

# Group Examination Analysis

Test Code: 7763, v1  
 Test Date: Tuesday, May 05, 2009  
 Number of Candidates: 10  
 Site Code: 8655

Examination Analysis	
Number of Candidates:	10
Low Score:	49
Mean:	60
High Score:	70
Number of Questions:	120
Pass Score:	0
International Average:	0.0%
Standard Deviation:	13.5
Standard Error of the Measurement:	4.3
KR20:	0.87

## Group Examination Performance

	Level/Title	# of Items in Section	Total Items Seen by Group	Total Items Passed by Group	Performance	Pct
1	1.0 Basic Concepts of Electricity	16	160	121		75.6%
	1.1 Systems of Units and Notation	2	20	18		90.0%
	1.2 Voltage and Current Concepts	1	10	10		100.0%
	1.3 Conductors and Insulators	3	30	11		36.7%
	1.4 Resistivity, Resistance and Color Codes	1	10	10		100.0%
	1.5 Ohm's Law	1	10	9		90.0%
	1.6 Capacitance, Capacitors and Markings	2	20	12		60.0%
	1.7 Inductance, Inductors and Markings	1	10	8		80.0%
	1.8 Power and Energy	3	30	27		90.0%
	1.9 Usage of Basic Electrical/Electronic Test Equipment	2	20	16		80.0%
2	2.0 Alternating Current (AC) Circuit Concepts	16	160	69		43.1%
	2.1 Sinusoidal Concepts	2	20	12		60.0%
	2.3 Inductance and Inductors	1	10	0		0.0%
	2.4 Energy Consumption and Storage	1	10	1		10.0%
	2.5 Capacitive and Inductive Reactance	3	30	23		76.7%
	2.6 AC Impedance/Admittance	2	20	1		5.0%
	2.7 Phase Relationships	1	10	9		90.0%
	2.8 Simplified RC and RL Transients	1	10	0		0.0%
	2.9 Complex Numbers and Phasors	1	10	9		90.0%
	2.10 AC Power, Power Factor and Power Triangle	1	10	3		30.0%
	2.11 Maximum Power Transfer	1	10	0		0.0%
	2.12 Series and Parallel Resonance	2	20	11		55.0%
3	3.0 Basic Circuit Analysis Methods	8	80	33		41.3%
	3.2 Ideal and Practical Source Models	1	10	9		90.0%
	3.3 Kirchhoff's Laws	1	10	0		0.0%
	3.4 Voltage and Current Divider Rules	1	10	1		10.0%
	3.5 Mesh Current Analysis	1	10	1		10.0%
	3.6 Node Voltage Analysis	1	10	1		10.0%
	3.7 Thevenin and Norton Theorems	1	10	7		70.0%
	3.9 Superposition	1	10	5		50.0%
	3.10 Bridge and Ladder Networks	1	10	9		90.0%

4	<b>5.0 Digital Electronics</b>	26	260	194		74.6%
	5.1 Numbering Systems and Codes	5	50	43		86.0%
	5.2 Boolean Algebra and Logic Operations	2	20	16		80.0%
	5.3 Logic Gates and Standard Symbols	3	30	25		83.3%
	5.4 Combinational Logic	2	20	20		100.0%
	5.5 Latches and Flip-Flops	2	20	10		50.0%
	5.7 Counters and Registers	3	30	18		60.0%
	5.8 Arithmetic Operations and Circuits	2	20	9		45.0%
	5.9 Analog-Digital Interfaces (A-D and D-A Circuits)	3	30	27		90.0%
	5.11 Encoders, Decoders and Multiplexers	1	10	10		100.0%
	5.12 IC Families	2	20	13		65.0%
	5.20 Memory	1	10	3		30.0%
5	<b>6.0 Analog Electronics</b>	21	210	56		26.7%
	6.1 Semiconductor Theory	1	10	4		40.0%
	6.2 The Semiconductor Diode	1	10	2		20.0%
	6.3 Voltage Rectification and Regulation Concepts	1	10	1		10.0%
	6.4 The Bipolar Junction Transistor	2	20	6		30.0%
	6.5 The Field Effect Transistor	2	20	15		75.0%
	6.6 Discrete-Device Amplifier Concepts, Design and Operation	2	20	7		35.0%
	6.8 Ideal Operational Amplifiers	1	10	10		100.0%
	6.9 Actual Operational Amplifiers	1	10	0		0.0%
	6.10 Basic Operational Amplifier Circuits	1	10	1		10.0%
	6.11 Advanced Operational Amplifier Circuits	2	20	1		5.0%
	6.12 Special Purpose Amplifiers	2	20	0		0.0%
	6.13 Frequency Response	1	10	1		10.0%
	6.14 Precision Diode Circuits	2	20	8		40.0%
	6.17 Power Supply and Regulator Circuits	1	10	0		0.0%
	6.18 Timers and Relaxation Oscillators	1	10	0		0.0%
6	<b>7.0 Microcontrollers and Microprocessors</b>	19	190	75		39.5%
	7.1 Data representation	1	10	4		40.0%
	7.2 Computer Arithmetic Functions	2	20	10		50.0%
	7.4 Basic Machine Architectures	4	40	15		37.5%
	7.6 Stack Based Architectures	1	10	4		40.0%
	7.7 Device Architecture, Memory and I/O	4	40	23		57.5%
	7.8 Programming Basics	1	10	2		20.0%
	7.11 Basic Math Programming	1	10	7		70.0%
	7.12 Serial and Parallel Ports and I/O	1	10	0		0.0%
	7.13 Interrupts	1	10	2		20.0%
	7.14 Assembly Language	1	10	8		80.0%
	7.16 Bus-Level Timing Analysis	1	10	0		0.0%
	7.17 Cache Architecture Analysis	1	10	0		0.0%
7	<b>12.0 Instrumentation and Measurements</b>	14	140	61		43.6%
	12.1 Measurement Parameters	3	30	11		36.7%
	12.3 Roundoff Strategies	2	20	8		40.0%
	12.4 Statistical Measures of Data	2	20	19		95.0%
	12.5 Basic Passive DC Instruments	1	10	4		40.0%
	12.7 Multimeters	1	10	3		30.0%
	12.10. Oscilloscope Specifications and Measurements	1	10	1		10.0%
	12.11 Frequency Response Measurements	1	10	3		30.0%
	12.12 Spectrum Measurements	2	20	8		40.0%
	12.13 Miscellaneous Electrical/Electronic Instruments	1	10	4		40.0%