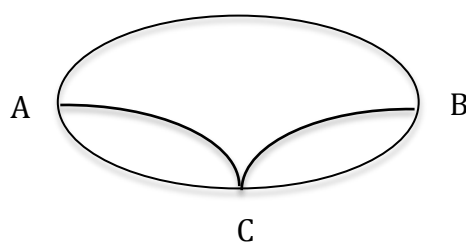*Critical reasoning: Specimen questions*

1   Amy has to visit towns B and C in any order. The roads connecting these towns with her home are shown on the diagram. How many different routes can she take starting from A and returning to A, going through both B and C (but not more than once through each) and not travelling any road twice on the same trip?

A   B

C

A   10

B   8

C   6

D   4

E   2

2   All German philosophers, except for Marx, are idealists.

The statement above logically follows from which of the following statements?

A   Except for Marx, if someone is an idealist philosopher, then he or she is German.

B   Marx is the only non-German philosopher who is an idealist.

C   If a German is an idealist, then he or she is a philosopher, as long as he or she is not Marx.

D   Marx is not an idealist German philosopher.

E   Aside from the philosopher Marx, if someone is a German philosopher, then he or she is an idealist.

3.   To play a football pools game, participants must select four matches from the fifty on the coupon. Points are scored depending on the result of each match as follows: If the home team wins, the participant scores 1.0 point. If the away team wins, the participant scores 1.5 points. If the match is a draw, the participant scores 3.0 points

Which of the following total scores for the four matches is not possible?

A   8.5 points

B   9.0 points

C   9.5 points

D   10.0 points

E   10.5 points

4.   Scientists investigating a rare metabolic disorder theorized that obesity was a necessary previous factor in the development of the disease. A study of twenty patients found that, on average, the patients were close to the normal weight for their height.

Before concluding that obesity is not a necessary previous factor, the researchers would find the answer to which of the following questions most useful?

A   Are the patients above or below normal height?

B   Were any of the patients underweight when the disorder was diagnosed?

C   Does weight loss reduce the severity of the symptoms?

D   Have the patients always been close to the normal weight for their heights?

E   How many of the patients had obese parents?

Answers 1 B, 2 E, 3 C, 4 D