



**higher education
& training**

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE

ENGINEERING DRAWING N1

15 November 2022

This marking guideline consists of 13 pages.

✓ = 1 mark

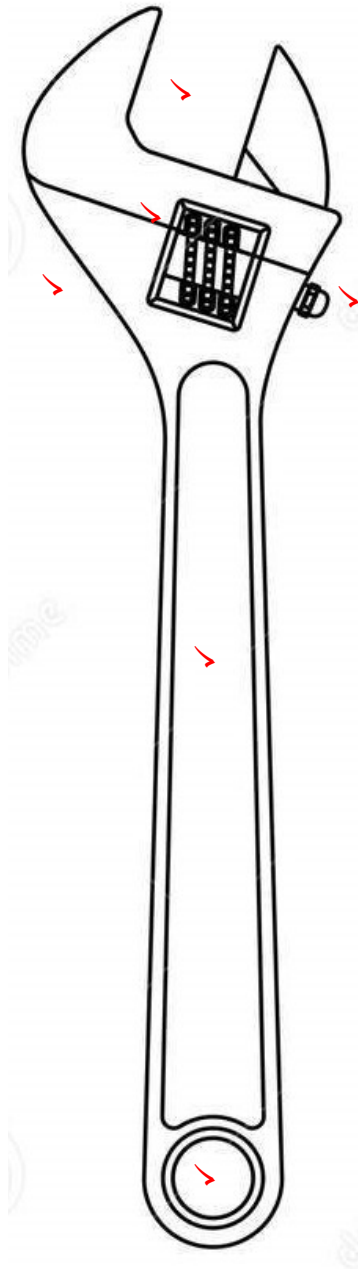
√ = ½ mark

QUESTION 1

1.1 Copied ANSWER BLOCK (1)

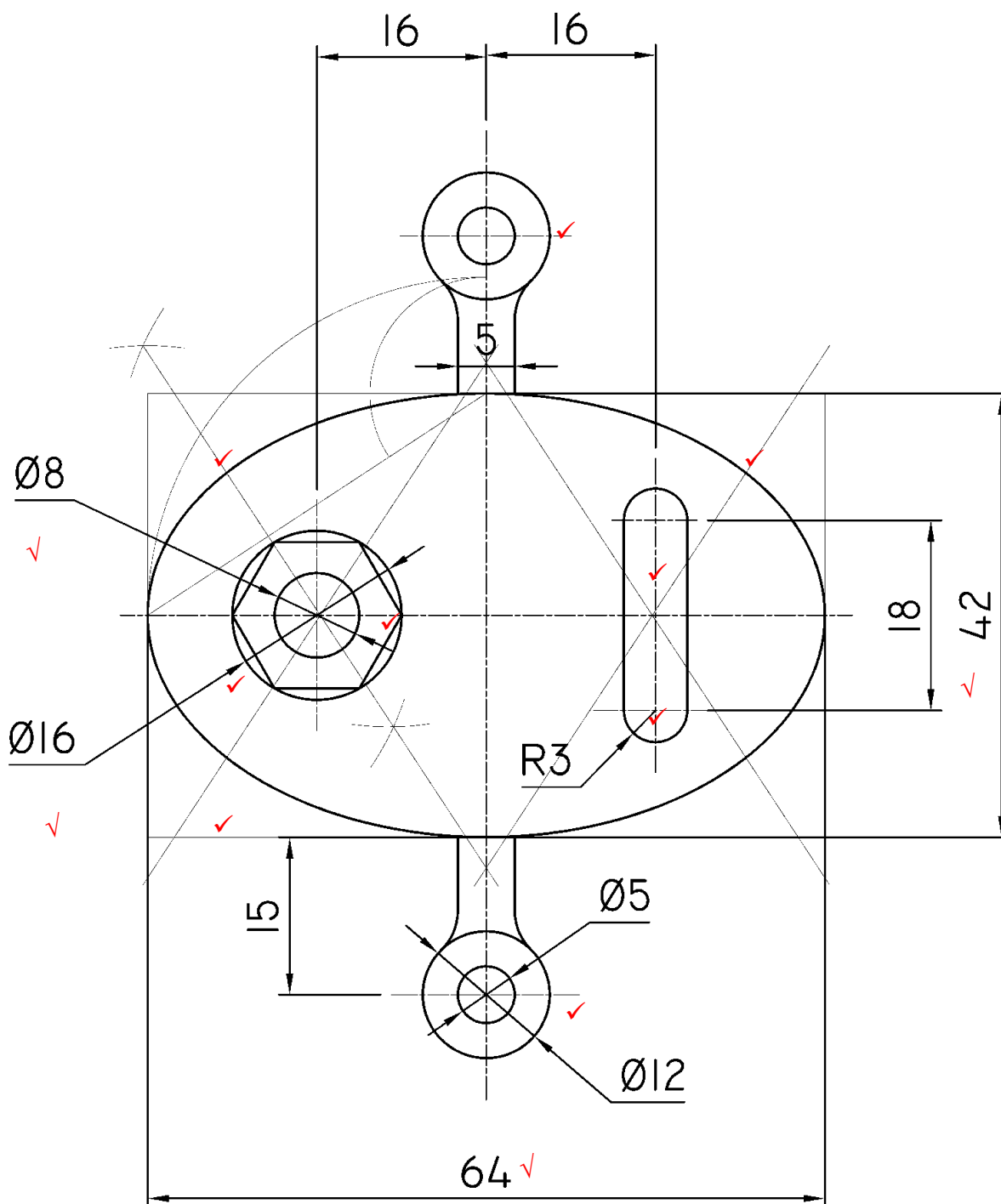
1.2 1.2.1 D
 1.2.2 A
 1.2.3 C
 1.2.4 B
 1.2.5 C

(5 × 1) (5)
 [6]

QUESTION 2: FREEHAND DRAWING

MARKING CRITERIA	
Correctness	6
Line work	2
Proportion	2
TOTAL	10

QUESTION 3: REPRODUCTION DRAWING

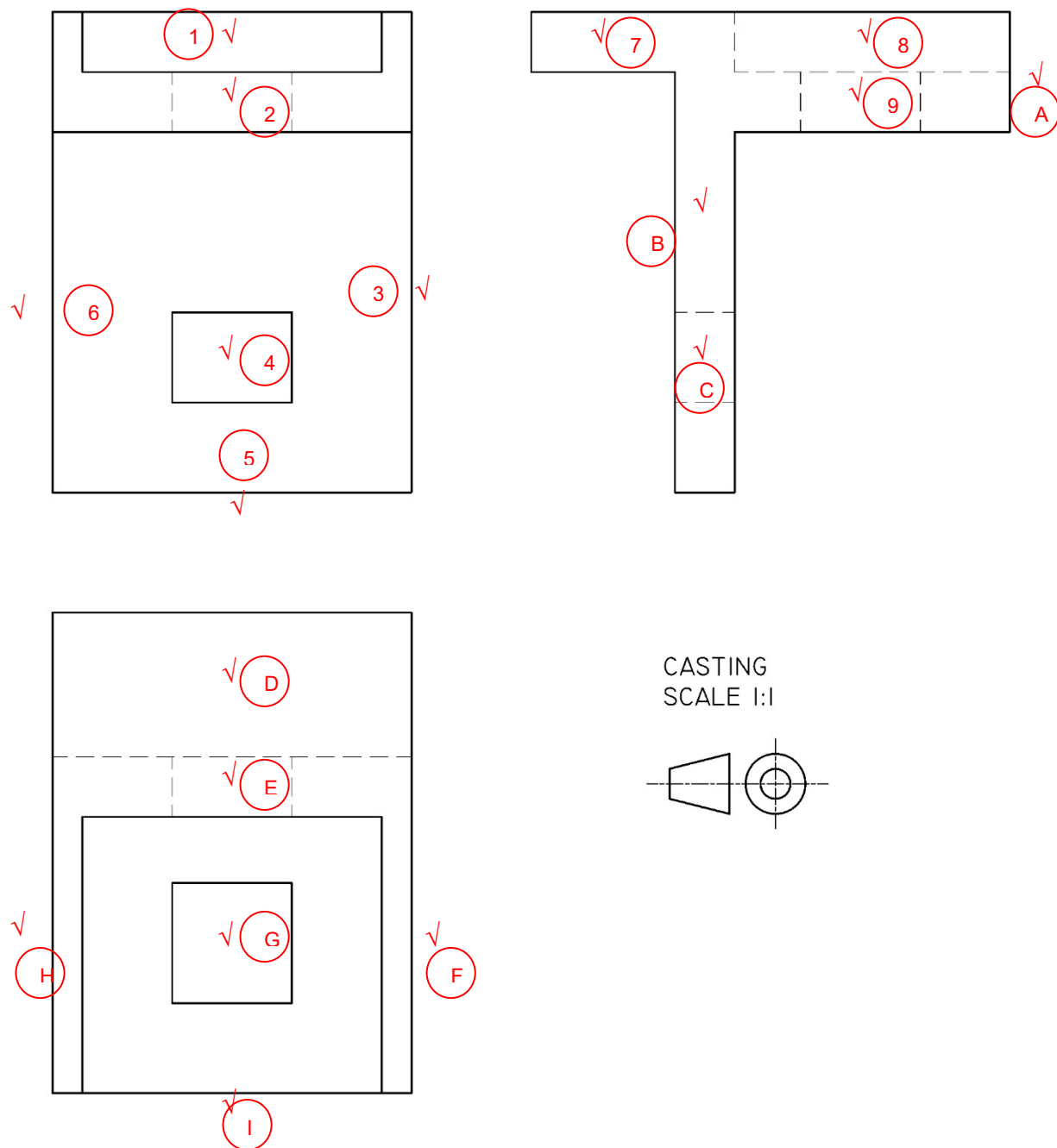


COVERPLATE✓
SCALE 2:1✓

MARKING CRITERIA	
Correctness	9
Line work	1
Accuracy	1
Dimensions	2
Title and scale	2
TOTAL	15

1	3	Marks for ellipse + construction lines	3	Marks
2	2	Marks hexagon	2	Marks
3	2	Marks for other circles	2	Marks
4	2	Marks for groove inside ellipse	2	Marks
TOTAL			9	Marks

[15]

QUESTION 4: FIRST-ANGLE ORTHOGRAPHIC PROJECTION

MARKING CRITERIA			
	FRONT	LEFT	TOP
Correctness	3	3	3
Line work	2		
Accuracy	2		
Title and scale	1		
Symbol	1		
TOTAL	15		

MARK ALLOCATION FOR CORRECTNESS – QUESTION 4**FV**

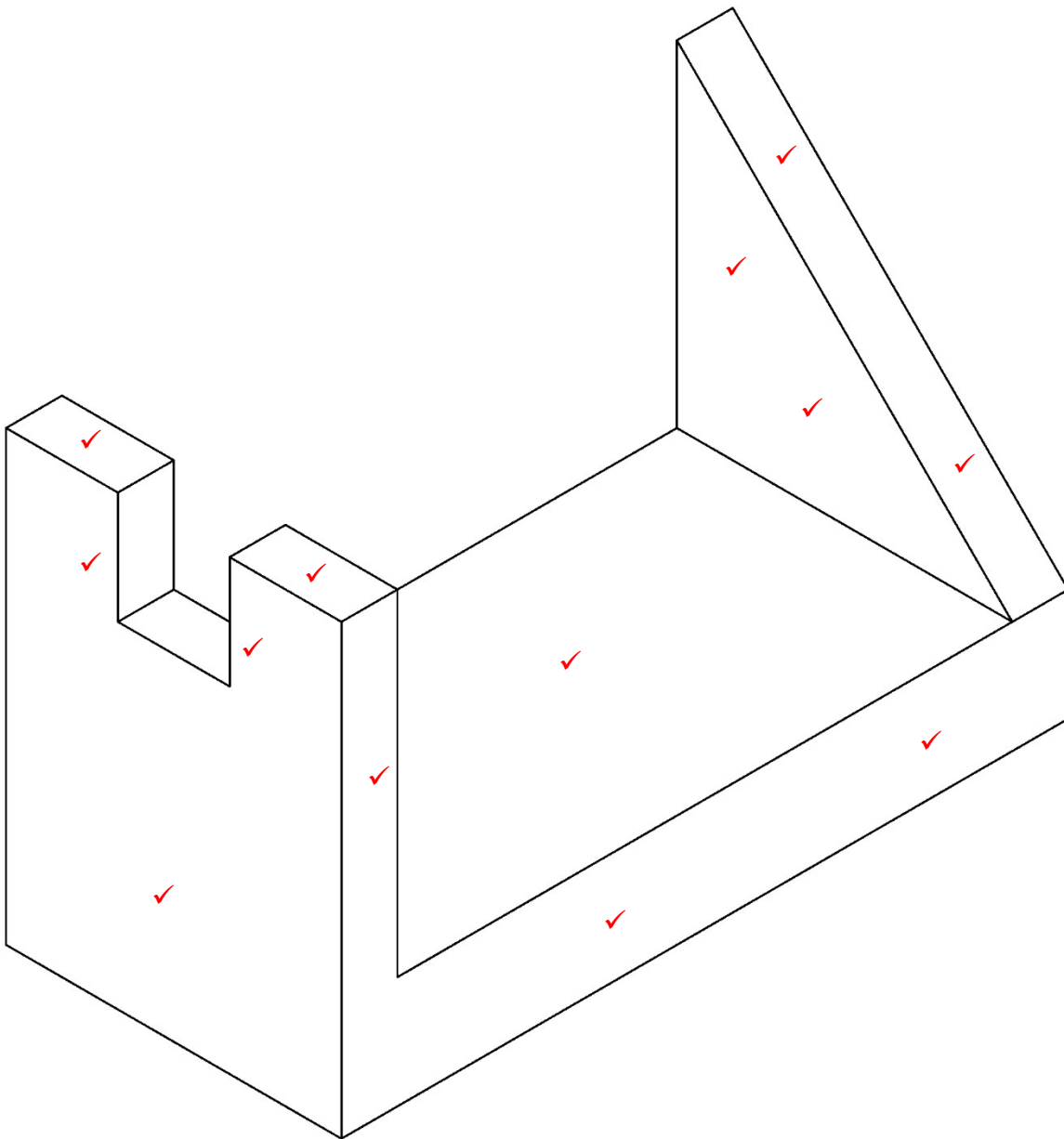
1	½	Mark top slot	½	Mark
2	½	Mark hidden detail	½	Mark
3	½	Mark right-side line	½	Mark
4	½	Mark rectangular	½	Mark
5	½	Mark bottom line	½	Mark
6	½	Mark left-side line	½	Mark
TOTAL			3	Marks

LV

7	½	Mark top-left side	½	Mark
8	½	Mark hidden detail	½	Mark
9	½	Mark hidden detail	½	Mark
A	½	Mark top-right side	½	Mark
B	½	Mark bottom hidden detail	½	Mark
C	½	Mark bottom part	½	Mark
TOTAL			3	Marks

TV

D	½	Mark top part	½	Mark
E	½	Mark hidden detail	½	Mark
F	½	Mark right-side line	½	Mark
G	½	Mark rectangle	½	Mark
H	½	Mark left-side line	½	Mark
I	½	Mark bottom line	½	Mark
TOTAL			3	Marks

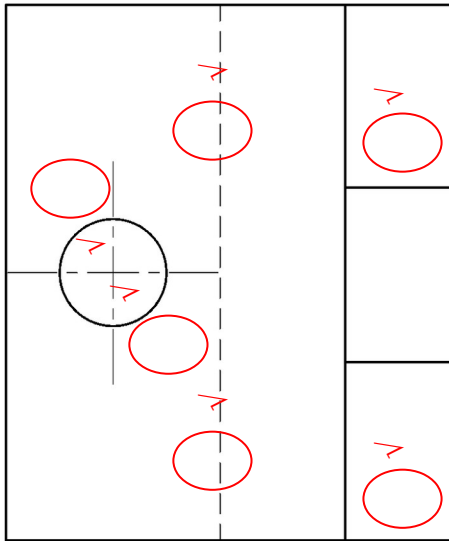
QUESTION 5: ISOMETRIC DRAWING

MARKING CRITERIA	
Correctness	13
Lowest point	1
Line work	2
Accuracy	2
TOTAL	18

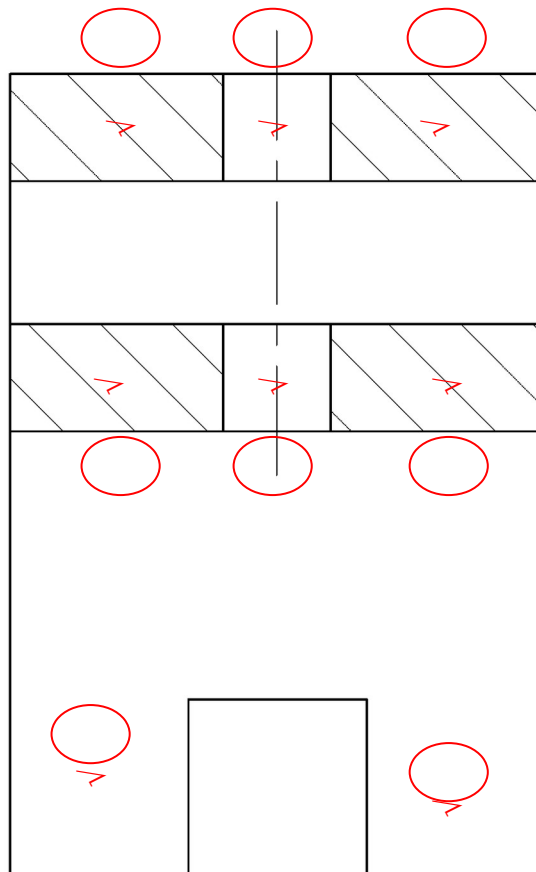
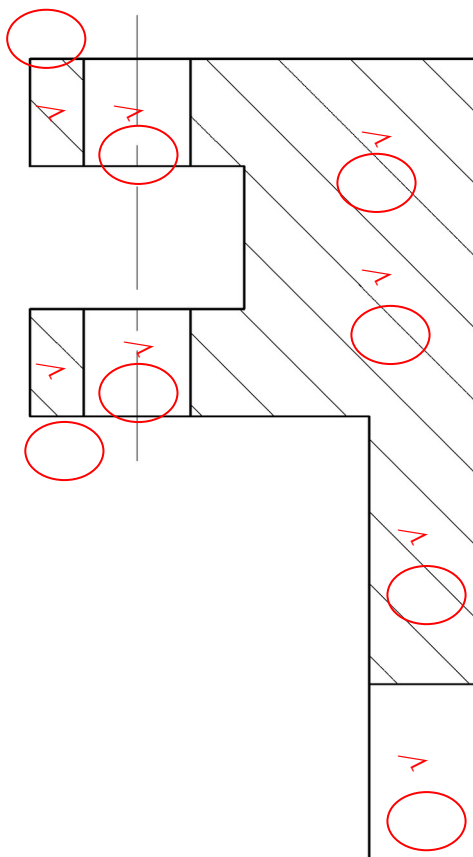
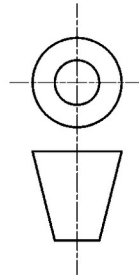
MARK ALLOCATION FOR CORRECTNESS – QUESTION 5

1	5	Marks left view	5	Marks
2	4	Marks front view	4	Marks
3	4	Marks top view	4	Marks
TOTAL			13	Marks

QUESTION 6: SECTIONAL DRAWING



CASTING
SCALE 2:1



MARKING CRITERIA			
	FRONT	LEFT	TOP
Correctness	4	3	4
Line work	2		
Accuracy	2		
Symbol	2		
TOTAL	17		

MARK ALLOCATION FOR CORRECTNESS – QUESTION 6**FS-FV**

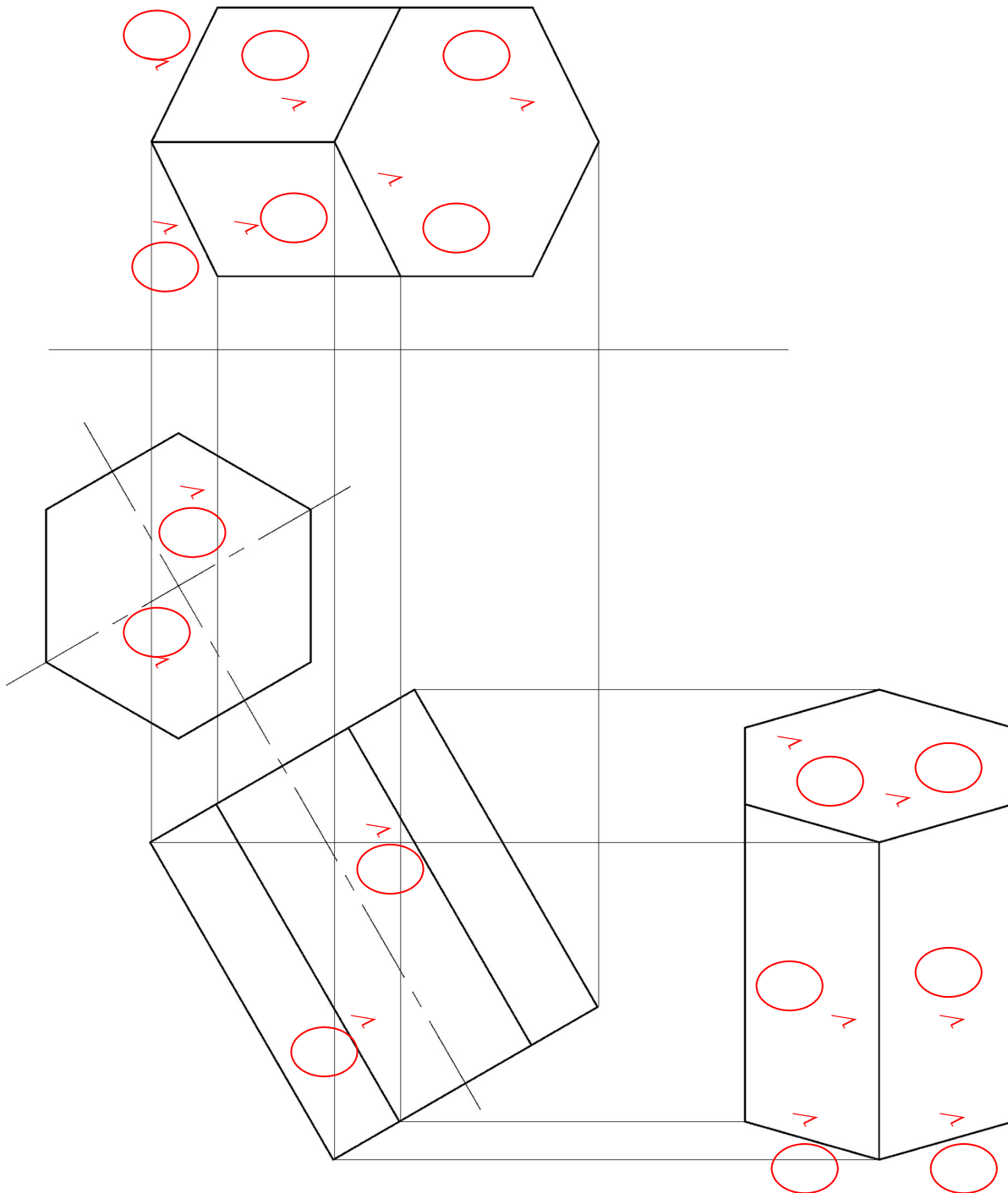
1	½	Mark for sectioning (x2)	1	Mark
2	½	Mark for holes (x2)	1	Mark
3	½	Mark for sectioning (x3)	1½	Marks
4	½	Mark for un-sectioned groove	½	Mark
TOTAL			4	Marks

LV

A	½	Mark for holes (x2)	1	Mark
B	½	Mark for hidden detail (x2)	1	Mark
C	½	Mark for bottom part (x2)	1	Mark
TOTAL			3	Marks

FS-TV – A-A

5	½	Mark for un-sectioned part (x2)	1	Mark
6	½	Mark for sectioning (x4)	2	Marks
7	½	Mark for holes (x2)	1	Mark
TOTAL			4	Marks

QUESTION 7: PRISM AND PYRAMID

MARKING CRITERIA			
	Front	Left	Top
Correctness	2	3½	3½
Line work	2		
Accuracy	1		
TOTAL	12		

MARK ALLOCATION FOR CORRECTNESS – QUESTION 7**FV & AUX**

1	½	Mark for FV (x2)	1	Mark
2	½	Mark for AUX VIEW (x2)	1	Mark
TOTAL			2	Marks

LV

3	½	Mark for BASE (x2)	1	Mark
4	½	Mark for prism lines (x3)	1½	Marks
5	½	Mark for hidden base (x2)	1	Mark
TOTAL			3½	Marks

TV

6	½	Mark for BASE (x2)	1	Mark
7	½	Mark for prism lines (x3)	1½	Marks
8	½	Mark for hidden base (x2)	1	Mark
TOTAL			3½	Marks

Balance, border lines, layout, and neatness of a completed DRAWING SHEET:**(7)**

MARKING CRITERIA	
Balanced layout	3
Border lines	2
Layout and neatness	2
TOTAL	7

TOTAL: 100