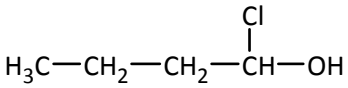
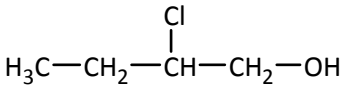
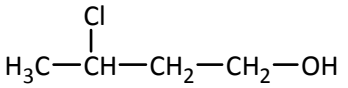
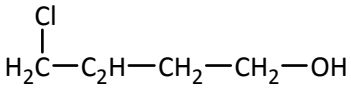
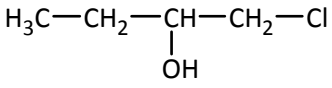
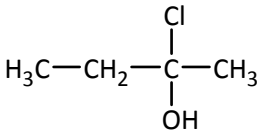
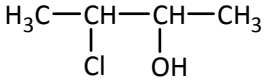
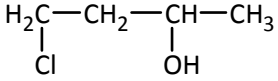
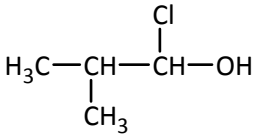
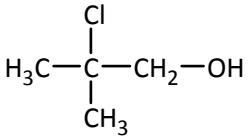
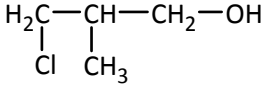
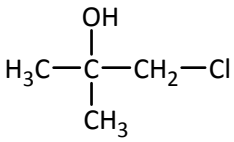
Rešitve

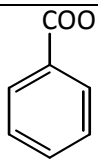
1.

	Racionalna formula	IUPAC ime spojine	
a)		1-klorobutan-1-ol	*1 T*
b)		2-klorobutan-1-ol	*1 T*
c)		3-klorobutan-1-ol	*1 T*
d)		4-klorobutan-1-ol	*1 T*
e)		1-klorobutan-2-ol	*1 T*
f)		2-klorobutan-2-ol	*1 T*
g)		3-klorobutan-2-ol	*1 T*
h)		4-klorobutan-2-ol	*1 T*
i)		1-kloro-2-metilpropan-1-ol	*1 T*
j)		2-kloro-2-metilpropan-1-ol	*1 T*
k)		3-kloro-2-metilpropan-1-ol	*1 T*
l)		1-kloro-2-metilpropan-2-ol	*1 T*

Dijak mora napisati 10 struktur.
Vsak v celoti pravilen odgovor se točkuje z *1 T*.

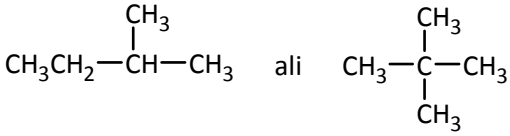
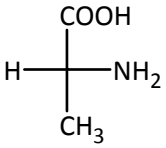
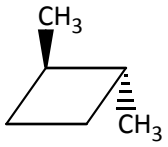
Skupaj: 10 T

2.

Pari spojin	**Racionalna formula bolj topne spojine**	**Utemeljitev**
butan-1-ol; oktan-1-ol	$CH_3CH_2CH_2CH_2—OH$ *1 T*	V butan-1-olu je alkilni, to je hidrofobni del molekule krajši. *1 T*
benzojska kislina; natrijev benzoat	 *1 T*	Soli so dobro topne v vodi. *1 T*
etil etanoat; etanojska kislina	CH_3COOH *1 T*	Etanojska kislina tvori močne vodikove vezi z molekulami vode. *1 T*
pentan; etil propil eter	$CH_3CH_2OCH_2CH_2CH_3$ *1 T*	Interakciji med molekulami etra in vode so vsekakor močnejše od interakcij med molekulami pentana in molekulami vode. *1 T*

Skupaj: 8 T

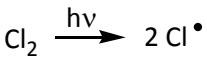
3.

	Strukturni zapis zahtevanega izomera	
a)		*2 T*
b)	$CH_3CH_2CH_2COOH$	*2 T*
c)		*2 T*
d)		*2 T*

Skupaj: 8 T

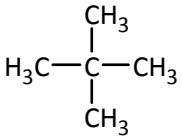
4.1

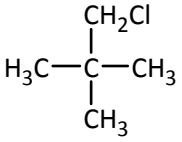
Svetloba je potrebna za razcep vezi v molekuli klora in nastanka atomov klora. *2 T*

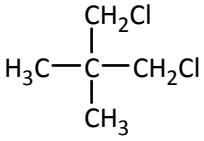


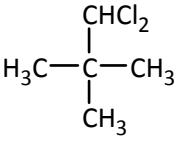
Ti sprožijo verižni proces reakcije.

4.2

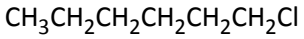
a)  *2 T*

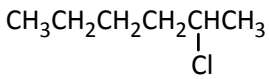
b)  *1 T*

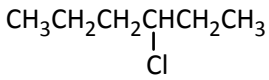
c)  *1 T*

 *1 T*

d) Nastanejo trije monosubstituirani produkti.

 1-kloroheksan *1 T*

 2-kloroheksan *1 T*

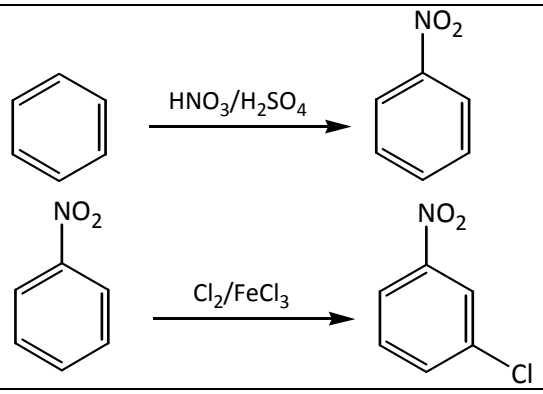
 3-kloroheksan *1 T*

Vsak v celoti pravilen odgovor se točkuje z *1 T*.

Skupaj: 10 T

5.

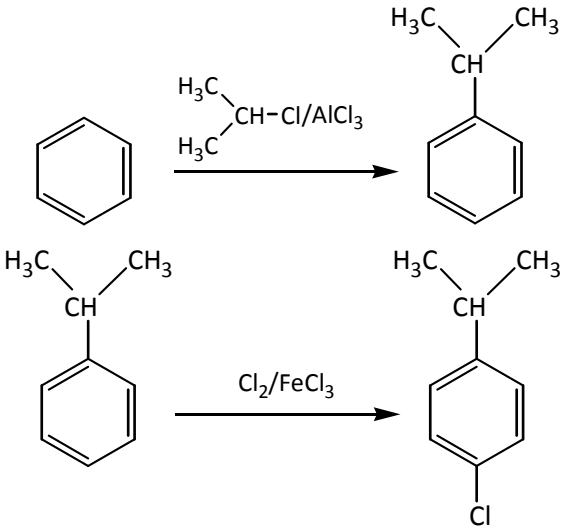
a)



2 T

2 T

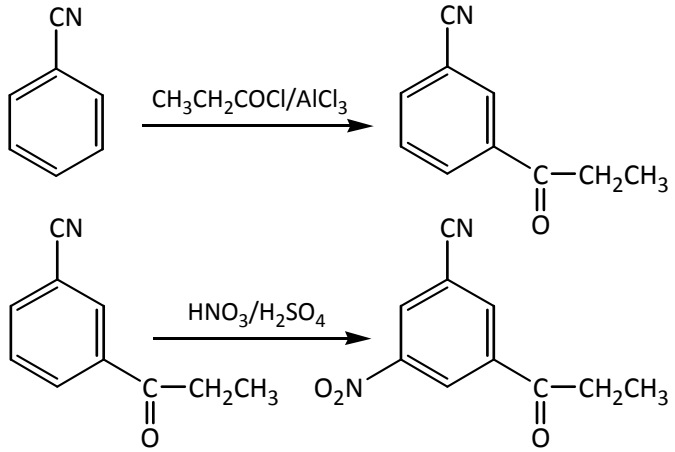
b)



2 T

2 T

c)

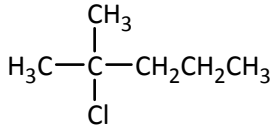


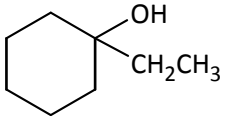
2 T

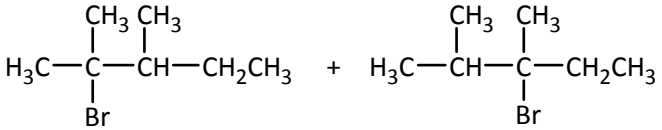
2 T

Skupaj: 12 T

6.1

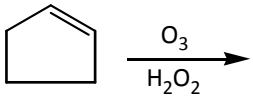
a)  *2 T*

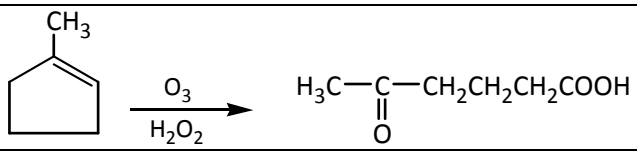
b)  *2 T*

c) 

2 T *2T*

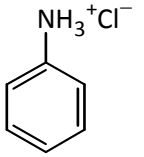
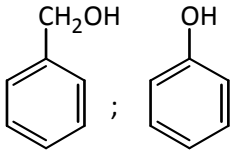
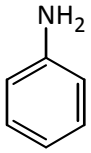
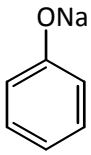
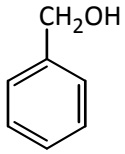
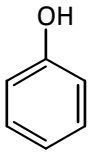
6.2

a)  *3 T*

b)  *3 T*

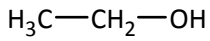
Skupaj: 14 T

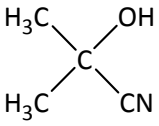
7.

A		*1 T*
B		*1 T*
C		*1 T*
D	vodna raztopina NaCl ali NaCl(aq)	*1 T*
E		*1 T*
F	 etrna raztopina	*1 T*
G		*1 T*
H	vodna raztopina NaCl ali NaCl(aq)	*1 T*

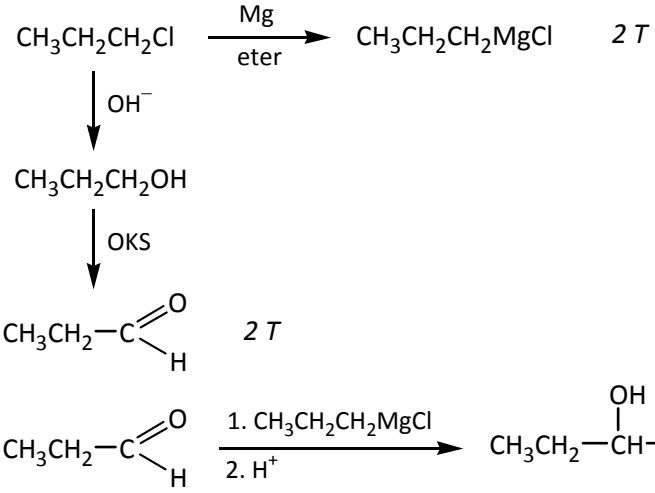
Skupaj: 8 T

8.1

a)  *2 T*

b)  *2 T*

8.2

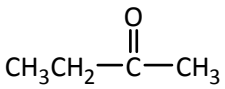
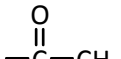
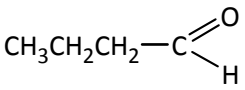
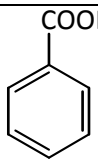
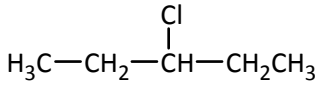


2 T

2 T

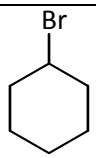
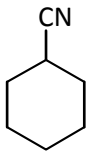
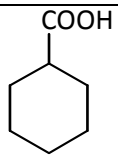
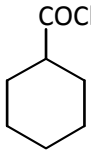
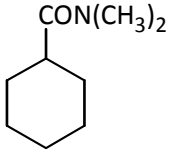
Skupaj: 10 T

9.

	Racionalna formula	Komentar
9.1	 *1 T*	Ker da spojina pozitivno haloformsko reakcijo, mora vsebovati  strukturni element. *1 T*
9.2	 *1 T*	Ker spojina reagira s fenilhidrozinom, vsebuje karbonilno skupino. Ker je test s Fehlingovim reagentom pozitiven, je spojina aldehid. *1 T*
9.3	 *1 T*	Ker spojina reagira z $NaHCO_3$ in tvori sol, je to karboksilna kislina. *1 T*
9.4	 *1 T*	Spojina ni alken, je alkan, ker reagira z bromom le ob osvetlitvi. *1 T*
9.5	 *1 T*	Spojina mora biti simetrična, ker po eleminaciji HCl nastaneta le dva geometrijska izomera. *1 T*

Skupaj: 10 T

10.

Spojina	Strukturna formula	
A		*2 T*
B		*2 T*
C		*2 T*
D		*2 T*
E		*2 T*

Skupaj: 10 T

Vse skupaj: 100 T