MEDICAL UNIVERSITY - PLEVEN, BULGARIA

ANSWER SHEET Sample Test v.1

Subject: Chemistry

Date: ……

City: ……

Part A: Multiple Choice Questions

1	a	~~b~~	c	d
2	a	~~b~~	c	d
3	a	b	~~c~~	d
4	a	~~b~~	c	d
5	a	~~b~~	c	d
6	~~a~~	b	c	d
7	a	~~b~~	c	d
8	a	b	~~c~~	d
9	a	b	~~c~~	d
10	a	b	c	~~d~~
11	a	~~b~~	c	d
12	a	b	c	~~d~~
13	a	b	~~c~~	d
14	a	b	~~c~~	d
15	a	b	~~c~~	d
16	~~a~~	b	c	d
17	a	b	~~c~~	d
18	a	~~b~~	c	d
19	a	b	c	~~d~~
20	a	~~b~~	c	d

21	~~a~~	b	c	d
22	~~a~~	b	c	d
23	a	b	~~c~~	d
24	a	b	c	~~d~~
25	a	b	c	~~d~~
26	a	b	~~c~~	d
27	a	b	c	~~d~~
28	a	b	~~c~~	d
29	a	~~b~~	c	d
30	~~a~~	b	c	d
31	a	~~b~~	c	d
32	a	b	c	~~d~~
33	a	~~b~~	c	d
34	a	~~b~~	c	d
35	a	~~b~~	c	d
36	a	b	c	~~d~~
37	~~a~~	b	c	d
38	a	b	~~c~~	d
39	a	b	~~c~~	d
40	a	~~b~~	c	d

Part B: Short Answer Questions

1. Identify the reducing and oxidizing agents in the redox reaction

$$\overset{-4\ +1}{CH_4} + \overset{0}{Cl_2} \rightarrow \overset{-2\ +1\ -1}{CH_3Cl} + \overset{+1\ -1}{HCl}$$

reducing agent ..... $\overset{-4}{C}\ (CH_4)$ oxidizing agent ..... $\overset{0}{Cl}\ (\overset{0}{Cl_2})$

2. Write the equilibrium constant expression K_c for the process: $2CO_{2(g)} \rightleftarrows 2CO_{(g)} + O_{2(g)}$

$$K_C = \frac{[CO]^2 \times [O_2]}{[CO_2]^2}$$

3. Draw the condensed structural (semi-structural) formulas of the compounds propanal and propanone.

CH_3-CH_2-CHO — propanal

$CH_3-CO-CH_3$ — propanone

4. Complete the following equation and name the products of the reaction:

$$CH_3\text{-}CH_2\text{-}COOH + CH_3\text{-}OH \rightleftarrows CH_3-CH_2-COOCH_3 + H_2O$$

methyl propanoate — water

or methyl ester of propanoic acid