



1. A complex problem (47 pt total)

1.1 (1 pt)

1.2 (20 pt)

Student signature:

Lab assistant signature:

1.3 (0 pt)

Student signature:

Lab assistant signature:

Time sample collected:

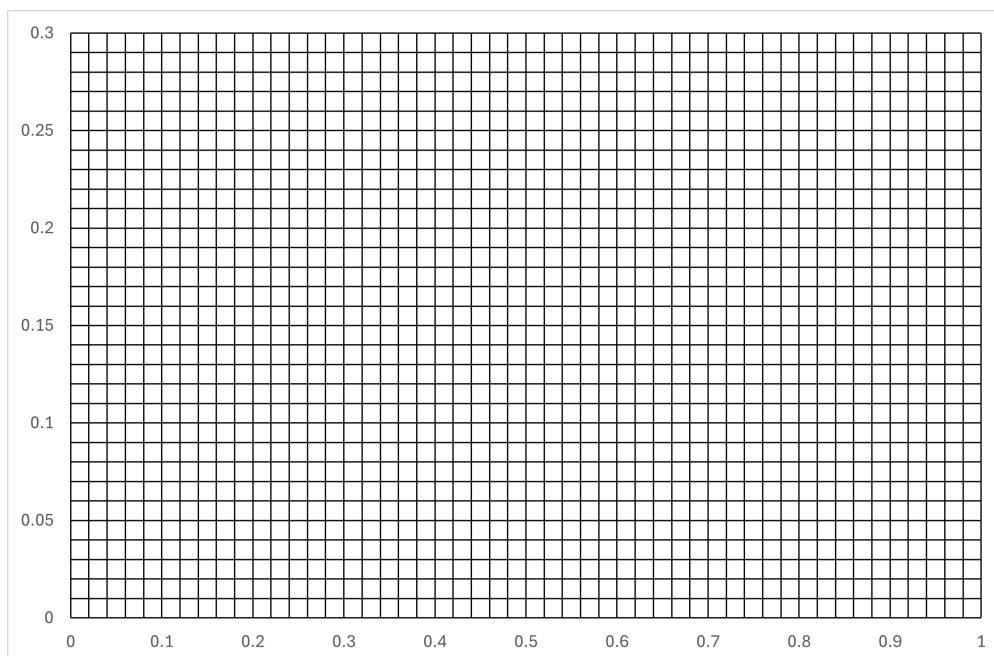
Time sample run:

1.4 (18 pt)

	1	2	3	4	5	6	7	8	9	10	11	12
☐ A												
☐ B												
☐ C												
☐ D												
☐ E												
☐ F												
☐ G												
☐ H												



1.5 (3 pt)

 $Fe:L:$ _____

1.6 (2 pt)

 $n:$ _____ $z:$ _____

1.7 (3 pt)



2. Exploring the AminOasis (65 pt total)

 Arg	 Cys	 Glu	 His	 Lys
 Phe	 Pro	 Ser	 Trp	 Tyr

2.2 (11.5 pt), 2.3 (6.5 pt)

	Mix 1		Mix 2		Mix 3		Mix 4		Mix 5	
pH										
Ehrlich										
Nitroprusside										
Sakaguchi										
Pauly										
Gerngross										
AA										
Higher R_f	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐



PQ2

2.4 (0 pt)

	1	2	3	4	5
V_0 , mL					
V_f , mL					
T , mL					

2.5 (10 pt)

$$V_{\text{Na}_2\text{H}_2\text{EDTA}} = \text{_____ mL}$$

2.6 (3 pt)

$$c_{\text{Cu}(\text{CH}_3\text{COO})_2} = \text{_____ M}$$



PQ2

2.7 (0 pt)

	1	2	3	4	5
V_0 , mL					
V_f , mL					
T , mL					

2.8 (15 pt)

$V_{\text{Cu}(\text{CH}_3\text{COO})_2} = \text{_____ mL}$

2.9 (1 pt)



2.10 (4 pt)

 $M_r =$ _____



3. R_f you ready to spot the answers? (62 pt total)

57th IChO 2025, UAE



PQ3

3.9, 3.10 (1 pt+1 pt)

UV

A
☐

B
☐

C
☐

D
☐

3.12(a) (1 pt)

A	B	C	D
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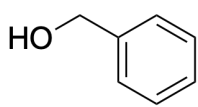
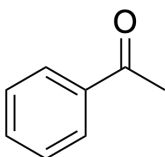
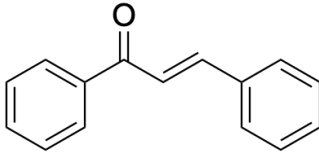
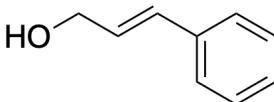
3.12(b) (1 pt)

A	B	C	D
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3.13 (1.2 pt)

a	b	c	d	e	f	g	h	i
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3.14 (4 pt)

 1	 2	 3	 4



PQ3

	E	F	G	H
3.15 (1 pt)	Y ☐ N ☐	Y ☐ N ☐	Y ☐ N ☐	Y ☐ N ☐
3.17 (1 pt)	Y ☐ N ☐	Y ☐ N ☐	Y ☐ N ☐	Y ☐ N ☐

3.18 (0 pt)

	E	F	G	H
E				×
F			×	
G				
H				

3.19 (4 pt)

E+F	E+G	E+H	F+G	F+H	G+H
Y ☐ N ☐	Y ☐ N ☐	Y ☐ N ☒	Y ☐ N ☒	Y ☐ N ☐	Y ☐ N ☐

3.20 (15 pt)

 5	 6	 7	 8	 9	 10	 11
N ☐	N ☐	N ☐	N ☐	N ☐	N ☐	N ☐



3.21 (4 pt)

57th IChO 2025, UAE

Practical Answer Booklet, English (Official)



Extra equipment and chemicals

Item	Penalty	Student Signature	Assistant Signature
1 TLC plate (non UV)	Free		
	Free		
	-1 pt		
	-2 pt		
	-3 pt		
	-4 pt		
	-5 pt		