

Part E [15 points]

Use only the data shown to answer the following questions.

All ranges have been named using the labels that appear in the worksheets.

A study group is preparing for a test. They want to randomly assign topics from a list to each of the members. The list is shown below. It includes a **Topic_No** and **Title** for each topic.

The rest of the columns are calculated:

- **Title_Count** is the number of students preparing each **Title**.
- **space** is the location of the space between the words in the **Title**.
- **FirstWord** & **SecondWord** are extracted from **Title**.
- **Short_Form** is the first letter of each of the words in the **Title**.
- **Short_Form_Count** is the number of students preparing each **Short_Form**.

Topic_No	Title	Title_Count	space	FirstWord	SecondWord	Short_Form	Short_Form_Count
1	Computing History	5	10	Computing	History	CH	5
2	Ethical Issues	2	8	Ethical	Issues	EI	2
3	Binary Numbers	4	7	Binary	Numbers	BN	4
4	Information Systems	4	12	Information	Systems	IS	4
5	System Components	3	7	System	Components	SC	3
6	Transistor Diagrams	4	11	Transistor	Diagrams	TD	4
7	Logic Diagrams	5	6	Logic	Diagrams	LD	5
8	Boolean Algebra	3	8	Boolean	Algebra	BA	3
9	Functional Notation	2	11	Functional	Notation	FN	2
10	Truth Tables	3	6	Truth	Tables	TT	3

1) Write the formula for **FirstWord**. [4]

=LEFT(Title, space -1)

The table on the next page shows a partial membership list.

Topic is a random integer form 1 to 10 (inclusive).

Topic Title is the corresponding **Title**.

Short Title is the corresponding **Short_Form**.

2) Write the formula for **Title_Count**. [3]

=COUNTIF(Topic_Title, Title)

Student	RandomFutureDate	Topic	Topic Title	Short Title
BUSHBY	Sunday, April 06, 2014	9	Functional Notation	FN
CAMPBELL	Tuesday, April 01, 2014	10	Truth Tables	TT
CORREIA	Wednesday, April 02, 2014	3	Binary Numbers	BN
DHILLON	Tuesday, April 15, 2014	9	Functional Notation	FN
FERNANDES	Tuesday, March 25, 2014	4	Information Systems	IS
FRASER	Sunday, April 13, 2014	9	Functional Notation	FN
GRAVAS	Thursday, April 10, 2014	1	Computing History	CH
HALL	Tuesday, April 08, 2014	6	Transistor Diagrams	TD
JOHNSON	Monday, April 14, 2014	8	Boolean Algebra	BA
JOLLY	Friday, April 18, 2014	10	Truth Tables	TT
KALICHARAN	Monday, March 31, 2014	4	Information Systems	IS
LUSSIER	Sunday, April 13, 2014	3	Binary Numbers	BN
MUHIC	Sunday, April 06, 2014	1	Computing History	CH
NACCI	Sunday, April 06, 2014	4	Information Systems	IS
OLDFIELD	Tuesday, April 15, 2014	5	System Components	SC
PARK	Friday, April 11, 2014	5	System Components	SC
PAULSON	Thursday, April 10, 2014	8	Boolean Algebra	BA
ROY	Monday, April 21, 2014	7	Logic Diagrams	LD
RUSSO	Friday, April 04, 2014	6	Transistor Diagrams	TD

3) Write the formula for **Topic**. [4]

=INT(RAND() *10) +1

4) Write the formula for **Topic Title**. [4]

=LOOKUP(Topic, Topic_No, Title)