



## **FACULTY OF HEALTH, SOCIAL CARE AND EDUCATION**

### **BSc (Hons) Radiography interview and selection day Numeracy and literacy tests: information and sample questions**

Radiographers need to be both numerate and literate. During the interview and selection day you'll complete a numeracy test and a literacy test.

#### **What do the tests involve?**

The literacy test lasts for 30 minutes. There are two elements to the literacy test: a fifteen minute multiple choice comprehension and an essay on a subject of our choice. The essay title will relate to why you wish to do either Diagnostic or Therapeutic radiography. The maximum score for the comprehension test is 16 and the essay is used as a formative piece of work. The pass mark is a minimum of 10 points from the comprehension.

The numeracy test also lasts for 30 minutes. It includes addition, subtraction, multiplication and division, as well as conversion of decimals to fractions, and fractions to decimals. The maximum score for the test is 30 and the pass mark is 20/30.

#### **What happens if I don't pass the tests?**

You need to pass all tests to be made an offer of a place on the course.

We are unable to consider applicants who do not achieve the pass mark in all tests.

If you fail one or more parts of the test this will be indicated in the rejection information you will receive from UCAS.



## Sample literacy (comprehension) questions

The following is an example of the type of passage you will be given on the interview day. You will have **15 minutes** to answer **16 questions** relating to the passage. This sample comprehension is a shorter passage and has **5 questions**. It should therefore be completed within **5 minutes**.

***Read the following passage and answer the questions which follow.***

### **Titanic**

In 1898 a struggling author concocted a novel about a fabulous Atlantic liner – far larger than had ever been built. He filled it with rich people and then wrecked it, one cold winters night, on an iceberg. Fourteen years later, a ship remarkably similar to the one in the novel was built by Harland and Wolff, in Belfast, for the British shipping company, the White Star Line. Both ships were about the same size and tonnage and could carry a similar number of people. Both had lifeboats for only a fraction of the passengers and crew and both ships were labelled as ‘unsinkable.’

On the 10<sup>th</sup> April 1912, the real ship left Southampton on her maiden voyage to New York. On her way she, too, struck an iceberg and went down on a freezing April night. As the sea closed over the largest and most glamorous ship in the world with a list of passengers collectively worth, at the time, \$250 million, the awful statistics of the tragedy were engraved on maritime history. Of the 2,206 passengers and crew, only 703 were saved. 65% of the passengers saved were First Class ticket holders. The ship had only half the number of lifeboats for the people she carried.

This White Star liner was the “*Titanic*.” The ship in the novel was called the “*Titan*.”

***Put a ring round the letter which gives the most appropriate answer.***

1. Which group of people were **most** likely to be saved from the Titanic?

- a. The best swimmers
- b. The crew
- c. Passengers who paid the most for their tickets
- d. Women and children

2. What was the **main** contributing factor to the loss of life on both ships?

- a. They were both thought of as unsinkable
- b. It was a maiden voyage
- c. There were too many passengers on board
- d. There were insufficient lifeboats



3. There is a **grammatical mistake** on line 3. Should the word be changed to

- a. winter's
- b. winters'

4. In line 3 of the second paragraph, 'collectively' could be replaced by which of the following word or words?

- a. separately
- b. individually
- c. in total
- d. co-operatively

5. What was the name of the owners of the "*Titanic*?"

- a. Harland and Wolff
- b. A British shipping company
- c. The White Star Line
- d. A ship builder in Belfast

(Answers on the next page)



## Titanic answers

1. **c**
2. **d**
3. **a**
4. **c**
5. **c**



## Sample numeracy questions

These are sample numeracy questions only. The test you will sit on your interview and selection day covers the categories illustrated below. It will have 30 questions and take 30 minutes to complete. Calculators are not permitted. This sample has **20 questions**. It should be completed, therefore, within **20 minutes**.

**Solve the following:**

**Use this space for your workings**

1.  $1907 + 83.46 =$
2.  $7.2 - 3.33 =$
3.  $42.3 \times 2.74 =$
4.  $1.4 \div 7 =$

**Convert to decimals:**

5.  $\frac{3}{8} =$
6.  $\frac{2}{25} =$

**Convert to simple fractions:**

7.  $0.28 =$
8.  $0.075 =$

**Which of the following fractions is bigger?**

9.  $\frac{1}{4}$  or  $\frac{3}{8} =$

**Convert the following:**

10.  $1.5\text{g} = \text{mg}$
11.  $2750\text{mg} = \text{g}$

**Solve the following:**

12.  $30\%$  of  $150 =$
13.  $12\frac{1}{2}\%$  of  $100 =$
14.  $\frac{4}{5}$  as a percentage  $=$
15.  $0.4$  as a percentage  $=$
16.  $\frac{1}{3} \times \frac{1}{2} =$

**Simplify the ratio:**

17.  $24:8$
18.  $3:18$

**Convert the following:**

19.  $1.15$  a.m. to 24-hour time
20.  $21:50$  to 12-hour (am/pm) time

(Answers on the next page)



## Sample numeracy questions - answers

1. 1990.46
2. 3.87
3. 115.902
4. 0.2
5. 0.375
6. 0.08
7.  $7/25$
8.  $3/40$
9.  $3/8$
10. 1500
11. 2.75
12. 45
13. 12.5
14. 80%
15. 40%
16.  $1/6$
17. 3: 1
18. 1: 6
19. 01:15
20. 9.50 p.m.