Question **1**

Correct

Mark 2.00 out of 2.00

Flag question

Consider the following formula which is in CNF Form

$$(a \vee b \vee \neg b) \wedge (a \vee b \vee \neg c) \wedge (a \vee c \vee \neg b) \wedge (a \vee c \vee \neg c)$$

What is the minimum number of Disjunctive and conjunctive operators needed for the corresponding DNF?

- a. None
- b. 2, 2 ✔
- c. 5,5
- d. 3,5
- e. 2, 4
- f. 5, 3
- g. 4,2
- h. 3,3

Your answer is correct.

The correct answer is:
2, 2

Question **2**

Incorrect

Mark 0.00 out of 2.00

Flag question

Consider the following formula

$$(a \vee b \vee c) \Rightarrow ((a \vee b) \wedge (a \vee c))$$

What is the minimum number of Disjunctive and conjunctive operators needed for the corresponding DNF?

- a. 4,3
- b. 3,3 ✖
- c. 5,5
- d. None
- e. 3,6
- f. 3,4
- g. 2,3
- h. 3,2

Your answer is incorrect.

The correct answer is:
None

Question **3**

Correct

Mark 2.00 out of 2.00

Flag question

**Which of the following answers are true about below recurrence relations**

**A.** $H_n = 2H_{n-1}+1$

**B.** $f_n = f_{n-1} + f_{n-2}$

**C.** $a_n = a_{n-1} + a^2_{n-2}$

**D.** $P_n = (1.11)P_{n-1}$

- a. A,C, D are not linear
- b. A not homogenous, B,D are homogenous ✔
- c. A homogenous, B,D are not homogenous
- d. A,B not homogenous, C,D are homogenous
- e. NONE
- f. A,B, D are linear ✔
- g. A,C, D are linear
- h. A,C homogenous, B,D are NOT homogenous

Your answer is correct.

The correct answers are:
A,B, D are linear,

A not homogenous, B,D are homogenous

Question **4**

Correct

Mark 1.00 out of 1.00

Flag question

number of formulas we can generate using 3 propositional variables

- a. 243
- b. 27
- c. infinite ✔
- d. 64
- e. 81

Your answer is correct.

The correct answer is:
infinite

Question **5**

Correct

Mark 1.00 out of 1.00

Flag question

what is the max  number of Disjunctive and Conjunctive operators are required for any PDNF corresponding to formula consisting of three propositional variables

- a. 25
- b. 64
- c. 22
- d. 23 ✔
- e. 32
- f. 24
- g. 27
- h. 38

Your answer is correct.

The correct answer is:
23