

# Examinations in Medical Microbiology & Virology

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WPBA / SLE

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#### The Assessment of Clinical Competence **Miller's Pyramid** Performance Does Workplace based assessment Competence Shows how Part 2 FRCPath Understanding **Knows how** Part 1 FRCPath **Knows** Knowledge

Miller GE. Academic Medicine 1990;65(Sup): S63-7



## **FRCPath Part 1**

- Also referred to as CICE for ID/GIM trainees who will not subsequently sit any FRCPath part 2 exam
- Covers the breadth of the CIT curriculum
- 2 x 100 question papers
- Single best answer style much like MRCP
- Don't be tempted to sit this exam too early near or after completion of the CIT programme preferable!



## When should I sit the Part 1?

- when you and your supervisor think you are ready
- normally about  $1\frac{1}{2}$   $2\frac{1}{2}$  years into training
- Don't sit the exam while a major curriculum gap remains to be filled



## The exam is mapped to the Curriculum

#### SPECIALTY SPECIFIC COMPETENCIES FOR COMBINED INFECTION TRAINING

6. BASIC BIOLOGY OF BACTERIA, VIRUSES, FUNGI AND PARASITES; HOST-PATHOGEN RELATIONSHIPS

7. MICROBIOLOGY/VIROLOGY LABORATORY PRACTICE

8. HEALTH AND SAFETY

9. PRINCIPLES OF PUBLIC HEALTH IN RELATION TO COMMUNICABLE DISEASES

- 10. INFECTION PREVENTION AND CONTROL
- **11. IMPORTANT CLINICAL SYNDROMES**
- 12. UNDERSTANDING USE OF ANTIMICROBIAL AGENTS

13. VACCINATION

- 14. THE MANAGEMENT OF HIV INFECTION
- 15. TRAVEL AND GEOGRAPHICAL HEALTH

Number of questions per curriculum section reflects importance – ie sections 7, 11, 12 are allocated more questions

It is NOT mapped to MM/MV/ID!



### **FRCPath Part 1**

#### See website Specialty pages for sample questions



https://www.rcpath.org/trainees/examinations/examinations-by-specialty.html/



## FRCPath Part 1 – Sample question 1

A 12-year-old boy underwent appendicectomy for acute appendicitis. At the time of surgery there was evidence of localised peritonitis, and a pus swab was sent for culture.

What is the most likely pathogen?

- A Streptococcus agalactiae
- B Streptococcus anginosus
- C Streptococcus equi
- D Streptococcus gallolyticus
- E Streptococcus infantarius



## FRCPath Part 1 – Sample question 2

Four patients on an elderly care ward were diagnosed with norovirus infection.

What immediate measure is most appropriate to prevent further spread within the institution?

- A close down the kitchen supplying meals to the ward
- B hydrogen peroxide vapour in affected areas
- C introduce alcohol hand rub to the ward
- D isolation of symptomatic patients
- E transfer asymptomatic patients to other wards



## FRCPath Part 1 - Sample question 3

A 72-year-old man developed fever and increased oxygen requirement while being ventilated 6 days after emergency surgery for a ruptured abdominal aortic aneurysm. Two days previously, he had been started on intravenous vancomycin for infection at the site of a peripheral intravenous cannula. He had a history of anaphylaxis following penicillin.

On examination, his temperature was 38.2°C, his pulse was 98 beats per minute and regular, and his blood pressure was 124/78 mmHg. There was decreased air entry and coarse crackles were audible at the right lung base.

Investigations:

chest X-ray

new infiltrate in right lower lung field

What is the most appropriate addition to his antibiotic treatment?

- A ceftazidime
- B ciprofloxacin
- C co-trimoxazole
- D fosfomycin
- E tigecycline



#### Pass standard

 What is the standard required to pass the Part 1 exam?

- the level of knowledge and understanding expected at the end of CIT
- pass candidates possess adequate knowledge to progress to higher training



### How we set the Pass standard

- How is the pass standard determined?
- Angoff Method
  - Based on the hypothetical minimally competent candidate
  - Completed before the exam is taken
  - Not dependent on performance of peers
  - Theoretically, the pass rate range is 0 -100%
  - (but in practice 70-90% of candidates usually pass)



## FRCPath Part 2 –





Essay + 10 short answer questions (SAQs)



Critical appraisal of a paper + 10 SAQs





## FRCPath Part 2 –

## **Requirements for achieving a pass**





## FRCPath Part 2 – Sample SAQ

The following serology results are from a patient attending the antenatal clinic. The request form states that she is 12 weeks pregnant but there are no other clinical details.

Name of Test	Result
Enzyme Immunoassay (EIA) Total antibody	Positive
EIA: IgM	Negative
Treponema Pallidum Particle Agglutination Test (TPPA)	Positive (>1:1280)
Rapid Plasma Reagin (RPR)	Negative

1. How would you report these results?

2. The midwife calls you to say that the patient and her partner were treated for syphilis 3 years ago with IM benzathine penicillin. She wants to know

a) if the mother requires further treatment – provide justification for your answer

b) how to investigate and treat the baby



## FRCPath Part 2 – Sample Long case

An 18 year old woman developed a sore throat and white patches on her tonsils ... 10-days after a flu-like illness ... subsequently developed clinical evidence of pneumonia...

Please state your recommended antibiotic regimen for a post-viral secondary bacterial pneumonia

#### Then a scenario of Lemierre syndrome unfolds ...

Candidates are walked through evolving lab results, and asked about the: clinical diagnosis, likely pathogen, pathogenesis of the organism, appropriate treatment



## FRCPath Part 2 – Sample OSPE station

You have been tasked with choosing the antibiotic disks to be included in a pair of 6-disk dispensers for direct antimicrobial susceptibility testing (AST) of inpatient urine specimens.

For each of the 6 places available in the two antibiotic disk dispensers, please choose an appropriate antimicrobial for direct antimicrobial susceptibility testing (AST) of inpatient urine specimens in your local laboratory.

Please justify the rationale for selecting these antibiotics



### How we set the Pass standard

- How is the pass standard determined?
- Angoff Method
  - Based on the hypothetical minimally competent candidate
  - Completed before (or just after) the exam is taken
  - Not dependent on performance of peers
  - Theoretically, the pass rate range is 0 -100%
  - (but in practice 60-70% of candidates usually pass)



# The Royal College of Pathologists