.2+1.1.3)	-	20 Marks	
1.2 Letter /Curriculum Vitae /Statement Page and Type Setting & Practice	15 Days	15 Marks	15 Marks
1.3 Statement / Mark Sheet Setting And Practice	15 Days	10 Marks	
1.4 E-Mail / Fax Etiquettes		05 Marks	
Total (1.2+1.3+1.4)	-	30 Marks	
Total	45 Days	50 Marks	25 Marks

<u>2.0 Computer Syllabus</u>	<u>Duration</u>	<u>Marks</u>	<u>Passing Marks</u>
2.1 Operating Systems - Windows, Linux, Unix, Mac OS – Basic Operating Skills	12 Days	25 Objective Questions (2 Marks Each Question)	25 Marks
2.2 MS-Office 2010	-		
2.2.1 MS- Word	35 Days		
2.2.2 MS-Excel	35 Days		
2.2.3 MS-PowerPoint	6 Days		
2.3 Internet Browsing	6 Days		
2.4 Email & Web Browsing	5 Days		
Total	99 Days	50 Marks	25 Marks
TOTAL (1.0 + 2.0)	144 Days	100 Marks	50 Marks

Government Certificate in Computer Typing Basic Course

GCC – TBC (English/Marathi/Hindi 30 w.p.m.)

INDEX

	Syllabus Title	Duration	Page
1.	Typing Syllabus - Theory & Practical	Total 45 days	
1.1	ENGLISH TYPEWRITING Keyboard awareness & Practice	15 days	7-13
	• Lesson 1 asdf ;lkj + word drill	1 day	8
	• Lesson 2 asdfgf ;lkjhj + word drill	2 days	8
	• Lesson 3 awerqfa ;oiupj; + word drill	2 days	9
	• Lesson 4 gftfrf hjyjuj + word drill	2 days	10
	• Lesson 5 azxcvf lkmnbj + word drill	2 days	10
	• Lesson 6 a to z, z to a + word drill	2 days	11
	• Lesson 7 use of shift key	1 day	12
	• Lesson 8 Sentences, Paragraph	1 day	12
	• Paragraph Typing Practice	2 days	13
1.1	MARATHI TYPEWRITING कीबोर्ड माहिती व सराव	15 दिवस	14-23
	• पाठ क्र. 1 े कहि श्यसा + शब्द सराव	1 दिवस	15
	• पाठ क्र. 2 े कहीह श्यसारा + शब्द सराव	1 दिवस	16
	• पाठ क्र. 3 े कहीह .श्यसारा + शब्द सराव	1 दिवस	16
	• पाठ क्र. 4 कळबदल अक्षरे (शिफ्ट की) कक् क थि हळह हभ्ह + शब्द सराव श्ष यय सस्स ज्ञा श्रा	1 दिवस	17
	• पाठ क्र. 5 हजह हलह पाा ना + शब्द सराव	1 दिवस	18
	• पाठ क्र. 6 े े े े कमक तिह हजह हलह श्ख श यचय सवस पाा ना + शब्द सराव	1 दिवस	18

	<ul style="list-style-type: none"> पाठ क्र. 10 शिफ्ट की कक बि हटह हठह श्छ यइ य सदस डा छा + शब्द प्रॅक्टीस 	1 दिन	31
	<ul style="list-style-type: none"> पाठ क्र. 11 काही चिन्हे व व्यंजने ः त्र ऋ घ ह ङ + शब्द प्रॅक्टीस वर्णमाला एवं व्यंजन 	1 दिन	32
	<ul style="list-style-type: none"> परिच्छेद टंकलेखन प्रॅक्टीस 	4 दिन	32
1.2	MS Word / Word Processing: Letter /Curriculum Vitae /Statement Page and Type Setting & Practice	15 days	33
1.3	MS Excel / Spreadsheet : Statement / Mark Sheet Setting And Practice	12 days	34
1.4	E-Mail / Fax Etiquettes	3 days	35

2	Computer Syllabus Theory & Practicle	Total 99 days	
2.1	Operating Systems Basic Operating Skills	12 Days	36-39
2.2	MS-Office 2010	-	
	2.2.1 MS- Word	35 Days	40-43
	2.2.2 MS-Excel	35 Days	44-48
	2.2.3 MS-PowerPoint	6 Days	49-50
2.3	Internet Browsing	6 Days	51-52
2.4	Email & Web Browsing	5 Days	52-54

Duration Of Course Total 144 Days			55
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1.1



LESSON NO. 1

LEFT HAND				RIGHT HAND			
LITTLE FINGER	RING FINGER	MIDDLE FINGER	INDEX FINGER	INDEX FINGER	MIDDLE FINGER	RING FINGER	LITTLE FINGER
a	s	d	f	j	k	l	;
HOME KEYS				HOME KEYS			
SPACE BAR							

Type following till you learn it perfectly :

asdf (space) ;lkj (space) asdf (space) ;lkj (space)

Sample :

asdf ;lkj asdf ;lkj asdf ;lkj asdf ;lkj
 asdf ;lkj asdf ;lkj asdf ;lkj asdf ;lkj
 asdf ;lkj asdf ;lkj asdf ;lkj asdf ;lkj
 asdf ;lkj asdf ;lkj asdf ;lkj asdf ;lkj

EXERCISE 1 : Type following line one page :

a add adds; ask lad all falls a add adds; ask lad all falls a add adds;

LESSON NO.2

LEFT HAND				RIGHT HAND			
LITTLE FINGER	RING FINGER	MIDDLE FINGER	INDEX FINGER	INDEX FINGER	MIDDLE FINGER	RING FINGER	LITTLE FINGER
a	s	d	f g	h j	k	l	;

Type following till you learn it perfectly :

asdfgf (space) ;lkjhj (space)

Sample :

asdfgf ;lkjhj asdfgf ;lkjhj asdfgf ;lkjhj asdfgf ;lkjhj
 asdfgf ;lkjhj asdfgf ;lkjhj asdfgf ;lkjhj asdfgf ;lkjhj

EXERCISE 2 : Type following each word four lines :

as	sad	ash	sag	dash	hall	glass	lakhs
dad	ass	had	lag	lash	fall	flask	shall
fad	all	has	jag	sash	half	slash	salad
lad	ask	gas	add	gall	glad	flash	halls

Sample : -

[illegible]

LESSON NO. 3

LEFT HAND					RIGHT HAND				
LITTLE FINGER	RING FINGER	MIDDLE FINGER	INDEX FINGER		INDEX FINGER	MIDDLE FINGER	RING FINGER	LITTLE FINGER	
q	w	e	r		u	i	o	p	
a			f		j			;	

Type following till you learn it perfectly :

awerqfa (space) ;oiupj; (space)

Sample :-

awerqfa ;oiupj; awerqfa ;oiupj; awerqfa ;oiupj;
awerqfa ;oiupj; awerqfa ;oiupj; awerqfa ;oiupj;

EXERCISE 3 : Type following each word four lines :

sails	jails	lakes	kodak	fields	sales	dirks
fails	flukes	liked	doles	forks	awful	apples
folds	skull	jokes	larks	asked	squeal	dark

Sample :

[illegible]

LESSON NO.4

LEFT HAND				RIGHT HAND			
LITTLE FINGER	RING FINGER	MIDDLE FINGER	INDEX FINGER	INDEX FINGER	MIDDLE FINGER	RING FINGER	LITTLE FINGER
			r	t	y	u	
			f	g	h	j	

Type following till you learn it perfectly :

gftfrf (space) hjyuj (space)

Sample :-

gftfrf hjyuj gftfrf hjyuj gftfrf hjyuj gftfrf hjyuj
gftfrf hjyuj gftfrf hjyuj gftfrf hjyuj gftfrf hjyuj

EXERCISE 4 : Type following each word four lines :

easy	kettles	shawls	joyful	spiritual	aweful	please
typewriter	faithful	artful	struggles	qualify	loyalty	hardship
therefore	styles	should	faults	disloyal	alert	tough

Sample :-

easy easy easy easy easy easy easy easy easy easy easy easy easy easy easy easy easy easy easy
easy easy easy easy easy easy easy easy easy easy easy easy easy easy easy easy easy easy easy
easy easy easy easy easy easy easy easy easy easy easy easy easy easy easy easy easy easy easy
easy easy easy easy easy easy easy easy easy easy easy easy easy easy easy easy easy easy easy

LESSON NO.5

LEFT HAND				RIGHT HAND			
LITTLE FINGER	RING FINGER	MIDDLE FINGER	INDEX FINGER	INDEX FINGER	MIDDLE FINGER	RING FINGER	LITTLE FINGER
a			f	j	k	l	
	z	x	c	v	b	n	m

Type following till you learn it perfectly :

azxcvf (space) lkmbj (space)

Sample :-

azxcvf lkmbj azxcvf lkmbj azxcvf lkmbj azxcvf lkmbj
azxcvf lkmbj azxcvf lkmbj azxcvf lkmbj azxcvf lkmbj

EXERCISE 5 : Type following each word four lines :

local	formal	smacks	surveyor	daybook	marginal	logical
sixfold	lacks	sandal	smaller	dazzled	jingled	pebble
weight	eighty	railway	hurried	usually	tourist	shocking

Sample :-

local local local local local local local local local local local local local local local local
 local local local local local local local local local local local local local local local local
 local local local local local local local local local local local local local local local local
 local local local local local local local local local local local local local local local local

LESSON NO.6

LEFT HAND					RIGHT HAND				
LITTLE FINGER	RING FINGER	MIDDLE FINGER	INDEX FINGER		INDEX FINGER	MIDDLE FINGER	RING FINGER	LITTLE FINGER	
q	w	e	r	t	y	u	i	o	p
a	s	d	f	g		j	k	l	
	z	x	c	v	b	n	m	,	.

Type following till you learn it perfectly :

abcdefghijklmnopqrstuvwxy., (space) ,.zyxwvutsrqponmlkjihgfedcba

Sample :

abcdefghijklmnopqrstuvwxy., ,.zyxwvutsrqponmlkjihgfedcba

abcdefghijklmnopqrstuvwxy., ,.zyxwvutsrqponmlkjihgfedcba

EXERCISE 6 : Type following each word four lines :

possible	received	exhibition	fascination	interested	government	inspection
trusting	frequent	mortgage	examined	aluminum	refrigeration	separate
Jointly	accounts	regularity	anticipation	commence	satisfactory	amounts
balance	discount	negligence	crystallize	Exploring	Commerce	exhibition

Sample :-

possible possible possible possible possible possible possible possible possible possible
 possible possible possible possible possible possible possible possible possible possible
 possible possible possible possible possible possible possible possible possible possible
 possible possible possible possible possible possible possible possible possible possible

LESSON NO.7

Use left shift key for right hand letters and right shift key for left hand letters. Use little fingers for both the shift keys.

EXERCISE 7 : Type following each word four lines:

April	Germany	London	Queen	Vermouth
Bombay	Holland	Monday	Russia	Wednesday
Canada	India	November	September	Xerox
December	Japan	October	Tuesday	Yellow
Ellora	Karachi	Paris	Uganda	Zambia
France	Ganapati	Wonderful	Honesty	Mission

EXERCISE 8 : Type the following daily 5 times :

abcdefghijklmnopqrstuvwxyz., ,zyxwvutsrqponmlkjihgfedcba

The quick brown fox jumps over the lazy little dog.

LESSON NO.8

Leave five spaces before beginning of the paragraph, two spaces after full stop, question mark, exclamation mark and one space after all other punctuation marks.

EXERCISE 9 : Type following paragraph five times.

He came to me yesterday. He brought pens, pencil, books and bags with him. Did you see him? I did not. What a wonderful boy he was! He was nice.

EXERCISE 10 : Type following sentences at least 5 times each.

- 1) Laws die, books never.
- 2) Every man has his price.
- 3) The belly teaches all arts.
- 4) Honesty is the best policy.
- 5) Diet cures more than a doctor.
- 6) Rome was not built in a day.
- 7) Common sense is not a common.
- 8) Empty vessels make much noise.
- 9) A beggar can never be bankrupt.
- 10) Every cloud has a silver lining.
- 11) Without labour nothing prospers.
- 12) Cracked bell can never sound well.
- 13) The best sauce for food is always hunger.
- 14) Typewriter was invented by Henry Mill.

- 15) The mob has many heads, but no brains.
- 16) In quarreling the truth is always lost.
- 17) In every art, it is good to have a master.
- 18) One enemy can do more harm than ten friends.
- 19) A soldier is the man who is trained to die.
- 20) There is no room for two kings in one country.
- 21) Every man is the architect of his own fortune.
- 22) Hope for the best, but prepare for the worst.
- 23) The paleness of the pilot is a sign of a storm.
- 24) A blind man will not thank you for a looking-glass.
- 25) When all men say you are an ass, it is time to bray.
- 26) Where an opinion is general, it is usually correct.
- 27) Assassination has never changed the history of the world.
- 28) The eyes believe themselves; the ears believe other people.
- 29) The best physicians are Dr. Diet, Dr. Quiet and Dr. Merry man.
- 30) Early to bed, early to rise, makes a man healthy, wealthy and wise.

Type following paragraphs five times each.

- 1) Of all things desired by man, peace of mind is the most important. Neither health nor wealth, neither fame nor can status be a substitute for this most valuable asset. Many people are apparently in good health and yet they feel miserable because their mind is not at peace. A man may accumulate an immense fortune but, in the absence of mental peace, he cannot enjoy it. Yoga exercises solve this problem.
- 2) Living is an art. It is the most complicated art as it based upon the scientific application of the good principles of living, which govern the behavior and attitude of a human being. Life has various aims for various people, to some it is just empty dream, to others it is zeal, pleasure and duty. Some live for enjoyment. They would like to eat, drink and be merry without caring for tomorrow, which they think may not come. For them, life is not a serious journey through years. In actual life, however, there are very few people who can themselves enjoy so easily, for life is not just a bed of roses, it has many thorns around.

3) Practice various speed passages.



1.1

मराठी कीबोर्ड माहिती व सराव



पाठ क्रमांक 1

डावा हात					उजवा हात			
करंगळी		अनामिका	मध्यमा	तर्जनी	तर्जनी	मध्यमा	अनामिका	करंगळी
	मात्रा	क	ि	ह	काना	स	य	श्
					।			
स्वगृह कळा					स्वगृह कळा			
					अंतर दंड			

પુઢીલ અક્ષર સમુહ ઢોન પાને ટંકલેખીત કરા.

` कहि (अंतर) श्यसा (अंतर) ` कहि (अंतर) श्यसा (अंतर) ` कहि (अंतर) श्यसा
 ` कहि (अंतर) श्यसा (अंतर) ` कहि (अंतर) श्यसा (अंतर) ` कहि (अंतर) श्यसा
 ` कहि (अंतर) श्यसा (अंतर) ` कहि (अंतर) श्यसा (अंतर) ` कहि (अंतर) श्यसा
 ` कहि (अंतर) श्यसा (अंतर) ` कहि (अंतर) श्यसा (अंतर) ` कहि (अंतर) श्यसा

अभ्यास क्रमांक 1

પુઢીલ પ્રત્યેક શબ્દ 4 ઓઢી ઢંકલિખિત કરા.

[illegible]

के	कि	सा	हाय	हेका
हे	हि	या	साय	याक
से	का	हाक	काक	सायास
ये	हा	हास	केस	कयास

अभ्यास क्रमांक 2

खालील प्रत्येक वाक्य 5 वेळा टंकलिखित करा.

काका या काका या काका या काका या काका या

(1) काका या (2) काका हसा (3) सहा कोस होय (4) काका हे कसे काय

पाठ क्रमांक 2

डावा हात					उजवा हात				
करंगळी	अनामिका	मध्यमा	तर्जनी		तर्जनी	मध्यमा	अनामिका	करंगळी	
मात्रा	क	पहिली	ह	ी	र	काना	स	य	श्
ॆ		वेलांटी			।				
		ि							

पुढील अक्षर समुह दोन पाने टंकलेखित करा.

ॆ कहिह

श्यसारा

सूचना जेव्हा ी व र ही अक्षरे टंकलेखित करावयाची असतील तेव्हा होम कीज (स्वगृह कळा) वरील बाकीची 3 बोटे उचलून का.

अभ्यास क्रमांक 3

पुढील प्रत्येक शब्द 4 ओळी टंकलिखित करा.

ही	काही	कहर	हाराकारी
की	केसरी	करारी	सोयरिक
री	सी	सारेकाही	हरिहर

खालील प्रत्येक वाक्य 5 वेळा टंकलिखित करा.

1) सही करा (2) हे काय रे (3) काहीही करा (4) ही काय रीस (5) हा हासरा सोयरा होय

पाठ क्रमांक 3

डावा हात					उजवा हात				
करंगळी	अनामिका	मध्यमा	तर्जनी		तर्जनी	मध्यमा	अनामिका	करंगळी	
अनुस्वार	मात्रा	क	पहिली	ह	ी	र	काना	स	य
•	ॆ		वेलांटी			।			श
			ि						पुर्ण
									विराम
									.

पुढील अक्षर समुह दोन पाने टंकलिखित करा.

ॆ कहिह

.श्यसारा

अभ्यास क्रमांक 4

पुढील प्रत्येक शब्द 4 ओळी टंकलिखित करा.

हंस	हंसा	रंक	कंस	कंकर	किंकर	संहार	संसार
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खालील प्रत्येक वाक्य 5 वेळा टंकलिखित करा.

(1) हा संसार करा. (2) ही हंसा होय. (3) हरी सारे काही कर. (4) ही सोय करा.

पाठ क्रमांक 4

डावा हात				उजवा हात			
करंगळी	अनामिका	मध्यमा	तर्जनी	तर्जनी	मध्यमा	अनामिका	करंगळी
दोन मात्रा	क	ख	ळ	श्र	ज्ञ	र	ट
१							
२	क	ख	ह	र	स	य	श

सूचना : डाव्या बाजूची अक्षरे टंकलिखित करण्याकरिता उजवी कळबदल दावा व उजव्या बाजूची अक्षरे टंकलिखित करण्याकरिता डावी कळबदल दावा. दोन्ही कळबदलांकरिता करंगळ्याचा उपयोग करा.

पुढील अक्षर समुह दोन पाने टंकलिखित करा.

क क थि हळह हभह शष् यय सस्स ाज्ञा ाश्रा

अभ्यास क्रमांक 5

पुढील प्रत्येक शब्द 4 ओळी टंकलिखित करा.

यश	शेष	कथा	भार	सद्य
काळ	शय्या	यज्ञ	रहस्य	सभ्य
श्री	शक्य	काथ्या	भाष्य	हास्य

अभ्यास क्रमांक 6

खालील प्रत्येक वाक्य 5 वेळा टंकलिखित करा.

(1) हे श्रेयस्कर कसे होय. (2) हे सहाय्य करा. (3) हे कथा रहस्य होय. (4) यास भाकरी द्या.

पाठ क्रमांक 5

डावा हात				उजवा हात			
करंगळी	अनामिका	मध्यमा	तर्जनी	तर्जनी	मध्यमा	अनामिका	करंगळी
			ज ल	न प			
			ह	।			

पुढील अक्षर समुह दोन पाने टंकलिखित करा.

हजह हलह ापा ाना हजह हलह ापा ाना हजह हलह ापा ाना हजह हलह ापा ाना

अभ्यास क्रमांक 8

पुढील प्रत्येक शब्द 4 ओळी टंकलिखित करा.

लय	पसारा	जहाल	लपालपी	नळ	यथाकाल
लैला	जलाशय	जपान	नापास	लस	जलपान

अभ्यास क्रमांक 9

पुढील प्रत्येक वाक्य 5 वेळा टंकलिखित करा.

1) हे जहाज पहा. (2) हा नकार नाही. (3) जपान हे काही लहान नाही. (4) हे जलपान सकळा लाभो. (5) हा लहान जलाशय पहा.

पाठ क्रमांक 6

डावा हात					उजवा हात				
करंगळी	अनामिका	मध्यमा	तर्जनी	तर्जनी	मध्यमा	अनामिका	करंगळी		
-ह्रस्व उकार ॲ	दीर्घ उकार ॳ	म	त	ज ल	न प	व	च	ख	स्वल्प विराम ,
ॱ	क	ि	ह	।	स	य	श्		

पुढील अक्षर समुह दोन पाने टंकलिखित करा.

ॲ ॳ ॱ ॲ कमक ति हि हजह हलह श,श् श्खश् यचय सवस ापा ाना

अभ्यास क्रमांक 10

पुढील प्रत्येक शब्द 4 ओळी टंकलिखित करा.

माता	पिता	विचका	सोयीस्कर	पखवाज
चुका	खूप	चकवा	ख्याती	समाचार
वास	वजन	चरखा	सीताराम	खुशामत

अभ्यास क्रमांक 11

खालील प्रत्येक वाक्य 5 वेळा टंकलिखित करा.

- 1) तो लुना चालवितो. (2) मी सिनेमा पाहतो. (3) ती काम करते.
(4) जून मासी पावसाळा येतो. (5) ते खूप पुस्तके वाचतात.

पाठ क्रमांक 7

डावा हात					उजवा हात				
करंगळी		अनामिका	मध्यमा	तर्जनी	तर्जनी	मध्यमा	अनामिका	करंगळी	
फकार	अर्धचंद्र	ॠ	ॡ	उ ल	ॠ	ॡ	उ	क्ष	द्व
ॢ									
ॣ		क	ि	ह	ॣ	स	ट	श	

पुढील अक्षर समुह दोन पाने टंकलिखित करा.

ॢ ॣ । ॥ कम्क त्ति हज्ज हल्ल श्द्वश् श्क्षश् यच्चय सवस ाण ान्।

सूचना :- ॢ (फकार चिन्हाचा उपयोग) :-

- (1) प पासून फ तयार करण्याकरिता. (2) र आणि उ ला ऊकार देण्याकरिता. उदा. रुपये ऊस इत्यादी

अभ्यास क्रमांक 12

पुढील प्रत्येक शब्द 4 ओळी टंकलिखित करा.

कक्ष	फाशी	हत्ती	मल्याळी	मॅच
यक्ष	रुप	मज्जाव	मान्य	कॅच
द्वार	रुपये	कज्जा	वन्य	वॉच
विद्वान	शाल्व	मल्ल	कप्पा	फॅशन
फार	मत्त	हल्ली	वास्तव्य	रॅक

अभ्यास क्रमांक 13

खालील प्रत्येक वाक्य 5 वेळा टंकलिखित करा.

(1) तो वारंवार फसविला जातो. (2) त्याची नेहमी फजीती होते. (3) त्याने व्हॅन नेली. (4) तू हिम्मत कर. (5) त्याने ज्योत लावली. (6) पल्लवी तू काम कर. (7) मला हे मान्य नाही. (8) हा कप्पा खोलून पहा. (9) त्याची वाहवा होते. (10) कमलने खच्ची होता कामा नये. (11) तो मस्त हत्ती नेहमी कक्षेत येतो.

पाठ क्रमांक 8

डावा हात				उजवा हात			
करंगळी	अनामिका	मध्यमा	तर्जनी	तर्जनी	मध्यमा	अनामिका	करंगळी
			ह	ा			
			अ इ	द उ			

पुढील अक्षर समूह दोन पाने टंकलिखित करा.

हअह हइह ाडा ादा हअह हइह ाडा ादा हअह हइह ाडा ादा हअह हइह ाडा ादा

अभ्यास क्रमांक 14

पुढील प्रत्येक शब्द 4 ओळी टंकलिखित करा.

आहे	इतर	ऊस	दयाळू
आज्ञा	इजा	उचल	दैन्य
आश्रय	इतका	उदर	दाखला
अहवाल	इवलासा	उपवास	दैनंदिनी

अभ्यास क्रमांक 15

खालील प्रत्येक वाक्य 5 वेळा टंकलिखित करा.

(1) परमेश्वराने त्याला आश्रय दिला. (2) आपली आज्ञा पाळावी. (3) हे आपल आद्य काम आहे. (4) हनुमान हा विचारी, ज्ञानी, रामभक्त आहे. (5) दौलतने दालनातील दवाखाना दाखविला. (6) अजयने आपोआपच आज्ञेची अवहेलना केली.

पाठ क्रमांक 9

डावा हात					उजवा हात				
करंगळी	अनामिका	मध्यमा	तर्जनी		तर्जनी	मध्यमा	अनामिका	करंगळी	
क	क	फि	ह		इ	स	य	श	
रकार	ग	ब	अ	इ	द	उ	ए	ण	ध

पुढील अक्षर समुह दोन पाने टंकलिखित करा.

ककक बि बि हअह हइह श्छ श यणय सएस ाडा ादा

अभ्यास क्रमांक 16

पुढील प्रत्येक शब्द 4 ओळी टंकलिखित करा.

समग्र	गंमत	बचाव	ऐकणे	बाण	कोण	धरण	बदक
प्रकाश	गाण	बगळा	ऐवज	वाण	बभ्रा	साध्य	धकाधकी
विक्री	गंभीर	बातचित	ऐरावत	खाण	बाध्य	गंगाजळी	एकाधिकार

अभ्यास क्रमांक 17

पुढील प्रत्येक वाक्य 5 वेळा टंकलिखित करा.

1) गणूने गजाननास गीत गाऊन गौरविले. (2) बबनने बायकोला बोलविले. (3) धावून धावून किती धावणार. (4) काकूने काकाचे कामाचे कागद कालच कापले. (5) गारा, वारा, पाऊसधारा, यांचा होऊन एकच मारा, मुले करिती पोबारा.

पाठ क्रमांक 10

डावा हात					उजवा हात				
करंगळी	अनामिका	मध्यमा	तर्जनी		तर्जनी	मध्यमा	अनामिका	करंगळी	
क	क	फि	ह		इ	स	य	श	
रफार	ग	ब	ट	ठ	छ	ड	ढ	झ	झ

पुढील अक्षर समुह दोन पाने टंकलिखित करा.

ककक बि बि हटह हठह श्छ श यइय सढस ाडा ाछा

पुढील प्रत्येक शब्द 4 ओळी टंकलिखित करा.

विराम चिन्हे :- (1) परिच्छेदातील पहिले वाक्य सुरु करण्यापूर्वी **पाच वेळा** अंतरिका सोडाव्यात. (2) वाक्यातील शेवटचे अक्षर टंकलिखित होताच विराम चिन्हे द्यावीत. (3) पूर्णविराम, प्रश्नचिन्ह आणि उद्गारवाचक चिन्ह यांच्या नंतर **दोन वेळा** अंतरिका सोडून द्याव्यात. (4) इतर सर्व विराम चिन्हांनंतर **एक वेळा** अंतरिका सोडावी.

पुढील परिच्छेद 5 वेळा टंकलिखित करा.

जग्गीने बग्गी बळकावली, तेव्हा सर्व लोक मार्गावर धावले. ते रस्त्याच्या मध्यभागी ठप्प उभे राहिले. बंदुकीचा काड काड आणि ठो ठो आवाज झाला. धुराचा जणू ढगच निर्माण झाला.

देवनागरी शब्दांची काही चिन्हे आणि व्यंजने संगणकाच्या की-बोर्डवर विविध ठिकाणी आहेत. जसे :

रोज टंकलिखित करा :

वर्णमाला : अ आ इ ई उ ऊ ऋ

ए ऐ ओ औ अं अः

व्यंजन : क ख ग घ ङ

च छ ज झ

ਟ ਠ ਡ ਢ ਣ

त थ द ध न

प फ ब भ म

य र ल व

श ष स ह ळ

क्षत्रज्ञश्च

खालील वाक्य दररोज दोन वेळा टंकलिखित करा.

राष्ट्रीय ऋण फेडण्यासाठी स्वातंत्र्योत्तर युगात श्रम व तंत्रज्ञानाद्वारे आर्थिक व औद्योगिक प्रगती झपाट्याने होऊन एक विलक्षण स्पर्धा समृद्धीस आली तरीही बेकारी सारखी गंभीर समस्या निश्चितच बऱ्याच जणांना छळते असे ठामपणे म्हणता येईल व यावर तोडगा काढण्यासाठी याबद्दल मनःपूर्वक विचार केला पाहिजे.



प्रतिज्ञा

भारत माझा देश आहे. सारे भारतीय माझे बांधव आहेत.

माझ्या देशावर माझे प्रेम आहे. माझ्या देशातल्या समृद्ध आणि विविधतेने नटलेल्या परंपरांचा मला अभिमान आहे. त्या परंपरांचा पाईक होण्याची पात्रता माझ्या अंगी यावी म्हणून मी सदैव प्रयत्न करीन.

मी माझ्या पालकांचा, गुरुजांचा आणि वडीलधाऱ्या माणसांचा मान ठेवीन आणि प्रत्येकाशी सौजन्याने वागेन.

माझा देश आणि माझे देशबांधव यांच्याशी निष्ठा राखण्याची मी प्रतिज्ञा करत आहे. त्यांचे कल्याण आणि त्यांची समृद्धी यातच माझे सौख्य सामावले आहे.

- विविध परिच्छेदांचा सराव करावा.



1.1



पाठ क्रमांक 1

बाया हात					दाया हात			
करांगुली		अनामिका	मध्यमा	तर्जनी	तर्जनी	मध्यमा	अनामिका	करांगुली
	मात्रा ॰	क	ि	ह	आकार ।	स	य	श्
स्वगृह कळा					स्वगृह कळा			
अंतर दंड								

निम्नलिखित अक्षर समुह दो पन्ने टंकलेखित किजिए।

॰ कहि (अंतर) श्यसा (अंतर) ॰ कहि (अंतर) श्यसा (अंतर) ॰ कहि (अंतर) श्यसा
॰ कहि (अंतर) श्यसा (अंतर) ॰ कहि (अंतर) श्यसा (अंतर) ॰ कहि (अंतर) श्यसा

अभ्यास क्रमांक 1

निम्नलिखित हर एक शब्द 4 पंक्तियाँ टंकलिखित किजिए।

1	2	3	4	5
के	कि	का	याक	काया
हे	हि	हा	हक	सोया
से	सि	सा	यह	काका
ये	यि	या	कह	साया

अभ्यास क्रमांक 2

निम्नलिखित हर एक वाक्य पाँच बार टंकलिखित किजिए।

(1) काकासे कहो (2) काकाको हकसे कहो (3) यह कहो की काका सोया

पाठ क्रमांक 2

बाया हात					दाया हात			
करांगुली	अनामिका	मध्यमा	तर्जनी		तर्जनी	मध्यमा	अनामिका	करांगुली
मात्रा ॰	क	-हस्व इकार ि	ह दीर्घ इकार ी		र आकार ।	स	य	श्

निम्नलिखित अक्षर समुह दो पन्ने टंकलेखित किजिए।

कहींह शयसारा कहींह शयसारा कहींह शयसारा कहींह शयसारा कहींह शयसारा
कहींह शयसारा कहींह शयसारा कहींह शयसारा कहींह शयसारा कहींह शयसारा

अभ्यास क्रमांक 3

निम्नलिखित हर एक शब्द 4 पंक्तियाँ टंकलिखित किजिए।

हिरा	हार	यार	सरकार
रास	हरा	साहस	हरिहर
रस	राह	केसरी	सरासर
सर	केसर	हाकाकिरी	सरोकार

निम्नलिखित हर एक वाक्य पाँच बार टंकलिखित किजिए।

1) साहस करो (2) हिरा रोयी (3) यह सरकार हारी (4) हरहरका यार हारकर रोया

पाठ क्रमांक 3

बाया हात					दाया हात				
करांगुली	अनामिका	मध्यमा	तर्जनी		तर्जनी	मध्यमा	अनामिका	करांगुली	
अनुस्वार	मात्रा	क	पहिली	ह	र	आकार	स	य	श
•	•		वेलांटी	ी		।			पुर्ण
			ि						विराम
									.

निम्नलिखित अक्षर समुह दो पन्ने टंकलेखित किजिए।

कहींह शयसारा

अभ्यास क्रमांक 4

निम्नलिखित हर एक शब्द 4 पंक्तियाँ टंकलिखित किजिए।

हंस	कंस	संहार	संकर
हंसा	रंक	संसार	हिंसा
हरी	हाय	किंकर	कंकर

निम्नलिखित हर एक वाक्य पाँच बार टंकलिखित किजिए।

- (1) यह संसार करो. (2) यही हंसा हारी. (3) हाय हाय करके हंस रोया.
(4) हिंसासे संसारका संहार रोको.

पाठ क्रमांक 4

बाया हात				दाया हात			
करांगुली	अनामिका	मध्यमा	तर्जनी	तर्जनी	मध्यमा	अनामिका	करांगुली
दो मात्रा ५	क	ख	ळ ५	श्र	ज्ञ	र	ट
५	क	ि	ह	र	ा	स	य
							श

निम्नलिखित अक्षर समुह दो पन्ने टंकलेखीत किजिए।

५ ५ ५ कक क थि हळह हभह शष यय सस्स ज्ञा श्रा

अभ्यास क्रमांक 5

निम्नलिखित हर एक शब्द 4 पंक्तियाँ टंकलिखित किजिए।

यश	श्री	शेष	कथा
हास्य	सभ्य	भार	यज्ञ
शय्या	रहस्य	शक्य	काथ्या
कथासार	श्रेयस्कर	भास्कर	भाष्य

अभ्यास क्रमांक 6

निम्नलिखित हर एक वाक्य पाँच बार टंकलिखित किजिए।

- (1) यह श्रेयस्कर है। (2) यज्ञही भास्करका रहस्य है। (3) शाक्य सभ्यता शेष है। (4) शेष कथा हास्यकारक है।
(5) श्री शंकर रहस्य थे।

पाठ क्रमांक 5

बाया हात				दाया हात			
करांगुली	अनामिका	मध्यमा	तर्जनी	तर्जनी	मध्यमा	अनामिका	करांगुली
			ज ल	न प			
			ह	।			

निम्नलिखित अक्षर समुह दो पन्ने टंकलेखीत किजिए।

हजह हलह ापा ाना हजह हलह ापा ाना हजह हलह ापा ाना हजह हलह ापा ाना

अभ्यास क्रमांक 8

निम्नलिखित हर एक शब्द 4 पंक्तियाँ टंकलिखित किजिए।

लय	नल	जहाल	यथाकाल
लैला	लस	जपान	जलपान
जहरिला	नापास	जहाज	जलाशय

अभ्यास क्रमांक 9

निम्नलिखित हर एक वाक्य पाँच बार टंकलिखित किजिए।

1) लैलाने यथाकाल जलाशयशे जलपान किया। (2) श्री शंकरने हलाहल जहर पी लिया। (3) यह पानी नलकाही है। (4) जपानी जहाज पानीपर जा रहा है।

पाठ क्रमांक 6

बाया हात				दाया हात			
करांगुली	अनामिका	मध्यमा	तर्जनी	तर्जनी	मध्यमा	अनामिका	करांगुली
-ह्रस्व उकार ॐ	दीर्घ उकार ॐ	म	त	न	प	व	च
			ज ल			ख	स्वल्प विराम ,
ॐ	क	ि	ह	।	स	य	श

निम्नलिखित अक्षर समुह दो पन्ने टंकलेखीत किजिए।

ॐ ॐ ॐ कमक ति हजह हलह श,श श्छश यचय सवस ापा ाना

अभ्यास क्रमांक 10

निम्नलिखित हर एक शब्द 4 पंक्तियों टंकलिखित किजिए।

माता	पिता	निवास	पूजना	पखवाज
पास	खपत	कुमारी	लहू	समाचार
चुना	चाय	चरका	ख्याल	खुशामत
पक्का	हजरत	वजन	ख्याती	सखाराम
जुहू	मक्का	वासना	तरवार	मनोकामना

अभ्यास क्रमांक 11

निम्नलिखित हर एक वाक्य पाँच बार टंकलिखित किजिए।

1) वह लुना चला रहा है। (2) हमें सिनेमामे काम करना है। (3) यह जानवर जहरिला है। (4) सखाराम की खुशामत करना चाहिए। (5) मुसलमान हजके लिये मक्का जाते हैं। (6) हमे यह समाचार मिला। (7) खाना, पिना, सोना यही जीवनका हेतु नहीं है।

पाठ क्रमांक 7

बाया हात					दाया हात				
करांगुली		अनामिका	मध्यमा	तर्जनी	तर्जनी	मध्यमा	अनामिका	करांगुली	
फकार	अर्धचंद्र	ः	त	उ ल	न र	ठ	च	क्ष	द्व
३	५								
,		क	ि	ह	।	स	ट	श्	

निम्नलिखित अक्षर समुह दो पन्ने टंकलेखित किजिए।

ॐ ॐ ॐ कम्क ति ति हज्ज हल्ह श्दश् श्क्षश् यच्च सवस ाण ान।

सूचना :- ३ (फकार चिन्हका प्रयोग) :-

(1) प से फ तयार करनेके लिए। (2) र और उ को ऊकार देने के लिए। उदा. रुपये प्याऊ

अभ्यास क्रमांक 12

निम्नलिखित हर एक शब्द 4 पंक्तियों टंकलिखित किजिए।

कक्ष	फाशी	हत्ती	कव्वाली	मँच
यक्ष	रुप	हल्का	मान्य	कैच
द्वार	रुपये	सत्ता	वन्य	वॉच
विद्वान	शाल्व	मल्ल	कप्पा	फैशन
फासला	प्यार	हल्ली	वास्तव्य	सच्चा

अभ्यास क्रमांक 13

निम्नलिखित हर एक वाक्य पाँच बार टंकलिखित किजिए।

- (1) तू हिम्मत कर। (2) ज्योतसे ज्योत जलाते चलो। (3) जिना यहाँ, मरना यहाँ, इसके सिवा जाना कहीं। (4) हमें यह मान्य नहीं। (5) द्वारपर यक्ष हंस रहा था। (6) जज्ज ने फाँसीकी सजा सोची थी। (7) रुपयोके चक्केपर सारा जहाँ हमारा। (8) यह मकान वास्तव्य लायक है। (9) उसने चुप्पी ली। (10) तुम जहाँ जहाँ हम वहाँ वहाँ। (11) मैं प्यारका रही हूँ।

पाठ क्रमांक 8

बाया हात				दाया हात			
करांगुली	अनामिका	मध्यमा	तर्जनी	तर्जनी	मध्यमा	अनामिका	करांगुली
			ह	।			
			अ इ	उ			

निम्नलिखित अक्षर समुह दो पन्ने टंकलेखित किजिए।

हअह हइह ।।। ।।। हअह हइह ।।। ।।। हअह हइह ।।। ।।। हअह हइह ।।। ।।।

अभ्यास क्रमांक 14

निम्नलिखित हर एक शब्द 4 पंक्तियों टंकलिखित किजिए।

अहवाल	इलतजा	इकायी	उल्फत
आज्ञा	इन्कार	दैन्य	उमर
आश्रय	इजाजत	दखल	उकसाना
इकायी	दिनकर	उपवास	दैनदिनी

अभ्यास क्रमांक 15

निम्नलिखित हर एक वाक्य पाँच बार टंकलिखित किजिए।

- (1) दयालू अल्हाहने अनारकलीकी इल्तजा उसी वक्त सुन ली। (2) इस अदालतमे उसकी अर्जीपर विचार हुआ। (3) दाऊतकी अम्मा इस उममे भी स्वस्थ है। (4) आईनेका काम है की उचित चेहरा दिखाना। (5) आपको इसका उत्तम दाम देना चाहिए।

पाठ क्रमांक 9

बाया हात					दाया हात				
करांगुली	अनामिका	मध्यमा	तर्जनी		तर्जनी	मध्यमा	अनामिका	करांगुली	
क	क	ि	ह		।	स	य	श्	
रकार	ग	ब	अ	इ	द	उ	ए	ण	ध

निम्नलिखित अक्षर समुह दो पन्ने टंकलेखित किजिए।

कगक ङि ङि हअह हइह श्ध श यण्य सएस ङा ङा

अभ्यास क्रमांक 16

निम्नलिखित हर एक शब्द 4 पंक्तियों टंकलिखित किजिए।

समग्र	गजराज	बचाव	एलोरा	बाण	ध्यान
प्रकाश	गाना	बगुआ	ऐसा	रावण	धारणा
विक्री	गहिना	बदक	एक	कोकण	बाधा
अभ्रक	गंगाजल	बातचित	ऐरावत	रणनीति	धनुष्य

अभ्यास क्रमांक 17

निम्नलिखित हर एक वाक्य पाँच बार टंकलिखित किजिए।

- 1) गणूने गीत गा गाकर गजाननका गौरव किया। (2) बया और बच्चे इस बातपर सोचने लगे। (3) बचपनकी बातोंको दिलसे न जुदा करना। (4) जब याद मेरी आये तो मिलनेकी दुवा करना। (5) अब यह बात उसके दिलमे उतर गयी। (6) रामने धनुष्यपर बाण रखा।

पाठ क्रमांक 10

बाया हात						दाया हात					
करांगुली		अनामिका	मध्यमा	तर्जनी		तर्जनी	मध्यमा	अनामिका	करांगुली		
	ॐ	क	फि	ह		ॐ	स	य	श		
	रफार	ग	ब	ट	ठ	छ	ड	ढ	इ	ए	

निम्नलिखित अक्षर समुह दो पन्ने टंकलेखित किजिए।

ॐ ॐ क ग क बि ह ट ह ह ठ ह श ष य इ य स ढ स डा ढा छा

अभ्यास क्रमांक 18

निम्नलिखित हर एक शब्द 4 पंक्तियों टंकलिखित किजिए।

गर्व	बगी	शब्द	पाठ	डॉक्टर	समझना
मार्ग	जगी	जाट	तब्बल	कडवा	साँझ
कर्ण	अग्नी	घंटा	ठग	डींग	रिझाना
चर्चा	प्रारब्ध	ढोर	छाता	ढंकना	झमेला
आग्नेय	टमाटर	ढेर	कुठ	छापखाना	घरोदा
अब्ज	कट्यार	छोर	घडियाल	लडकी	घुंघट
उपलब्ध	ठुमरी	छोडना	डमरू	ढील	घटीया

पाठ क्रमांक 11

देवनागरी शब्दोंके कुछ चिन्ह तथा व्यंजन संगणकीय की-बोर्डपर अलग अलग जगह पर है।

जैसे : ॐ ॐ : त्र ऋ ऌ ह इ इनसे बने शब्दों का अध्याय करें।

दृष्टी	सृष्टी	ऑस्ट्रेलिया	शतशः	द्योतक	क्षत्रिय	ऋणनिर्देश
पुत्र	आद्य	महाराष्ट्र	पुनःश्च	वाङ्मय	हृदय	सत्र

रोज टंकित करे :

वर्णमाला : अ आ इ ई उ ऊ ऋ

व्यंजन : क ख ग घ ङ

ट ठ ड ढ ण

प फ ब भ म

श ष स ह ळ

ए ऐ ओ औ अं अः

च छ ज झ

त थ द ध न

य र ल व

क्ष त्र ज्ञ श्र



निम्नलिखित परिच्छेद हररोज दो बार टंकलिखित किजिए ।

राष्ट्रीय ऋणकी कठोर जिम्मेदारी पूरी करनेके स्वातंत्र्योत्तर युगमे श्रम ओर तंत्रज्ञानके द्वारा आर्थिक ओर औद्योगिक प्रगती झटपट होकर एक विलक्षण रुपमे संघर्षमय स्पर्धा समृद्ध हो गयी । फिर भी बेकारी जैसी कट्टर समस्या निश्चयही बहूत लोगोंको छल रही है, ऐसा हम दृढतासे कह सकते है। और इसपर उपाय ढुंढनेके लिए इस बारेमे मनःपुर्वक विचार किया जाना चाहिये।



प्रतिज्ञा

भारत मेरा देश है । सभी भारतीय मेरे भाई-बहन हैं ।

मुझे अपने देश से प्यार है । अपने देश की समृद्ध तथा विविधताओं से विभूषित परंपराओं पर मुझे गर्व है ।

मैं हमेशा प्रयत्न करूँगा / करूँगी कि उन परंपराओं का सफल अनुयायी बनने की क्षमता मुझे प्राप्त हो ।

मैं अपने माता-पिता, गुरुजनों और बड़ों का सम्मान करूँगा / करूँगी और हर एक से सौजन्यपूर्ण व्यवहार करूँगा / करूँगी ।

मैं प्रतिज्ञा करता / करती हूँ कि मैं अपने देश और अपने देशवासियों के प्रति निष्ठा रखूँगा / रखूँगी । उनकी भलाई और समृद्धि में ही मेरा सुख निहित है ।



- **विविध परिच्छेदोंका अध्याय करें ।**

MS Word / Word Processing

Letter /Curriculum Vitae
/Statement Page and
Type Setting & Practice

Refer various question papers from previous GCC Exams as well as prepare new assignments and give maximum possible practice to the students.

1.3

MS Excel / Spreadsheet

Statement / Mark Sheet
Setting And Practice

Refer various question papers from previous GCC Exams as well as prepare new assignments and give maximum possible practice to the students.

1.4



Computer Syllabus

INTRODUCTION

A computer is an electronic device which can perform Arithmetic and logical operations at very high speed. It can also store large amount of data almost permanently. The stored data can be recalled or retrieved as and when required.

HISTORY OF COMPUTERS

The history of computers is a story of stage by stage development of this wonderful tool offered by electronics to the human being.

GENERATIONS OF COMPUTER

The digital computer has evolved through a series of technical innovations and developments. These are so clearly defined that the computers are said to belong to different generations.

Presently the computers are supposed to be in fourth fifth and sixth generations. The typical characteristics and salient features of each generation of computers are summarized in following paragraphs.

FIRST GENERATION COMPUTERS : (1949 to 1959)

Second Generation computers : (1959-1965)

Third Generation Computers : (1965-1970)

Fourth Generation Computers : (1970 - 1985)

Fifth Generation Computers : (1985 -1990)

Sixth Generation Computers :(1990 onwards)

TYPES OF COMPUTERS :

Analog Computers:

Digital Computers :

Mainframe Computers :

Mini Computers :

Micro Computers :

COMPUTER

Computer is an electronic device which takes some input, stores it, process it to give some meaningful result.

Input means different characters, figures, numbers, information, charts, etc. which we are providing to computer. Along with this we have to provide instruction to the computer because computer do not have own brain. It is just like an obedient servant. So it will work according to our instruction.

PROCESS

In process, computer performs arithmetic and logical operations.

OUTPUT

Output means result which we will get after the processing

USES OF COMPUTER

1. Entertainment 2. Calculations 3. Account 4. Advertisements
5. Industry 6. Banking 7. Printing technology 8. Hospitals
9. Hotels 10. Movies 11. Agriculture 12. Research, etc.

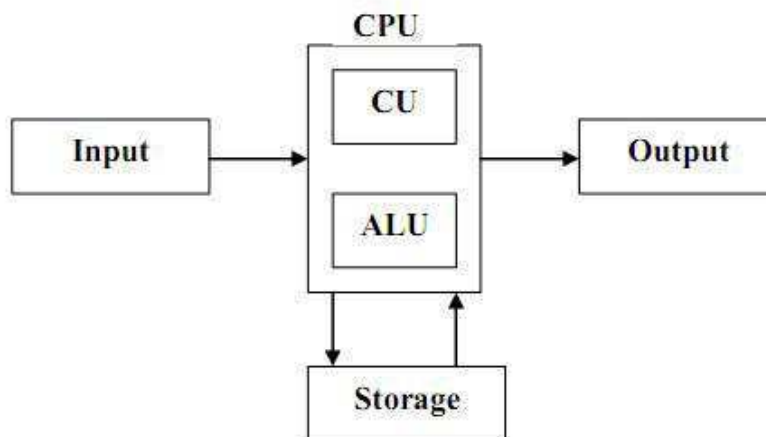
CHARACTERISTICS OF COMPUTERS

- a) SPEED
- b) STORAGE
- c) ACCURACY
- d) AUTOMATION
- e) VERSATILITY
- f) DILIGENCE

COMPUTER SYSTEM ORGANISATION

Mainly Computer System consists of 3 units :-

- 1) Input Unit
- 2) Central Processing Unit (CPU)
- 3) Output Unit



a) Memory

This is used to store the data. The given input data is first stored in the memory is BIT (Binary DigiT). When we collect 8 BITS, it is called as 1 Byte.

8 Bits = 1 Byte

1024 Bytes = 1 Kilo Byte (KB)

1024 KB = 1 Mega Byte (MB)

1024 MB = 1 Giga Byte (GB)

1024 GB = 1 Tera Byte (TB)

Arithmetic Logic Unit (ALU)

It is used for arithmetic and logical calculations.

This has 3 subunits.

1) Register (2) Adder (3) Accumulator

1) **Register** :- It is used for temporary storage of the data.

2) **Adder** :- It is used for exact calculations.

3) **Accumulator** :- It is used to store the intermediate results.

Control Unit

Output Unit

SECONDARY STORAGE DEVICES

- **Hard Disk**
- **Optical Disk**
- **Flash Memory Cards**
- **Pen Drive**

HARDWARE AND SOFTWARE

Hardware

Software

Application Software

System Software

Types of System Software

Programming Language

TYPES OF MEMORY

RAM (RANDOM ACCESS MEMORY)

ROM (READ ONLY MEMORY)

INPUT DEVICES

KEYBOARD :

MOUSE :

SCANNER

OUTPUT DEVICES

VDU (VISUAL DISPLAY UNIT)

PRINTERS

INK-JET PRINTERS

LASER PRINTERS

PLOTTER

Compiler

Interpreter :

COMPUTER VIRUSES

What is a virus?

Origin of Virus

Full form of Virus

V- vital I- information R- resources U- under S- seize

Two types of viruses:

A) File Viruses B) Boot File Viruses

The virus can infect a system by two ways:

- ▶ By infecting a boot sector (Boot Sector Virus)
- ▶ By infecting other files.(File Virus)

Activities of Virus

How do viruses spread?

Symptoms of virus

Prevention of virus

Detecting viruses

A number of programs are available which can detect the virus and clean the infected disk or program. Such programs are called **Antiviruses**.

One such set of programs that is widely used is **Viruscan**

Viruscan: Removing the virus

Watchdog programs

E.g. Nashmen.com

The Antivirus

OPERATING SYSTEM

1) **Working with Shortcut Keys**

2) Type of Files

3) File Extension

4) File Compression

5) Arranging Desktop

Start Menu

Desktop Background

Gadgets

Taskbar

Personalizing your desktop Screen Saver

Changing Date and Time

6) Working with PDF Files

7) File Transfer

8) Installing Unicode fonts

MICROSOFT WORD

MS-Word is the application software which is normally used for word processing. It is under the software MS Office. It is useful for words processing the word editing, formatting and other processing works and printing. There are certain commands that have great control over word processing which are the basic features of word.

INTRODUCTION

Microsoft word for windows is a powerful and features-rich word processor it can practically do everything that one desires from a word processor. It can user friendly interface, simple techniques and more often intuitive ways of getting your work done.

THE TITLE BAR

This is the top most bar on the screen.

THE MENU BAR

Menu Bar provides access to the Word commands.

THE TOOLBARS

Toolbars are strips of buttons, each button representing a command. They provide quick access to commonly used commands.

THE RULERS

A ruler allows you to adjust your text the way you want.

THE SCROLL BARS

There are two Scroll bars - a vertical scroll bar on the right edge of the screen and horizontal one at the bottom of the screen.

THE PAGE VIEW BUTTONS

On the left end of the horizontal bar you will see a set of four buttons. These are page view buttons.

Normal View

- ❖ Online Layout View
- ❖ Page Layout View
- ❖ Outline View

RETRIEVING SAVED DOCUMENT

Description

Whenever you create or modify your document, you should save it before closing your document so that you can continue your work in the next session. Thus, the documents that are saved previously can be opened again

EXITING WORD

CREATING A NEW DOCUMENT

SAVING THE DOCUMENT

CLOSING THE DOCUMENT FILE

INSERTING AND DELETING TEXT

INSERTING TEXT IN A SENTENCE

INSERTING TEXT AS A PARAGRAPH

UNDO & REDO

SELECTING TEXT

SELECTING TEXT USING MOUSE

SELECTING FROM THE KEYBOARD

COPY, MOVE & DELETE TEXT

COPYING THE TEXT BY COPY AND PASTE METHOD.

DELETING THE TEXT

SPELLING & GRAMMAR CHECKING

REPLACING THE TEXT

FORMATTING THE TEXT

- ◆ Character formatting
- ◆ Paragraph formatting
- ◆ Page formatting

CHARACTER FORMATTING

CHANGING FONT & FONT SIZE : Font is the term used to refer to the shape and style of characters in text.

APPLYING BOLD, ITALIC AND UNDERLINE ATTRIBUTE

[Using keyboard : Ctrl+B for Bold, Ctrl+I for Italic, Ctrl+U for underline]

CHANGING THE CASE OF CHARACTERS

Case of text refers to the style of characters used, either lower case or Upper case .

Case options are as :-

Case Option	Sample Text
Sentence case	My country is great.
lower case	my country is great
UPPER CASE	MY COUNTRY IS GREAT
Title Case	My Country Is Great
Toggle cASE	mY cOUNTRY iS gREAT

PARAGRAPH FORMATTING

JUSTIFICATION OF TEXT

KEYBOARD SHORTCUTS

Ctrl+L - Left Align
Ctrl+R - Right Align
Ctrl+E - Center Align
Ctrl+J - Justify

CHANGING LINE SPACING

KEYBOARD SHORTCUTS

Ctrl + 1 - Single Line Spacing.
Ctrl + 2 - Double Line Spacing.
Ctrl + 5 - One and a half line spacing.

SETTING INDENTS (Left, Right, First Line) VIA RULER LINE

ALIGNING TEXT VERTICALLY

NUMBERING OR BULLETING EXISTING TEXT

CHANGING THE TYPE AND SHAPE OF BULLETS

BORDERING AND SHADING TEXT

SETTING PAGE BORDERS

SHADING TEXT

USING TABS

YOU CAN SET TAB STOPS VIA RULER LINE OR VIA FORMAT → TABS
OPTION

PAGE FORMATTING

Page formatting applies to whole pages and include, setting up of page, page size, page orientation, headers and footers, page numbering etc.

SETTING PAGE MARGINS

CHANGING FONT (USING FONT DIALOG BOX)

(TO CHANGE FONT, FONT SIZE OR STYLE , FIRST OF ALL SELECT THE TEXT TO WHICH THE EFFECTS ARE TO BE APPLIED)

CHANGING FONT SIZE

To choose the font size click the down arrow key at the font size option and then select the desired size or type it directly.

CHANGING THE FONT STYLE

There are different font styles as Regular, Bold, Italics etc. Choose it from the font style option.

USING DROP CAP

It is generally used for the first character of the beginning paragraph of your document to give it an attractive look.

HEADERS AND FOOTERS

PAGE NUMBERING

SETTING PAGE SIZE AND ORIENTATION

INSERTING PAGE BREAKS

COLUMNS FORMAT

DIFFERENT VIEWS

There are different views with which you may view your document in different ways.

- | | |
|----------------------------|-------------------------------|
| 1. NORMAL VIEW | 3. OUTLINE LAYOUT VIEW |
| 2. PAGE LAYOUT VIEW | 4. PRINT PREVIEW |

WORKING WITH TABLES

MS Word Table : Tables are made up of rows and columns or data entered intercells. The cells contains are individual paragraphs and can be formatted. A table consists of rows (no limit) and columns (maximum limit 63) of cells that you can fill with text and graphics. Cell expands vertically to fit the amount of text you type. You can create a new table and fill new empty cells or you can convert exiting the paragraph to a table. After you create a table you can modify it in a vertical ways by deleting/editing rows and columns, adjusting columns width, sorting text and adding borders and shading. You can also set up simple data basics, perform calculations.

Tables are used to arrange information in rows and columns, that is in the table format.

INSERTING A TABLE

ADDING OR INSERTING ROWS

INSERTING OR ADDING COLUMNS

DELETING COLUMNS AND ROWS
MERGING OF THE CELLS
FORMATTING TABLE WITH AUTOFORMAT
ROTATING TEXT IN TABLES

AUTOCORRECT FEATURE

To make changes in the Auto Correct dictionary....

AUTOTEXT FEATURE

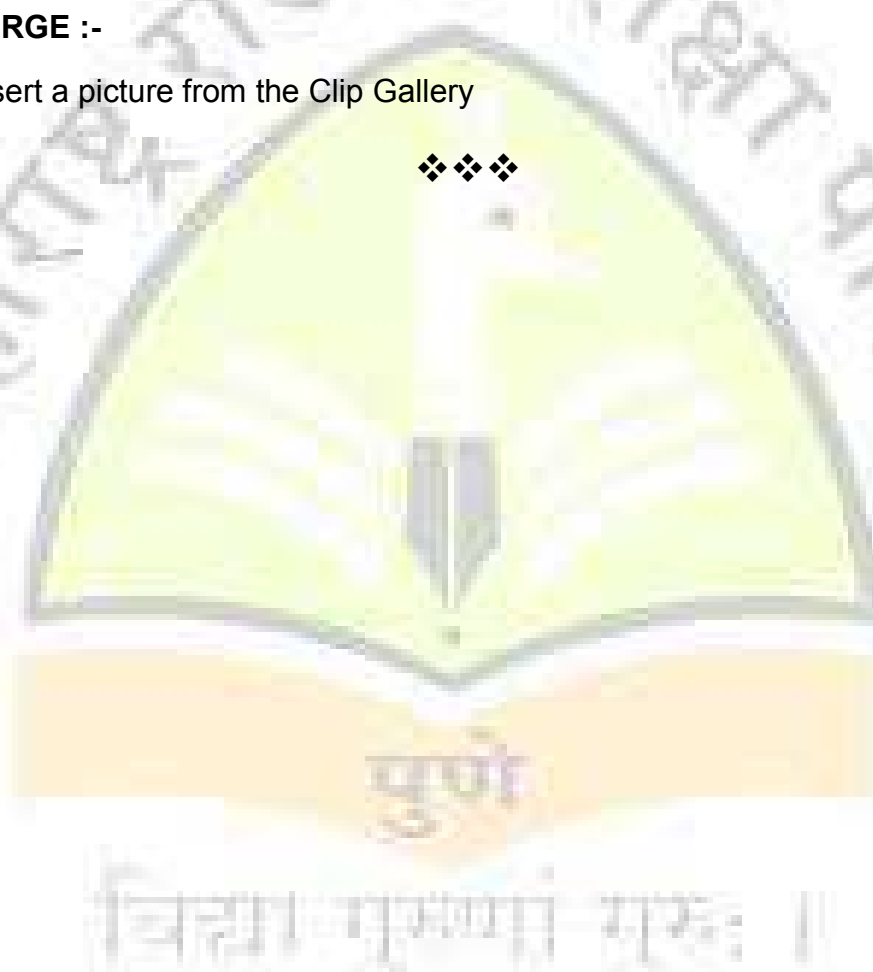
To see all the Auto Text entries follow steps....

To delete an Auto Text entries, Follow steps...

INSERTING SPECIAL SYMBOLS AND CHARACTERS.

MAIL MERGE :-

Insert a picture from the Clip Gallery



MICROSOFT EXCEL

INTRODUCTION TO MS EXCEL

Excel is a general purpose Application program software under MS OFFICE program group. Excel is collection of Workbooks. Each workbook is the collection of several spread-sheets or work-sheets.

WORKSHEET (Excel sheet) Workbooks

ROWS, COLUMNS & CELLS

UNDERSTANDING EXCEL SCREEN ELEMENT

TITLE BAR : This is the top most bar of the screen.

THE MENU BAR : Menu bar provides access to excel commands.

THE TOOL BAR : Toolbars are strips of buttons, each button representing a command. They provide quick access to commonly used commands.

Standard Toolbar : The standard toolbar contains most common tasks as Opening, Saving, and printing worksheet. Cut or copy and paste information etc.

Formatting Toolbar : Formatting is the process of making you worksheet look visually attractive. The formatting toolbar contains the tools required to format the worksheet. These include fonts, font style, size, alignment, borders, colors etc.

The formula Bar : Formula bar is the most important toolbar. It will be the focus of your attention while working in Excel. It consists of an area known as Name box and Edit formula area and a contents box.

The Status Bar : The Status bar indicates the status of the current worksheet.

The Worksheet Area : The area between the toolbars at the top and the status bar at the bottom is the worksheet area or the primary working area. It is a grid of rows and columns. The work area is bounded at top by column headings,

The Scroll Bars : Owing to the large size of the worksheet, at any given time you will be seeing only a small part of it –

The Vertical Scroll bar : The vertical scroll bar graphically represents the total length of current worksheet.

The Horizontal scroll bar : The Horizontal scrollbar covers the right-half of the bar at the bottom of the screen.

The Sheet Tabs : Excel uses the concept of Book to store your information. A book is nothing but a signal file folder for holding a number of individual worksheets. In Excel, a file is termed as a "Workbook", and has an extension of XLS. To the left of the horizontal scroll bar, you will find a set of tabs marked as sheet1, sheet2, sheet3. These are the individual worksheets, which make up the Workbook.

The Scroll Buttons : By default, you can see only three sheet tabs. To display other sheet tabs, if any, you can make use of "Tab Scrolling" buttons provided to the left of the sheet tabs. You can move among the sheet tabs using the Scrolling buttons.

MOVING AROUND THE WORKSHEET USING KEYBOARD

DATA TYPES SUPPORTED BY EXCEL

There are three types of data.

- 1. Label :** Labels, also known as text or character types is descriptive type of information, not meant for performing calculations.
- 2. Values :** Numbers represent data, which can be used for performing calculations. This include data and time type of information, since excel converts these into numbers and stores them as such. We can perform date arithmetic on dates like adding and subtracting.
- 3. Formulas and functions :** The formulae or functions which perform calculations using data in other cells.

SAVING THE WORKSHEET

Choose File->Save or Ctrl + s

EDIT KEY : If you have changes to do in the entered data then

- Position your pointer on the cell
- Press F2 function key
- Make changes

Hence F2 is called as the Edit key.

CLEARING CELL ENTRY :

Select the cell to be cleared, and choose EDIT -> CLEAR from menu options.

ENTERING FORMULAS:

One of the important reasons for the popularity of spreadsheets is their ability to perform automatic calculations using formula and functions. This activity introduces you to the use of formula and in the next activity you will get to know about functions.

Mathematical operators that can be used in formulas:

- | | | | | |
|---|---|-----------|---|---|
| + | : | Plus | - | Adds two numbers or concatenating two strings |
| - | : | Minus | - | Performs subtraction |
| * | : | Asterisk- | - | Performs multiplication |
| / | : | divide | - | Performs division |
| ^ | : | Caret | - | Performs Exponentiation |

SELECTING ROWS, COLUMNS, AND RANGE BY SHORTCUTS

Excel provides many convenient ways by which you can select rows, columns, ranges etc using mouse.

INSERTING ROW

INSERTING COLUMN

DELETING ROW

DELETING COLUMN

CHANGING COLUMN WIDTH

SETTING COLUMN WIDTH WITH AUTOFIT

CHANGING ROW HEIGHT

ALIGNING DATA IN CELL

Merge & Center:

RENAMING A WORKSHEET

INSERTING A NEW WORKSHEET

DELETING A WORKSHEET

MOVING AND COPYING THE WORKSHEET IN SAME WORKBOOK

FREEZING TITLES

ENTERING DATA WITH AUTOFILL

Filling a Text series.

Filling Numbers

CREATING A CUSTOM SERIES

FORMULAS AND FUNCTIONS

*** USING FORMULAS :**

1. Sum: Place pointer cell address G4 and give formula as
= C4 + D4 + E4 + F4
or =SUM(C4:f24) (Use of function)

2. Percentage: Place pointer at cell address H4 and give formula as
=G4/4 & then apply the percent format

Note : Using Fill Handle, Calculate the total & Percentage for further Records

USING FUNCTIONS

1.	SUM(Range)
2.	AVERAGE(Range)
3.	MAX(Range)
4.	MIN(Range)
5.	IF(Condition, True, False)
6.	TODAY()

7.	NOW ()
8.	FACT(No)
9.	INT(No)
10.	MOD (No. 1, No. 2)
11.	SQRT (No.)
12.	ROUND

DATABASE MANAGEMENT IN EXCEL

Database is the third component of Microsoft excel, the other two being Worksheet and Graphics.

A database is simply a collection of data or information stored in the computer in a well-defined manner. Some of the routine management operations which are frequently required are:

- ◆ Adding of new data to the database
- ◆ Editing and updating of the existing data
- ◆ Sorting of data in any desired manner
- ◆ Searching and retrieving of any type of stored data
- ◆ Printing of selected data

SORTING THE DATABASE

Sorting on Single Field :

Ascending Order

Sorting on Multiple Fields

CREATING REPORTS :

1. Area Chart:

In this type we can represent the data components which are changing.

2. Column Chart :

A column chart is graphical collection of vertical column representing the corresponding data item or data list.

3. Bar Chart :

Bar chart consists of horizontal bars representing the corresponding data item or list. Each bar in chart is a single data series.

4. Line Chart :

The data item or list are represented in line format in increasing or decreasing line vibrated lines.

5. Pie Chart :

Pie chart is the collection of arc parts representing percentwise correspondance data item. The pie chart is devided into slices depending upon the data item list.

6. Radar Chart:

Radar chart shows data changes in relation to centre point to each other.

Radar chart can be used to plot several interrelated series and easily make visual comparison

7. Scatter Chart :

In scatter chart the data items are expressed int X and Y axis with relationship of consolidate pair of number. This chart type is especially used for numerical data analysis.

8. 3D Chart :

In to this type of chart we can view the created chart into all possible directions into three dimensions.

Creating Chart

We can create chart using chart wizard for creation of charts,

- (1) Select the data range (cell range) you want to include into chart .then.
- (2) Click on Insert Menu
- (3) Then click on Chart
- (4) It will have option
(a) On this sheet (b) As new sheet

(a) **On this sheet**

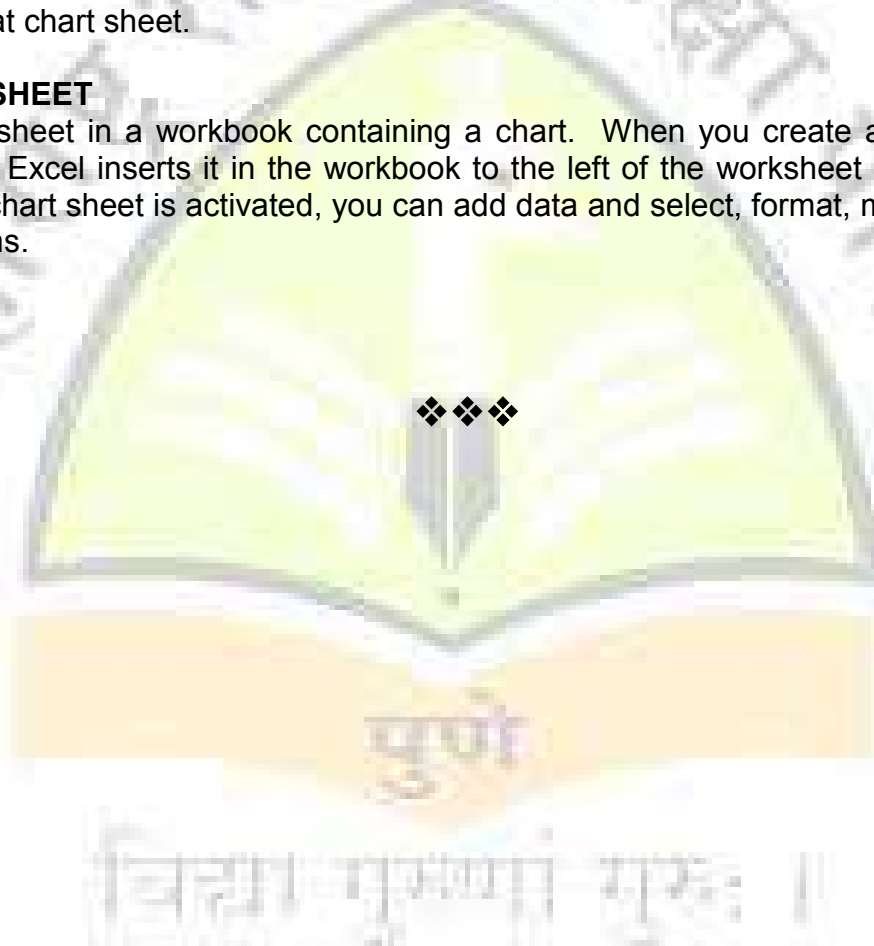
Through this option the chart is embedded on the current worksheet.

(b) **As new sheet**

It inserts new worksheet with sheet name 'chart' and will embed the chart into that chart sheet.

CHART SHEET

A sheet in a workbook containing a chart. When you create a chart sheet, Microsoft Excel inserts it in the workbook to the left of the worksheet it's based on. When a chart sheet is activated, you can add data and select, format, move and size most items.



MICROSOFT POWERPOINT

1.**MS-POWERPOINT** :- MS-PowerPoint is a package which used most useful to learn basic about multimedia. It will help you to create good looking overhead transparency, 31 mm. slide and even video slide show, PowerPoint helps you to quickly create up to and sort slide based professional looking presentable material.

2.**SLIDEDS** :- You can create and edit individual pages, called slides sliders are individual format of your presentation slides can have title, text graphs, drawing, object, shapes, clipart and visual. In slide you can create just small animation film.

3.**PLACE HOLDER** :- The boxes with doted outline that appear when you create a new line. Thus boxes serve as place holder for objects such as title, text, charts, tables and clip arts. Just click to add text in any place holders or double click to add the specified object.

4.**SPEAKER NOTES** :- The speaker notes are visually printed are paper and can be either the exact text of speech or some important points thereof You can create and print speakers note but in slide show you can not see speakers note.

5.**HANDOUTS** :- Handouts are paper copy of all or some of the slides to be given to the audience.

SLIDE SHOW

The Screen Elements Of Powerpoint

The Main Window

A window is rectangular area on the screen, in which you view a program or a slides. Power Point uses two windows, one nestled within the other. The outer window is called the application window. It contains The Powerpoint program's main option and commands, Scroll bar, Status bar, Ruler Etc.

Title bar :- Contains the application title.

Menu bar :- Displays the menu items.

Standard Toolbar :- The buttons represent frequently used commands and utilities.

Formatting toolbar :- The buttons represent frequently used formatting commands.

Drawing Toolbar :- Use the buttons to draw on slides.

Status bar :- Give information about the currently selected commands.

View slide button :- Give information about the current slide and view.

New slide button :- Used to create a new presentation slide.

Layout button :- Used to change the slides layout.

Template button :- Used to apply the design template to your presentation.

To create a new presentation

Open An Existing Presentation

To Start a slide show

THE POWER POINT VIEWS :

In Powerpoint you can view your presentation in five different ways. These are

- Slide view outline view slide sorter view
- notes page view slide show

SLIDE VIEW :

Slide view allows you to view and work on one slide at a time. By default, this is the view you will be using for creating your slides and to modify existing slides. In this view, you can type text, copy and move text, draw insert clip arts and pictures, arrange and change the look of your text and objects.

OUTLINE VIEW :

Outline view allows you to look at your presentation in formatted or plain text in an outline manner. Pictures and other objects included in that slide will not be displayed. However, when you click on any of the outlined item, the actual slide will be displayed in a miniature form. Outline view is very good for organising various slides of your presentation in an orderly manner. In this view, you can conveniently make changes in the text, re-arrange slides by copying or moving, delete or hide unwanted slides etc.

SLIDE SORTER VIEW :

Slide Sorter View is an overall view of your presentation in which all your slides are displayed in miniature form complete with graphics and text. In this view, you can add transitions, set timing for slide transitions, hide slides, change the order of slides, copy, move or delete slides etc. You can have an overall view and feel of your presentation.

NOTES PAGE VIEW :

Notes Page View allows you to create speaker's notes. It displays a box below the slide so that you can make some notes, if required, to refer to during presentation. This is for your use only and will not be displayed to the audience.

SLIDE SHOW VIEW :

Slide Show View is the final electronic presentation on your computer as seen by the audience. This is the culmination of your ideas and efforts. Each slide fills the screen. The effects of transition, animation and timing will be displayed. You can move from slide to slide by clicking mouse button or PgUp and PgDn keys. If you press the right mouse key, a short menu pops up with many options including Next and Previous slide option. You can stop the presentation any time by pressing the Esc key.



INTERNET

1.1 WHAT IS INTERNET?

1.2 HISTORY OF THE INTERNET

1.3 APPLICATION OF THE INTERNET

In the simplest terms ,you can do following three things on the Internet.

- Communicate with other people
- Get information
- Connect to other computer system

INTERNET TERMINOLOGY

MODEM :-

The term modem stands, for MODulator/DEModulator, A modem is a device that enables a computer to transmit data over telephone lines.

NETWORK :-

A network is a group of computers connected to each other, for communicating and sharing resources. Networks can either be local (Local Area Networks or LAN), which are generally contained within one building, or quite dispersed (Wide Area Networks or WAN) which are computers that are connected to each other over long distances. Internet can be thought of as a huge Wide Area Network.

CLIENT :-

Client is a computer or program that requests a service of another computer or program. For instance, if you wish to download a file from a remote computer using FTP, then your computer will be the client and the remote computer will be the server.

SERVER :-

Server is a computer or program that provides services to other computer or programs.

BAUD RATE :-

The baud rate is the speed at which your modem can transfer data. Baud rate is also called BPS (bits per second). The higher the baud rate, the faster your modem works. For example, a 300 bps modem is very slow as compared to a 28800 bps (i.e. 28.8 kbps) modem.

TCP/IP

A protocol can be defined as a standard set of rules to be followed by all computers wanting to talk to each other. This enables different types of computers running different types of operating system to communicate efficiently. The de-facto standard today is TCP/IP. The acronym TCP/IP stands for Transmission Control Protocol/Internet Protocol. It is a standard set of protocols that lets networked computers communicate with each other, regardless of the type of computer connected to the network.

HYPER TEXT TRANSFER PROTOCOL (HTTP) :-

This is a protocol that World Wide Web clients and servers use to communicate. Popularly known as HTTP.

UNIVERSAL RESOURCE LOCATOR (URL) :-

A standardized way of representing different documents, media, and network services on the World Wide Web.

The process of copying file(s) from a remote computer on the Internet to your computer is known as **file downloading**.

Gopher is yet another approach used to search for the desired information on the Internet, developed by the University of Minnesota. They named this approach as Gopher after their soccer team. Gopher systems are more structured and easy to use.

WWW or the **World Wide Web**, is a system of Internet servers that support specially formatted documents called web pages.

A **browser** is a software used to locate and display Web pages. Three of the most popular browsers are Netscape Navigator, Microsoft Internet Explorer, and Spyglass Mosaic.

The **WWW** system is based on the client/server architecture.

The **Hyper Text Markup Language** (HTML) is the standard language used for creating the web pages.

The protocol that Web clients and servers use to communicate with each other is called the **Hyper Text Transfer Protocol** (popularly known as HTTP).

Standards for HTML and HTTP are defined by an organization known as the World Wide Web Consortium (W3C)

E-mail

The most common use of the Internet is electronic mail (popularly known as e-mail). Using e-mail a user can send text, pictures, sounds, programs, or even movies to any other person on the Internet anywhere in the world. Each user on the Internet has a unique address. This address helps you in identifying a user to whom you wish to send e-mail. An example of a typical e-mail address could be accurate@rediffmail.com.

Internet News : Another method of communicating on the Internet is called the Internet news.

Characteristics of an E-MAIL

- ❖ E-mail, short for electronic mail, is the transmission of messages over communications networks. The messages can be notes entered from the key-board or electronic files stored on disk.
- ❖ To send and receive e-mails, you need a software, known as a mail client. Some of the popular mail clients are Netscape Mail, Outlook Express, Eudora, Pine, etc.
- ❖ A mail client lets you compose, edit, send and retrieve e-mail messages.

- ❖ An e-mail address is of the format username@domainname.
- ❖ An Internet mail message has two parts-a header and a body.
- ❖ The header of the message includes the address of the recipient, address of the sender, subject, and other information about the message such as date and time when it was sent, type of the mailing client the sender is using, etc.
- ❖ The body of the message contains the actual message.
- ❖ Internet e-mail is based on standards, known as mail protocols.
- ❖ The mail protocols help in standardizing the process of exchanging mail with other users.
- ❖ Popular mail protocols are SMTP, POP, IMAP, MIME, etc.
- ❖ SMTP(Simple Mail Transfer Protocol) is a standard mail protocol that specifies the format in which a mail message had to be composed. SMTP is generally used to send messages from a mail client to a mail server.
- ❖ POP (Post Office Protocol) is a mail protocol that defines how mail clients can retrieve messages from a mail server
- ❖ IMAP(Internet Message Access Protocol) is another mail protocol used for retrieving e-mail messages.
- ❖ MIME(Multipurpose Internet Mail Extensions) is a mail protocol that can be used to exchange e-mail messages that contain non-textual data such as graphics, sound, and other multimedia files.
- ❖ Having an account with an ISP is not mandatory to have access to e-mails. There are a lot of e-mail providers on the Web that offer free e-mail services.

Writing an e-mail

When writing a new e-mail message a window will appear. Several fields are required when sending an e-mail, the **From** or **Reply-To** is a field that is automatically filled out and is where the e-mail returns if a reply is made. Next, the **CC (Carbon Copy) or BCC (Blank Carbon Copy)** field allows you to send a copy of the message to another e-mail address, but is not a required field. The **To** field is where you type the e-mail address of who you are sending the e-mail address. Next, the subject line although not required should be a few words describing what the e-mail is about. Finally, the message body will be the location you type your message and is what will contain your signature.

INTERNET : BROWSING

The process of Searching the information over the Internet is called Browsing. The words “Browsing” or “Surfing” are used to describe the process of looking at documents, websites and web pages on the Internet. A software program that allows a person to explore the Internet in an easy to use way. Navigating the Internet through a series of links the user can browse the Internet. Examples of popular browsers are Chrome, Internet Explorer, Firefox, Safari, and Opera. The picture is of the Google Chrome browser and a good example of a browser.

Following is the list of some Government Websites :

Maharashtra Government www.maharashtra.gov.in(for General Information)
Maharashtra Tourism Development Corporation (M Sadan) www.maharashtratourism.gov.in (for tourism Information)
Maharashtra Industrial Development Corporation www.midcindia.org (for industrial policies, IT parks, projects, guidelines & forms)
City & Industrial Development Corporation of Maharashtra Ltd. www.cidcoindia.com (for Navi Mumbai, Schemes, tenders etc.)
Maharashtra State Road Development Corporation www.msrdc.org (for Profile, Project, Tenders)
Maharashtra Knowledge Corporation www.mkcl.org (for admission information for Engineering Colleges)
State Industrial and Investment Corpn.of Maharashtra Ltd. www.sicomindia.com (for Information about industrial policy, incentives etc.)
Maharashtra State Seeds Corporation Ltd. www.mahabeej.com (for Information on seeds.)
Maharashtra Energy Development Agency www.mahaurja.com (for Information on Energy Development Devices, incentives.)
Forest Development Corporation of Maharashtra Ltd. www.fdcn.nic.in (for Information on Forests.)
Solapur www.solapur.com
DTE.of Medical Education www.dmer.org
DTE.of Technical Education www.dte.org.in
YashwantraoChavan Academy of Dev. Admn.(Yashada) www.yashada.org (Apex Training Institute of GOM for training Sr.officers)
Public Works Department www.mahapwd.com
Forest Department www.mahaforest.gov.in
Cooperative Department www.mahacot.com
Tribal Development Corporation www.mahatdc.com
Yashwantrao Maharashtra Open University www.ycmou.com
Mumbai High Court www.hcbom.mah.nic.in
Maharashtra Administrative Tribunal www.matmumbai.nic.in

★ **Duration of the Course:**

Duration of proposed course is 6 months, which includes 2 months theory and 4 months practical. Have to complete theory and practical of proposed course within 6 months. Timing of course will be 1 hour theory and 1 hour practical. In a week there will be 2 days for theory & 4 days for practical. In each month 4 Sundays and average 2 holidays since we will get 100 hours hours duration to complete syllabus.



First Term	:-	July To December
Admission Period	:-	15 June to 15 July
Exam	:-	December
Second Term	:-	January To June
Admission Period	:-	15 December to 15 January
Exam	:-	June