



The Royal College of Pathologists

Pathology: the science behind the cure

## **FRCPath Part 2 examination**

### **Medical Microbiology - Second Written paper**

**Spring 2017**

**Candidates must answer ALL questions in Section A (short-answer questions) and TWO questions in Section B (journal article evaluation questions).**

You must use separate answer books for Section A and Section B.

You must NOT remove this question paper from the examination hall, nor copy any question and remove it from the examination hall.

Section A is worth a total of 25 closed marks.

Section B is worth a total of 50 closed marks.

**Time allowed - THREE HOURS**

## Section B: Journal article evaluation questions

Answer **TWO** of the following **THREE** questions.

You should justify your answers by reference to the article wherever possible. In addition, you should include your knowledge of relevant literature when this is available.

Each question carries equal marks.

### Question 1

#### **Peter J et al Mortality and LAM testing Lancet 2016:387; 1187-1197**

1. Write an abstract for this paper in no more than 250 words
2. Name two nonparametric tests used in this paper. When should such tests be used?
3. Table 2 refers to absolute and relative risk. What are these and what is the difference?
4. Where is LAM found and what does its detection indicate?
5. What is the main advantage in this paper of LAM testing?

### Question 2

#### **Enhanced performance feedback and patient participation to improve hand hygiene compliance of health-care workers in the setting of established multimodal promotion: a single centre, cluster randomised controlled trial.**

AJ Stewardson et al. *Lancet Infect Dis* 2016; 16: 1345-55

1. Write an abstract for this paper in no more than 250 words, using the headings Background, Methods, Findings and Conclusions.
2. Explain the phrase "All p values were based on two-tailed tests". Comment on the appropriateness of this approach in this paper.
3. How would you argue in favour of hand hygiene interventions in your place of work given the equivocal data on 'patient level outcomes' (table 4) presented in this paper?
4. How generalisable are the findings in this study? Justify your answer.
5. What are the weaknesses of randomised controlled trials in the study of hospital infection control interventions? Suggest alternative study designs.

### Question 3

#### **Oral vancomycin followed by fecal transplantation versus tapering oral vancomycin treatment for recurrent *Clostridium difficile* infection: An open-label, randomised control trial**

Susy S Hota et al. *Clinical Infectious Diseases* 2017; 64: 265-271

1. Write an abstract for the paper in no more than 250 words using the headings: Background, Methods, Findings and Conclusion
2. Describe the features of Phase 1, 2, and 3 studies.
3. What is a Bayesian analysis and why was this performed?
4. Describe the potential sources of bias that you have identified in this study.
5. What factors will you take into consideration when determining the applicability of the results from this study to your patients with recurrent *C. difficile* associated diarrhoea?