

**ANSWER SHEET Sample Test 3**

Subject: ..... *Chemistry* .....

**Part A: Multiple Choice Questions**

1	<input checked="" type="checkbox"/>	b	c	d
2	a	b	c	<input checked="" type="checkbox"/>
3	a	<input checked="" type="checkbox"/>	c	d
4	a	b	c	<input checked="" type="checkbox"/>
5	a	b	c	<input checked="" type="checkbox"/>
6	<input checked="" type="checkbox"/>	b	c	d
7	<input checked="" type="checkbox"/>	b	c	d
8	<input checked="" type="checkbox"/>	b	c	d
9	a	b	<input checked="" type="checkbox"/>	d
10	a	b	c	<input checked="" type="checkbox"/>
11	a	b	<input checked="" type="checkbox"/>	d
12	a	<input checked="" type="checkbox"/>	c	d
13	<input checked="" type="checkbox"/>	b	c	d
14	a	b	<input checked="" type="checkbox"/>	d
15	a	b	c	<input checked="" type="checkbox"/>
16	a	b	c	<input checked="" type="checkbox"/>
17	<input checked="" type="checkbox"/>	b	c	d
18	a	b	c	<input checked="" type="checkbox"/>
19	a	<input checked="" type="checkbox"/>	c	d
20	a	b	c	<input checked="" type="checkbox"/>

21	a	b	<input checked="" type="checkbox"/>	d
22	<input checked="" type="checkbox"/>	b	c	d
23	a	<input checked="" type="checkbox"/>	c	d
24	a	b	c	<input checked="" type="checkbox"/>
25	a	b	<input checked="" type="checkbox"/>	d
26	a	<input checked="" type="checkbox"/>	c	d
27	a	<input checked="" type="checkbox"/>	c	d
28	a	<input checked="" type="checkbox"/>	c	d
29	a	b	c	<input checked="" type="checkbox"/>
30	a	b	c	<input checked="" type="checkbox"/>
31	a	b	c	<input checked="" type="checkbox"/>
32	a	<input checked="" type="checkbox"/>	c	d
33	<input checked="" type="checkbox"/>	b	c	d
34	a	b	<input checked="" type="checkbox"/>	d
35	<input checked="" type="checkbox"/>	b	c	d
36	a	b	<input checked="" type="checkbox"/>	d
37	a	b	<input checked="" type="checkbox"/>	d
38	a	<input checked="" type="checkbox"/>	c	d
39	a	b	<input checked="" type="checkbox"/>	d
40	a	<input checked="" type="checkbox"/>	c	d

## **Part B: Short Answer Questions**

**1. The pH of aqueous solution is 3 at room temperature (25°C). What is the concentration of H<sup>+</sup> ions?**

$$pH = -\log [H^+] \quad [H^+] = \text{antilog} (-pH) = \text{antilog} (-3) = 1 \times 10^{-3} \text{ mol/l}$$

$$[H^+] = 1 \times 10^{-3} \text{ mol/l}$$

2. Express the rate law equation for the reaction  $2 \text{H}_2\text{(g)} + \text{O}_2\text{(g)} \rightarrow 2\text{H}_2\text{O(g)}$

$$v = k \cdot [H_2]^2 \cdot [O_2]$$

v - rate

$k$  -rate constant

### **3. What is the IUPAC name of the compound shown?**



## 3-methyl-1-pentene

**4. Show the equation and name the products of the reaction between ethanoic acid and NaOH.**

