

200510 1/25/2006

Graduate Engineering

Subject Matter Report by Major and PM Examination

Board: Kentucky Institution: Kentucky_ University of

Board Code: 71 School Code: 7101

Major: Agricultural PM Exam: Civil-Water Resources

Institution	State	National		Comp	arator Group	ings
2	2	48		41	1	6
0	0	30		26	0	4
0	0	62		63	0	67
# Exam Questions	Institution AVG % Correct	National AVG % Correct	National Standard Deviation *	Carnegie 1 AVG % Correct **	Carnegie 2 AVG % Correct **	Carnegie 3 AVG % Correct **
8	62	77	1.4	77	88	75
8	50	48	1.5	47	50	58
8	50	61	1.4	62	25	60
8	69	64	1.4	64	50	69
8	75	68	1.3	69	38	65
12	50	61	2.1	61	58	60
8	38	64	1.4	64	62	69
6	58	59	1.2	59	33	67
10	40	45	1.5	44	30	53
4	25	46	1.0	49	25	25
	2 0 0 # Exam Questions 8 8 8 8 8 12 8 6 10	2 2 0 0 0 0 0 0 0 0	Z Z 48 0 0 30 0 0 62 # Exam Institution AVG % AVG % Correct National AVG % AVG % Correct 8 62 77 8 50 48 8 50 61 8 69 64 8 75 68 12 50 61 8 38 64 6 58 59 10 40 45	Z Z 48 0 0 30 O 0 62 # Exam Questions Institution AVG % AVG % Standard Deviation * National Standard Deviation * 8 62 77 1.4 8 50 48 1.5 8 50 61 1.4 8 69 64 1.4 8 75 68 1.3 12 50 61 2.1 8 38 64 1.4 6 58 59 1.2 10 40 45 1.5	Z Z 441 0 0 30 26 0 0 62 63 # Exam Questions Institution AVG % AVG % Standard Correct National Standard Deviation * Correct ** Carnegie 1 AVG % Correct 8 62 77 1.4 77 8 50 48 1.5 47 8 50 61 1.4 62 8 69 64 1.4 64 8 75 68 1.3 69 12 50 61 2.1 61 8 38 64 1.4 64 6 58 59 1.2 59 10 40 45 1.5 44	Z Z 48 41 1 0 0 30 26 0 0 0 62 63 0 # Exam Questions Institution AVG % AVG % Standard AVG % AVG % Correct AVG % Deviation * Correct *** AVG % Correct *** AVG % Correct ** 8 62 77 1.4 77 88 8 50 48 1.5 47 50 8 50 61 1.4 62 25 8 69 64 1.4 64 50 8 75 68 1.3 69 38 12 50 61 2.1 61 58 8 38 64 1.4 64 62 6 58 59 1.2 59 33 10 40 45 1.5 44 30

^{*} The standard deviation above is based on number of questions correct not percentage of questions correct.

^{**} Carnegie 1 - Research Extensive, Carnegie 2 - Research Intensive, Carnegie 3 - Masters I and II combined



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Graduate Engineering

Subject Matter Report by Major and PM Examination

Board: Kentucky Institution: Kentucky_ University of

Board Code: 71 School Code: 7101

Major: Chemical PM Exam: Environmental

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		Institution	State	National		Comp	arator Group	ings
Examinees Taking		1	2	87		49	2	34
Examinees Passing		1	2	32		27	2	2
Examinees Passing %	6	100	100	37		55	100	6
· · · · · · · · · · · · · · · · · · ·	#	# Exam Questions	Institution AVG % Correct	National AVG % Correct	National Standard Deviation *	Carnegie 1 AVG % Correct **	Carnegie 2 AVG % Correct **	Carnegie 3 AVG % Correct **
Wastewater		11	45	33	1.7	37	45	28
Storm Water		6	17	45	1.4	48	75	38
Potable Water		11	45	52	2.0	58	64	43
Water Resources		6	67	51	1.2	58	50	41
Ambient Air		8	100	62	1.7	66	88	54
Emissions Sources		4	75	34	8.0	35	50	33
Control Strategies		8	75	50	1.8	52	81	44
Municiple Solid Waste	e (MSW), Commercial, and In	id. 10	70	38	1.8	45	35	28
Hazardous Waste, Sp	ecial, and Radioactive Waste	e 10	50	51	1.6	52	65	45
Environmental Assess	sments	8	38	49	1.4	53	69	44
Remediation		8	62	56	1.6	61	75	45
Public Health and Saf	ety	10	50	41	1.5	45	50	35

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^{**} Carnegie 1 - Research Extensive, Carnegie 2 - Research Intensive, Carnegie 3 - Masters I and II combined



200510 1/25/2006

Graduate Engineering

Subject Matter Report by Major and PM Examination

Board: Kentucky Institution: Kentucky_ University of

Board Code: 71 School Code: 7101

Major: Civil PM Exam: Civil-Environmental

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	Institution	State	National		Comp	arator Group	ings
Examinees Taking	3	3	130		68	21	34
Examinees Passing	0	0	29		22	2	4
Examinees Passing %	0	0	22		32	10	12
	# Exam Questions	Institution AVG % Correct	National AVG % Correct	National Standard Deviation *	Carnegie 1 AVG % Correct **	Carnegie 2 AVG % Correct **	Carnegie 3 AVG % Correct **
Breadth - Environmental	8	88	76	1.6	82	65	71
Breadth - Geotechnical	8	46	48	1.5	53	36	47
Breadth - Structural	8	67	62	1.4	70	51	54
Breadth - Transportation	8	58	61	1.6	66	57	53
Breadth - Water Resources	8	33	56	1.7	61	51	50
Wastewater Treatment	7	33	31	1.6	38	18	26
Biology	9	56	45	1.9	50	40	40
Solid/Hazardous Waste	5	60	47	1.2	51	42	43
Groundwater & Well Fields	5	47	48	1.0	51	49	39
Geotechnical	4	33	55	1.0	58	49	54
Water Resources	10	40	50	1.9	55	42	42

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^{**} Carnegie 1 - Research Extensive, Carnegie 2 - Research Intensive, Carnegie 3 - Masters I and II combined



200510 1/25/2006

Graduate Engineering

Subject Matter Report by Major and PM Examination

Board: Kentucky Institution: Kentucky_ University of

Board Code: 71 School Code: 7101

Major: Civil PM Exam: Civil-Geotechnical

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	Institution	State	National		Comp	arator Group	ings
Examinees Taking	2	9	775		337	107	219
Examinees Passing	2	6	362		206	53	62
Examinees Passing %	100	67	47		61	50	28
	# Exam Questions	Institution AVG % Correct	National AVG % Correct	National Standard Deviation *	Carnegie 1 AVG % Correct **	Carnegie 2 AVG % Correct **	Carnegie 3 AVG % Correct **
Breadth - Environmental	8	88	66	1.8	72	67	60
Breadth - Geotechnical	8	81	62	1.7	66	66	58
Breadth - Structural	8	69	68	1.5	72	69	65
Breadth - Transportation	8	100	67	1.6	72	70	62
Breadth - Water Resources	8	81	53	1.6	57	54	47
Subsurface Exploration & Sampling	4	75	54	1.0	60	51	48
Engineering Properties & Soil Mechanics	8	56	46	1.4	47	45	43
Foundations	8	44	37	1.6	42	37	31
Earth Retaining Structures & Seismic Engineering	g 6	58	41	1.3	45	41	36
Environmental	4	38	40	1.0	44	40	37
Structural	8	56	44	1.5	48	43	40
Transportation	2	100	59	8.0	67	61	50

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^{**} Carnegie 1 - Research Extensive, Carnegie 2 - Research Intensive, Carnegie 3 - Masters I and II combined



200510 1/25/2006

Graduate Engineering

Subject Matter Report by Major and PM Examination

Board: Kentucky Institution: Kentucky_ University of

Board Code: 71 School Code: 7101

Major: Civil PM Exam: Civil-Structural

	Institution	State	National		Comp	arator Group	ings
Examinees Taking	1	2	613		385	89	115
Examinees Passing	1	2	324		228	36	48
Examinees Passing %	100	100	53		59	40	42
	# Exam Questions	Institution AVG % Correct	National AVG % Correct	National Standard Deviation *	Carnegie 1 AVG % Correct **	Carnegie 2 AVG % Correct **	Carnegie 3 AVG % Correct **
Breadth - Environmental	8	88	69	1.8	71	65	65
Breadth - Geotechnical	8	62	62	1.7	65	58	56
Breadth - Structural	8	88	82	1.3	85	79	78
Breadth - Transportation	8	38	68	1.5	69	64	66
Breadth - Water Resources	8	62	56	1.7	58	53	51
Loading/Analysis	7	71	53	1.5	56	49	49
Mechanics of Materials/Materials	8	62	43	1.5	44	38	42
Member Design	8	25	42	1.5	43	42	39
Design Criteria	3	67	48	0.8	50	51	43
Geotechnical	10	40	48	2.0	50	41	44
Transportation	4	75	56	1.1	59	52	52

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^{**} Carnegie 1 - Research Extensive, Carnegie 2 - Research Intensive, Carnegie 3 - Masters I and II combined



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Graduate Engineering

Subject Matter Report by Major and PM Examination

Board: Kentucky Institution: Kentucky_ University of

Board Code: 71 School Code: 7101

Major: Civil PM Exam: Civil-Transportation

Institution	State	National		Comp	arator Group	ings	
43	53	1,880		1,091	322	366	
19	23	775		521	131	85	
44	43	41		48	41	23	
# Exam Questions	Institution AVG % Correct	National AVG % Correct	National Standard Deviation *	Carnegie 1 AVG % Correct **	Carnegie 2 AVG % Correct **	Carnegie 3 AVG % Correct **	
8	74	66	1.7	69	66	59	
8	51	50	1.5	51	49	46	
8	62	64	1.4	66	63	61	
8	67	71	1.4	73	71	66	
8	55	55	1.6	57	55	50	
11	57	56	1.9	58	54	51	
7	68	62	1.4	64	62	55	
8	53	54	1.5	55	54	49	
5	62	63	1.0	65	63	59	
9	56	57	1.9	60	58	51	
	43 19 44 # Exam Questions 8 8 8 8 8 11 7 8	43 53 19 23 44 43 # Exam Institution AVG % Correct AVG % Correct 8 74 8 51 8 62 8 67 8 55 11 57 7 68 8 53 5 62	43 53 1,880 19 23 775 44 43 41 # Exam Questions Institution AVG % AVG % Correct AVG % AVG % AVG % Correct 8 74 66 8 51 50 8 62 64 8 67 71 8 55 55 11 57 56 7 68 62 8 53 54 5 62 63	43 53 1,880 19 23 775 44 43 41 44 43 41 45 46 47 47 47 48 55 55 1.6 11 57 68 62 64 1.4 8 53 54 1.5 5 62 63 1.0	43 53 1,880 1,091 19 23 775 521 44 43 41 48 # Exam Questions Institution AVG % AVG % Standard Correct National Standard Deviation * Correct ** Correct ** 8 74 66 1.7 69 8 51 50 1.5 51 8 62 64 1.4 66 8 67 71 1.4 73 8 55 55 1.6 57 11 57 56 1.9 58 7 68 62 1.4 64 8 53 54 1.5 55 5 62 63 1.0 65	43 53 1,880 1,091 322 19 23 775 521 131 44 43 41 48 41 # Exam Unstitution AVG % Correct National Standard Deviation * Carnegie 1 AVG % AVG % Correct ** Carnegie 2 AVG % AVG % Correct ** AVG % Correc	

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^{**} Carnegie 1 - Research Extensive, Carnegie 2 - Research Intensive, Carnegie 3 - Masters I and II combined



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Graduate Engineering

Subject Matter Report by Major and PM Examination

Board: Kentucky Institution: Kentucky_ University of

Board Code: 71 School Code: 7101

Major: Civil PM Exam: Civil-Water Resources

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	Institution	State	National		Comp	arator Group	ings
Examinees Taking	13	20	1,438		757	263	328
Examinees Passing	7	10	744		448	145	114
Examinees Passing %	54	50	52		59	55	35
	# Exam Questions	Institution AVG % Correct	National AVG % Correct	National Standard Deviation *	Carnegie 1 AVG % Correct **	Carnegie 2 AVG % Correct **	Carnegie 3 AVG % Correct **
Breadth - Environmental	8	74	73	1.6	76	74	66
Breadth - Geotechnical	8	55	51	1.5	53	51	48
Breadth - Structural	8	65	65	1.5	66	64	63
Breadth - Transportation	8	63	66	1.5	68	65	62
Breadth - Water Resources	8	63	62	1.5	64	61	57
Hydraulics	12	58	58	2.0	60	58	52
Hydrology	8	57	59	1.5	61	58	53
Water Treatment	6	54	52	1.5	54	54	45
Environmental	10	47	43	1.7	45	42	39
Geotechnical	4	29	37	1.0	37	37	32

^{*} The standard deviation above is based on number of questions correct not percentage of questions correct.

^{**} Carnegie 1 - Research Extensive, Carnegie 2 - Research Intensive, Carnegie 3 - Masters I and II combined



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Graduate Engineering

Subject Matter Report by Major and PM Examination

Board: Kentucky Institution: Kentucky_ University of

Board Code: 71 School Code: 7101

Major: Civil PM Exam: Environmental

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	Institution	State	National		Comp	arator Group	ings
Examinees Taking	2	2	67		51	7	5
Examinees Passing	1	1	38		33	3	1
Examinees Passing %	50	50	57		65	43	20
	# Exam Questions	Institution AVG % Correct	National AVG % Correct	National Standard Deviation *	Carnegie 1 AVG % Correct **	Carnegie 2 AVG % Correct **	Carnegie 3 AVG % Correct **
Wastewater	11	41	37	1.5	40	34	24
Storm Water	6	75	51	1.2	54	40	47
Potable Water	11	45	58	2.1	60	51	56
Water Resources	6	67	56	1.1	59	50	37
Ambient Air	8	69	66	1.7	71	48	42
Emissions Sources	4	38	27	0.9	29	18	20
Control Strategies	8	50	51	1.9	53	54	32
Municiple Solid Waste (MSW), Commercial, and Ir	nd. 10	55	46	1.7	48	41	38
Hazardous Waste, Special, and Radioactive Waste	e 10	45	54	1.6	56	50	50
Environmental Assessments	8	69	53	1.6	58	27	42
Remediation	8	69	63	1.6	66	70	38
Public Health and Safety	10	30	40	1.6	41	37	28

^{*} The standard deviation above is based on number of questions correct not percentage of questions correct.

^{**} Carnegie 1 - Research Extensive, Carnegie 2 - Research Intensive, Carnegie 3 - Masters I and II combined



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Graduate Engineering

Subject Matter Report by Major and PM Examination

Board: Kentucky Institution: Kentucky_ University of

Board Code: 71 School Code: 7101

Major: Civil PM Exam: Structural I

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	Institution	State	National		Comp	arator Group	ings
Examinees Taking	1	1	321		227	40	41
Examinees Passing	0	0	119		85	18	9
Examinees Passing %	0	0	37		37	45	22
	# Exam Questions	Institution AVG % Correct	National AVG % Correct	National Standard Deviation *	Carnegie 1 AVG % Correct **	Carnegie 2 AVG % Correct **	Carnegie 3 AVG % Correct **
Analysis of Structures-Loads	6	67	67	1.2	65	69	70
Analysis of Structures-Lateral Forces	6	50	61	1.2	61	62	57
Analysis of Structures-Lateral Forces Distribution	9	0	44	2.1	45	42	44
Analysis of Structures-Methods	4	25	56	0.9	56	59	55
Design and Details of Structures-General Structu	ral (6	67	71	1.0	72	71	71
Design and Details of Structures-Steel (AISC-AA	SHT 15	47	56	2.7	57	60	51
Design and Details of Structures-Concrete (AASI-	HTO 12	42	66	2.1	66	69	59
Design and Details of Structures-Wood (NDS-AS	D) 7	29	52	1.5	52	57	45
Design and Details of Structures-Masonry (ACI 5	30-l 7	43	50	1.3	49	55	44
Design and Details of Structures-Foundations & F	Reta 8	50	44	1.7	44	46	40

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^{**} Carnegie 1 - Research Extensive, Carnegie 2 - Research Intensive, Carnegie 3 - Masters I and II combined



200510 1/25/2006

Graduate Engineering

Subject Matter Report by Major and PM Examination

Board: Kentucky Institution: Kentucky_ University of

Board Code: 71 School Code: 7101

Major: Electrical PM Exam: Electrical & Computer-Computer

Major: Electrical	PIV	ı Exam:	Electrical & C	computer-com	iiputei		
	Institution	State	National		Comp	arator Group	ings
Examinees Taking	1	1	66		26	14	19
Examinees Passing	1	1	44		22	11	8
Examinees Passing %	100	100	67		85	79	42
	# Exam Questions	Institution AVG % Correct	National AVG % Correct	National Standard Deviation *	Carnegie 1 AVG % Correct **	Carnegie 2 AVG % Correct **	Carnegie 3 AVG % Correct **
Basic ELE - Professionalism and Enginee	ering Econor 2	50	88	0.5	90	89	84
Basic ELE - Safety & Reliability	3	100	77	8.0	87	81	63
Basic ELE - Electric Circuits	10	100	52	2.3	61	54	43
Basic ELE - Electric & Magnetic Field The	eory & Applic1	100	70	0.5	85	64	58
Basic ELE - Computer Systems & Engr	2	100	88	0.5	94	86	79
Electronics, Circuits & Components - Cor	nponents 6	67	55	1.3	66	49	54
Electronics, Circuits & Components - Mat	erials 2	50	53	0.6	46	64	47
Controls & Communications Systems	6	83	39	1.5	44	39	31
Power - Transmission & Distribution	5	20	34	1.2	38	37	26
Power - Rotating Machines & Elecromagn	netic Device 3	100	60	0.9	59	74	58
General EE Knowledge - Interpret of Cod	es & Standa 2	50	48	0.7	52	57	39
General EE Knowledge - Microprocessor	Systems 2	50	54	0.7	56	61	55
Hardware - Digital Electronics	6	33	62	1.6	68	70	49
Hardware - Design Analysis	8	25	48	1.5	54	53	39
Hardware - Systems	4	100	48	1.1	53	50	41
Software - System Software	5	40	62	1.3	66	76	51
Software - Development/Applications	9	67	54	1.9	62	60	41
Networks	4	50	67	1.1	73	70	62

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^{**} Carnegie 1 - Research Extensive, Carnegie 2 - Research Intensive, Carnegie 3 - Masters I and II combined



200510 1/25/2006

Graduate Engineering

Subject Matter Report by Major and PM Examination

Board: Kentucky Institution: Kentucky_ University of

Board Code: 71 School Code: 7101

Major: Electrical PM Exam: Electrical & Computer-ECC

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	Institution	State	National		Comp	arator Group	ings
Examinees Taking	3	6	141		51	8	57
Examinees Passing	1	2	53		28	4	14
Examinees Passing %	33	33	38		55	50	25
<u> </u>	# Exam Questions	Institution AVG % Correct	National AVG % Correct	National Standard Deviation *	Carnegie 1 AVG % Correct **	Carnegie 2 AVG % Correct **	Carnegie 3 AVG % Correct **
Basic ELE - Professionalism and Engineering Eco	nor 2	100	88	0.5	97	100	78
Basic ELE - Safety & Reliability	3	78	76	8.0	83	83	74
Basic ELE - Electric Circuits	10	57	53	2.3	59	64	48
Basic ELE - Electric & Magnetic Field Theory & Ap	oplic1	100	83	0.4	90	88	82
Basic ELE - Computer Systems & Engr	2	100	88	0.5	92	100	84
Electronics, Circuits & Components - Components	s 6	44	54	1.5	57	62	51
Electronics, Circuits & Components - Materials	2	67	49	0.7	56	38	43
Controls & Communications Systems	6	33	51	1.7	60	54	45
Power - Transmission & Distribution	5	40	40	1.2	42	48	40
Power - Rotating Machines & Elecromagnetic Dev	ice 3	56	64	0.9	76	62	54
General EE Knowledge - Measurement & Instrum	ent: 2	17	22	0.6	17	6	27
General EE Knowledge - Interpret of Codes & Sta	nda 1	0	16	0.4	14	12	19
General EE Knowledge - Computer Systems	1	67	33	0.5	27	25	40
Electronics - Electric Circuit Theory	4	17	18	8.0	15	16	18
Electronics - Electric & Magnetic Field Theory & A	ppl 3	33	26	0.8	26	33	26
Electronics - Components & Circuits	7	33	27	1.1	29	29	26
Control System Fundamentals	4	42	14	0.7	14	3	14
Control System Design/Implementation	2	0	18	0.5	16	12	23
Controls - Stability	4	25	32	0.7	30	34	34
Communications & Signal Processing	6	11	21	0.9	22	19	22
Communications - Noise & Interference	3	33	23	0.6	27	12	20
Telecommunications	3	44	27	0.7	26	21	28

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^{**} Carnegie 1 - Research Extensive, Carnegie 2 - Research Intensive, Carnegie 3 - Masters I and II combined



200510 1/25/2006

Graduate Engineering

Subject Matter Report by Major and PM Examination

Board: Kentucky Institution: Kentucky_ University of

Board Code: 71 School Code: 7101

Major: Electrical PM Exam: Electrical & Computer-Power

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	Institution	State	National		Comp	parator Group	ings		
Examinees Taking	5	9	709		315	116	209		
Examinees Passing	4	5	325		174	52	82		
Examinees Passing %	80	56	46		55	45	39		
,	# Exam Questions	Institution AVG % Correct	National AVG % Correct	National Standard Deviation *	Carnegie 1 AVG % Correct **	Carnegie 2 AVG % Correct **	Carnegie 3 AVG % Correct **		
Basic ELE - Professionalism and Engineering Ec	onor 2	60	89	0.5	90	90	87		
Basic ELE - Safety & Reliability	3	87	72	0.8	77	71	69		
Basic ELE - Electric Circuits	10	40	45	1.9	47	44	43		
Basic ELE - Electric & Magnetic Field Theory & A	Applic 1	80	72	0.4	73	70	74		
Basic ELE - Computer Systems & Engr	2	90	82	0.6	86	75	83		
Electronics, Circuits & Components - Component	ts 6	63	49	1.2	51	49	47		
Electronics, Circuits & Components - Materials	2	60	42	0.7	48	45	37		
Controls & Communications Systems	6	53	35	1.4	36	36	35		
Power - Transmission & Distribution	5	48	44	1.2	48	44	40		
Power - Rotating Machines & Elecromagnetic De	evice 3	53	62	0.9	66	63	60		
General Power - Measure, Instrument & Statistic	s 2	60	70	0.7	75	70	67		
General Power - Special Applications	1	80	70	0.5	73	66	68		
General Power - Codes, Standards & Special Ap	pls 3	80	54	0.9	57	55	50		
Circuit Analysis - Analysis	6	63	56	1.3	60	54	52		
Circuit Analysis - Devices and Power Electronic (Circu 3	40	28	0.8	30	32	24		
Circuit Analysis - Electric and Magnetic Fields an	d Ar 2	20	44	0.7	46	41	45		
Rotating Machines	7	83	68	1.3	70	68	66		
Electromagnetic Devices	4	25	33	1.0	38	33	28		
Transmission & Distrib - Systems Analysis	6	37	45	1.1	47	46	42		
Transmission & Distrib - Power System Performa	ince 2	60	68	0.7	70	75	64		
Transmission & Distrib - Protection	4	80	64	0.9	67	63	59		

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^{**} Carnegie 1 - Research Extensive, Carnegie 2 - Research Intensive, Carnegie 3 - Masters I and II combined



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Graduate Engineering

Subject Matter Report by Major and PM Examination

Board: Kentucky Institution: Kentucky_ University of

Board Code: 71 School Code: 7101

Major: Engr Physics/Engr Scien PM Exam: Civil-Water Resources

	Institution	Institution State National				Comparator Groupings				
Examinees Taking	1	1	8		6	1	1			
Examinees Passing	1	1	4		4	0	0			
Examinees Passing %	100	100	50		67	0	0			
	# Exam Questions	Institution AVG % Correct	National AVG % Correct	National Standard Deviation *	Carnegie 1 AVG % Correct **	Carnegie 2 AVG % Correct **	Carnegie 3 AVG % Correct **			
Breadth - Environmental	8	62	70	1.8	69	62	88			
Breadth - Geotechnical	8	38	48	2.1	50	50	38			
Breadth - Structural	8	88	69	1.2	67	75	75			
Breadth - Transportation	8	75	69	1.8	73	62	50			
Breadth - Water Resources	8	75	59	2.0	67	50	25			
Hydraulics	12	75	55	1.9	57	58	42			
Hydrology	8	75	62	2.1	62	75	50			
Water Treatment	6	83	52	1.6	53	17	83			
Environmental	10	30	38	2.5	42	20	30			
Geotechnical	4	75	44	1.0	50	0	50			

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^{**} Carnegie 1 - Research Extensive, Carnegie 2 - Research Intensive, Carnegie 3 - Masters I and II combined



200510 1/25/2006

Graduate Engineering

Subject Matter Report by Major and PM Examination

Board: Kentucky Institution: Kentucky_ University of

Board Code: 71 School Code: 7101

Major: Mechanical PM Exam: Fire Protection

	Institution	State	Mational		_		
			National		Comp	arator Group	ings
Examinees Taking	3	3	48		26	15	6
Examinees Passing	0	0	14		9	4	1
Examinees Passing %	0	0	29		35	27	17
	# Exam Questions	Institution AVG % Correct	National AVG % Correct	National Standard Deviation *	Carnegie 1 AVG % Correct **	Carnegie 2 AVG % Correct **	Carnegie 3 AVG % Correct **
FP Analysis - Type of Analysis	10	67	60	1.5	59	67	47
FP Analysis - Information Sources for Analysis	6	44	63	1.3	62	64	61
FP Management	8	50	57	1.5	56	56	62
Fire Science & Human Behavior - Fire Dynamic	s 8	33	58	1.7	58	57	65
Fire Science & Human Behavior - Human Resp	onse 4	50	44	1.1	52	35	33
FP System - Water-Based Fire Suppression Sy	stems 10	57	54	2.2	54	53	47
FP System - Special Hazard Systems	4	25	35	1.1	30	43	33
FP System - Fire Detection and Alarm Systems	7	62	59	1.2	60	57	60
FP System - Smoke Management Systems	4	33	64	0.9	62	68	58
FP System - Explosion Protection and Preventi	on Sy: 3	56	54	0.9	60	49	39
Passive Building Systems - Building Construction	on 10	53	60	1.8	63	55	57
Passive Building Systems - Means of Egress	6	39	49	1.7	45	56	47

^{*} The standard deviation above is based on number of questions correct not percentage of questions correct.

^{**} Carnegie 1 - Research Extensive, Carnegie 2 - Research Intensive, Carnegie 3 - Masters I and II combined



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Graduate Engineering

Subject Matter Report by Major and PM Examination

Board: Kentucky Institution: Kentucky_ University of

Board Code: 71 School Code: 7101
Maior: Mechanical PM Exam: Industrial

Major:	Mechanical	PM	l Exam:	Industrial				
		Institution	State	National		Comp	arator Group	ings
Examinees Taking		1	1	7		2	4	1
Examinees Passing		1	1	5		2	2	1
Examinees Passing %	, 0	100	100	71		100	50	100
		# Exam Questions	Institution AVG % Correct	National AVG % Correct	National Standard Deviation *	Carnegie 1 AVG % Correct **	Carnegie 2 AVG % Correct **	Carnegie 3 AVG % Correct **
Facilities Engineering	& Planning - Facility Requir	em 68	88	86	1.1	94	81	88
Facilities Engineering	& Planning - Facility Design	ı Alt 8	88	86	1.1	94	81	88
Systems Analysis & D	lesign - Analysis & Design F	Proc 10	70	76	1.3	75	70	100
Systems Analysis & D	esign - Costing & Performa	nce 6	83	76	1.0	83	71	83
Logistics - Production	Planning & Control	12	58	75	2.7	79	67	100
Logistics - Distribution	& Storage-Warehousing M	ethc 4	50	54	1.1	50	44	100
Work Design - Method	ds to Measure Work	5	80	54	1.0	60	45	80
Work Design - Method	ds Design & Analysis	5	60	74	1.0	60	75	100
Ergonomics & Safety	- Risk Factors & Exposure l	₋imi⊧6	83	69	0.9	67	67	83
Ergonomics & Safety	- Design Issues	4	25	57	1.0	38	69	50
Quality Engineering -	Quality Control	8	88	70	1.0	81	62	75
Quality Engineering -	Reliability & Maintainability	4	100	75	0.6	88	69	75

^{*} The standard deviation above is based on number of questions correct not percentage of questions correct.

^{**} Carnegie 1 - Research Extensive, Carnegie 2 - Research Intensive, Carnegie 3 - Masters I and II combined



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Graduate Engineering

Subject Matter Report by Major and PM Examination

Board: Kentucky Institution: Kentucky_ University of

Board Code: 71 School Code: 7101

Major: Mechanical PM Exam: Mechanical-HVAC

'								
	Institution	State	National		Comparator Groupings			
Examinees Taking	2	7	406		189	65	119	
Examinees Passing	2	6	215		122	28	49	
Examinees Passing %	100	86	53		65	43	41	
	# Exam Questions	Institution AVG % Correct	National AVG % Correct	National Standard Deviation *	Carnegie 1 AVG % Correct **	Carnegie 2 AVG % Correct **	Carnegie 3 AVG % Correct **	
General - Codes & Standards - Engineering Prince	ciple 6	83	68	1.4	73	62	63	
General - Codes & Standards - Fundamental Eng	gine: 5	80	68	1.1	73	62	65	
General - Codes & Standards - Interpretation of 0	Cod∈ 1	100	60	0.5	60	57	64	
Machine Design & Materials - Principles	5	50	48	1.2	50	46	47	
Machine Design & Materials - Applications	2	100	63	0.6	66	68	54	
Hydraulics & Fluids - Principles	4	75	56	1.1	60	49	55	
Hydraulics & Fluids - Applications	3	83	73	0.9	74	73	71	
Energy Conversion/Power Systems - Principles	4	62	65	1.0	68	63	60	
Energy Conversion/Power Systems - Analysis of	Sys 3	67	62	0.9	65	53	59	
HVAC & Refrigeration - Principles	7	86	64	1.5	68	58	62	
Fundamentals - Psychrometrics	5	70	56	1.3	61	51	52	
Fundamentals - Principles	9	72	56	1.7	60	53	51	
Equipment and Materials	14	64	46	2.5	50	42	42	
Applications - Systems	9	67	50	2.1	56	47	42	
Applications - Supportive Knowledges	3	50	60	0.9	62	51	60	

^{*} The standard deviation above is based on number of questions correct not percentage of questions correct.

^{**} Carnegie 1 - Research Extensive, Carnegie 2 - Research Intensive, Carnegie 3 - Masters I and II combined



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Graduate Engineering

Subject Matter Report by Major and PM Examination

Board: Kentucky Institution: Kentucky_ University of

Board Code: 71 School Code: 7101

Major: Mechanical PM Exam: Mechanical-Machine Design

'								
	Institution	State	National		Comparator Groupings			
Examinees Taking	1	2	341		205	55	62	
Examinees Passing	0	1	199		130	33	27	
Examinees Passing %	0	50	58		63	60	44	
· · · · · · · · · · · · · · · · · · ·	# Exam Questions	Institution AVG % Correct	National AVG % Correct	National Standard Deviation *	Carnegie 1 AVG % Correct **	Carnegie 2 AVG % Correct **	Carnegie 3 AVG % Correct **	
General - Codes & Standards - Engineering Prince	ciple 6	67	69	1.3	71	72	62	
General - Codes & Standards - Fundamental Eng	gine: 5	100	67	1.2	69	65	63	
General - Codes & Standards - Interpretation of G	Cod∈ 1	100	89	0.3	89	93	82	
Machine Design & Materials - Principles	5	60	61	1.1	63	64	54	
Machine Design & Materials - Applications	2	0	50	0.7	53	48	41	
Hydraulics & Fluids - Principles	4	25	57	1.1	61	55	50	
Hydraulics & Fluids - Applications	3	33	70	0.9	73	72	64	
Energy Conversion/Power Systems - Principles	4	75	67	1.0	68	64	65	
Energy Conversion/Power Systems - Analysis of	Sys 3	67	62	1.0	63	69	54	
HVAC & Refrigeration - Principles	7	57	50	1.6	53	48	44	
Engineering Principles	18	39	52	2.9	55	52	48	
Machine Design - Components	14	29	53	2.8	55	54	49	
Applications - Systems	4	25	57	1.0	57	56	54	
Applications - Supportive Knowledge	4	75	50	1.0	54	51	36	

^{*} The standard deviation above is based on number of questions correct not percentage of questions correct.

^{**} Carnegie 1 - Research Extensive, Carnegie 2 - Research Intensive, Carnegie 3 - Masters I and II combined



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Graduate Engineering

Subject Matter Report by Major and PM Examination

Board: Kentucky Institution: Kentucky_ University of

Board Code: 71 School Code: 7101

Major: Mechanical PM Exam: Mechanical-Thermal & Fluids

'								
	Institution	State	National		Comparator Groupings			
Examinees Taking	1	4	357		204	42	88	
Examinees Passing	1	1	179		112	17	36	
Examinees Passing %	100	25	50		55	40	41	
· · · · · · · · · · · · · · · · · · ·	# Exam Questions	Institution AVG % Correct	National AVG % Correct	National Standard Deviation *	Carnegie 1 AVG % Correct **	Carnegie 2 AVG % Correct **	Carnegie 3 AVG % Correct **	
General - Codes & Standards - Engineering Prin	iciple 6	83	71	1.3	75	62	65	
General - Codes & Standards - Fundamental En	gine: 5	80	67	1.2	70	68	59	
General - Codes & Standards - Interpretation of	Cod∈ 1	100	70	0.5	73	69	64	
Machine Design & Materials - Principles	5	40	51	1.3	53	53	46	
Machine Design & Materials - Applications	2	0	51	0.7	54	55	43	
Hydraulics & Fluids - Principles	4	75	61	1.1	63	60	57	
Hydraulics & Fluids - Applications	3	67	74	0.8	75	67	74	
Energy Conversion/Power Systems - Principles	4	75	72	0.9	73	73	68	
Energy Conversion/Power Systems - Analysis of	f Sys 3	0	68	1.0	68	70	64	
HVAC & Refrigeration - Principles	7	86	56	1.6	59	52	49	
Fundamentals - Engineering Principles	9	56	50	1.8	52	49	46	
Fundamentals - Supportive Knowledges	4	25	49	1.2	52	43	44	
Components - Hydraulic System Components	6	50	49	1.5	50	45	48	
Components - Power Plant Components	8	25	49	2.0	50	46	47	
Applications - System Applications	10	50	47	1.9	48	47	45	
Applications - Supportive Knowledges	3	100	75	0.9	78	72	65	

^{*} The standard deviation above is based on number of questions correct not percentage of questions correct.

^{**} Carnegie 1 - Research Extensive, Carnegie 2 - Research Intensive, Carnegie 3 - Masters I and II combined



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Graduate Engineering

Subject Matter Report by Major and PM Examination

Board: Kentucky Institution: Kentucky_ University of

Board Code: 71 School Code: 7101

Major: Mechanical PM Exam: Mining & Mineral

Major:	Mechanical	PM Exam: Mining & Mineral			eral			
		Institution	State	National		Comp	arator Group	ings
Examinees Takin	q	1	1	1		1	0	0
Examinees Passi	•	0	0	0		0	0	0
Examinees Passi	ng %	0	0	0		0	0	0
	- -	# Exam Questions	Institution AVG % Correct	National AVG % Correct	National Standard Deviation *	Carnegie 1 AVG % Correct **	Carnegie 2 AVG % Correct **	Carnegie 3 AVG % Correct **
Exploration: Meth	ods & techniques	2	0	0	0.0	0	0	0
Exploration: Depo	osits modeling	1	0	0	0.0	0	0	0
Exploration: Geo	conditions modeling	2	100	100	0.0	100	0	0
Exploration: E&E	resources/reserves	3	0	0	0.0	0	0	0
Mine Plan/Oper: I	Methods & layouts	9	33	33	0.0	33	0	0
Mine Plan/Oper: I	Equip, Fac, Systems	12	83	83	0.0	83	0	0
Mine Plan/Oper: I	E&D ground Control	7	86	86	0.0	86	0	0
Mine Plan/Oper: (O&M mines & systems	6	67	67	0.0	67	0	0
Mineral Proc: Lab	& Pilot T&A	4	50	50	0.0	50	0	0
Mineral Proc: D&	E process flowsheets	9	22	22	0.0	22	0	0
Mineral Proc: P&I	D equip, fac & systems	10	30	30	0.0	30	0	0
Mineral Proc: O&	M plants & facilities	3	67	67	0.0	67	0	0
Env & Reclaim: S	s, M & PE characterization	3	67	67	0.0	67	0	0
Env & Reclaim: M	1&P impact design	4	25	25	0.0	25	0	0
Env & Reclaim: C	0&M Env Plan	2	50	50	0.0	50	0	0
Env & Reclaim: C	Close & Reclaim site	3	33	33	0.0	33	0	0

^{*} The standard deviation above is based on number of questions correct not percentage of questions correct.

^{**} Carnegie 1 - Research Extensive, Carnegie 2 - Research Intensive, Carnegie 3 - Masters I and II combined



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Graduate Engineering

Subject Matter Report by Major and PM Examination

Board: Kentucky Institution: Kentucky_ University of

Board Code: 71 School Code: 7101

Major: Mining/Mineral PM Exam: Mining & Mineral

	Institution	State	National		Comparator Groupings				
Examinees Taking	7	7	37		21	9	0		
Examinees Passing	3	3	20		11	7	0		
Examinees Passing %	43	43	54		52	78	0		
•	# Exam Questions	Institution AVG % Correct	National AVG % Correct	National Standard Deviation *	Carnegie 1 AVG % Correct **	Carnegie 2 AVG % Correct **	Carnegie 3 AVG % Correct **		
Exploration: Methods & techniques	2	36	35	0.6	31	44	0		
Exploration: Deposits modeling	1	14	54	0.5	43	67	0		
Exploration: Geo conditions modeling	2	43	51	0.7	48	61	0		
Exploration: E&E resources/reserves	3	52	50	8.0	54	41	0		
Mine Plan/Oper: Methods & layouts	9	62	70	1.2	69	75	0		
Mine Plan/Oper: Equip, Fac, Systems	12	77	75	1.8	75	77	0		
Mine Plan/Oper: E&D ground Control	7	63	64	1.3	65	68	0		
Mine Plan/Oper: O&M mines & systems	6	62	60	1.3	66	46	0		
Mineral Proc: Lab & Pilot T&A	4	61	55	1.3	56	58	0		
Mineral Proc: D&E process flowsheets	9	46	54	1.9	51	64	0		
Mineral Proc: P&D equip, fac & systems	10	46	48	1.9	48	54	0		
Mineral Proc: O&M plants & facilities	3	67	77	0.7	73	81	0		
Env & Reclaim: S, M & PE characterization	3	48	44	0.8	43	56	0		
Env & Reclaim: M&P impact design	4	50	52	1.2	51	58	0		
Env & Reclaim: O&M Env Plan	2	79	81	0.5	74	94	0		
Env & Reclaim: Close & Reclaim site	3	81	74	0.6	75	70	0		
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^{*} The standard deviation above is based on number of questions correct not percentage of questions correct.

^{**} Carnegie 1 - Research Extensive, Carnegie 2 - Research Intensive, Carnegie 3 - Masters I and II combined