



G.C.E A/L Examination March - 2019

Fied Work Centre

Grade - 13 (2019)

Physics

Marking Scheme

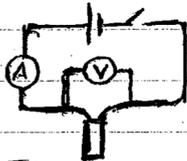
No.		Part I							
1)	3	11)	3	21)	1	31)	1	41)	4
2)	1	12)	2	22)	1	32)	3	42)	3
3)	1	13)	4	23)	2	33)	3	43)	2
4)	1	14)	5	24)	5	34)	4	44)	2
5)	1	15)	4	25)	4	35)	3	45)	2
6)	3	16)	1	26)	3	36)	2	46)	1
7)	5	17)	4	27)	3	37)	1	47)	1
8)	5	18)	1	28)	2	38)	2	48)	1
9)	5	19)	2	29)	3	39)	3	49)	5
10)	5	20)	5	30)	2	40)	2	50)	2

(50x1=50)

Part II

- 1) a) i) Stable and vertical, Tested with the help of plumb line — (1)
 ii) Effective weight may not become different due to reaction of board — (1)
- b) i) 1. with the help of ruler draw lines through P_1 and P_2 , through Q_1 and Q_2 through S_1 and S_2
 2) Taking a scale 3) Complete parallelogram OABC and join OC.
 4) measure OC. — (2)
- ii) weights are at rest — (1) iii) parallax error — (1)
 iv) i) pulleys may have friction
 2) Thread may have weight — (1) v) 210g — (1)
 vi) position O - move upward; $\angle AOB$ - increases, length OC - decreases. — (2)

2) a)



— (2)

b) i) Balance or measuring cylinder. — (1)

2) stop watch. — (1)

c) To allow heater to reach temperature of the ice — (1)

d) i) 0°C — (1)

ii) $mc = IVE$

$$L = \frac{IVE}{m} = \frac{1.6 \times 62.5 \times 2 \times 60}{(247.9 - 212.1) \times 10^{-3}} = 3.35 \times 10^5 \text{ J kg}^{-1}$$

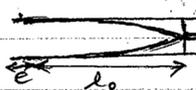
iii) All melted ice by heat from heater is collected in beaker — (1)

e) Mass of ice melted by room temperature is avoided in calculation — (1)

f) Thermometer. — (1)

g) decrease, part of the heat will use raising of temperature of ice — (1)

3) a)



— (1)

b) A, high frequency tuning fork have minimum fundamental resonance length.