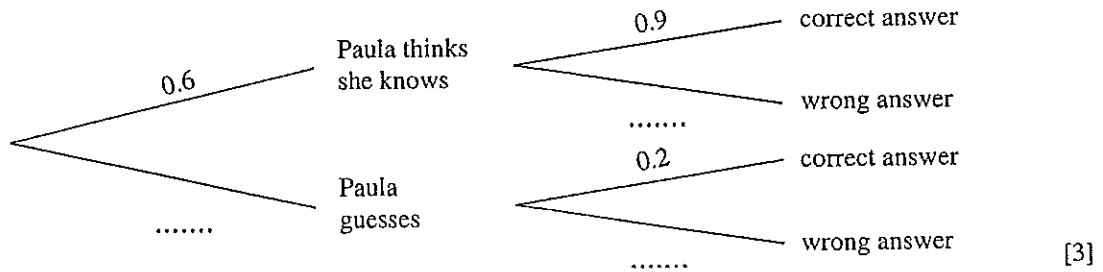


IGCSE - Tree diagrams – paper 4 -2

May 02 Paper 4

- 3 Paula and Tarek take part in a quiz.
 The probability that Paula thinks she knows the answer to any question is 0.6.
 If Paula thinks she knows, the probability that she is correct is 0.9.
 Otherwise she guesses and the probability that she is correct is 0.2.

(a) Copy and complete the tree diagram.



(b) Find the probability that Paula

- (i) thinks she knows the answer and is correct, [1]
 (ii) gets the correct answer. [2]

(c) The probability that Tarek thinks he knows the answer to any question is 0.55.
 If Tarek thinks he knows, he is always correct.
 Otherwise he guesses and the probability that he is correct is 0.2.

- (i) Draw a tree diagram for Tarek. Write all the probabilities on your diagram. [3]
 (ii) Find the probability that Tarek gets the correct answer. [2]

(d) There are 100 questions in the quiz.
 Estimate the number of correct answers given by

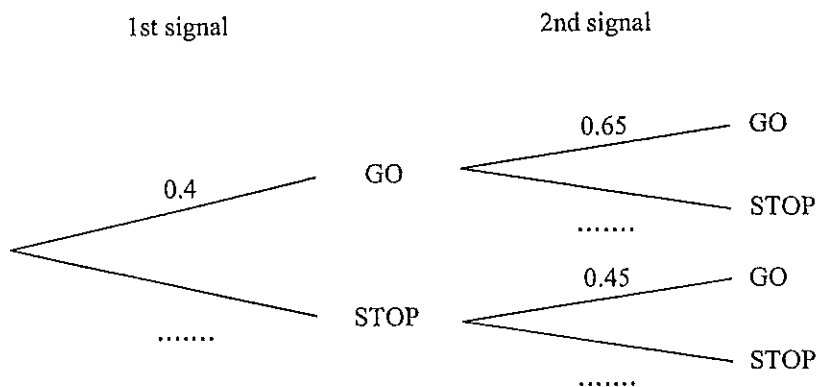
- (i) Paula, [1]
 (ii) Tarek. [1]

3

May 03 Paper 4

- 3 There are 2 sets of road signals on the direct 12 kilometre route from Acity to Beetown.
 The signals say either "GO" or "STOP".
 The probabilities that the signals are "GO" when a car arrives are shown in the tree diagram.

(a) Copy and complete the tree diagram for a car driver travelling along this route.



[3]