

**ASSESSMENT PRE-MODERATION**  
**MECHANICAL TECHNOLOGY GRADE 12 SPECIALIZATION**

**ADMINISTRATIVE DETAILS:**

<b>SCHOOL:</b>		<b>DISTRICT:</b>	D	<b>ASSESSMENT TYPE:</b>	T1 / MY / Prelim
<b>ASSESSMENT DATE</b>	/ /	<b>SECURE STORAGE DATE</b>	/ /		
<b>GRADE</b>	12	<b>Number of Learners / Scripts</b>			

**ASSESSMENT CHECK LIST:**

##	DETAIL CLEARLY INDICATED and CORRECT	YES	NO	COMMENTS
1	School Cover Page with Subject Name			
2	Date of Assessment and Time / Duration of Paper			
3	Examiners Name AND Moderators Name			
4	Instructions to Learners			
5	Total Mark for Complete Paper - Added Correctly and Displayed			
6	Marks per Section - Total Added Correctly and Displayed			
7	Marks per Sub-Question - Displayed			
8	Question Numbering, Diagram / Table Referencing & Page Numbers			
9	Questions Aligned with Curriculum (Table Below) & Work Schedule			
10	Cognitive Levels & Complexity Weighting Applied (Blooms completed)			
11	Academic Language Style and Spelling			
12	Blend: Multiple Choice, Short, Long Questions, Labelling			
13	Includes Graphs, Diagrams, Sketches, Cartoons etc			
14	First Draft Approved			
15	Clear Type Font Appropriate for Mass Reproduction - no fading			
16	Memorandum Covers All Permutations / Options - User Friendly			
17	Tick Marks on Memorandum Reflects Total Mark Allocation per Question			
18	Question Paper Numbering Aligned with Memorandum Numbering			
19	Digital Format for Effective Storage, Modification and Reuse			
20	Scanned Images - Avoiding Manual Cut & Paste			
21	Un-altered Grade 12 Formula Sheet attached for All Grades			
22	Final Version with ALL Images and Attachments Included - Approved			

Responsible Levels	Initials and Surnames	Dates	Signatures
EXAMINER One		/ /	
EXAMINER Two		/ /	
MODERATOR		/ /	
PRINT APPROVED (Proof Read)		/ /	

**The table below combines Cognitive Levels, Key Words, Weightings and Question Mark Allocation Check List**

When setting/moderating assessments, a *Cognitive Level* spread be must displayed (Blooms Taxonomy - Revised GDE Poster), enabling a **standard** that will *not disadvantage Learners* when faced with external assessments. Each question must fall into a low, middle or high ranking (*Mechanical Technology CAPS pg. 35*) and conform to a *Weight Limit (Column W)*, for that *Cognitive Level*. Use key words in different levels as a guide to check question structure - note words alone DO NOT determine level but the question as a whole! Determine *assessments complexity* by placing *Question Number (Q)* and its *Mark Value (M)* in the appropriate column for the *question and corresponding level* row. Finally **add** up the marks for each question, inserting the *Total* in the last column (T) to confirm that the *cognitive weighting* is correct for the assessment as a *whole*.

<b>Cognitive Level and Key Words</b>	<b>W</b>	<b>Q 1</b>	<b>M1</b>	<b>Q 2</b>	<b>M2</b>	<b>Q 3</b>	<b>M3</b>	<b>Q 4</b>	<b>M4</b>	<b>Q 5</b>	<b>M5</b>	<b>Q 6</b>	<b>M6</b>	<b>Q 7</b>	<b>M7</b>	<b>Q 8</b>	<b>M8</b>	<b>Q9</b>	<b>M9</b>	<b>T</b>
<b>CREATING (Higher Order Thinking)</b> Generating new ideas, products or ways to viewing things <i>Key Words in Question:</i> designs, constructs, plans, produces, invents, assembles, creates, develops, formulates, writes.		1.		2.		3.		4.		5.		6.		7.		8.		9.		
		1.		2.		3.		4.		5.		6.		7.		8.		9.		
		1.		2.		3.		4.		5.		6.		7.		8.		9.		
<b>EVALUATING (Higher Order Thinking)</b> Justifying a decision or course of action <i>Key Words in Question:</i> checks, hypothesises, critiques, experiments, judges, appraises, compares, concludes, defends, discriminates, evaluates, justifies, relates, supports.	10/50	1.		2.		3.		4.		5.		6.		7.		8.		9.		
	20%	X		2.		3.		4.		5.		6.		7.		8.		9.		
	30/150	X		2.		3.		4.		5.		6.		7.		8.		9.		
<b>ANALYSING (Higher Order Thinking)</b> Breaks info. into parts to explore understanding & relationships <i>Key Words in Question:</i> organises, deconstructs, interrogates, findings, analyses, breaks down, contrasts, diagrams, differentiates, distinguishes, illustrates, outlines, relates, separates.	40/200	X		2.		3.		4.		5.		6.		7.		8.		9.		
		X		2.		3.		4.		5.		6.		7.		8.		9.		
		X		2.		3.		4.		5.		6.		7.		8.		9.		
<b>APPLYING (Middle Order Thinking)</b> Using information in another familiar situation <i>Key Words in Question:</i> implements, carries out, executes, applies, changes, computes, builds, demonstrates, calculates, uses, discovers, manipulates, modifies, operates, predicts, prepares, produces, shows, solves.	25/50	1.		2.		3.		4.		5.		6.		7.		8.		9.		
	50%	1.		2.		3.		4.		5.		6.		7.		8.		9.		
		1.		2.		3.		4.		5.		6.		7.		8.		9.		
<b>UNDERSTANDING (Middle Order Thinking)</b> Explaining ideas or concepts - Stating problem in own words. <i>Key Words in Question:</i> interprets, summarises, paraphrases, classifies, explains, comprehends, converts, estimates, extends, generalizes, gives, examples, infers, predicts, re-writes, translates.	75/150	1.		2.		3.		4.		5.		6.		7.		8.		9.		
	100/200	1.		2.		3.		4.		5.		6.		7.		8.		9.		
		1.		2.		3.		4.		5.		6.		7.		8.		9.		
<b>REMEMBERING (Lower Order Thinking)</b> Recalling information <i>Key Words in Question:</i> defines, describes, identifies, knows, labels, lists, matches, names, outlines, recalls, retrieves, recognizes, reproduces, selects, states.	15/50	1.		2.		3.		4.		5.		6.		7.		8.		9.		
	30%	1.		2.		3.		4.		5.		6.		7.		8.		9.		
	45/150	1.		2.		3.		4.		5.		6.		7.		8.		9.		
60/200	1.		2.		3.		4.		5.		6.		7.		8.		9.			

**QUESTION PAPER – QUESTION STRUCTURE**  
**FITTING and MACHINING**

Term 1 Formal Test				Mid-Year Examination				Preliminary Examination			
Q. NO	CONTENT	Tot	Time	Q. NO	CONTENT	Tot	Time	Q. NO	CONTENT	Tot	Time
<b>Section A - Generic</b>				<b>Section A - Generic</b>				<b>Section A - Generic</b>			
1	Multiple Choice	5	6	1	Multiple Choice	6	6	1	Multiple Choice	6	6
2	Safety	10	12	2	Safety	18	18	2	Safety	10	10
<b>Section B - Specific</b>				<b>Section B - Specific</b>				3	Materials	14	14
3	Multiple Choice	5	6	3	Multiple Choice	14	10	<b>Section B - Specific</b>			
4	Terminology (Lathe & Milling)	10	12	4	Terminology (Lathe & Milling)	32	27	4	Multiple Choice	14	10
5	Terminology (Indexing)	10	12	5	Terminology (Indexing)	33	29	5	Terminology (Lathe & Milling)	18	20
6	Tools & Equipment	10	12	6	Tools & Equipment	26	24	6	Terminology (Indexing)	28	25
<b>TOTAL</b>		<b>50</b>	<b>60</b>	7	Forces	45	38	7	Tools & Equipment	13	10
				8	Maintenance	26	24	8	Forces	33	35
				<b>TOTAL</b>		<b>200</b>	<b>180</b>	9	Maintenance	18	10
								10	Joining Methods	18	10
								11	Systems and Control	28	30
								<b>TOTAL</b>		<b>200</b>	<b>180</b>

## AUTOMOTIVE

Term 1 Formal Test				Mid-Year Examination				Preliminary Examination			
Q. NO	CONTENT	Tot	Time	Q. NO	CONTENT	Tot	Time	Q. NO	CONTENT	Tot	Time
<b>Section A - Generic</b>				<b>Section A - Generic</b>				<b>Section A - Generic</b>			
1	Multiple Choice	5	6	1	Multiple Choice	6	6	1	Multiple Choice	6	6
2	Safety	10	12	2	Safety	18	18	2	Safety	10	10
<b>Section B - Specific</b>				<b>Section B - Specific</b>				<b>Section B - Specific</b>			
3	Multiple Choice	5	6	3	Materials	14	14	3	Materials	14	14
4	Engines (Crankshafts)	10	12	4	Multiple Choice	14	10	4	Multiple Choice	14	10
5	Engines (Turbos and Superchargers)	10	12	5	Engines	28	26	5	Tools & Equipment	23	20
6	Tools & Equipment	10	12	6	Tools & Equipment	25	22	6	Engines	28	25
<b>TOTAL</b>		<b>50</b>	<b>60</b>	7	Forces	35	31	7	Forces	32	25
				8	Maintenance	22	18	8	Maintenance	23	20
				9	Systems and Control (Drive Trains)	38	35	9	Systems and Control (Automatic Gearbox)	18	20
				<b>TOTAL</b>		<b>200</b>	<b>180</b>	10	Systems and Control (Axles, Steering Geometry and Electronics)	32	30
								<b>TOTAL</b>		<b>200</b>	<b>180</b>

## WELDING AND METALWORK

Term 1 Formal Test				Mid-Year Examination				Preliminary Examination			
Q. NO	CONTENT	Tot	Time	Q. NO	CONTENT	Tot	Time	Q. NO	CONTENT	Tot	Time
<b>Section A - Generic</b>				<b>Section A - Generic</b>				<b>Section A - Generic</b>			
1	Multiple Choice	5	6	1	Multiple Choice	6	6	1	Multiple Choice	6	6
2	Safety	10	12	2	Safety	18	18	2	Safety	10	10
3	Materials	10	12	3	Materials	14	14	3	Materials	14	14
<b>Section B - Specific</b>				<b>Section B - Specific</b>				<b>Section B - Specific</b>			
4	Multiple Choice	5	6	4	Multiple Choice	14	10	4	Multiple Choice	14	10
5	Terminology (Templates & Weld Sym)	10	12	5	Terminology (Templates & Weld Sym)	32	30	5	Terminology (Templates)	23	20
6	Tools & Equipment	10	12	6	Tools & Equipment	31	28	6	Tools & Equipment	18	15
<b>TOTAL</b>		<b>50</b>	<b>60</b>	7	Forces	40	35	7	Forces	45	30
				8	Joining Methods (Inspection of Welds)	18	16	8	Joining Methods (Inspection of Welds)	23	20
				9	Joining Methods (Stresses and Distortion)	27	23	9	Joining Methods (Stresses and Distortion)	18	20
				<b>TOTAL</b>		<b>200</b>	<b>180</b>	10	Maintenance	9	10
								11	Terminology (Development)	20	25
								<b>TOTAL</b>		<b>200</b>	<b>180</b>