





































































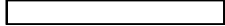



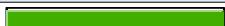















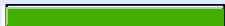



# 11111111: EXAMINEE NAME

## Examination Analysis

Site Code: 3360, SME  
 Name: EXAMINEE NAME  
 ID: 11111111  
 Test Code: 9104, v1 - Certified Manufacturing Technologist (CMfgT)  
 Test Date: 01/01/2022  
 Pass Percent: 60.00%  
 Score: 94.6%  
 Status: Pass

	Level/Title	# of Items in Section	# of Items Passed	Performance	Percent
1	1.1 Mathematics	2	2		100.0%
	1.1.1 Algebra	1	1		100.0%
	1.1.2 Trigonometry	1	1		100.0%
2	1.2 Print Reading	1	1		100.0%
	1.2 Print Reading	1	1		100.0%
3	1.3 Geometric Dimensioning and Tolerancing	2	2		100.0%
	1.3.1 GD & T	1	1		100.0%
	1.3.2 Tolerance Analysis	1	1		100.0%
4	1.4 Engineering Science	8	8		100.0%
	1.4.1 Chemistry	1	1		100.0%
	1.4.2 Physics	2	2		100.0%
	1.4.3 Fluid Mechanics	1	1		100.0%
	1.4.4 Thermodynamics/Heat Transfer	1	1		100.0%
	1.4.5 Mechanical Technologies in Statics & Dynamics	1	1		100.0%
	1.4.6 Analytical Simulation, Methods and Techniques	1	1		100.0%
	1.4.7 Electrical Circuits and Electronics	1	1		100.0%
5	1.5 Environmental Health & Safety	11	10		90.9%
	1.5.1 Human Factors	3	3		100.0%
	1.5.3 Hazardous Materials	3	3		100.0%
	1.5.4 Personal Protective Equipment	1	1		100.0%
	1.5.5 Situational Awareness	3	2		66.7%
	1.5.6 Ergonomics	1	1		100.0%
6	1.6 Ethics	2	2		100.0%
	1.6 Ethics	2	2		100.0%
7	2.1 Materials Process Application of:	4	4		100.0%
	2.1.1 Metals	1	1		100.0%
	2.1.2 Plastics/Polymers	1	1		100.0%
	2.1.3 Composites	1	1		100.0%
	2.1.4 Ceramics	1	1		100.0%
8	2.2 Manufacturing Processes	10	9		90.0%
	2.2.1 Additive Manufacturing/3D Printing	1	1		100.0%
	2.2.2 Subtractive Manufacturing/Material Removal	1	1		100.0%
	2.2.3 Fabrication	1	1		100.0%
	2.2.3.1 Hot and Cold Forming	1	1		100.0%
	2.2.3.2 Casting and Molding	1	1		100.0%
	2.2.4 Electrical/Electronics Manufacturing	1	0		0.0%
	2.2.5 Treatments (e.g. Heat Treatment) and Coatings	1	1		100.0%
	2.2.6 Finishing	1	1		100.0%
	2.2.7 Joining, Welding and Assembly	1	1		100.0%
	2.2.8 Material Handling and Packaging	1	1		100.0%
9	3.1 Intellectual Property Protection	1	1		100.0%

	Level/Title	# of Items in Section	# of Items Passed	Performance	Percent
9	3.1 Intellectual Property Protection	1	1		100.0%
	3.1.3 Copyrights	1	1		100.0%
10	3.2 Computer-Aided Design/Drafting/Engineering Graphics/Modeling	7	6		85.7%
	3.2.2 Slice Files	1	1		100.0%
	3.2.3 3D vs. 2D Scan and Print	1	1		100.0%
	3.2.4 Drafting Standrds Mechanism	2	2		100.0%
	3.2.5 Computer-Aided Drafting	2	2		100.0%
	3.2.6 Bill of Materials	1	0		0.0%
11	3.3 Concurrent Engineering/Design for X	4	3		75.0%
	3.3.1 Manufacture	2	2		100.0%
	3.3.2 Asembly	1	0		0.0%
	3.3.6 Reliability	1	1		100.0%
12	3.4 Computer-Aided Engineering (CAE) Design and Manufacturing Tools	1	1		100.0%
	3.4.1.5 Engineering Design Analysis	1	1		100.0%
13	3.5 Equipment/Tool Design and Development	10	9		90.0%
	3.5.1 Cutting Tool Design	1	1		100.0%
	3.5.2 Workholding Tool Design	2	1		50.0%
	3.5.3 Die/Mold Design	1	1		100.0%
	3.5.4 Gage Design	1	1		100.0%
	3.5.5 Machine Design	2	2		100.0%
	3.5.6 Power Systems Design (Mech/Elec/Fluid)	2	2		100.0%
	3.5.7 Control Systems Design (Mech/Elec/Fluid)	1	1		100.0%
14	3.6 Additive Manufacture/3D Printing Applications	3	3		100.0%
	3.6.1 Rapid Prototyping	1	1		100.0%
	3.6.2 Production Parts	1	1		100.0%
	3.6.4 3D Scan and Print	1	1		100.0%
15	4.1 Digital Organization	1	1		100.0%
	4.1.3 Cybersecurity	1	1		100.0%
16	4.2 Industrial Internet of Things	2	2		100.0%
	4.2.1 Device Sensors	1	1		100.0%
	4.2.2 Data Collection	1	1		100.0%
17	4.3 Data Science	1	0		0.0%
	4.3.1 Cloud Computing	1	0		0.0%
18	4.5 Artificial and Augmented Intelligence	1	1		100.0%
	4.5.1 Machine Learning	1	1		100.0%
19	4.6 Machine Health, Assest Optimization and Industrial Maintnace	2	2		100.0%
	4.6.1 Condition Monitoring	1	1		100.0%
	4.6.2 Preventative Maintenance	1	1		100.0%
20	4.7 Digital Twin	1	1		100.0%
	4.7 Digital Twin	1	1		100.0%
21	5.1 Controls	8	8		100.0%
	5.1.1 Computer Numerical Controls (CNC)	4	4		100.0%
	5.1.2 Programmable Logic Controls (PLC)	2	2		100.0%
	5.2.1 Information Technology Infrastructure	1	1		100.0%
	5.2.3 Enterprise-wide Systems Integration	1	1		100.0%
22	5.2 Computer Systems and Networks	1	1		100.0%
	5.2.4 Database Systems	1	1		100.0%
23	5.3 Supply Chain	3	3		100.0%
	5.3.2 Capacity Planning	1	1		100.0%
	5.3.4 Demand Forecast for Products	1	1		100.0%
	5.3.7 Supply Planning	1	1		100.0%
24	5.5 Supervisory Control & Data Acquisition (SCADA) Human-Machine Interfa	1	1		100.0%
	5.5.2 Closed Loop Machine Interface	1	1		100.0%
25	6.1 Total Quality Management (TQM)	1	1		100.0%
	6.1.4 Quality Standards (e.g., QS, ISO, etc.)	1	1		100.0%
26	6.2 Statistical Control Methods	6	6		100.0%

	<b>Level/Title</b>	<b># of Items in Section</b>	<b># of Items Passed</b>	<b>Performance</b>	<b>Percent</b>
26	6.2 Statistical Control Methods	6	6		100.0%
	6.2.1 Problem Analysis & Solving (e.g. Fishbone, Pareto, etc.)	2	2		100.0%
	6.2.2 Factor Analysis (e.g. QS, ISO. Etc.)	1	1		100.0%
	6.2.3 Capability Analysis	2	2		100.0%
	6.2.4 Reliability Analysis	1	1		100.0%
27	6.3 Inspection, Test and Validation	6	6		100.0%
	6.3.1 Metrology	1	1		100.0%
	6.3.2 Inspections	1	1		100.0%
	6.3.3 Test	2	2		100.0%
	6.3.4 Validation and Compliance	1	1		100.0%
	6.3.5 Non-Destructive Testing	1	1		100.0%
28	6.4 Quality for Additive Manufacturing	1	0		0.0%
	6.4.2 Secondary Processes	1	0		0.0%
29	7.1 Systems, Processes and Tools (e.g. Lean, Six Sigma, etc.)	11	11		100.0%
	7.1 Systems, Processes and Tools (e.g. Lean, Six Sigma, etc.)	1	1		100.0%
	7.1.1 Benchmarking	1	1		100.0%
	7.1.3 Just-in-Time Manufacturing	1	1		100.0%
	7.1.3 Visual Workplace (5S)	1	1		100.0%
	7.1.5 Visual Workplace (5S)	1	1		100.0%
	7.1.6 Workflow Analysis	1	1		100.0%
	7.1.7 Kanban/Pull Systems	1	1		100.0%
	7.1.10 Standardized Work	1	1		100.0%
	7.1.12 Root Cause Analysis	1	1		100.0%
	7.1.13 Statistical Process Control	1	1		100.0%
	7.1.14 Theory of Constraints	1	1		100.0%
30	7.2 Business Results and Measurement Systems	2	2		100.0%
	7.2.7 Customer Focus	1	1		100.0%
	7.2.7.2 Measure Whats Matters to the Customer	1	1		100.0%
31	7.3 Quality, Cost and Delivery (QCD)	3	3		100.0%
	7.3 Quality, Cost and Delivery (QCD)	1	1		100.0%
	7.3.1 Takt Time	1	1		100.0%
	7.3.4 Inventory Turns	1	1		100.0%
32	8.1 Soft Skills/Personal Effectiveness	7	7		100.0%
	8.1.1 Managing in a Digital Environment	1	1		100.0%
	8.1.3 Negotiating and Conflict Management	3	3		100.0%
	8.1.4 Presentation Skills and Oral Communication	2	2		100.0%
	8.1.5 Written Communication Skills	1	1		100.0%
33	8.2 Project Management	2	2		100.0%
	8.2 Project Management	2	2		100.0%
34	8.3 Finance	3	3		100.0%
	8.3.2 Engineering Economics	2	2		100.0%
	8.3.3 Cost Justification	1	1		100.0%
35	8.5 Labor Relations	1	1		100.0%
	8.5 Labor Relations	1	1		100.0%