

Workbook : Basic Microbiology.

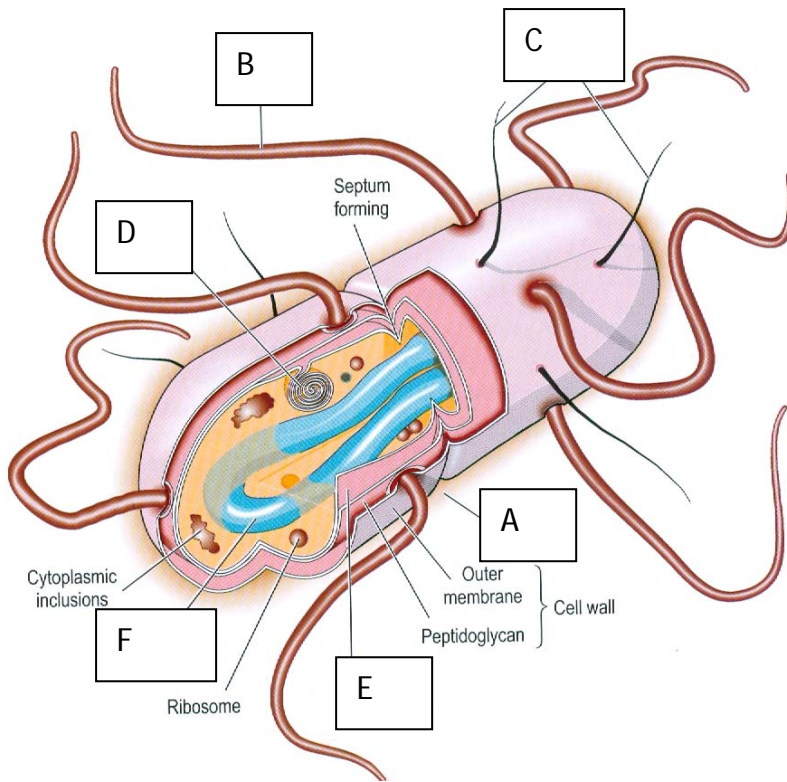
This workbook has been designed to be used in conjunction with the course reading booklet. You are free to complete as few or as many of the tasks as you wish. The workbook can then be added to your CPD portfolio as evidence of your activity. It also provides room for you to reflect your thoughts in relation to this course and your learning experience.

Self assessment.

1	What criteria are used to classify bacteria ?
2	What functions are carried out by the bacterial cell wall ?

3

Name the structures labelled A - F on the diagram below:



A

B

C

D

E

F

4	What differences are there between the cell walls of Gram positive and Gram negative organisms ?
5	What is a spore?
6	Briefly describe fungal structure.

7	<p>What are the mechanisms of tissue damage in fungal infection ?</p> <p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p>
8	<p>What are usual reservoirs and sources of infection for fungi?</p>

9	What differentiates a virus from a bacteria?
10	Under what circumstances can a virus replicate?
11	What is the capsid?

12

Discuss the steps in replication of a virus.

13	What is the difference between colonisation and contamination?
14	<p>Give the nine steps of infection development.</p> <ol style="list-style-type: none">123456789

15

Briefly describe microbial virulence factors.

16

Pathogenic microbes fall into three categories. What are these?

17	Why are normal flora useful?
18	What damage can normal flora do?
19	What reservoirs of infection exist?

20	Name the usual routes of transmission.
21	State the four major entry portals 1 2 3 4
22	What are first line defences (give examples) ?

23

Discuss second line defences.

24

Describe the role of lymphocytes and antibodies in third line defences.

25

What is cell-mediated immunity (CMI) ?

26	How many types of hypersensitivity reaction are there ? Choose one type, and describe it, using your own diagram and words.
27	How do micro-organisms evade the host's defences?

28

What are the purposes of fever and shock ?

29

Discuss the structure of staphylococci.

30

Why is *S. aureus* such an important pathogen ?

31

What differentiates streptococcus from staphylococcus ?

32

In haemolytic streptococci, how does one differentiate between alpha, beta, and gamma sub groups ?

33

Draw and label a streptococcal cell wall.

34

What kinds of clinical problems are associated with streptococcal infection ?

35

Which are the important Cloistridium species?

36

Choose one of these, and give a brief description of it.

37

Give four features of Pseudomonads.

38	What kind of organism is Candida?
39	What kinds of problems to Candida species cause?
40	Cutaneous mycoses infect which type of tissue?
41	What three species are usually involved ? 1 2 3
42	Which species most commonly affects skin, hair and nails ?

Reflection.

Take some time to think about the learning that you have completed using this course. Was it useful, was it interesting, was it applicable to your practice? Is there anything in particular you have gained from the course, and does it encourage you to alter your practice? Have you enjoyed it? These are all questions you should ask yourself before you complete your reflective account below, as these are key points that you need to mention.

How much time have you spent completing this course?	
Did you complete the course on your own, or as part of a learning group?	

Your general reflective account :

Key Learning / Practice points (list up to 5) :

1.

2.

3.

4.

5.

If you feel you have any further comments to make about your learning, please use the space below.