PROGRAMME BOOK **OF UNESCO IHP MALAYSIA WATER AWARENESS PROGRAMME**

IN CONJUNCTION WITH WORLD RIVERS DAY 2022

15TH OCTOBER 2022 (SATURDAY) 7:00 AM - 5:00 PM SEMENYIH ECOVENTURE RESORT & RECREATION



RIVER AS THE LIFELINE FOR SUSTAINABILITY

Hosted by:



UNESCO-IHP MALAYSIA

Organized by:



UNIVERSITY OF NOTTINGHAM MALAYSIA

Supported by:



UNM ICE STUDENT CHAPTER

Collaboration with:



DEPARTMENT OF IRRIGATION AND DRAINAGE (JPS)



PUTRAJAYA CORPORATION (PPI)

Sponsored by:



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UNIVERSITY OF MALAYA (UM)



INSTITUTE FOR ENVIRONMENT AND DEVELOPMENT (LESTARI), UNIVERSITI KEBANGSAAN MALAYSIA (UKM)



UNIVERSITY OF MALAYSIA KELANTAN (UMK)



ECOVENTURE RESORT & RECREATION



UNIVERSITY OF NOTTINGHAM MALAYSIA

ASSOC. PROF. IR. TS. DR. TEO FANG YENN

MESSAGES FROM ORGANISING CHAIR:

ON BEHALF OF THE ORGANISING COMMITTEE, I AM
DELIGHTED TO INVITE YOU TO PARTICIPATE IN THE
UNESCO IHP MALAYSIA WATER AWARENESS
PROGRAMME IN CONJUNCTION WITH THE WORLD
RIVERS DAY, TO BE HELD IN SEMENYIH ECOVENTURE
RESORT & RECREATION, ON OCTOBER 15TH, 2022. THE
EVENT AIMS TO SERVE AS A PLATFORM FOR INCREASING
AWARENESS AND EDUCATION OF GLOBAL WATER
ISSUES PARTICULARLY ON RIVER FOR SUSTAINABILITY
AMONG THE UNIVERSITY STUDENTS. YOU ARE
CORDIALLY INVITED TO JOIN US FOR THIS EXCITING
EVENT AND SEE YOU ALL SOON!

BACKGROUND:

THE GOVERNMENT OF MALAYSIA THROUGH THE MINISTRY OF ENVIRONMENT AND WATER (KASA) HAS LAUNCHED SEVERAL MAJOR PROJECTS WITH THE THEME OF "SHARED RESPONSIBILITY ENVIRONMENT" IN CONJUNCTION WITH NATIONAL ENVIRONMENT DAY 2020. AMONG THE PROGRAMMES IMPLEMENTED, THE NATIONAL RIVER TRAIL PROGRAMME (DENAI SUNGAI KEBANGSAAN, DSK) WITH THE COMMUNITY TO INCREASE PUBLIC AWARENESS ON THE IMPORTANCE OF PRESERVING RIVERS. THIS IS A MAJOR STEP TO ENSURE THE SUSTAINABILITY OF THE RIVER, BEAUTIFUL RIVERS, LEISURE ACTIVITIES, ECO-TOURISM, AND AWARENESS CAMPAIGNS ARE ALSO IMPLEMENTED HOLISTICALLY TO FURTHER INCREASE THE PUBLIC AWARENESS.

PURPOSES:

THE UNESCO IHP WATER AWARENESS PROGRAMME IN CONJUNCTION WITH THE WORLD RIVERS DAY IS ONE OF THE IMPORTANT EVENTS OF DSK, IT WILL BE HELD IN SEMENYIH ECOVENTURE RESORT & RECREATION, ON OCTOBER 15TH, 2022. THIS EVENT WILL BE HOSTED BY THE UNESCO IHP MALAYSIA AND ORGANISED BY THE UNIVERSITY OF NOTTINGHAM MALAYSIA (UNM), IN COLLABORATION WITH OTHER AGENCIES SUCH AS THE DEPARTMENT OF IRRIGATION AND DRAINAGE (JPS). PERBADANAN PUTRAJAYA (PPJ), SEMENYIH ECOVENTURE RESORT & RECREATION, GLOBAL WATER CONSULTANTS SDN. BHD., HIGHER EDUCATION INSTITUTIONS (HEIS) AROUND THE KLANG VALLEY, AND NON-GOVERNMENTAL ORGANISATIONS (NGOS). ALL OF THESE PARTIES ARE CONCERNED IN DEALING WITH THE ISSUES RELATED TO SEMENYIH RIVER. PARTICULARLY THIS IS ONE OF THE IMPORTANT SOURCES OF WATER SUPPLY AND IT IS EASILY ACCESSIBLE BY VARIOUS PARTIES IN KLANG VALLEY. THE EVENT AIMS TO SERVE AS A PLATFORM FOR INCREASING AWARENESS AND EDUCATION OF GLOBAL WATER ISSUES PARTICULARLY ON RIVER FOR SUSTAINABILITY AMONG THE UNIVERSITY STUDENTS AROUND THE KLANG VALLEY. THE THEME OF THIS EVENT IS "RIVER AS THE LIFELINE FOR SUSTAINABILITY".



Itinerary:

15 th October	· 2022 – Semenyih	EcoVenture	Resort &	Recreation

Time	Activities	Venue				
7:00 AM	Registration & Breakfast	Lake Side				
8:00 AM	Distribution of Groups & Aerobics	Main Field				
8:15 AM	Arrival of VVIP					
8:30 AM	Opening Ceremony	Main Field				
	 Welcoming Speech by Professor Sarah Metcalfe, Provost and CEO of the University of Nottingham Malaysia Prayers Recital Opening Speech by YBhg. Ir. Haji Azmi bin Ibrahim, Director of Water Resources and Hydrology Division, Department of Irrigation and Drainage, Malaysia Presentation of Appreciation Tokens and Certificates Tree Planting Initiative – Let's Plant a Tree for River and We Plant a Hope for Sustainability 					
9:00 AM	Module Activities	Based on Module's Venue				
12:00 PM	Lunch & Prayer	Lake Side				
1:00 PM	Module Activities	Based on Module's Venue				
4:00 PM	Tea Break & Closing	Lake Side				
5:00 PM	Disperse	Car Park				

Map Overview:



Module	Title/Activity	Location
	Registration	Lake Side
	Opening & Closing Main Field	
	Meals	Lake Side
M1	Water and human interactions	Next to Main Field
M2	Water conservation and wetlands	Next to Eco Lake
M3	Water biodiversity and databases	Next to Swimming Pool
M4	Water quality and monitoring	Next to Villa
M5	Water flow and measurements	Next to Bridge
M6	Water environment and bio-indicator	Next to Flying Fox
M7	Water pollution and treatment	Next to Tube Rooms
M8	Water and forest conservations	Next to ATV Track

CONTENTS OF MODULES:

MODULE 1 (Next to Main Field)					
Title	Water and Human Interactions				
Summary	The module begins with a basic introduction to water, water resources, and their importance in human life. Through interactive games, the participants will learn the primary usage of water resources in Malaysia. Next, the participants going to learn facts related to the river and the concept of the river basin River has been the heart of life ever since civilization, and until now we are depending on a clean river for our water supply. Therefore, a disruption to the healthy river ecosystem and water quality will give an impact on human lives. The river ecosystem's health also depends on the overall management of its river basin area. The interconnection of water resources rivers and humans is important in sustainable river management. To showcase the current effort toward sustainable river basin management, the participants will be introduced to Program Denai Sungai Kebangsaan (DSK) as well as the concept of Integrated Water Resource Management (IWRM) and Integrated River Basin Management (IRBM) that empowered the stakeholders to preserve and conserve our water resource.				
Convenor	Mr. Nik Mohd Noor Faizul Md Saad/ Mr. Norazmi Abdul Kadir/ Ms. Nurlina Mohamad Ramzan - Universiti Kebangsaan Malaysia (UKM)				

IODULE 2 (Next to Eco Lake)
Title	Water Conservation and Wetlands
Summary	This module is about Constructed Wetlands, a nature-based solution which mimic natural wetland processes to enhance water quality. It starts with an introductory session on natural wetlands veconstructed wetlands, follow suit with the functions and it ecosystem services. The artificial wetland is built by using aquation plants to remove pollutants such as nutrients, organics, suspendents solids, and bacteria. Mimicking natural process, this method also environmentally friendly and can be developed at a moderate cost. It is usually used as an extension treatment to get rid of pollutants that remain after conventional treatment. In addition, this treatment system can also be used to treat and conserve surface water such a lakes and rivers. The module will also give a demonstration showing how to build a simple wetland with selecting suitable aquatic plants handling techniques, and maintenance. It is easy to build and installocalize for a small-scale project. Next, participants can build manmade wetlands for the benefit of river management at their
Convenor	Ms. Normaliza Noordin/ Ms. Nurliyana Abdul Rahaman/ Ms. Yahzam Muhammad/ Mr. Muhammad Syafiq Irham Shamsuddin/ Ms. Nik Norazlina Che Ya/ Mr. Nor Azlee Che Deraman/ Mr. Mohammad Fairoz Abdul Aziz / Mr. Mustazal Affindi Mat Jusoh - Putrajaya Corporation (PPj)

MODULE 3 (Next to Swimming Pool)				
Title	Water Biodiversity and Databases			
Summary	This module will be implemented individually in surrounding groups selected rivers including watersheds. Following a lesson on mobile phone photography techniques, introduction to citizen science/crowd resources, and the basics of riparian ecology river. Next, guidance on the site about the method of upload photos and data about recorded flora and fauna using the iNaturalist App. One of the world's most popular nature apps, iNaturalist helps you identify the plants and animals around you. Get connected with a community of over 400,000 scientists and naturalists who can help you learn more about nature! What's more, by recording and sharing your observations, you'll create research quality data for scientists working to better understand and protect nature. iNaturalist is a joint initiative by the California Academy of Sciences and the National Geographic Society. A demonstration of the most recent technology using drone flights along the river to observe and record river data will also be offered to the participants.			
Convenor	Dr. Wong Soon Yee/ Prof. Andy Chan/ Ir. Ts. Goh Boon Hoe/ Mr. Lip Yih Yoong - University of Nottingham Malaysia (UNM)			

MODULE 4 (Next to Villa)				
Title	Water Quality and Monitoring			
Summary	This module involves guidelines that must be followed by participants to monitor and maintain the quality of river water through monitoring and observation. Physical monitoring involves the four senses to monitor the health stage of the river. For the observance of water quantities, hydrological and visual monitoring will be used. Chemical monitoring involves water quality analysis for pH, temperature, dissolved oxygen, turbidity and conductivity. At the end of the training, participants will be able to classify the river index based on physical and chemical parameters. Participants will also be briefed about water sample collection for microplastic analysis and they will also be given an opportunity to count microplastics from previously processed samples from Semenyih River. Participants will be able to monitor the water quality when returning to their respective areas.			
Convenor	Dr. Sivathass Bannir/ Ir. Ts. Dr. Teo Fang Yenn - University of Nottingham Malaysia (UNM)			

MODULE 5 (Next to Bridge)					
Title	Water Flow and Measurements				
Summary	Flow measurement is a fundamental aspect of hydrology, which is very common in engineering practises. It is important for many applications such as flood control, drought management, water supply, irrigation, etc. However, due to the complexity of the water that flow in a river, accurate flow measurement is still remained a challenging task which require the knowledge of various measurement techniques depending on different site conditions, and many others influencing factors. In this module, all the participants will be introduced to the basic of hydraulic characteristics in a river, stream gauging station selection, gauging station preparation, flow measurement methods, etc. The participants are then required to conduct stream flow measurement at selected site using selected methods that will be identified at the site. Through this module, it is hope that knowledge learnt will spikes the interest of participants on rivers and love our rivers eventually.				
Convenor	Associate Prof. Ir. Dr. Lai Sai Hin, Dato' Ir. Lim Chow Hock, Mr. Tan Cha Yao - Universiti Malaya (UM) & University of Nottingham Malaysia (UNM)				

MODULE 6 (Next to Flying Fox)				
Title	Water Environment and Bio-indicator			
Summary	River systems are important for human societies and wildlife alike for the critical resource they supply, namely water, as well as other benefits such as food and transport. Healthy river systems are characterized by physical, chemical and biological components that are in good condition. One of the ways in which we can assess these components is through the use of biological indicators (bio-indicators) such as macroinvertebrates. Macroinvertebrates are small animals (i.e. 2mm-10mm) that live within rivers. They rely on the river substrate, vegetation, water flow and water quality, for food, shelter and reproduction. Many of these macroinvertebrates are sensitive to changes in water quality and so, we can monitor their presence, absence or abundance to help us determine overall water quality or river conditions. This module will demonstrate how macroinvertebrates are collected, identified and then compared to assess water quality and monitor changes in river conditions.			
Convenor	Prof. Christopher Gibbin/ Ms. Chong Xin Yi/ Ms. Selam Solomon Gebreselassie - University of Nottingham Malaysia (UNM)			

MODULE 7 (Next	MODULE 7 (Next to Tube Rooms)				
Title	Water Pollution and Treatment				
Summary	This module is aimed on giving exposure, knowledge and basic skills on river water quality improvement technologies, especially on natural treatment and water disinfection. The module is developed specifically for participants coming from different background and age group. These technologies are very suitable to improve water quality, which include natural treatment using biochar and advanced treatment using ozonation. These technologies are usually used to treat raw water and sewerage. Both technologies are capable to improve the quality of water as these technologies can treat organic matter including germs, bacteria and virus that can be found in water. Participants can apply the knowledge about the treatment technologies to produce their own creative design in the future.				
Convenor	Dr. Anurita Selvarajoo/ Prof. Law Chung Lim/ Ir. Lim Sin Poh - University of Nottingham Malaysia (UNM)				

MODULE 8 (Next to ATV Track)					
Title	Water and Forest Conservations				
Summary	The module starts with explanation about the status of forests in Malaysia and the importance of forests in maintaining the water content. The concept of Earth greening will be introduced to the participants by activities of planting trees. Next, a simple step demonstration of tree planting techniques will be taught, and participants will plant tree saplings prepared in the selected areas. This initiative is to support the Malaysian Greening Program through the 100 Million Tree Planting Campaign. It will increase the awareness of all parties about the importance of green cover areas and forests for well-being and quality of life in addition to efforts to improve the ecosystem and biodiversity of our country. Through this module, the spirit of love the nature through the planting of various trees species to all levels of society can be expressed as well as supporting the commitment to maintain the cover of forested areas in Malaysia. Each group will record their planting activities through mobile application. (https://www.100jutapokok.gov.my/)				
Convenor	Ts. Dr. Noor Janatun Naim Jemali/ Dr. Marinah Muhammad/ Ms. Syafinie Majid - University of Malaysia Kelantan (UMK)				

MODULE DIVISION

	Group	Group	Group	Group	Group	Group	Group	Group
	A	В	С	D	Е	F	G	Н
9:00 AM	M1	M2	М3	M4	M5	M6	M7	M8
9:45 AM	M2	М3	M4	M5	M6	M7	M8	M1
10:30 AM	М3	M4	M5	M6	M7	M8	M1	M2
11:15 AM	M4	M5	M6	M7	M8	M1	M2	М3
12:00 PM		Lunch Break						
1:00 PM	M5	M6	M7	M8	M1	M2	М3	M4
1:45 PM	M6	M7	M8	M1	M2	М3	M4	M5
2:30 PM	M7	M8	M1	M2	М3	M4	M5	M6
3:15 PM	M8	M1	M2	М3	M4	M5	M6	M7
4:00 PM		Tea Break						

^{*}M= Module

GROUP DIVISION

Group A

No.	Name	University	T-Shirt Size	Group
1	Ong Ting Zhi	UNM	S	Α
2	Goh Yi Jie	UNM	XL	Α
3	Chai Chan Yu	UNM	XL	Α
4	Chia Jason	UNM	L	A
5	On Zi Quan	UNM	XL	A
6	AFIQAH QHALEEDA BINTI MEKAIL	UiTM	L	A
7	NURWAHEERAH BINTI DARMAN	UITM	2XL	A
8	Zarish Hafilda binti Azlan	UITM	M	Α
9	ERINA BINTI JANTAN	UiTM	S	A
10	NADZRATUL NAZIRAH BINTI MOHD SALLEH	UiTM	L	A

Group B

No.	Name	University	T-Shirt Size	Group
1	Wong Xiao Xuan	UNM	L	В
2	Bong Lu Gine	UNM	2XS	В
3	Yee Hong Ming	UNM	M	В
4	On Tin Yian	UNM	L	В
5	Brandon Matthew Fernandez	UNM	XL	В
6	Jordan Ngu Shi Kai	UNM	S	В
7	Poovan A/L Rajaratnam	IUKL	5XL	В
8	Nadiya Chong Zhi Ying	UNITEN	M	В
9	Ng Meng See	UNITEN	M	В
10	Raja Fara binti Raja Abd Jalil	UNITEN	L	В

Group C

No.	Name	University	T-Shirt Size	Group
1	Dylan Yap Zi Jian	UNM	M	C
2	Chong Shu Qing	UNM	XS	C
3	Noor Nafirda bt. Riedzuan	UNM	3XL	C
4	Brian Ong Zhe	UM	M	C
5	Khor Jingyi	UM	M	C
6	HANISAH NURAINI BINTI HARMAN	UM	L	C
7	Shekinah Ramanah	UM	S	C
8	RAYMOND TING SIONG LEE	UM	L	C
9	TAN KEO SING	UM	S	C
10	Natasya Fakhira Binti Mohd Ismail	UM	M	C

Group D

No.	Name	University	T-Shirt Size	Group
1	Cheryl Chan Yan Yi	UNM	S	D
2	Leong Yi Bin	UNM	L	D
3	CH'NG ZEN WU	UNM	L	D
4	Ong Jun Tong	UNM	M	D
5	Leong Shu Qi	UNM	XS	D
6	Felicia Ong Wui Lynn	UNM	M	D
7	Puteri Eerdyna Binti Zakaria	UNM	L	D
8	Harry Kueh Wei Kang	UTAR	M	D
9	Hwong Yu Yi	UTAR	L	D
10	Thong Poh Ling	UTAR	L	D

Group E

No.	Name	University	T-Shirt Size	Group
1	Lee Keet Men	UNM	XS	E
2	Roshan Ramdas	UNM	S	E
3	Yousif Aboud Ahmed Musa	UNM	S	E
4	Athoof Ibrahim	UNM	2XL	E
5	Wong Ming Lam	UNM	2XL	E
6	AINUR RASHIDAH BINTI HARIS	UITM	L	E
7	MUHAMMAD AFIQ ZULHILMI BIN MAT SABERI	UITM	XL	E
8	Nur syazwani bt abd rahim	UITM	2XL	E
9	NURELYNA AZEERA BINTI MOHD REDZUAN	UITM	S	E
10	NURFATIN NABILAH BINTI NORAZMI	UITM	S	E

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Group F

No.	Name	University	T-Shirt Size	Group
1	Kennedy Tan Keat Hoo	UNM	M	F
2	Chen Jack Han	UNM	M	F
3	Lim Jit Joon	UNM	M	F
4	Ahmad Haris bin Norhelme	UNM	M	F
5	Azalea Dyah Maysarah Satya	UNM	M	F
6	Ghofran Walid Mohammed Hassan Mohammed Ramdan	UNM	M	F
7	Abdelrahman Mohamed Abdelsalam Abdelkader Ahmed	UNM	M	F
8	NISA SOFIAH BINTI ROSZELI	UITM	L	F
9	Nur Sabrina Iman Binti Ishak	UITM	M	F
10	ANIQ SYAHMI BIN AZMAN	UiTM	M	F

Group G

No.	Name	University	T-Shirt Size	Group
1	Farah Qistina binti Alnizam	UNM	S	G
2	Sunay Nath	UNM	L	G
3	Abdirahman	SEGI	L	G
4	Prassanth Tichana Moorthy	SEGI	L	G
5	Low Chun Lan	SEGI	XS	G
6	tian changbin	SEGI	XL	G
7	Sabrina Bt Mohd Reduan	SEGI	XS	G
8	Md. Sadiqul Hoque	SEGI	L	G
9	Hasan Abdulkarem Hasan Lahwal	SEGI	L	G

Group H

No.	Name	University	T-Shirt Size	Group
1	Jessilyn Teh Jing Ying	UNM	M	Н
2	WONG RUO LIN	UNM	S	Н
3	Subateeswarran Looganaden	UNM	3XL	Н
4	Justine Risa Lin Rellin	UNM	XL	Н
5	NURUL SAHIRA BINTI MOHD AZHARI	UIAM	M	Н
6	Hanisah Binti Yasrizul	UiTM	S	Н
7	NUR HAZIQAH BINTI YAHYA	UITM	L	Н
8	SAIFUDDIN SYAHMI BIN SAHARUDIN	UITM	L	Н
9	MUHAMMAD ALIFF SYAZWAN BIN SUHAIMI	UITM	M	Н

Organising Committees:

UNESCO IHP Malaysia Water Awareness Programme in Conjunction with World Rivers Day 2022

	World Rivers Day 2022
Main Organisors	UNESCO IHP Malaysia
	University of Nottingham Malaysia (UNM)
Chair	Assoc. Prof. Ir. Ts. Dr. Teo Fang Yenn (UNM)
Secretary and Treasurer	Asst. Prof. Dr. Wong Soon Yee (UNM)
	Prof. Andy Chan (UNM)
	Prof. Law Chung Lim (UNM)
	Prof. Christopher Gibbin (UNM)
	Assoc. Prof. Ir. Ts. Goh Boon Hoe (UNM)
	Asst. Prof. Dr. Anurita Selvarajoo (UNM)
	Asst. Prof. Dr. Sivathass Bannir (UNM)
	Ms. Hanani Abdul Rahim (UNM)
	Ts. Dr. Noor Janatun Naim Jemali (UMK)
	Dr. Marinah Muhammad (UMK)
	Ms. Syafinie Majid (UMK)
On CCF - Thanks	Associate Prof. Ir. Dr. Lai Sai Hin (UM)
Staff Facilitators	Ms. Normaliza Noordin (PPj)
	Ms. Nurliyana Abdul Rahaman (PPj)
	Ms. Yahzam Muhammad (PPj)
	Mr. Muhammad Syafiq Irham Shamsuddin (PPj)
	Ms. Nik Norazlina Che Ya (PPj)
	Mr. Nor Azlee Che Deraman (PPj)
	Mr. Mohammad Fairoz Abdul Aziz (PPj)
	Mr. Mustazal Affindi Mat Jusoh (PPj)
	Mr. Nik Mohd Noor Faizul Md Saad (UKM)
	Mr. Norazmi Abdul Kadir (UKM)
	Ms. Nurlina Mohamad Ramzan (UKM)

Organising Committees:

UNESCO IHP Malaysia Water Awareness Programme in Conjunction with World Rivers Day 2022

	World Rivers Day 2022
	Ir. Dato' Lim Chow Hock (UNM)
	Ir. Lim Sin Poh (UNM)
Facilitators	Mr. Lip Yih Yoong (UNM)
	Ms. Chong Xin Yi (UNM)
	Mr. Tan Cha Yao (UNM)
	Ms. Selam Solomon Gebreselassie (UNM)
Haalah O Cafatu Cumant	Mr. Nor Raimy Ismail (UNM)
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	Ong Ting Zhi (UNM)
	Dyaln Yap Zi Jian (UNM)
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Technical Supports	Bong Lu Gine (UNM)
recinical Supports	Wong Xiao Xuan (UNM)
	Goh Yi Jie (UNM)
	Jason Chia (UNM)
*	Yee Hong Ming (UNM)
	Department of Irrigation and Drainage (JPS)
	Putrajaya Corporation (PPj)
Collaborating Agencies	University of Malaya (UM)
Conasor acing Agenoies	University of Malaysia Kelantan (UMK)
	Institute for Environment and Development (LESTARI), Universiti Kebangsaan Malaysia (UKM)
	Global Water Consultants Sdn. Bhd.
Sponsors	EcoVenture Resort & Recreation

UNESCO IHP MALAYSIA WATER AWARENESS PROGRAMME

Token of Appreciation

UNESCO International Hydrological Programme (IHP) Malaysia

Department of Irrigation and Drainage (JPS)

Global Water Consultants Sdn. Bhd.

Ecoventure Resort & Recreation

Putrajaya Corporation (PPj)

Universiti Malaya (UM)

Institute for Environment and Development (LESTARI),

Universiti Kebangsaan Malaysia

Universiti Malaysia Kelantan (UMK)

Universiti Teknologi Mara (UiTM)

National Energy University (UNITEN)

Universiti Tunku Abdul Rahman (UTAR)

International Islamic University Malaysia (UIAM)

SEGI University



NOTES