

2019

ACADEMIC INTELLECTUAL INTERNATIONAL INVENTION,

INNOVATION & DESIGN BOOK

Published by: Student Affairs Department,

Universiti Teknologi MARA Kedah,

P.O. Box 187, 08400 Merbok, Kedah, Malaysia.

Patron : Dr. Wan Irham Ishak

Dr. Abd Latif Abdul Rahman

Project Manager : Yazwani Mohd Yazid

Design Director : Mohd Hamidi Adha Mohd Amin

Fadila Mohd Yusof

Editorial Director : Mohd Hamidi Adha Mohd Amin

Mas Aida Abd Rahim

Copyright © 2019 Student Affairs Department, Universiti Teknologi MARA Kedah. No part of this publication may be reproduced, stored in retrieval system, or transmitted in any form or by means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of the publisher.

ISBN: 978-967-0314-71-6

Printed by: Perpustakaan Sultan Badlishah,

Universiti Teknologi MARA Kedah,

P.O Box 187, 08400 Merbok, Kedah, Malaysia.

89.	Dadu BiMate TJI: AN INNOVATION OF BOARD GAME FOR FUN AND	91
	EFFECTIVE NUMBER, BASIC OPERATIONS AND BASIC MEASUREMENT	
	FACTS LEARNING IN PRIMARY MATHEMATICS	
90.	ANICARE	92
91.	PEMPEK BO SANG (FISHCAKE MADE OF BANANA'S FLORAL STEM)	93
92.	EXAMINATION MANAGEMENT SYSTEM (EXAMS)	94
93.	KLEAN	95
94.	MUSON (MUSHROOM NOODLE) INNOVATION OF HEALTHY FOOD	96
	PRODUCTS FROM OYSTER MUSHROOMS WITH NEW INNOVATION AS A	
	POTENTIAL BUSINESS OPPORTUNITY IN PUBLIC SECURITY	
95.	TENAGA GUNA SEMULA (TEGUSE)	97
96.	ANALISIS PUNCA MASALAH PEMBELAJARAN OPERASI TOLAK	98
	DALAM LINGKUNGAN 10 DAN KEUPAYAAN BITOBI MATCH-UP	
	DALAM MENGATASI MASALAH: KAJIAN RINTIS	
97.	IMPROVING STUDENTS AWARD SELECTION PROCESS THROUGH THE	99
	DEVELOPMENT OF AKSIS (ANUGERAH KECEMERLANGAN SISWA) WEB	
	INFORMATION SYSTEM	
98.	IMPROVING RECORDS' MANAGEMENT PRACTICES VIA	100
	ATTENDANCE MONITORING SYSTEM (AMOS)	
99.	DELAT ADLER: THE PORTABLE AND VERSATILE ELECTRCITY GENERATOR.	101
100.	DISASTER E-DRONE PREVENT INCREASING OF VICTIM ENGLISH!	102
101.	SPEAK UP SYSTEM	103
102.	H-BALM: HARUMANIS-BASED RELIEVING PRODUCT	104
103.	H-CUBE: INNOVATIVE HARUMANIS PERLIS PRODUCT	105
104.	DARE TO INVEST: CREATIVE MIND AND INNOVATIVE IDEA	106
105.	POLYVALENT CARREL	107
106.	Ezi4BANNER 2.0	108
107.	RANGGU "THE NATURAL COLOUR"	109
108.	SMART EMERGENCY DRONE FOR MANAGEMENT OF DISASTER	110
109.	SMARTOVATION YUZA WITH LONG DEPENDABLE WIRES	111
110.	THE CONVERSION OF THERMOELECTRIC ENERGY INTO ELECTRICAL	112
	ENERGY IN APPLICATION OF DEREM CHARGER	
111.	TEH HARUMANIS PERLIS	113
112.	·	114
113.	RECYCLE BIN: WASTE BUSINESS PLATFORM TO IMPROVE	115
	SCAVENGER'S CHILDREN EDUCATION BASED ON MOBILE APPLICATION	
114.	SMART WUDHUK	116
115.	CAPTION (CANTILEVER PIEZOELECTRIC ENERGY HARVESTER	117
	WITH ENERGY BANK SYSTEM FOR FISHERMAN) AS AN ALTERNATIVE	
	TECHNOLOGY INNOVATION TO OPTIMIZE MARITIME ENERGY RESOURCES	
116.	AUTO WATER RECLOSE	118
117.	WIRELESS AIR POLLUTION DETECTOR (MAGIC NOZZ)	119
118.	E-CAMFINDER LEARNING APPLICATION	120
119.	ROTARY GRILL-gen2	121
120.	GARBARGAIN: A SOLUTION FOR PRA-PROSPEROUS COMMUNITIES	122
	BY EXCHANGED GARBAGE TO GET THE SUITABLE LEFTOVER FOOD	



POLYVALENT CARREL

Fara Zila Binti Md. Saril, Amirah Zakiah Binti Rosihidin, Nur Husna Binti Husni, Sarah Natasya Binti Nasri and Raja Alwi Bin Raja Omar

Universiti Teknologi MARA Kampus Sungai Petani, Kedah, Malaysia.

amirahzzz101@gmail.com

A carrel is a desk that specially design to be use for reading or studying. Its cubicle shape gives the experience of privacy to the users. Therefore, it is usually placed at spaces like in the library and study room where student use it to do their work, revision or reading. Polyvalent is defined as one thing that has many different uses. By combining these carrel and polyvalent element, we created the Polyvalent Carrel which is a redesign of a carrel that comes with multi-purpose function and in a portable form. The objectives behind this creation is to provide space of privacy to student especially during revision or reading. Besides, we want to improvise the ordinary carrel to add up its function so that can ease student's activity while using it and able to be bring and use it anywhere. The novelty and uniqueness of our carrel is that is portable as the design allow it to change the shape into an easier form to carry, comes with a wireless connection to the build in printer and also has multi-purpose function such as printer, desk and storage. The uniqueness will help student to use the carrel as all in one desk. We aim this product towards students to give the usefulness for student such as students can create their own privacy anywhere they go when using the carrel while using some of the carrel's function like print documents right away with the built in printer. This product can be commercialized to any institution such as universities, colleges and schools. Also potential to be commercialize to libraries that become the place that usually visited by students like public library, school library, academic library and national library. Other than that, students can buy it for their individual use. Hence, the Polyvalent Carrel is a useful product that will ease student in many ways from the various function that has been put into the desk itself.







