



**ADMISSION TEST FOR THE DEGREE COURSE IN MEDICINE AND SURGERY**

**Academic Year 2012/2013**

Thinking Skills

- 1 Approximately 1 in 14 men over the age of 50 has prostate cancer. The level of 'prostate specific antigen' (PSA) is used as a preliminary screening test for prostate cancer.

7% of men with prostate cancer do not have a high level of PSA. These results are known as 'false negatives'.

75% of those men with a high level of PSA do not have cancer. These results are known as 'false positives'.

If a man over 50 has a normal level of PSA, what are the chances that he has prostate cancer?

- A 0.7%
- B 0.5%
- C 5%
- D 7%
- E 25%

- 2 Three friends, Adam, David and Sue are sharing out a bag of marbles. To do this more quickly, they take 10 marbles each time and repeat until the bag is empty. There are not enough marbles for Sue to take 10 on the last turn. Adam and David then give her two marbles each and they all have the same.

How many marbles did Sue take on the last turn?

- A 4
- B 2
- C 3
- D 6
- E 8