### **Chemistry Teaching Schedule – Form 4**

## A. Periods allocation

Term	No. of weeks	No. of periods	
1 <sup>st</sup>	13	65	
$2^{nd}$	15	75	
Total	28	140	

### **B.** Topics covered

Term	1 <sup>st</sup> term	2 <sup>nd</sup> term
Content	1. Laboratory safety & regulation (1 period)	4. Acids and bases (35 periods)
	2. Microscopic world 1 (14 periods)	7. Redox reactions, chemical cells and electrolysis (40 periods)
	3. Metals (40 periods)	
	4. Acids and bases (15 periods)	

### C. <u>Teaching Schedule</u>

# 1<sup>st</sup> term

Date	Period	Content	Activity / Experiment	UT	Remarks
05/09 - 12/10	1	Course requirements	Fire drill		
		Laboratory Safety & Regulations			
		2. The Microscopic World 1	1) Model of structures	UT (Form 3)	
	19	7,8. Chemical bonds (Revision)	2) 5-in-1 ex (All MC)		
		9. Structure, bonding and properties			
		3. Metals	1) Expt:	UT (part 2)	
		10. Occurrence and extraction of metals	Compare reactivity of metals		
15/10 - 30/11	30	11. Reactivity of metals	Displacement reaction		
		12. Reacting masses	Corrosion of metals and their protection		
		13. Corrosion of metals and their protection	2) 5-in-1 ex (All MC)		
			1) Expt:	UT (part 3)	
3/12 - 19/12	10	4. Acids and alkalis	Role of water in acidic properties		
		14. Introduction to acids and alkalis	How do acids react?		
			2) 5-in-1 ex (Unit 14: MC)		
20/12 - 01/01	Christmas Holiday				
02/01 - 18/01	1 <sup>st</sup> term examination				

#### TKPSS

2 <sup>nd</sup> term
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Date	Period	Content	Activity / Experiment	UT	Remarks		
21/01 - 30/01	5	Examination Review					
31/01 - 10/02		Lunar New Year Holiday					
11/02 - 01/03	12	15. Concentration of solutions	Expt: Jumping metals				
	12	16. Indicator and pH					
04/03 - 04/04		17. Strength of acids and alkalis	1) Expt:				
		18. Salts and neutralization	Qualitative Analysis 2: Al <sup>3+</sup> , Zn <sup>2+</sup> , Pb <sup>2+</sup>				
	18	19. volumetric analysis involving acids and alkalis	Preparation of standard solution				
			Titration				
			2) 5-in-1 ex (All MC)				
08/04 - 12/04	5	7. Redox reactions, chemical cells and electrolysis					
	5	30. Redox reactions					
13/04 - 22/04		E	aster Holiday				
23/04 - 31/05		7. Redox reactions, chemical cells and electrolysis	Expt:	UT (part 4)			
		30. Redox reactions	redox reaction				
	35	29. Simple chemical cells	Chemical cell				
		28. Chemical cells in daily life	Fuel cell car model				
		31 Redox reactions in chemical cells	Electrolysis				
		32 Electrolysis	Suppl 2B (All MC)				
04/06 - 19/06	Yearly examination						

Post-exam and summer lessons:

Electrolysis

Microscopic world 2

UT (part 7)