



**Institut Kemahiran MARA  
Kuching Sarawak**

### LESSON PLAN

<b>COURSE/CLASS :</b>	SIJIL TEKNOLOGI BEKALAN AIR DAN PEMBENTUNGAN		
<b>SESSION :</b>	JUL – DEC 2009	<b>SEMESTER :</b>	2
<b>CODE/SUBJECT :</b>	TCP 2114 EXTERNAL WATER SUPPLY SYSTEM	<b>SHEET NO :</b>	TCP2114/IS2
<b>NO OF STUDENTS :</b>	4 STUDENTS	<b>WEEK :</b>	2
<b>DURATION :</b>	2 HOURS	<b>VENUE :</b>	CLASSROOM
<b>LECTURER :</b>	EN ISMAIL BIN MT DAUT		

<b>TOPIC :</b>	1.0 WATER DISTRIBUTION SYSTEM
<b>SUB-TOPIC :</b>	1.2 UNDERSTAND VARIOUS TYPES OF DISTRIBUTION LAYOUT .
<b>LEARNING OUTCOME :</b>	<p>Students must be able to :</p> <ol style="list-style-type: none"> <li>1) Understand various types of distribution layout .</li> <li>2) Identify terms and definations used in water main laying works .</li> </ol>

INSTRUCTIONAL AIDS	TITLE	CODE NO/QUANTITY
<b>WRITTEN INSTRUCTIONAL MATERIALS</b>	Module Exercise Sheet	TCP 2114 4 SET
<b>AUDIO VISUAL AIDS</b>	Computer LCD Screen	1 set 1 set 1 set
<b>TOOLS/EQUIPMENTS</b>	Marker ( Blue /Black/Red ) Duster Thumb drive Mini hard disk drive Presentation CD	3 nos 1 no 1 no 1 no 1 kpg

STAGE/TIME	TEACHER ACTIVITIES	STUDENT ACTIVITIES	REMARKS
<p><b>INTRODUCTION</b> (10 mins)</p> <p>Induction Set</p> <p>Prior Knowledge</p>	<ul style="list-style-type: none"> <li>Greet student salam / Good Morning to student</li> <li>Check and Mark student attendant .</li> </ul> <p>Write down the main topic for this lesson on whiteboard ‘UNDERSTAND VARIOUS TYPE OF WATER DISTRIBUTION LAYOUT ‘</p> <ul style="list-style-type: none"> <li>List the Objektif for this lesson on Whiteboard and explain to student .</li> <li>Ask student knowledge and experiences about</li> </ul>	<ul style="list-style-type: none"> <li>Reply and Answer</li> <li>Prays .</li> <li>Pay attention and take note .</li> <li>Pay attention and give respond and take note.</li> </ul>	<p>Lcd cd White Board Marker Pen</p>
<p><b>DEVELOPMENT</b> (90 mins)</p>	<ol style="list-style-type: none"> <li>1. Explain various type of water distribution layout . <b>( Refer Presentation )</b></li> <li>2. Explain Dead End System . <b>( Refer Presentation )</b></li> <li>3. Explain Grid Iron System . <b>( Refer Presentation )</b></li> </ol>	<ul style="list-style-type: none"> <li>Pay attention and give respond and take note.</li> </ul>	<ul style="list-style-type: none"> <li>Rujuk IS 2</li> <li>Present ation LCD</li> <li>Real Object</li> </ul>

	<p>4. Explain Circular System . ( Refer Presentation )</p> <p>5. Explain Radial System ( Refer Presentation</p>	<ul style="list-style-type: none"> <li>• Pay attention and give respond and take note.</li> </ul>	
<p><b>SUMMARY</b> (10 Mins)</p>	<ul style="list-style-type: none"> <li>• Get feed back by asking several question regarding to the topic .</li> </ul> <p><b>Question 1 :</b></p> <p>List 4 types of water Distribution layout in water reticulation system ?</p> <p><b>Jawapan :</b></p> <ol style="list-style-type: none"> <li>Dead End</li> <li>Grid Iron</li> <li>Circular</li> <li>Radial</li> </ol> <p><b>Soalan 2 :</b></p> <p><b>Draw / sketch dead end system .</b></p> <ul style="list-style-type: none"> <li>• Meminta beberapa orang pelatih menjawab dan memberi peluang kepada pelatih lain membantu sekiranya pelatih yang dipilih tidak dapat menjawab.</li> </ul>	<ul style="list-style-type: none"> <li>• Student respon by unswering question .</li> </ul> <p>Sketch Dead End System on White Board</p>	

	<ul style="list-style-type: none"> <li>• Memberi pujian kepada pelatih yang dapat menjawab soalan dengan betul.</li> <li>• Memastikan kefahaman pelatih tercapai melalui soalan yang diberi</li> <li>• Memberi imbasan bagi topik seterusnya iaitu ' <b>Main Pipe</b> '</li> </ul>		
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**EVALUATION :**

1. Give Information Sheet and Exercise Sheet .
2. Ask student to Check Information Sheet and Exercise Sheet given .
3. Ask student to answer question given .
4. Inform student 10 minute given to complete the task .

**REFERENCE :**

- *Catalogue*
- *User Manual ( SOP )*
- o *Plumbing 1 & 2 – Townsend – Hutchinson Of London .*
- o *Safety / first Aids Book .*
- o *Materials , Tools and Equipment Catalogue .*
- o *Plumbing Service Design Guide – Institut Of plumbing UK .*
- o *Undang – Undang Bekalan Air Tempatan – KWB , JBA / JKR.*
- o *Welding Handbook JIS 1991*
- o *Modul - TCP 2114 External Water Supply System*
- o *Laman web - [http:// ibmdtkp2007.tripod.com](http://ibmdtkp2007.tripod.com)*

**LESSON REFLECTION :**

1.1 I felt satisfied with today's lesson because students gave a good response in the class. All groups gave a correct answer for Exercise 1. Therefore, the learning objectives were achieved and students showed their interest in understand various types of distribution layout .

Prepared by :

Signature :

Name : Ilsmail Bin Mt Daut

Designation :

Date :

Checked by :

Signature :

Name :

Designation :

Date :