

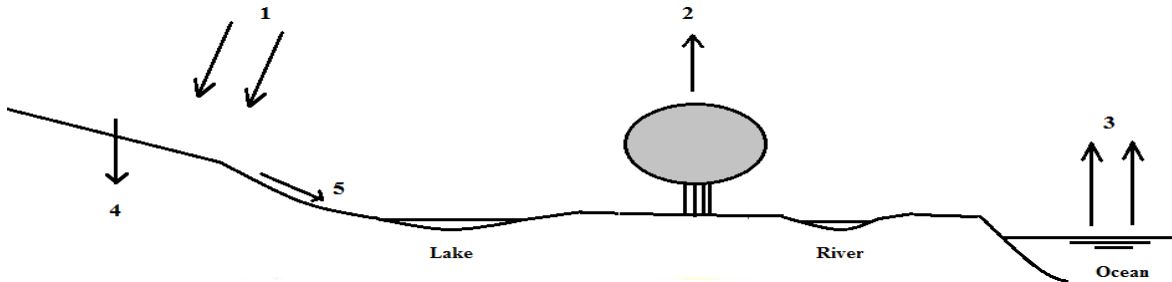


- Answer all the following questions
- Illustrate your answers with sketches when necessary

..... الرقم الأكاديمي: الاسم:

Question (1) (6 marks)

a- *In the figure:* 1: 2:
 3: 4: 5:



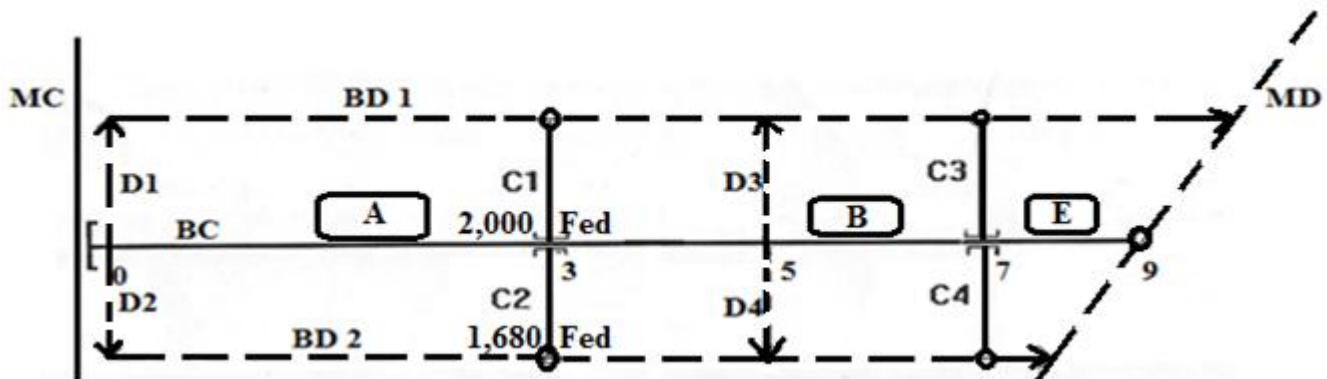
- b- The rain was 70 mm with 30 % lost on surface and 29 mm stored.
- 1) How much water was lost?
 - 2) Where this water was lost?

c- FC = 41%, WP = 20% TAW = RAW = Maximum Water Capacity =

Irrigation efficiency can be increased by:

- 1-
- 2-

Question (2) (4 marks)



	Area	Irrigation Source	Drainage Service
1-	A		
2-	B		
3-	E		

- 4- What is the type of this sloping land?
- 5- Determine the length of D₃?

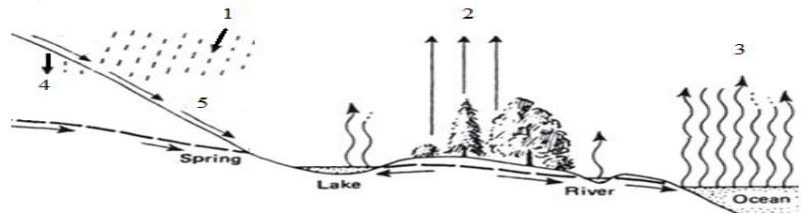


Mid First Term Exam – 8/11/2017

Question (1)

(6 marks)

- a- 1: Precipitation
- 2: Transpiration
- 3: Evaporation
- 4: Infiltration
- 5: Surface Runoff



b- $\Delta S = P - R - ET - F$

$ET + F = 70 - 21 - 29 = 20 \text{ mm}$

Losses are: Evapo-transpiration & Infiltration

c- $FC = 41\%$, $WP = 20\%$ $TAW = 21\%$ $RAW = 14\% - 15.75\%$

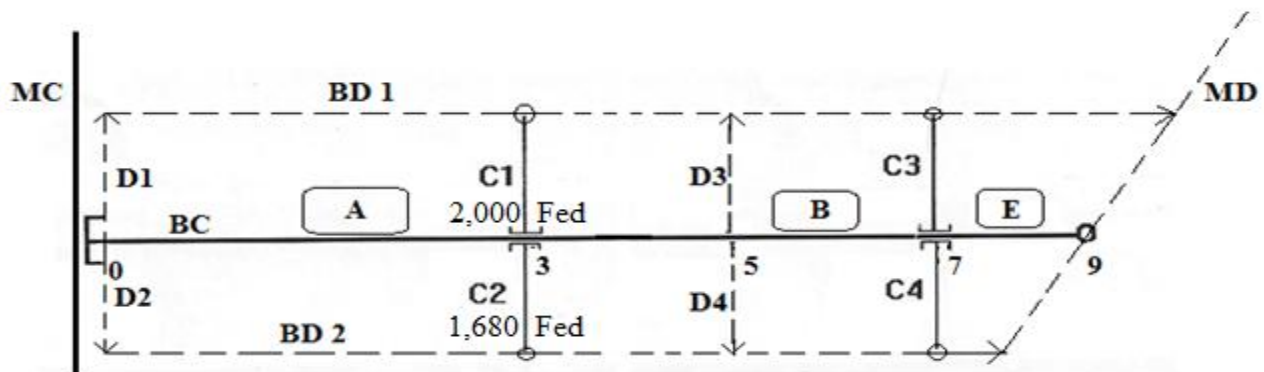
Maximum Water Capacity = 100 %

Irrigation efficiency can be increased by:

- 1- Taking $RAW = 14\%$
- 2- Taking $FC = 38\%$

Question (2)

(4 marks)



	Area	Irrigation Source	Drainage Service
1-	A	C 1	D 1
2-	B	C 3	D 3
3-	E	---	---

4- Flat sloping, As 2-way irrigation and drainage.

5- $L_{D3} = L_{C1} = (2,000 * 4,200) / 5,000 = 1.68 \text{ Km}$