

Republic of the Philippines Professional Regulation Commission Manila

PROFESSIONAL REGULATORY BOARD OF MECHANICAL ENGINEERING

RESOLUTION NO. <u>57</u> Series of 2013

PROMULGATION AND ADOPTION OF THE TABLES OF SPECIFICATIONS (TOS) FOR THE SUBJECTS IN THE BOARD LICENSURE EXAMINATION FOR REGISTERED MECHANICAL ENGINEERS

WHEREAS, Section 17, Article III of R.A. 8495, known as the "Philippine Mechanical Engineering Act of 1998" states that the Professional Regulatory Board of Mechanical Engineering, may amend or revise the subjects, syllabi, passing average, and the system and procedure in the licensure examinations for the practice of mechanical engineering and the corresponding weight pursuant to the implementing rules and regulations issued for this purpose;

WHEREAS, Section 9(h) of R.A. 8981, called as the "PRC Modernization Act of 2000", empowers the Professional Regulatory Boards to prepare, adopt, and issue the syllabi or tables of specifications of the subjects for examinations, in consultation with the academe; determine and prepare the questions for the licensure examinations which shall strictly be within the scope of the syllabus or table of specifications (TOS) of the subject for examination;

WHEREAS, a syllabus for each examination subject is necessary to delineate the scope or parameters of each subject for examination and to guide the Professional Regulatory Boards, examinees and reviewers in preparing, taking and reviewing the licensure examinations;

WHEREAS, the syllabus or TOS is the basis for the test questions that will be inputted into the computer test question bank;

WHEREAS, the adoption of the syllabus or TOS will appropriately incorporate the competencies covering the topics and sub-topics, or areas and sub-areas, or concepts and sub-concepts into the Board Licensure Examination subjects, with the same not only providing the percentage weights and number of items but also the levels of difficulty, namely, Easy: K (knowledge), Moderate: U (understanding), C (comprehension), Difficult: A (analysis), S (synthesis), and E (evaluation);

WHEREFORE, the Professional Regulatory Board of Mechanical Engineering, pursuant to Sec. 9(k) Article II of R.A. 8495, **RESOLVES**, as it is hereby **RESOLVED**, to adopt, promulgate, and issue a modified syllabi of the subjects in the licensure examination for Registered Mechanical Engineers;

FURTHER RESOLVED, that this Resolution with Annexes "A" and "B" hereof shall apply in the September 2013 Licensure Examinations for Registered Mechanical Engineers.

FURTHERMORE RESOLVED, this Resolution shall take effect after it shall have been docketed and received by the Records Division, Rating Division, Educational Statistic Division (ESD), and the Board.

FINALLY RESOLVED, that this Resolution be widely disseminated and circularized, through the Philippine Society of Mechanical Engineers (PSME), to all schools, colleges and universities offering courses in Mechanical Engineering, and all other concerned sectors.

Done in the City of Manila, this 25thday of July, 2013.

EANDRO A. CONTI Officer-in-Charge

VICENTE B. VOSOTROS Member

(VACANT) Member

ATTESTED BY:

Loulila J. Bantuta LOVELIKA T. BAUTISTA OIC, Secretary to the Professional Regulatory Boards

APPROVED:

Chairperson

7/23 Mandeli **JENMFER JARDIN-MANALILI**

Commissioner

(VACANT) Commissioner

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Republic of the Philippines Professional Regulation Commission Manila

PROFESSIONAL REGULATORY BOARD OF MECHANICAL ENGINEERING

Table of Specifications in Machine Design, Materials and Shop Practice

COMPETENCY	181. 1. 1.	No	Dika	. 14	1	Difficulty		
COMPETENCY in	Weight	t No. of Items 100	Easy Items		Moderate	Difficult Items		
Machine Design, Mateials and Shop Practice	30%		knowledge K	comprehension C	application A	analysis A	synthesis S	evaluation E
0 Kinematics	2.88	12						
1.1 Displaceent velocity and acceleration analysis	0.96	4.0	1	1	1	1		1
Define the basic knowledge and concepts	0.24	1.0	1					
Explain the basic methods and concepts	0.24	1.0		1				
Analyze the concepts	0.24					1		
Apply the concepts (designing or problem solving)	0.24	1.0	and the second sec		1		a 	
1.2 Analysis of mechanism	0.96	4.0	1	1	1	1		1
Define the basic knowledge and concepts	0.24	1.0	1					
. Explain the basic methods and concepts	0.24	1.0	17-44-41-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	1				
Analyze the concepts	0.24	1.0				1		
. Apply the concepts	0.24	1.0			1			
1.3 Cam mechanism and gear train	0.96	4.0	1	1	1	1		
. Define the basic knowledge and concepts	0.24		1	-	3	1		
Explain the basic methods and concepts	0.24			1				
Analyze the concepts	0.24					1		
. Apply the concepts (designing or problem solving)	0.24				1			
0 Machine Design	25.00	81.0						
				-				
2.1 Stress Analysis-Simple Stresses	0.96	3.0	1	1	1			
. Define the basic knowledge and concepts	0.32	1.0	1					
2. Explain the basic methods and concepts	0.32			1				
Analyze & apply the concepts (designing or problem solving)	0.32	1.0			1			
2.2 Materials and their Properties	0.96	3.0	1	1	1			
. Define the basic knowledge and concepts	0.32	2 1.0	1					
2. Explain the basic methods and concepts	0.32	2 1.0		1				
Analyze & apply the concepts through proper material selection	0.32	2 1.0			1			
2.3 Tolerances and Allowances	0.96	3.0	1	1		1		
1. Define the basic knowledge and concepts	0.32		1					
2. Explain the basic methods and concepts	0.32			1				
Analyze & apply the concepts (designing or problem solving) 0.32	2 1.0				1		
2.4 Variable Loads & Stress Concentration	0.96	3 3.0	1		1	1		
1. Define the basic knowledge and concepts	0.32		1				-	
2. Explain the basic methods and concepts	0.32				1			
3. Analyze & apply the concepts (designing or problem solving)	0.32	2 1.0				1		
2.5 Colums and Central Loads	0.9	6 3.0	1	1		1		
1. Define the basic knowledge and concepts	0.3	and the second s	1					
2. Explain the basic methods and concepts	0.3			1				
3. Analyze & apply the concepts (designing or problem solving)	0.3	2 1.0				1		
2.6 Combined Stresses	0.9	6 3.0	1	1	1			
1. Define the basic knowledge and concepts	0.3		1					
2. Explain the basic methods and concepts	0.3			1				
3. Analyze & apply the concepts (designing and problem solving)	0.3	2 1.0			1			
2.7 Ball and Roller Bearings	0.9	6 3.0	1	1	1			
1. Define the basic knowledge and concepts	0.3			1	- I			

	1 11 41 44	-73 23 U						
2. Explain the basic methods and concepts	0.32	1.0	900000 (F-10000)	1		1	1	
3. Analyze & apply the concepts (designing or problem solving)	0.32	1.0			1			
2.8 Journal and Plane-Surface Bearings	0.96	3.0	1	1		1		
I. Define the basic knowledge and concepts	0.32	1.0	1					
2. Explain the basic methods and concepts	0.32	1.0		1	Colored Management and Street Street			
3. Analyze & apply the concepts (designing or problem solving)	0.32	1.0		3		1		
				1		· · · ·		
2.9 Flexible transmission, flat belts, v-blets, and chains	0.96	3.0	1	1		1		
1. Define the basic knowledge and concepts	0.32	1.0	1					
2. Explain the basic methods and concepts	0.32	1.0		. 1				
3. Analyze & apply the concepts (designing or problem solving)	0.32	1.0				1		
2.10 Screw Fastening and Rivets	0.96	3.0	1	1	1			
1. Define the basic knowledge and concepts	0.32	1.0	1					
2. Explain the basic methods and concepts	0.32	1.0		1	an a			
3. Analyze & apply the concepts (designing or problem solving)	0.32	1.0			1		1	
		The second s			a Care and a single of a construction of a galaxy dust out in young			
2.11 Springs	0.96	3.0	1	1	1			
1. Define the basic knowledge and concepts	0.32	1.0	1				1	
2. Explain the basic methods and concepts	0.32	1.0		1				
3. Analyze & apply the concepts (designing or problem solving)	0.32	1.0	ana ang panananyan ny padana yana ana ang pa		1	1		
2.12 Shafts	0.96	3.0	1	1		1		
1. Define the basic knowledge and concepts	0.32	1.0	1	1	#34506/emmerson 5454-244-24-24-24-24-24-24-24-24-24-24-24-2			· · ·
2. Explain the basic methods and concepts	0.32	1.0		1				
3. Analyze & apply the concepts (designing or problem solving)	0.32	1.0	Allen (7) b Farren (1) and an an and a second s			1		
0401/ 10 1								1
2.13 Keys and Couplings	0.96	3.0	1	1		1		
1. Define the basic knowledge and concepts	0.32	1.0	1		** ****		1	· · · ·
2. Explain the basic methods and concepts	0.32	1.0		1	and apply when an address in the Danible series in consequenting			
3. Analyze & apply the concepts (designing or problem solving)	0.32	1.0	********		AND	1		
					NAME OF CONTRACTOR OF CONTRACTOR			
2.14 Journal and Plane-Surface Bearings	0.96	3.0	1	1		1	1	
1. Define the basic knowledge and concepts	0.32	1.0	1			1		
2. Explain the basic methods and concepts	0.32	1.0		1	tan barran fa popular a anna Maada anna anna Arra	1		
3. Analyze & apply the concepts (designing or problem solving)	0.32	1.0				1		
2.15 Spur Gears	0.96	3.0	1	1		1		
1. Define the basic knowledge and concepts	0.32	1.0	1					
2. Explain the basic methods and concepts	0.32	1.0		1				
3. Analyze & apply the concepts (designing or problem solving)	0.32	1.0				1		
2.16 Helical Gears								
	0.96	3.0	1	1		1		
1. Define the basic knowledge and concepts	0.32	1.0	1					
2. Explain the basic methods and concepts	0.32	1.0		1				
3. Analyze & apply the concepts (designing or problem solving)	0.32	1.0				1		
2.17 Bevel Gears								
	0.96	3.0	1	1		1		
1. Define the basic knowledge and concepts	0.32	1.0	1					
2. Explain the basic methods and concepts	0.32	1.0		1				
3. Analyze & apply the concepts (designing or problem solving)	0.32	1.0	ANOTO THE SECOND AND AND AND AND AND AND AND AND AND A			1		
2 18 Worm Cooring								
2.18 Worm Gearing	0.96	3.0	1	1		1 .		
1. Define the basic knowledge and concepts	0.32	1.0	1					
2 Evalgin the basic methods and assessed	(3				The second s			
2. Explain the basic methods and concepts	0.32	1.0		1				
 Explain the basic methods and concepts Analyze & apply the concepts (designing of problem solving) 	0.32	1.0 1.0	92006.014.00000000000000000000000000000000	1		1		
3. Analyze & apply the concepts (designing or problem solving)	0.32	1.0						
3. Analyze & apply the concepts (designing or problem solving) 2.19 Brakes & Clutches	0.32	1.0 3.0	1	1				
Analyze & apply the concepts (designing or problem solving) 2.19 Brakes & Clutches 1. Define the basic knowledge and concepts	0.32 0.96 0.32	1.0 3.0 1.0	1	1				
Analyze & apply the concepts (designing or problem solving) 2.19 Brakes & Clutches I. Define the basic knowledge and concepts Z. Explain the basic methods and concepts	0.32 0.96 0.32 0.32	1.0 3.0 1.0 1.0	AT-TACKAR AND			1		
Analyze & apply the concepts (designing or problem solving) 2.19 Brakes & Clutches 1. Define the basic knowledge and concepts	0.32 0.96 0.32	1.0 3.0 1.0	AT-TACKAR AND	1				
 3. Analyze & apply the concepts (designing or problem solving) 2.19 Brakes & Clutches Define the basic knowledge and concepts 2. Explain the basic methods and concepts 3. Analyze & apply the concepts (designing or problem solving) 	0.32 0.96 0.32 0.32 0.32	1.0 3.0 1.0 1.0 1.0	1	1		1		
 Analyze & apply the concepts (designing or problem solving) 2.19 Brakes & Clutches 1. Define the basic knowledge and concepts 2. Explain the basic methods and concepts 3. Analyze & apply the concepts (designing or problem solving) 2.20 Welding 	0.32 0.96 0.32 0.32 0.32 0.32	1.0 3.0 1.0 1.0 1.0 3.0	4	1		1		
 Analyze & apply the concepts (designing or problem solving) 2.19 Brakes & Clutches Define the basic knowledge and concepts Explain the basic methods and concepts Analyze & apply the concepts (designing or problem solving) 2.20 Welding Define the basic knowledge and concepts 	0.32 0.96 0.32 0.32 0.32 0.32 0.96 0.32	1.0 3.0 1.0 1.0 1.0 3.0 1.0	1	1		1		
 3. Analyze & apply the concepts (designing or problem solving) 2.19 Brakes & Clutches Define the basic knowledge and concepts 2. Explain the basic methods and concepts 3. Analyze & apply the concepts (designing or problem solving) 2.20 Welding Define the basic knowledge and concepts Explain the basic knowledge and concepts 	0.32 0.96 0.32 0.32 0.32 0.32 0.96 0.32 0.32	1.0 3.0 1.0 1.0 1.0 1.0 1.0 1.0	4	1		1		
 Analyze & apply the concepts (designing or problem solving) 2.19 Brakes & Clutches Define the basic knowledge and concepts Explain the basic methods and concepts Analyze & apply the concepts (designing or problem solving) 2.20 Welding Define the basic knowledge and concepts 	0.32 0.96 0.32 0.32 0.32 0.32 0.96 0.32	1.0 3.0 1.0 1.0 1.0 3.0 1.0	4	1		1		
 3. Analyze & apply the concepts (designing or problem solving) 2.19 Brakes & Clutches Define the basic knowledge and concepts 2. Explain the basic methods and concepts 3. Analyze & apply the concepts (designing or problem solving) 2.20 Welding Define the basic knowledge and concepts Explain the basic knowledge and concepts Explain the basic methods and concepts 2. Explain the basic knowledge and concepts 3. Analyze & apply the concepts (designing or problem solving) 	0.32 0.96 0.32 0.32 0.32 0.32 0.32 0.32 0.32 0.32	1.0 3.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0		1		1		
Analyze & apply the concepts (designing or problem solving) 2.19 Brakes & Clutches 1. Define the basic knowledge and concepts 2. Explain the basic methods and concepts 3. Analyze & apply the concepts (designing or problem solving) 2.20 Welding 1. Define the basic knowledge and concepts 2. Explain the basic knowledge and concepts 2. Explain the basic methods and concepts 3. Analyze & apply the concepts (designing or problem solving) 2.21 Thin Cyclinders & Cylindrical Cylinders	0.32 0.96 0.32 0.32 0.32 0.32 0.32 0.32 0.32 0.32	1.0 3.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 3.0	1 1 1 1 1	1	1	1		
 Analyze & apply the concepts (designing or problem solving) 2.19 Brakes & Clutches Define the basic knowledge and concepts Explain the basic methods and concepts Analyze & apply the concepts (designing or problem solving) 2.20 Weiding Define the basic knowledge and concepts Analyze & apply the concepts (designing or problem solving) 2.20 Weiding Define the basic knowledge and concepts Explain the basic methods and concepts Analyze & apply the concepts (designing or problem solving) 2.21 Thin Cyclinders & Cylindrical Cylinders Define the basic knowledge and concepts 	0.32 0.96 0.32 0.32 0.32 0.32 0.32 0.32 0.32 0.32 0.32 0.32 0.32	1.0 3.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 3.0 1.0		1	1	1		
Analyze & apply the concepts (designing or problem solving) 2.19 Brakes & Clutches 1. Define the basic knowledge and concepts 2. Explain the basic methods and concepts 3. Analyze & apply the concepts (designing or problem solving) 2.20 Welding 1. Define the basic knowledge and concepts 2. Explain the basic knowledge and concepts 2. Explain the basic methods and concepts 3. Analyze & apply the concepts (designing or problem solving) 2.21 Thin Cyclinders & Cylindrical Cylinders	0.32 0.96 0.32 0.32 0.32 0.32 0.32 0.32 0.32 0.32	1.0 3.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 3.0	1 1 1 1 1	1	1	1		

К. У. 		ANNE	EX A-3						
2.22 Steel Tubes		0.96	3.0	1	1	1	1		
. Define the basic knowledge and concepts		0.32	1.0	1					
. Explain the basic methods and concepts		0.32	1.0		1				
3. Analyze & apply the concepts (designing or	problem solving)	0.32	1.0			1			
2.23 Flat Plates		0.96	3.0	1	1	1			
. Define the basic knowledge and concepts		0.32	1.0	1	1	1			
2. Explain the basic methods and concepts		0.32	1.0	1	1				
3. Analyze & apply the concepts (designing or	problem solving)	0.32	1.0			1			
2.24 Flywheels		0.96	3.0	1	1	1			
1. Define the basic knowledge and concepts		0.32	1.0	1					
2. Explain the basic methods and concepts		0.32	1.0		1				
Analyze & apply the concepts (designing or p	roblem solving)	0.32	1.0			1			
2.25 Punch Press		0.96	3.0	1	1	1			
1. Define the basic knowledge and concepts		0.32	1.0	1		1			
2. Explain the basic methods and concepts		0.32	1.0		1	and the two series of the providence of the series of the			
3. Analyze & apply the concepts (designing or	problem solving)	0.32	1.0		1	1			
2.26 Pipe and Fittings	na si seran engrikasi	0.96	3.0	1	1	1			
1. Define the basic knowledge and concepts		0.32	1.0	1	4				
2. Explain the basic methods and concepts		0.32	1.0	1	1				
3. Analyze & apply the concepts (designing or	problem solving)	0.32	1.0		1	1			
2.27 Engineering Drawing Practices	and the second second	0.96	3.0	1	1	1			
1. Define the basic knowledge and concepts		0.32	1.0	1	1				
2. Explain the basic methods and concepts		0.32	1.0	1	1				
3. Analyze & apply the concepts (designing or	problem solving)	0.32	1.0			1			
3.0 Shop Machinery		0.96	3.0	1	1	1			
1. Define the basic knowledge and concepts		0.32	1.0	1	1	1			
2. Explain the basic methods and concepts		0.32	1.0	I	1				
3. Analyze & apply the concepts through proper r	material selection	0.32	1.0			1			
4.0 Shop Practice		0.96	4.0	4					
1. Define the basic knowledge and concepts			4.0	1	1	1	1	New York Contractor State St	and a stand of the
2. Explain the basic methods and concepts		0.24	1.0	1					
3. Analyze the concepts			1.0		1				
4. Apply the concepts		0.24	1.0				1		
TED are concepts		0.24	1.0			1			
		30%	100.0	32	31	19	18	0	0

Total Test Questions = 100

Easy = Mod = Diff =

63 19

18

63% 19% 18% 100%

Prepared by:

21

CENTE B. VOSOTROS Member Reviewed by:

Sawila & Jubigan DRA. LUCILA F. TIBIGAR PRC Consultant



Republic of the Philippines Professional Regulation Commission Manila

PROFESSIONAL REGULATORY BOARD OF MECHANICAL ENGINEERING

Table of Specifications in Power Plant Engineering

							Difficulty		
COMPETENCY in		Weight		Easy Items		Moderate	Difficult Items		
Power Plant Engineering	and with the rest of a state in the state of	35%	% Items 100	knowledge K	comprehension C	application A	analysis A	synthesis S	evaluation <i>E</i>
ID POWERPLANT ELEMENTS		3.80%	11	5	5	1	0	0	0
1.1 Fuels and Combustion		0.76	2.0	4	A	1	and the boot developed and set of a street to segme		
. Define the basic knowledge and concepts		0.70	3.0	1	1	1			
2. Explain the basic methods and concepts				1	1				
3. Apply the the knowledge and concept						1			
1.2 Variable Load Problems		0.76	2.0	1		en senar de la companya de			
. Define the basic knowledge and concepts		0.10	du i ty	1			an a faid an		
2. Explain and apply the basic methods and cor	icepts				1				
1.3 Thermodynamics		0.76	2.0	1	1				
 Define the basic knowledge and concepts Explain the basic methods and concepts 				1					
2. Explain the basic methods and concepts					1				
1.4 Internal Combustion Engines		0.76	2.0	1	1				
1. Define the basic knowledge and concepts		0.70	2.0	1					
2. Explain and comprehend the basic methods	and concepts		A MARKET KENNER SHAMPOON	President Detter ministration (damacup dama	1		Ward Diversity of the Property	Die gestanden die state best and die gesten and	
				40 					
1.5 Heat Transfer									
 Define the basic knowledge and concepts 		0.76	2.0	1	1				
 Explain and apply the basic methods and concepts 	oncepts			- 1	1				
	ann an								
	na an a	3.80							
2.0 Power Plant Design		7.60	24.0	2	3	10	7	1	1
2.1 Diesel Engine Power Plant		0.76	3.0	1		2			
1. Define and explain the basic knowledge and				1					1
Comprehend and apply the basic methods a	and concepts					2			
2.2 Gas Turbine Power Plant		0.76	3.0	1	1	1			
1. Define and comprehend the basic knowledg	e and concepts			1	1				
2. Apply the basic methods and concepts						1			
2.3 Combined Cycle Power Plant		0.76	2.0			1	1		-
1.Define and comprehend the basic knowledg	e and concepts	0.10	2.0		-	-			-
2. Apply and Analyze the basic methods and c						1	1		
2.4 Steam Power Plant		0.76	3.0		1	1		1	
1. Define and comprehend the basic knowledge	e and concepts	5.10		1	1	1	-	1	
 Apply and analyze the basic methods and co Synthesize the methods and concepts 	oncepts					1		1	-
2.5 Hydro-electric Power Plant	a Paster	0.76	5 2.0			1	1		
1. Define and explain the basic knowledge and	d concente			1			1		1

5-	ANNE	:X A-3						
2. Apply and analyze the methods and concepts				1	1	4 1	1	
					1	1		
2.6 Geothermal Power Plant	0.76	3.0		1	1	1		
1. Define and explain the basic knowledge and concepts				1	Catalogical Control of			nya kawa kata kata kata kata kata kata kat
2. Apply the methods and concepts					1			
3. Analzye the methods and concept (problem solving)						1		
2.7 Nuclear Power Plant	0.76	2.0			4	4		man many shared, some shared at the
1. Define and comprehend the basic knowledge and concepts	0.70	2.0			1	1		
2. Apply and analyze the methods and concepts					1	1		
2.8 Non-conventional Sources of Energy	0.76	2.0			1	1		
1. Define and comprehend the basic knowledge and concepts								
3. Analyze & apply the concepts (designing or problem solving)					1	1		
	Optimite Courses	and the second						· · ·
2.9 Piping System and Insulation	0.76	2.0			1	1		
 Define and apply the basic knowledge and concepts Apply and analyze the concepts (designing or problem solving) 			· · · · · · · · · · · · · · · · · · ·					
2. Apply and analyze the concepts (designing of problem solving)					1	1		
2.10 Insstrumentation and Control	0.76	2.0			1			
1. Defineand comprehend the basic knowledge and concepts	0.70	2.0			1			
2. Apply and evaluate the concepts (designing or problem solving)								1
	7.60							
				1				
3.0 Industrial Plant Engineering	4.56	13.0	4	6	2	1	0	0
Industrial Plant Elements	and the second se	and the second						And a second
3.1. Project Feasibility Study 1. Define the basic knowledge and concepts	0.76	3.0	1	1		1		
Explain the basic knowledge and concepts Explain the basic methods and concepts			1					
3. Analyze & apply the concepts			an a	1		1		
						1		
3.2 Industrial Safety and Accident Prevention	0.76	2.0		1	1			
1. Define & comprehend the basic knowledge and concepts				1				
2. Apply the methods & concepts					1			1
3.3 Heat Transfer Modes and Laws	0.76	2.0	1	1				
1. Define the basic knowledge and concepts			1					a second s
2. Explain the basic methods and concepts				1				
3.4 Fluid Machineries Principles and Operation	0.70	2.0	A					
1. Define the basic knowledge and concepts	0.76	2.0	1	1				
2. Explain and comprehend the basic methods and concepts			1	1				
presentation comprehenta une subie methods and concepts								
3.5 Industrial Lubrication	0.76	2.0		1	1			
1.Comprehend, basic principles				1				
2. Apply the basic methods and concepts					1			
2.0 Environmental Environment P. D. H. H. O								
3.6 Environmental Engineering & Pollution Control 1. Define the basic knowledge and concepts	0.76	2.0	1	1				
2.Comprehend the basic methods and concepts			1	1				
	4.56							
	1.00					-		
4.0 Industrial Plant Design	9.12	24.0	1	10	11	2	0	0
4.1 Dryers	0.76	2.0			1	1	1	
1. Comprehend & apply the basic knowledge and concepts								
2. Apply the concepts (designing or problem solving)					1			
3. Analyze the concepts and methods						1		-
		+						
		+					1	
		1		-				
			1					
		2.0			1	1		
4.2 Fans and Blowers	0.76	1	1					
1. Apply the basic knowledge and concepts	0.76				1			
	0.76				1	1		-
1. Apply the basic knowledge and concepts	0.76				1	1		
1. Apply the basic knowledge and concepts	0.76	2.0		1	1	1		

	ANN	IEX A-3			X			
. Comprehend & apply the basic knowledge and concepts		1		1	1	7	1	
Apply the concepts (designing or problem solving)				1	1			
					1			
4.4 Cooling Towers & Other Water Cooling Equipment	0.76	2.0		1	1	and the local division of the local division		
Comprehend the basic knowledge and concepts				1				
Apply the concepts (designing or problem solving)				1	1			
150-0					8			
4.5 Gas Compressors	0.76	2.0		1	1			
Explain the basic methods and concepts				1				
. Apply the concepts (designing or problem solving)					1			
4.6 Chimney-Smokestack and Draft System	0.76	2.0		1	1	+		
. Comprehend the basic knowledge and concepts				1				
. Apply the concepts (designing or problem solving)					1			
				1	1			
				1				
4.7 Heat Transfer Equipment	0.76	2.0		1	1	1		
. Comprehend the basic knowledge and concepts			1 Mar 1 M 100 M 101 M	1	1	+		
Apply the concepts (designing or problem solving)	MANDOCK ADVANCES SERVICES AND				1	+		
					1	+		
				1		1	+	
4.8 Conveyors & Other Material Handling Equipment	0.76	2.0		1	1			
. Comprehend the basic knowledge and concepts				1	1			
Apply the concepts (designing or problem solving)					A			
					1			
4.9 Industrial Instrumentation and Control	0.76	2.0	1	1				
. Define the basic knowledge and concepts	0-10	الاست.	1	1				
. Explain the basic methods and concepts			1	1			+	
4.10 Machinery Foundatin	0.76	2.0		1	4			
Comprehend the basic knowledge and concepts		Au , Q	anganat, and a constant for an and a second	1	1			
Apply the concepts (designing or problem solving)				1	4			
and the second					1			
4.11 A.C. and D.C. Machinery Performance and Characteristics	0.76	2.0		1	4			
. Comprehend the basic knowledge and concepts	0.10	dia . V		1	1			
. Apply the concepts (designing or problem so ving)					4			
					1			
4.12 Industrial Processes: Mfg Procedures & Flowheets	0.76	2.0		1	1			
				1	1			
Explain the basic methods and concepts				1			1	
. Apply the basic methods and concepts	9.12			1	1			
					ŀ			
.0 Refrigeration Engineering & Its Applicatin	3.80	10.0	1	4	4	4	-	
					-4		0	
5.1 Principles of Different Refrigerations Systems	0.76	2.0		4				
	0.10	ais - U		1		1		
Explain the basic methods and concepts				1			+	
Analyze the concepts								
						1		
5.2 Determination of Cooling Loads	0.76	2.0		1	1		+	
Explain the basic methods and concepts				1	1			
Aply the basic concepts				1	1			
					1			
							1	
							+	
							-	
						1		
							1	
						1		
						1		
3 Basic Design of Ico Blocks, Cult Of	much 200-do common april of the							
5.3 Basic Design of Ice Plants , Cold Storage & Skating Rinks	0.76	2.0		1	1			
Explain the basic knowledge and concepts				1				4
Apply the basic methods and concepts(problem solving)					1			
			CHERT IN THE OWNER WATER AND ADDRESS OF					
5.4 Desison selection & specification of ref. plants ? Equipment	0 40				1	1	1	1
5.4 Desisgn selection & specification of ref. plants & Equipment	0.76	2.0	New York Control of Co	1	1			
5.4 Desisgn selection & specification of ref. plants & Equipment Explain the basic knowledge and concepts Apply the basic methods and concept(archiere activity)	0.76	2.0		1				
5.4 Desisgn selection & specification of ref. plants & Equipment Explain the basic knowledge and concepts Apply the basic methods and concepts(problem solving)	0.76	2.0			1			

е ^н 21 ₁₀		ANNE	EX A-3						
5.5 Instrumentation and Controls		0.76	2.0	1		1			
1. Define the basic knowledge and concepts		0.70	2.0	1		1			
2. Apply the basic methods and concepts(pro	plem solving)			1		1			
		3.80							
6.0 Air Conditioning		6.12	18.0	al a second	6	8	2	0	1
6.1 Psychrometric properties of air		0.76	3.0			1	1		1
1.Apply the basic knowledge and concepts						1			de sera estada a a
2. Analyze the methods and concepts							1		
3. Evaluate the knowledge and concepts				-1					1
6.2 Various Aircnditioning Processes		0.76	2.0			1	1		
1.Apply the basic knowledge and concepts 2. Analyze the methods and concepts						1			
2. Analyze the methods and concepts							1		
6.3 Factors Affecting Human Comfort 1. Explain the basic methods and concepts		0.76	2.0		1	1			
2. Apply the concepts					1				
						1			
6.4 Air Distribution and Simple Duct D	esign	0.76	2.0		1	1			-
1. Explain the basic methods and concepts					1	1			
2. Apply the concepts						1			
6.5 Drying Heating and Ventilation		0.76	2.0		1	1			
1. Explain the basic methods and concepts					1				
2. Apply the concepts						1			
									-
6.6 Cooling Load Calculations		0.76	2.0		1	1			
1.Comprehend the basic knowledge and cond	cepts				1				
2. Apply the concepts (designing or problem	solving)	alfordenne finanske i byretner songe			-	1			
6.7 Selection & Specification of aircondition	ning plants & comp	0.76	3.0		1	1			1
1.Comprehend the basic knowledge and con-	cepts	0.10	0.0		1	1			1
2. Apply the concepts (designing or problem	solving)					1			
3.Evaluate the knowledge and concepts									1
6.8 Instsrumentation and Controls		0.76	2.0		1	1			
1.Comprehend the basic knowledge and con	cepts	0.10	Anto		1	1			
2. Apply the concepts (designing or problem	i solving)					1			
		6.08							
		0.00							
	A REPORT OF A DESCRIPTION OF A DESCRIPTI	35%	100.0	13	34	35	14	1	3

Total Test Questions = 100

Easy =	54	
Mod =	36	
Diff =	10	

54% 36% 10% 100%

Prepared by:

Mus LEANDRO A. CONTI-

Chairman

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Reviewed by:

Justa 7 Julian DRA. LUCILA F. TIBIGAR PRC Consultant

Manila

PROFESSIONAL REGULATORY BOARD OF MECHANICAL ENGINEERING

Table of Specifications in Mathematics

5. Electricity and Magnetism 2.0% 2.0 2 06. STRENGTH OF MATERIALS 14.0% 9.0 1 4 4 1. Stress and Strain 4.0% 3.0 1 1 1 1 2. Torsion and Bending 4.0% 2.0 1 1 1 1 3. Tensile and Compressive Stresses 4.0% 2.0 1 1 1 1			1	Lough & Diff						
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Prepared by:

LEANDRO A. CONTI Chairman

Easy = 50 Mod = 31 Diff = 19 Reviewed by: Jucila 7 Jikigan DRA. LUCILA F. TIBIGAR

Total Test Questions = 100

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PRC Consultant

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