EPEA516
ANALYTICAL SKILLS II

Dr. Harish Mittu

Associate Professor

Learning Outcomes

After this lecture, you will be able to

- develop understanding about the basics of mixed letter and mixed number coding,

- analyze different types of mixed letter and mixed number coding,

- solve various problems relating to mixed letter and mixed number coding.

Mixed Letter Coding

- Complete Messages

- Coded Language

- Code – Particular Word

- Common Code

- Analyse – Message(s)

Mixed Letter Coding

- If 'nso ptr kli chn' stands for 'Sharma gets marriage gift', 'ptr lnm wop chn' stands for 'wife gives marriage gift', 'tti wop nhi' stands for 'he gives nothing', what would mean 'gives'?

nso	ptr	kli	chn
Sharma	gets	marriage	gift

ptr	lnm	wop	chn
wife	gives	marriage	gift
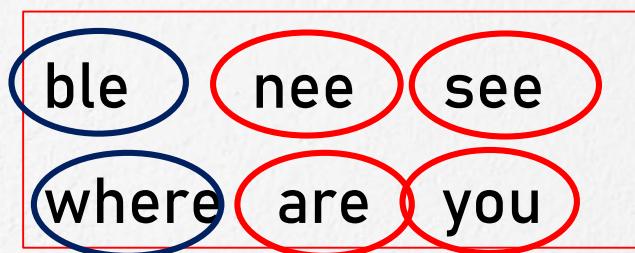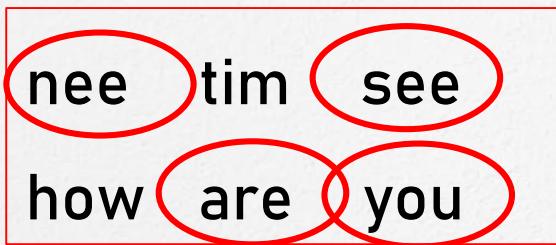
tti	wop	nhi
he	gives	nothing

gives ⟶ wop

Mixed Letter Coding

- In a certain code, 'nee tim see' means 'how are you', ble nee see' means 'where are you', what is the code for 'where'?

nee tim see
how are you

ble nee see
where are you

where ⟶ ble

Mixed Letter Coding

- In a certain code language, 'col tip mot' means 'singing is appreciable', 'mot baj min' means 'dancing is good' and 'tip nop baj' means 'singing and dancing', which of the following means 'good' in that code language?

col   tip   mot
singing   is   appreciable

mot   baj   min
dancing   is   good

tip   nop   baj
singing   and   dancing

good ⟶ min

Mixed Letter Coding

- In a certain code language. 'economics is not money' is written as 'ka la ho ga' 'demand and supply economics' is written as 'mo ta pa ka' 'money makes only part' is written as 'zi la ne ki' 'demand makes supply economics' is written as 'zi mo ka ta'. What is the code for 'money' in the given code language?

economics	is not	money
ka	la	ho ga

demand	and	supply	economics
mo	ta	pa	ka

money	makes	only part
zi	la	ne ki

demand	makes	supply	economics
zi	mo	ka	ta

Mixed Letter Coding

- In a certain language, 'sun shines brightly' is written as 'ba lo sul', 'houses are brightly lit' as 'kado ula ari ba' and 'light comes from sun' as 'dopi kup lo mo'. What are the code words for 'sun' and 'brightly'?

sun	shines	brightly
ba	lo	sul

houses	are	brightly	lit
kado	ula	ari	ba

| light	comes	from	sun
dopi	kup	lo	mo
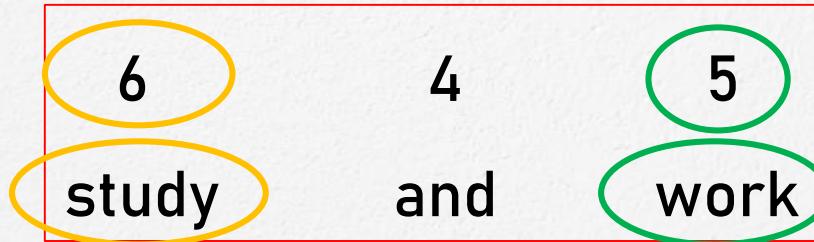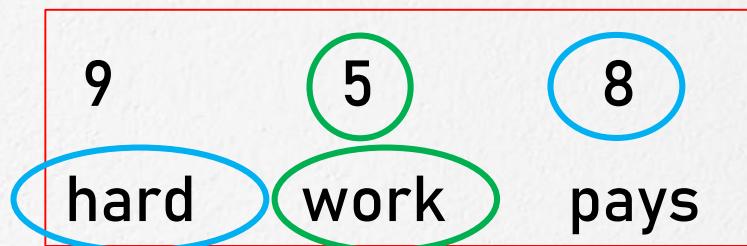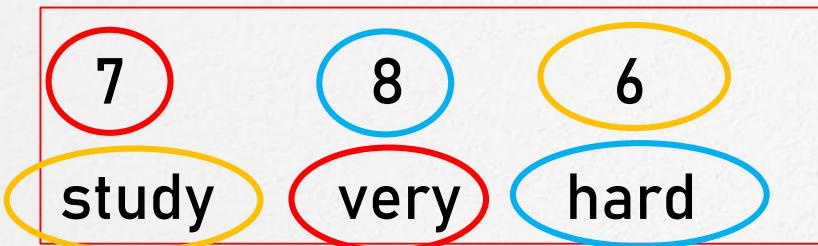
sun → lo

brightly → ba

Mixed Number Coding

- Groups of Numbers

- Short Message

- Number Code – Each Word

Mixed Number Coding
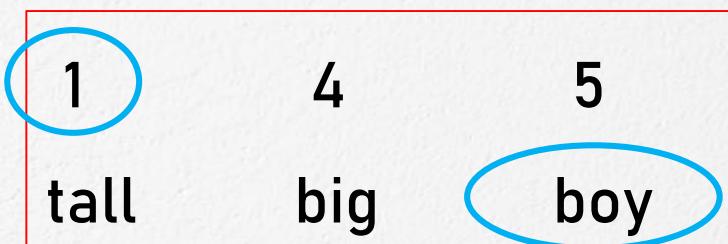
- In a certain code, '786' means 'study very hard', '958' means 'hard work pays' and '645' means 'study and work'. Find the code for 'very'.

7	8	6
study	very	hard

9	5	8
hard	work	pays

6	4	5
study	and	work

very ⟶ 7

Mixed Number Coding

- In a certain code language, '123' means 'bright little boy', '145' means 'tall big boy' and '637' means 'beautiful little flower'. Which digit in that language means 'bright'?

1	2	3
bright	little	boy

1	4	5
tall	big	boy

6	3	7
beautiful	little	flower

bright → 2

Mixed Number Coding

- In a certain code, '256' means 'red colour chalk', '589' means 'green colour flower' and '245' means 'white colour chalk'. Which digit represents 'white'?

2	5	6
red	colour	chalk

5	8	9
green	colour	flower

2	4	5
white	colour	chalk

white ⟶ 4

Mixed Number Coding

- In a certain code, '975' means 'throw away garbage', '528' means 'give away smoking' and '213' means 'smoking is harmful'. Which digit in that code means 'smoking'?

9	7	5
throw	away	garbage

5	2	8
give	away	smoking
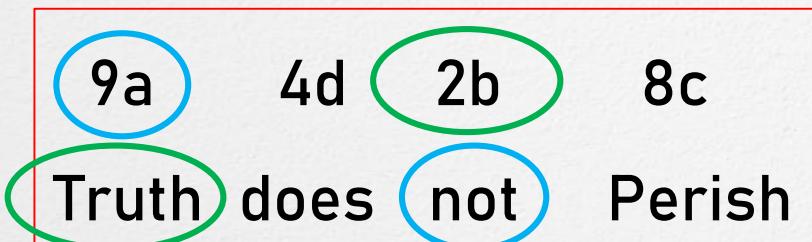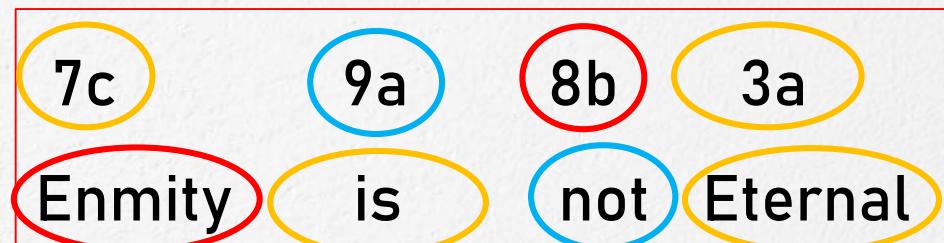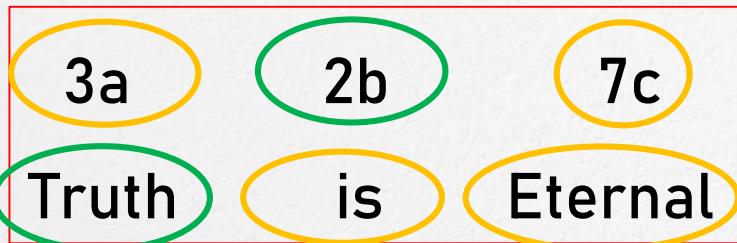
2	1	3
smoking	is	harmful

smoking ➝ 2

Mixed Number Coding

- In a certain code language, '3a, 2b, 7c' means 'Truth is Eternal', '7c, 9a, 8b, 3a' means 'Enmity is not Eternal' and '9a, 4d, 2b, 8b' means 'Truth does not Perish'. Which means 'Enmity' in that language?

3a	2b	7c
Truth	is	Eternal

7c	9a	8b	3a
Enmity	is	not	Eternal

9a	4d	2b	8c
Truth	does	not	Perish

Enmity → 8b

Conclusion

- Mixed Letter Coding

  - Messages – Coded language

- Mixed Number Coding

  - Group of Numbers – Short Messages

Summary

- Coding – Decoding

  - Mixed Letter Coding

  - Mixed Number Coding

That's all for now...