



<b>THEME</b>					<b>ENGINEERING GRAPHICS AND DESIGN</b>				
<b>SCHOOL:</b>					<b>DATE</b>		<b>Day</b>	<b>Month</b>	<b>Year</b>

<b>CYCLE / WEEK</b>	1	2	3	4	5	6	7	8	9	10	<b>TERM</b>			
<b>THEME</b>	<b>SOLID GEOMETRY</b>													

<b>INTEGRATION WITH OTHER SUBJECTS</b>												
Business Studies	Manufacturing	✓	Human Science	Mathematics								
Commerce Studies	Engineering	✓	Social Science	Computers								
Management Studies	Technology	✓	Arts and Culture	Physical Sciences								
Service Studies	Languages		Agricultural Sciences	Life Sciences								

<b>CONTEXT</b>	<b>CRITICAL OUTCOMES (CO's)</b>	<b>DEVELOPMENTAL OUTCOMES (DO's)</b>
Civil	✓ 1. Problem solving 2. Teamwork	1. Learn more effectively 2. Responsible citizens
Mechanical	✓ 3. Self-management 4. Research and critical analysis	3. Culturally & aesthetically sensitive 4. Explore education & career opportunities
Electrical	5. Effective communication 6. Science and technology 7. The world as a set of related systems	5. Entrepreneurship
	<b>Skills</b>	<b>Knowledge</b>
	Drawing and perception	<b>Values including Attitudes</b>

<b>NCS PRINCIPLES</b>	<b>ASSESSMENT</b>					
	<b>LTSM</b> (resources used in teaching & learning)	<b>TEACHING &amp; LEARNING STRATEGIES</b> (Learning Activities)	<b>ASSESSMENT ACTIVITIES</b> (Assessment Activities / Tasks)	<b>TOOLS</b>	<b>METHODS</b>	
Social Transformation	Observation	✓	Show & Demonstrate	✓	Rating Scales	Self Assessment
Outcomes-based Education	Environment		Explain the Technology		Observation Sheets	Peer Assessment
Higher knowledge & Skill	Models	✓	Explain the Terminology	✓	Checklists	Group Assessment
Integration & Applied competence	CAD – Software		Producing free hand drawings		Task Lists	✓ Teacher Assessm.
Progression	Audio Visual		Self made Models		Memo/Mask	✓ External Assessm.
Articulation & Portability	Worksheets	✓	Design		Rubrics / Grids	✓
Human rights, Inclusivity, Environmental & Social justice	Drawing Instruments	✓	Class discussion		<b>EVIDENCE COLLECTION</b>	
Valuing Indigenous Knowledge Systems	Transparencies / OHP		Group discussion		Observation	
	Chalkboard / Posters	✓	Group work		Test - based	✓
Credibility, Quality & Efficiency	Other (specify)		Individual work	✓	Task based	✓

<b>CONTENT: LEARNING OUTCOMES(LO's) AND ASSESSMENT STANDARDS(AS's)</b>							
<b>LO1</b>		<b>LO2</b>		<b>LO3</b>		<b>LO4</b>	
10.1.1 Relationship environment	10.2.1 Identify Problems	10.3.1 Code of Practice	10.4.1 Interpretation Drawing				
10.1.2 Human Right Issues	10.2.1 Research	10.3.2 Projects multi/pict.	10.4.2 Drawing Principles				
10.1.3 HIV/AIDS	10.2.3 Final Solution	10.3.3 CAD Drawings	10.4.3 Multi & single view				
10.1.4 Communication	10.2.4 Present solution	10.3.4 Basic design	10.4.4 Pictorial Drawings				
10.1.5 Entrepreneurship	10.2.5 Evaluation	10.3.5 Drawing Techniques	10.4.5 Sectioning multiview				
		10.3.6 Sectional Views	10.4.6 Design Process				
		10.3.7 Graphic Comm.	10.4.7 CAD				





**QUESTION 4**

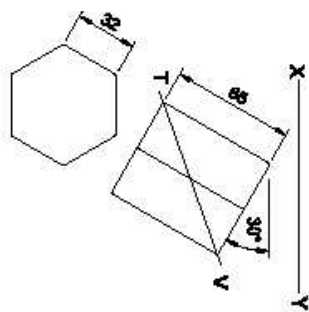
**Given:**  
The front view and auxiliary view of a right regular hexagonal prism that is tilted towards the right. The prism is cut by an inclined cutting plane, VT.

**Instructions:**

Draw in third-angle orthographic projection the following views of the prism:

- The given front view
- The sectioned top view (Show all hidden details)
- The sectioned left side view (Show all hidden details)
- The true shape of the sectioned surface

[20]



**Assessment criteria:**

Correctly drawn in third-angle projection	2
The front view is drawn correctly	8
The top view is drawn correctly	2
The left side view is drawn correctly	4
The true shape is drawn correctly	4
<b>TOTAL</b>	<b>22</b>

NAME	
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NAME	4



**QUESTION 4**

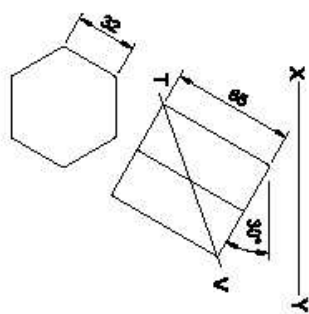
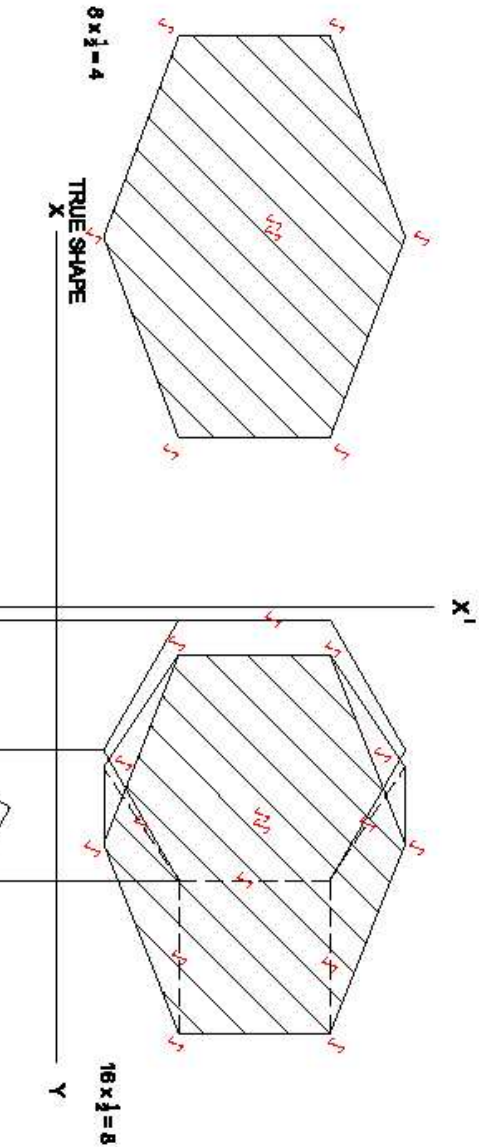
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NAME	
NAME	
MARKS	4