1. Task

2)Use the following production function to answer the question below where labour(L) is measured in workers per day and out put (Q) is number of units per day.

L O MPP TVC TC MC ATC
0 0 RM0 RM0 RM120 RM0
1 60 60 60 180 3
2 150 75 120 240 1.6
3 210 70 180 300 1.43
4 240 60 240 360 1.5
5 260 52 300 420 1.62

b) what level of labour is associated with the point of diminishing returns? explain your answer.
d) draw the marginal cost and average total cost on the same graph.

2. Solution

$$MC = \Delta TC \div \Delta Q$$

Table 1.

L	Q	MPP	TVC (RM)	TC (RM)	MC (RM)	ATC (RM)
0	0	0	0	120	1,00	-
1	60	60	60	180	0,67	3,00
2	150	75	120	240	1,00	1,60
3	210	70	180	300	2,00	1,43
4	240	60	240	360	3,00	1,50
5	260	52	300	420	-	1,62

3. Answer

a) Level of 2 workers per day is associated with the point of diminishing returns because they give max MPP value of 75 and after increasing of workers per day MPP starts to decrease. Also MC has its minimum when we take the second worker.

b) Graph 1. MC, ATC