



**Institut Kemahiran MARA
Kuching Sarawak**

SCHEME OF WORK THEORY

COURSE :	SIJIL TEKNOLOGI BEKALAN AIR DAN PEMBENTUNGAN		
SESSION :	JAN – JUN 2009	SEMESTER : 2	2
CODE/SUBJECT :	TCP 2114 External Water Supply System		
HOURS/WEEK :	8	CREDIT HOUR :	4
LECTURER :	EN ISMAIL BIN MT DAUT		

WEEK	DATE	TOPICS/CONTENTS	HOURS	REMARKS
1	05/01 - 09/01/09	<p>1 . WATER DISTRIBUTION SYSTEM 1.1 Understand various type of distribution system.</p> <p style="text-align: center;">&</p> <p>3.0 MAINTAIN TOOLS AND MACHINE 3.1 Perform Maintenance Of Tools And Machine</p>	8	THEORY & PRACTICAL
2	12/ 01 - 16/01/09	<p>1. WATER DISTRIBUTION SYSTEM 1.2 Understand various type of distribution layout.</p> <p style="text-align: center;">&</p> <p>4.0 INTRODUCTION TO SYSTEM COMPONENT 4.1 Main Pipe - Identify type of pipe used in water supply main laying.</p>	8	THEORY & PRACTICAL

WEEK	DATE	TOPICS/CONTENTS	HOURS	REMARKS
3	19/01 - 23/01/09	<p>1. WATER DISTRIBUTION SYSTEM 1.3 Identified terms and definitions used in water main laying works.</p> <p style="text-align: center;">&</p> <p>4.0 INTRODUCTION TO SYSTEM COMPONENT 4.2 Identify various type of valves, fitting and special used.</p>	8	THEORY & PRACTICAL
4	26/01 - 30/01/09	<p>2. REGULATION AND BYE LAW 2.1 Understand regulation code of practice standard approved by the local water authority.</p> <p style="text-align: center;">&</p> <p>5.0 SYSTEM INSTALLATION 5.1 Pipe Installations 5.1.1 Install All Types Of Valves</p>	2	THEORY & PRACTICAL CHINESE NEW YEAR 26 JAN & 27 JAN 2009
5	02/02 - 06/02/09	<p>2. REGULATION AND BYE LAW 2.2 Joints and lay pipe in trenches in accordance to code of practice, local byelaw, regulations and standards approved by JBA/JKR as job per specification.</p> <p style="text-align: center;">&</p> <p>5.0 SYSTEM INSTALLATION 5.1 Pipe Installations 5.1.1 Install All Types Of Valves</p>	8	THEORY & PRACTICAL
6	09/02 - 13/02/09	<p>2. REGULATION AND BYE LAW 2.4 Identified method and procedures of tapping main pipe and comply with the code of practice and local water byelaw.</p> <p style="text-align: center;">&</p> <p>5.0 SYSTEM INSTALLATION 5.1 Pipe Installations 5.1.2 Construct Anchor And Thrust Block</p>	8	THEORY & PRACTICAL

WEEK	DATE	TOPICS/CONTENTS	HOURS	REMARKS
7	16/02 - 20/02/09	3. MAINTENANCE OF TOOLS AND MACHINE 3.1 Identified tools and machine used & 5.0 SYSTEM INSTALLATION 5.1 Pipe Installations 5.1.2 Perform Pressure And Leakage Test	8	THEORY & PRACTICAL
8	23/02 - 27/02/09	3. MAINTENANCE OF TOOLS AND MACHINE 3.2 Identified method of tools and machine maintenance & 5.0 SYSTEM INSTALLATION 5.1 Pipe Installations 5.1.3 Perform Sterilizing Test	8	THEORY & PRACTICAL TEST 1(15%)
9	02/03 - 06/03/09	3. MAINTENANCE OF TOOLS AND MACHINE 3.3 Identified the source of electricity supply and fix the appropriate wire to a tool or machine. . & 5.0 SYSTEM INSTALLATION 5.2 Tapping Of Main Pipe 5.2.1 Perform Tapping Of Main Pipe	8	THEORY & PRACTICAL
10	09/03 - 13/03/09	4. INTRODUCTION TO SYSTEM COMPONENT 4.1 Main Pipe - Identify types of pipe used in water supply main laying & 5.0 SYSTEM INSTALLATION 5.2 Tapping Of Main Pipe 5.2.1 Install Communication Pipe	8	THEORY & PRACTICAL

WEEK	DATE	TOPICS/CONTENTS	HOURS	REMARKS
11	16/03 - 20/03/09	ACTIVITY WEEK		
12	23/03 - 27/03/09	<p>4. INTRODUCTION TO SYSTEM COMPONENT 4.2 Main Pipe - Identify types of pipe used in water supply main laying</p> <p style="text-align: center;">&</p> <p>5.0 SYSTEM INSTALLATION 5.2 Tapping Of Main Pipe 5.2.1 Install Water Meter As Per Specification</p>	8	THEORY & PRACTICAL
13	30/03 - 03/04/09	<p>4. INTRODUCTION TO SYSTEM COMPONENT 4.3 Identify various type of valves, fitting and special used.</p> <p style="text-align: center;">&</p> <p>5.0 SYSTEM INSTALLATION 5.2 Tapping Of Main Pipe 5.2.2 Perform Pressure And Leakage Test</p>	8	THEORY & PRACTICAL
14	06/04 - 10/04/09	<p>5. SYSTEM INSTALLATIONS 5.1 Pipe Installation</p> <p style="text-align: center;">&</p> <p>5.0 SYSTEM INSTALLATION 5.2 Tapping Of Main Pipe 5.2.2 Perform Sterilizing Test</p>	8	THEORY & PRACTICAL
15	13/04 - 17/04/09	<p>5. SYSTEM INSTALLATIONS 5.2 Tapping Of Main Pipe</p> <p style="text-align: center;">&</p> <p>5.0 SYSTEM INSTALLATION 5.3 Cross Over And Bend 5.3.1 Construct Cross Over Or "S" Bend</p>	8	THEORY & PRACTICAL & PRACTICAL TEST (30%)

WEEK	DATE	TOPICS/CONTENTS	HOURS	REMARKS
16	20/04 - 24/04/09	<p>5. SYSTEM INSTALLATIONS 5.3 Cross Over Or 'S' Bend</p> <p style="text-align: center;">&</p> <p>5.0 SYSTEM INSTALLATION 5.3 Cross Over And Bend 5.3.2 Perform Pressure And Leakage Test</p>	8	THEORY & PRACTICAL & TEST 2 (15%)
17	27/04 - 01/05/09	<p>6. ARC WELDING 6.1 Identify Welding Joints And Symbols</p> <p>6.1.1 Butt 6.1.2 Lap</p>	8	THEORY & PRACTICAL
18	04/05 - 08/05/09	<p>6. ARC WELDING 6.2 Identify Tool And Equipment 6.2.1 Holders 6.2.2 Cables 6.2.3 Clamps 6.2.4 Transformers 6.2.5 Shields</p> <p>6.3 Identify Welding Substances. 6.3.1 Electrodes</p>	8	THEORY & PRACTICAL
19	11/05 - 15/05/09	<p>6. ARC WELDING 6.4 Identify Welding Techniques And Procedures</p> <p>6.4.1 Flat position 6.4.2 Vertical and horizontal position 6.4.3 Overhead position 6.4.4 Angle</p>	8	THEORY & PRACTICAL
20	18/05 - 22/05/09	<p>6. ARC WELDING 6.5 Perform Arc Welding And Practices</p> <p>6.5.1 Generate the arc. 6.5.2 Preheating, beading, crater. 6.5.3 Beads appearance – penetration, undercut, overlap.</p>	8	THEORY & PRACTICAL

WEEK	DATE	TOPICS/CONTENTS	HOURS	REMARKS
21	25/05 - 29/05/09	FINAL EXAM WEEK / REVISION WEEK		
22	01/06 -05/06/09	FINAL EXAM WEEK		
23	08/06 -12/06/09	FINAL EXAM WEEK		

Prepared by : Signature : Name : ISMAIL BIN MT DAUT Designation : PPLV Date : 05 JAN 2009	Checked by : Signature : Name : ZULKARNAIN MD YUNUS Designation : PPLV Date : 06 JAN 2009	Approved by : Signature : Name : AZMAN BIN ALIAS Designation : Date :
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