

CHEMISTRY

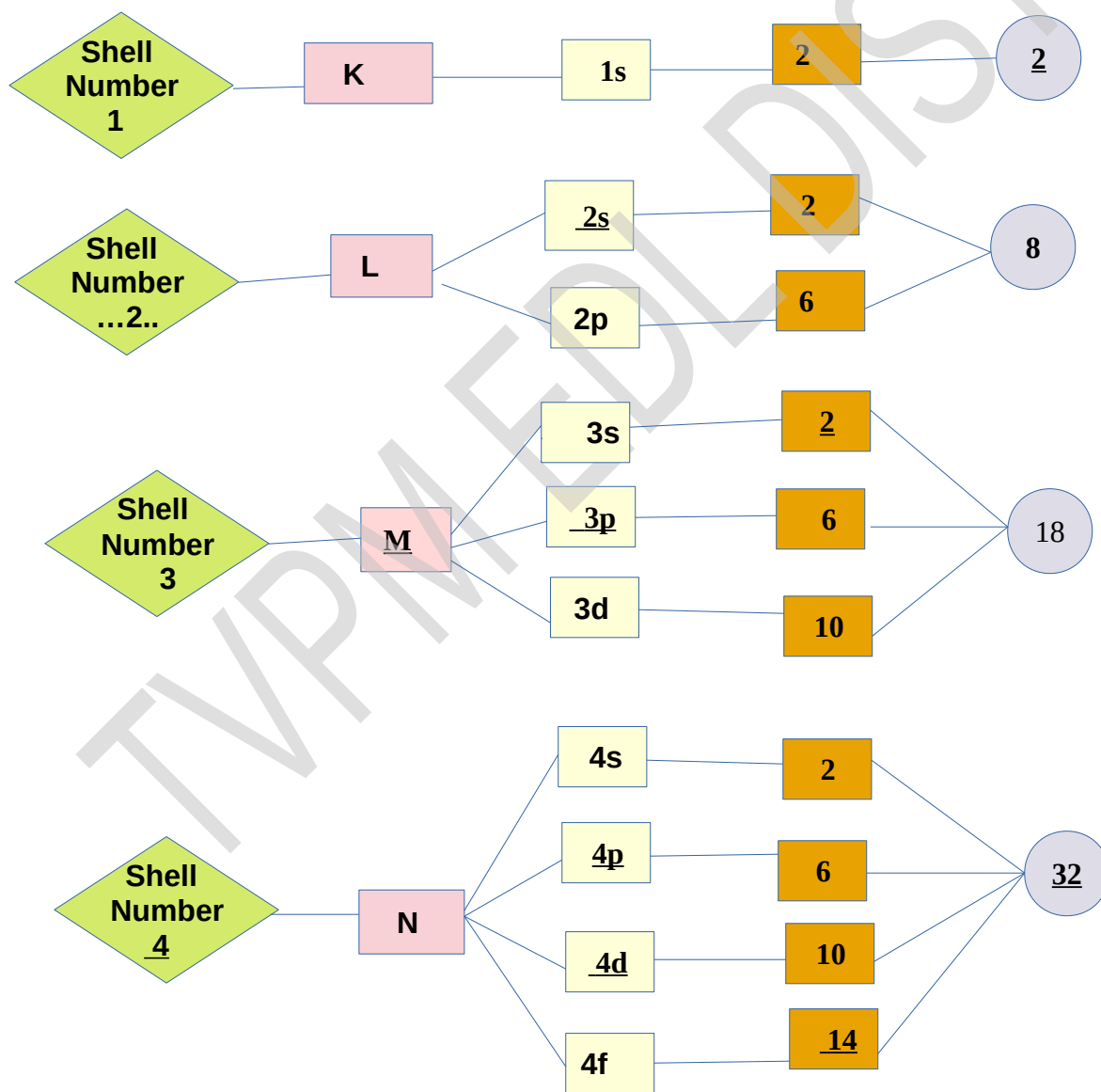


THIRUVANANTHAPURAM EDUCATIONAL DISTRICT

AK2CH101(E)

STANDARD X ANSWER KEY-1

1.



2021-22

CHEMISTRY

2.. a) $1s < 2s < 2p < 3s < 3p < 4s < 3d$

b) 1p, 3f

c) 10

3. a) $1s^2 2s^2 2p^6 3s^2$

b) Z

c) group - 1

period - 4

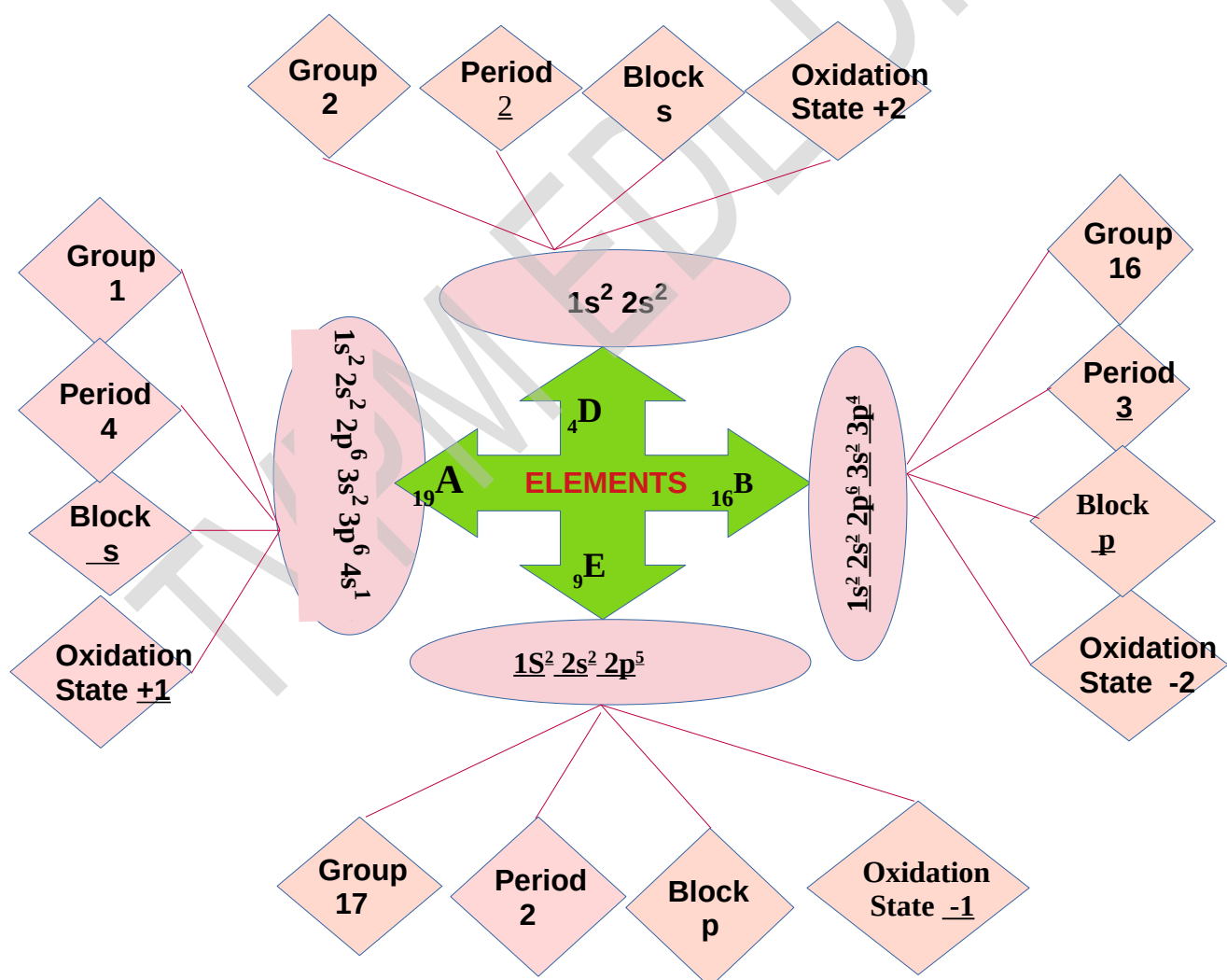
4.. a) $1s^2 2s^2 2p^6 3s^2 3p^6 3d^5 4s^2$

b) +4

c) $1s^2 2s^2 2p^6 3s^2 3p^6 3d^3$

d) $MnCl_2$

5.



CHEMISTRY

a) s, p blocks. They are commonly known as Representative Elements

b) DB

6.a) (i) $1s^2 2s^2 2p^6 3s^2 3p^6 3d^5 4s^1$

b) In order to attain stability 3d subshell receive one electron from 4s subshell and it become half filled state.

c) $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2$

7.

s block

2) Less ionisation energy

4) forms ionic bonds

p block

8) high electronegativity

6) High ionisation energy

d block

1) The last electron filled in the penultimate shell.

9) Most of them are coloured

5) Transition elements

f block

3) Most of them are used in petroleum industry

7) last electrons are filled in the antipenultimate shell

8.

A	F	L	U	O	R	I	N	E	B
S	D	M	L	E	C	T	Q	B	N
F	G	K	N	E	O	N	X	R	O
R	B	E	W	Q	P	J	M	C	X
A	U	K	T	E	P	P	Q	Y	Y
N	R	L	U	Z	E	O	X	R	G
C	H	N	T	Y	R	K	X	C	E
I	B	F	H	K	I	C	B	J	N
U	Y	X	I	T	E	M	S	R	B
M	A	G	N	E	S	I	U	M	T

VERTICAL

a) Francium

b) Copper

c) Oxygen

Horizontal

a) Fluorine

b) Magnesium

c) Neon