

**Pre-registration
Examination
Online Workshop
2020**



**South African
Pharmacy Council**

Format of the workshop

- ▶ Format and content of the examination
- ▶ Preparing for calculation questions
- ▶ Preparing for general questions
- ▶ Examples of calculation questions
- ▶ Examples of general questions



Format of the examination



Open book online examination

120 multiple choice questions



4 hours 45 min



Pass mark 50%

No negative marking



30% Calculation MCQs



2 hours



Subminimum of 60%



70% General MCQs



2 hours 30 min



Subminimum of 50%



Exam Content

2018 Competency Standards for Pharmacists

Domain 1

PUBLIC HEALTH

Domain 2

SAFE AND RATIONAL USE OF MEDICINES AND MEDICAL DEVICES

Domain 3

SUPPLY OF MEDICINES AND MEDICAL DEVICES

Domain 4

ORGANISATION AND MANAGEMENT SKILLS

Domain 5

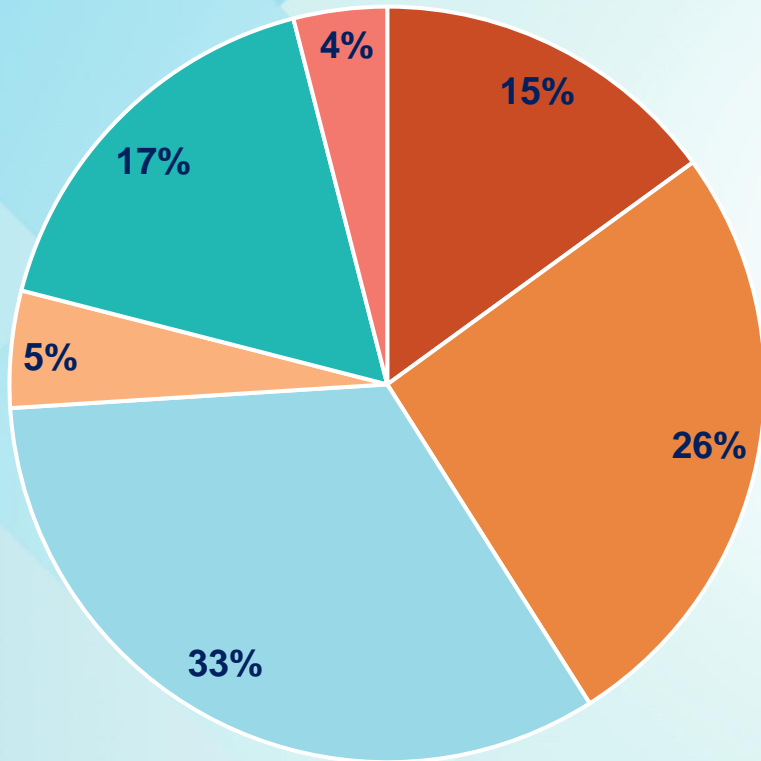
PROFESSIONAL AND PERSONAL PRACTICE

Domain 6

EDUCATION, CRITICAL ANALYSIS AND RESEARCH



Exam Blueprint



- Domain 1
- Domain 2
- Domain 3
- Domain 4
- Domain 5
- Domain 6

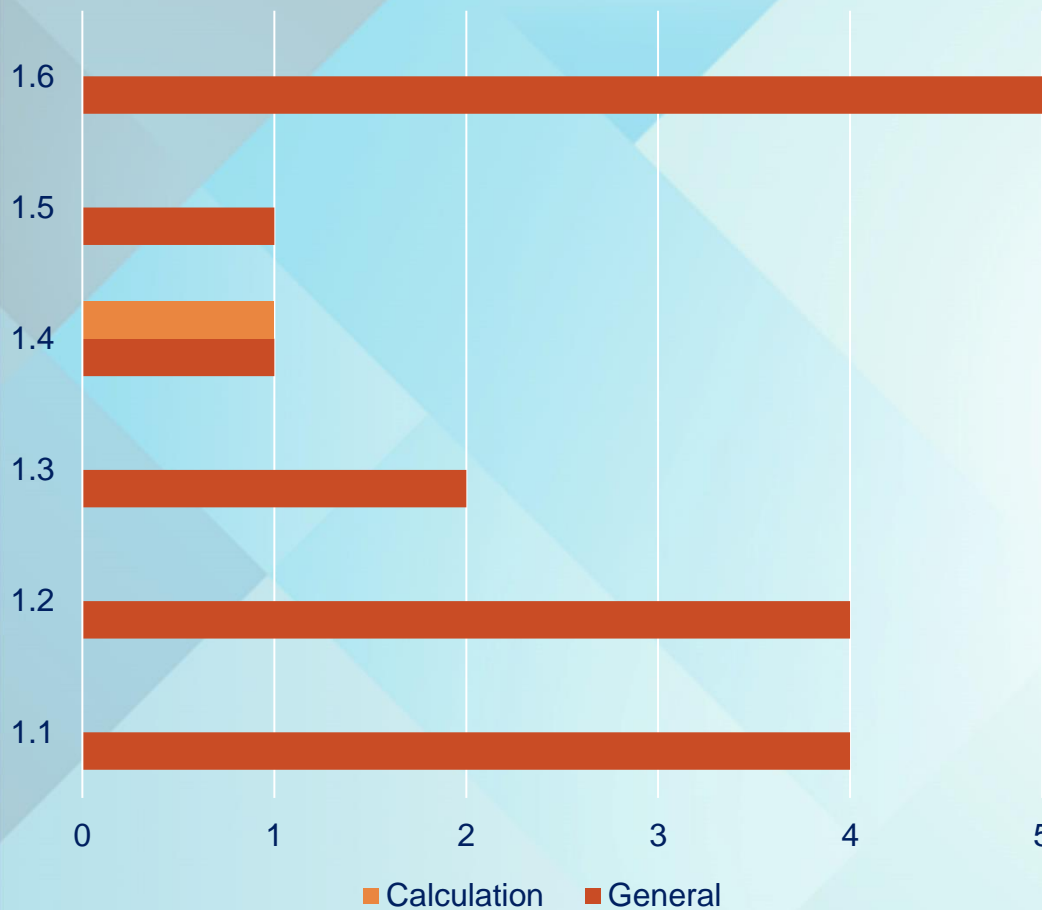


Types of questions



Domain 1: PUBLIC HEALTH

15%



1.6 Primary healthcare

1.5. Epidemic and disaster management

1.4 Health economics

1.3 Professional and health advocacy

1.2 Medicines information

1.1 Promotion of health and wellness



20%



60%

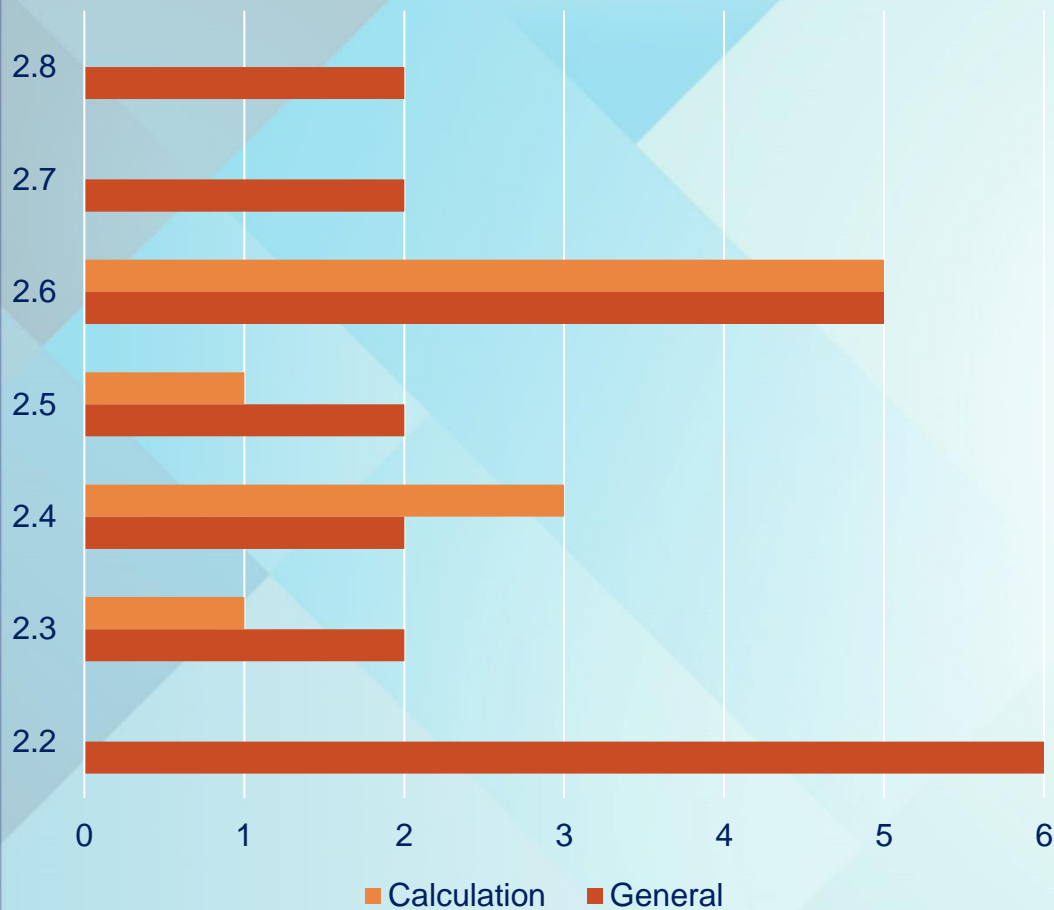


20%



Domain 2: SAFE AND RATIONAL USE OF MEDICINES AND MEDICAL DEVICES

26%



2.8 Clinical trials

2.7 Pharmacovigilance

2.6 Pharmacist initiated therapy

2.5 Therapeutic outcome monitoring

2.4 Medicines and medical devices safety

2.3 Patient medicine review and management

2.2 Patient counselling



15%



55%

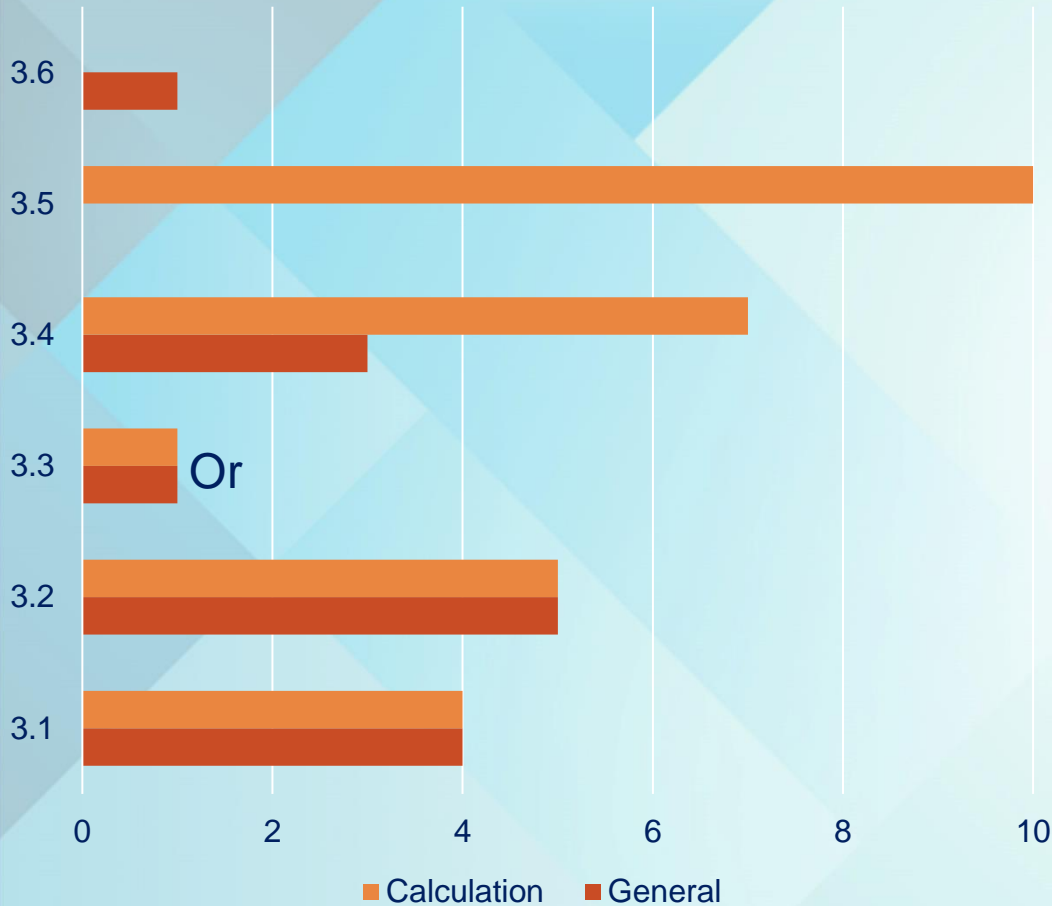


30%



Domain 3: SUPPLY OF MEDICINES AND MEDICAL DEVICES

33%



3.6 Medicine disposal/destruction

3.5 Medicine compounding

3.4 Medicine dispensing

3.3 Formulary development

3.2 Supply chain management

3.1 Medicine production according to GxP



5%



65%

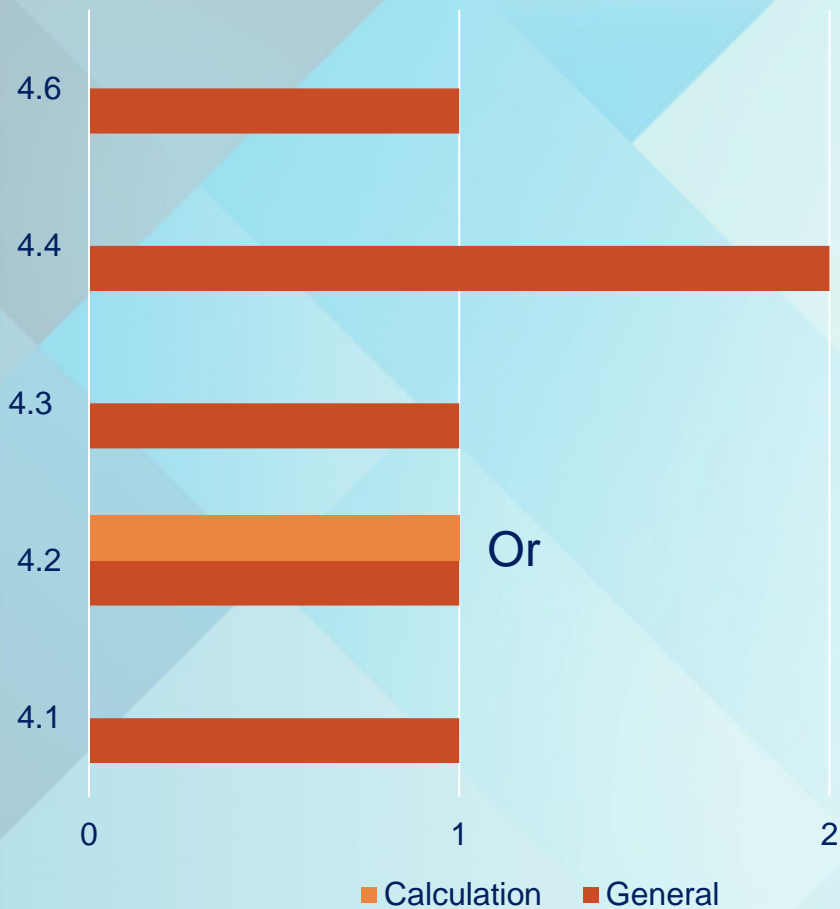


30%



Domain 4: ORGANISATION AND MANAGEMENT SKILLS

5%



4.6 Policy development
4.4 Quality assurance
4.3 Pharmaceutical infrastructure management
4.2 Financial management
4.1 Human resources management



10%



80%



10%



Domain 5: PROFESSIONAL AND PERSONAL PRACTICE

17%



10%



45%

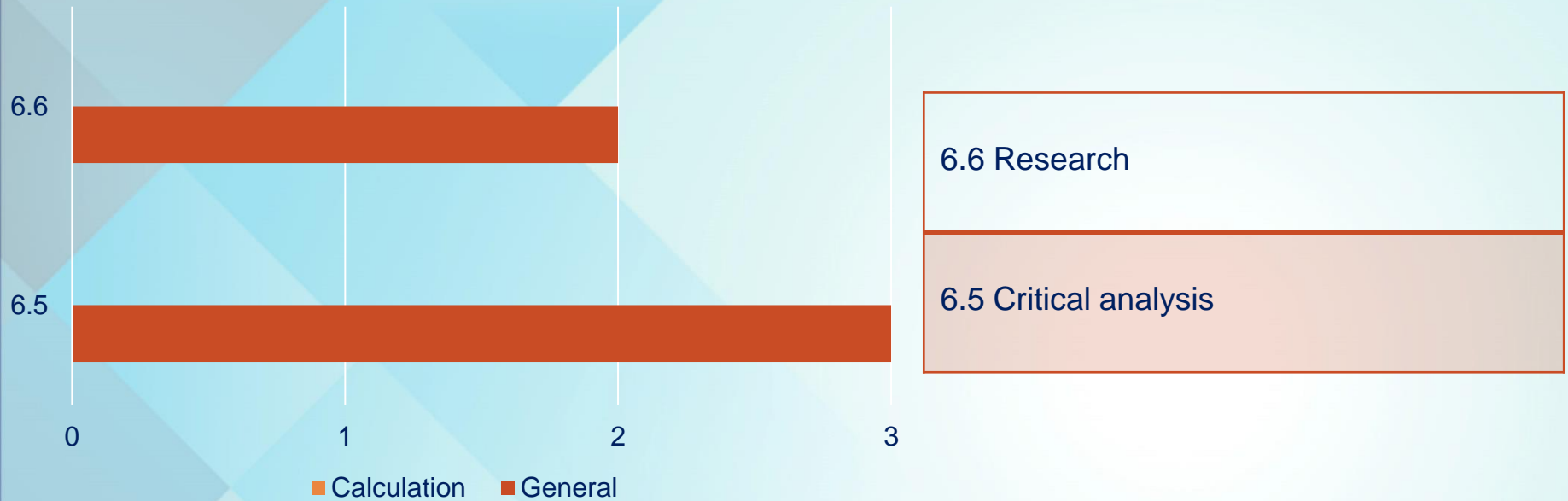


45%



Domain 6: EDUCATION, CRITICAL ANALYSIS AND RESEARCH

4%



5%



40%



55%



Admin

- Consult 2020 Intern Manual
- When is the exam?
- Where is the exam?
- How do I book my place?
- What resources do I need?

Prepare

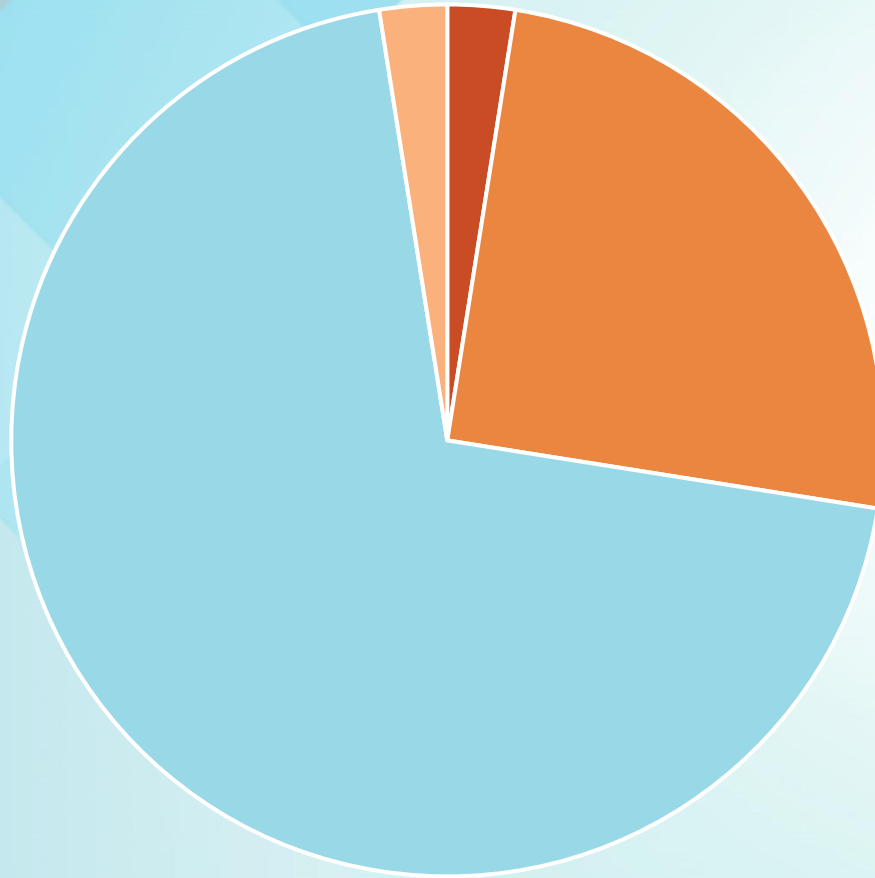
- How can I prepare?
- Which references do I need?
- How do I use the references?

Exam

- What do I need to bring?
- How does the online exam work?
- How long is the exam?



Calculations Question (Blueprint)



■ Domain 1

■ Domain 2

■ Domain 3

■ Domain 4





Admin



Prepare



Exam

▶ **Types of calculations:**

- Health Economics
- Patient medicine review and management
- Medicines and medical devices safety
- Therapeutic outcome monitoring
- Pharmacist initiated therapy
- Medicine production according to GxP
- Supply chain management
- Formulary development
- Medicine dispensing
- Medicine compounding
- Financial management





Admin



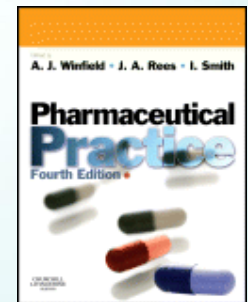
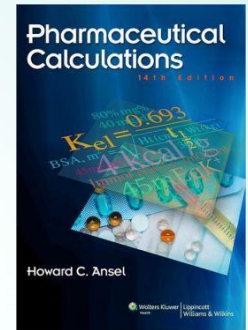
Prepare



Exam

▶ Resources Textbooks

- Pharmaceutical Calculations
 - ▶ H. C. Ansel
- Calculations for Pharmaceutical Practice
 - ▶ A. J. Winfield & I.O. Edafiogho 4th Edition
- Pharmaceutical Practice
 - ▶ A. J. Winfield, J.A. Rees & I. Smith



Note: Text books are of more value before the exam than during the exam. **BE MINDFUL OF TIME**





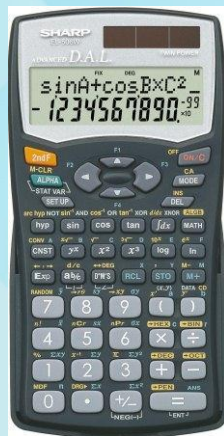
Admin

Prepare

Exam

► **Equipment**

• **Calculator:**



- Scientific calculator
- Use the same one to practice as you will use in the exam
- Check batteries
- Know the settings of your calculator

NO iPads, Tablets, Laptops, Cell phones, Smart watches allowed





Admin



Prepare



Exam

TEXTBOOKS

- ▶ Identifying calculations:
 - Know how to identify calculations
 - Find out which calculations YOU battle with and PRACTICE these more.

SAMPLE EXAMINATION PAPERS

- ▶ Complete these as mock examinations (under exam conditions)
 - Complete within 2 hours
 - Do not assume you got the question correct
 - Compare answers with colleagues





Admin

Prepare

Exam

▶ **Tips:**

- **Units**
 - ▶ Familiarise yourself with standard SI units
 - Example: % w/v = g/100ml
- **Conversion**
 - ▶ Practice converting between units
 - Example: 10 ppm can be expressed as 0.001%
- **Equations**
 - ▶ Take note of the equations you have used while practicing
 - Example: $C_1V_1 = C_2V_2$

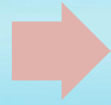
Prepare the following for the examination for quick reference:

- List of SI units
- Conversions
- List of equations





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Prepare



Exam

▶ Exam technique

- Write the calculation clearly and legibly
- Transferring data → double check what you have written down
- Write down every step
- Do not take short cuts
- Try not being totally dependent on your calculator
- Always double check your calculation





Admin



Prepare



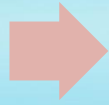
Exam

- ▶ Using your reference material
 - Haven't got time to look up how to complete the calculation for each question
 - Have the following on hand:
 - List of equations
 - Conversion sheets
 - List of SI units
 - If you can't complete the question, carry on and when you have time towards the end of the exam, use the reference books you brought to help you work it out.





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Prepare



Exam

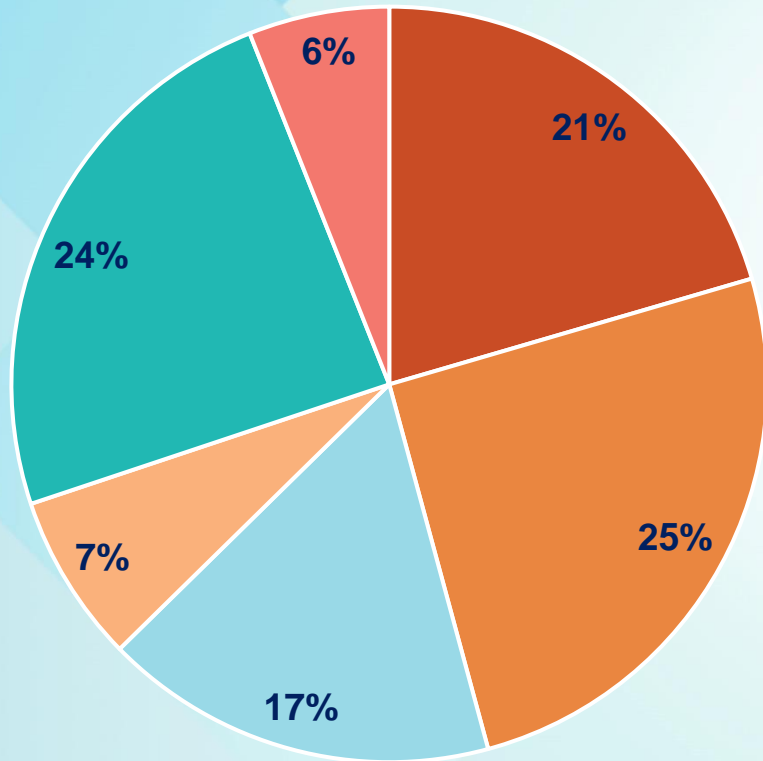


- ▶ Maximizing your time - 120 minutes
 - Approximately 40 MCQs
 - Approximately 3 minutes per question

No negative marking – do not leave anything blank



General Questions (Blueprint)

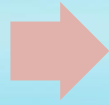


- Domain 1
- Domain 2
- Domain 3
- Domain 4
- Domain 5
- Domain 6





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Prepare



Exam

▶ References to bring:

- SAMF
- MIMS / MDR
- Daily Drug Use

▶ PDF References provided:



- EML and STG – PHC, Pediatric and Hospital
- Good Pharmacy Practice
- Good Manufacturing Practice
- Pharmacy Act
- Medicines and Related Substances Act

Note:

- Is it current?
- Will the information I find be up to date?





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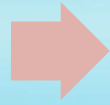
Exam



What other textbooks may I want to bring?



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Prepare



Exam

▶ **Resources**

- Practice Paper:
(Available on the SAPC Website)
- Sample examination paper





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Prepare



Exam

REFERENCE MATERIAL

- ▶ Learn how to use each reference material
 - Where is the index?
 - What information can I find in each reference material?
- ▶ Tips:
 - More is not necessarily better
 - Avoid taking in a reference book you have never used before
 - Using notes from University may not help
(information no longer be valid)





Admin



Prepare



Exam

▶ How else can I prepare?

- What current events are happening?
- Are there any epidemics or pandemics locally or globally?
- How can I learn while at work?
 - ▶ SOPs
 - ▶ Work environment
- Am I up to date?
 - ▶ e-Pharmaciae (www.pharmaciae.org.za)
 - ▶ SAPJ
 - ▶ Attend CPD sessions





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Prepare



Exam

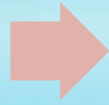
SAMPLE EXAMINATION PAPER

- Look at the type of questions asked
 - Would the reference material I have enable me to answer this question?
- Answer the question
 - be familiar with topics which arise – not enough time to look up each statement
- Sample examination paper
 - Complete the paper under exam conditions
 - Compare answers with colleagues
 - Do not assume you got the question correct





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Prepare



Exam

▶ What's your strategy?

- Identify the statements you know.
- Confirm only the statements you don't know.
- If you can't complete the question, carry on and when you have time towards the end of the exam come back to it.





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Prepare



Exam

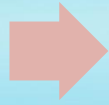
▶ Be careful of the following:

- “true”, “is” and “correct”
- “false” and “incorrect”
- “most appropriate” is asking for the most correct answer





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Prepare



Exam



- ▶ Maximizing your time - 150 minutes
 - Approximately 80 MCQs
 - 4 options per MCQ
 - 240 statements
 - Less than 2 minutes per question

No negative marking – do not leave anything blank.

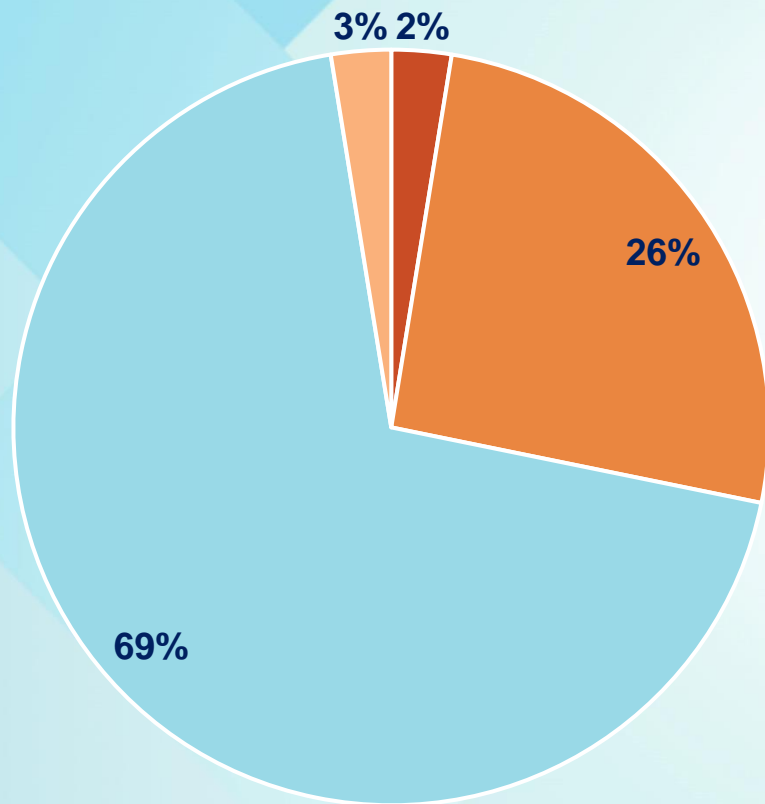
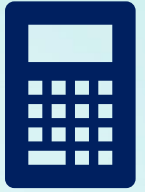




- ▶ Types of questions
- ▶ Resources/reference material
- ▶ Equipment



Calculations Question (Blueprint)



■ Domain 1

■ Domain 2

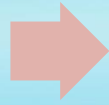
■ Domain 3

■ Domain 4





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Prepare



Exam

▶ **Types of calculations:**

- Health Economics
- Patient medicine review and management
- Medicines and medical devices safety
- Therapeutic outcome monitoring
- Pharmacist initiated therapy
- Medicine production according to GxP
- Supply chain management
- Formulary development
- Medicine dispensing
- Medicine compounding
- Financial management





Admin



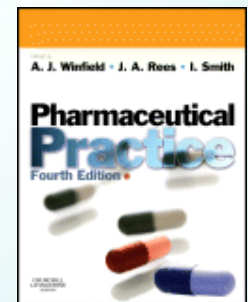
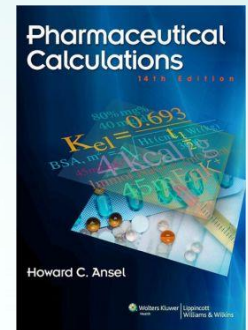
Prepare



Exam

▶ Resources Textbooks

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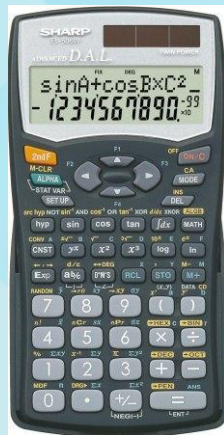
Admin

Prepare

Exam

► **Equipment**

• **Calculator:**



- Scientific calculator.
- Use same one to practice as you will use in the exam.
- Check batteries.
- Know the settings of your calculator.
- No access to any websites during exam

NO iPads, Laptops, Cellphones, Smart watches allowed





Admin



Prepare



Exam

TEXTBOOKS

- ▶ Identifying resources/reference materials
- ▶ Identifying calculations:
 - Know how to identify calculations.
 - Find out which calculations YOU battle with and PRACTICE these more.

SAMPLE EXAMINATION PAPER

- ▶ Complete the paper under exam conditions.
 - Sample examination paper – complete within 2 hours.
 - Compare answers with colleagues.
 - Do not assume you got the question correct.





Admin

Prepare

Exam

▶ **Tips:**

- **Units**
 - What are the SI units?
 - Example: % w/v = g/100ml
- **Conversion**
 - Practice converting between units
 - Example: 10 ppm can be expressed as 0.001%
 - If you battle with this, prepare a conversion sheet to use in the exam.
- **Equations**
 - Identify the equations you have used while practicing.
 - Example: $C_1V_1 = C_2V_2$

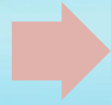
Suggestion:

Create an equation sheet which you can take into the exam.





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Prepare



Exam

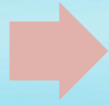
▶ Exam technique

- Write the calculation clearly and legibly.
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- Write down every step.
- Do not take short cuts.
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- Always double check your calculation.





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Prepare



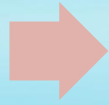
Exam

- ▶ Using your reference material
 - Haven't got time to look up how to complete the calculation for each question.
 - Have the following on hand:
 - List of equations.
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 - List of SI units
 - If you can't complete the question, carry on and when you have time towards the end of the exam, use the reference books you brought to help you work it out.





Admin



Prepare



Exam



- ▶ Maximizing your time - 120 minutes
 - Approximately 40 MCQs
 - Approximately 3 minutes per question

No negative marking – do not leave anything blank.



Domain 1

CS 1.6



Question 12:

Which of the following statements regarding immunisation in South Africa is TRUE?

- (a) DTP should be given at birth, 10 weeks, 14 weeks and 18 months
- (b) Rotavirus should be given to infants after 24 weeks of age
- (c) Measles should be given at 6 months and 12 months
- (d) HPV vaccine should be administered after becoming sexually active



Domain 1

CS 1.6



Question 12 (modified):

Which of the following statements regarding immunisation in South Africa is TRUE?

- (a) DTP should be given at birth, 10 weeks, 14 weeks and 18 months
- (b) Rotavirus should be given to infants after 24 weeks of age
- (c) **Measles should be given at 6 months and 12 months**
- (d) HPV vaccine should be administered after becoming sexually active

Reference:

- ▶ EDL and STG – PHC



Domain 2

CS 2.6



Question 29:

One of your patients is going on holiday and is visiting a malaria area. She will be in the area for 1 week. If the patient cannot see their doctor, which of the following medicines would you supply to the patient?

- (a) Mefloquine 250 mg 1 tablet per week, starting 1 week prior to entry and continue 4 weeks after return
- (b) Doxycycline 100 mg daily, starting 2 days prior to entry and continue 4 weeks after return
- (c) Atovaquone 250 mg, proguanil 100 mg combination daily, starting 2 days prior to entry and continue 7 days after return
- (d) It is not necessary to take medicine provided that you use a mosquito repellent, sleep under a mosquito net and wear long sleeves at dusk and dawn



Domain 2

CS 2.6



Question 29:

One of your patients is going on holiday and is visiting a malaria area. She will be in the area for 1 week. If the patient cannot see their doctor, which of the following medicines would you supply to the patient?

- (a) Mefloquine 250 mg 1 tablet per week, starting 1 week prior to entry and continue 4 weeks after return
- (b) **Doxycycline 100 mg daily, starting 2 days prior to entry and continue 4 weeks after return**
- (c) Atovaquone 250 mg, proguanil 100 mg combination daily, starting 2 days prior to entry and continue 7 days after return
- (d) It is not necessary to take medicine provided that you use a mosquito repellent, sleep under a mosquito net and wear long sleeves at dusk and dawn

Reference:

- ▶ MIMS / MDR
- ▶ SAMF
- ▶ Government Gazette



Domain 2

CS 2.6



Question 29 (modified):

One of your patients is going on holiday and is visiting a malaria area. She will be in the area for 1 week. If the patient cannot see their doctor, which of the following medicines would you supply to the patient?

- (a) Mefloquine 250 mg 1 tablet per week, starting 1 week prior to entry and continue 4 weeks after return
- (b) Doxycycline 100 mg daily, starting 2 days prior to entry and continue 4 weeks after return
- (c) Atovaquone 250 mg, proguanil 100 mg combination daily, starting 2 days prior to entry and continue 7 days after return
- (d) It is not necessary to take medicine provided that you use a mosquito repellent, sleep under a mosquito net and wear long sleeves at dusk and dawn



Schedule 4

SCHEDULE 4

Doxycycline, except

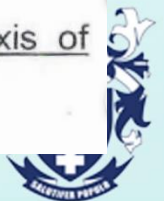
- a. when intended and labelled for the chemoprophylaxis of malaria in those aged 8 years and older, for periods not exceeding 4 months of continuous use; (S2)

Schedule 4

SCHEDULE 4

[Atovaquine] Atovaquone, except

- a. when co-formulated with proguanil and intended and labelled for the chemoprophylaxis of malaria in those weighing 11 kilograms or more. (S2)



Domain 3

CS 3.1



Question 43:

Which of the following statements regarding storage areas of pharmaceutical products is FALSE?

- (a) Receiving and dispatch bays should protect materials and products from the weather
- (b) Sampling of pharmaceutical products can only take place in storage areas
- (c) They should be of sufficient capacity to allow orderly storage of the various categories of materials and products
- (d) Pharmaceutical products should be stored in such a manner as to prevent cross-contamination



Domain 3

CS 3.1



Question 43:

Which of the following statements regarding storage areas of pharmaceutical products is FALSE?

- (a) Receiving and dispatch bays should protect materials and products from the weather
- (b) **Sampling of pharmaceutical products can only take place in storage areas**
- (c) They should be of sufficient capacity to allow orderly storage of the various categories of materials and products
- (d) Pharmaceutical products should be stored in such a manner as to prevent cross-contamination

Reference:

- ▶ GMP Guidelines



Domain 4

CS 4.3



Question 72:

In order to establish quality and safety of pharmaceutical services provided, pharmacy operations and premises are inspected for compliance to standards. Pharmacies are thereafter graded accordingly. Which of the following statements regarding the purpose of grading is FALSE?

- (a) To ensure that all licensed pharmacies comply with GPP standards at all times
- (b) To ensure that all recorded pharmacies comply with GPP standards at all times
- (c) To establish the location of pharmacies in South Africa
- (d) To inform the public of the standard of pharmacies in South Africa



Domain 4

CS 4.3



Question 72:

In order to establish quality and safety of pharmaceutical services provided, pharmacy operations and premises are inspected for compliance to standards. Pharmacies are thereafter graded accordingly. Which of the following statements regarding the purpose of grading is FALSE?

- (a) To ensure that all licensed pharmacies comply with GPP standards at all times
- (b) To ensure that all recorded pharmacies comply with GPP standards at all times
- (c) **To establish the location of pharmacies in South Africa**
- (d) To inform the public of the standard of pharmacies in South Africa

Reference:

- ▶ GPP Guidelines



Domain 5:

CS 5.3



Question 81

While you are doing your internship, you want to earn extra money over weekends. Which of the following statements is TRUE?

- (a) You may locum as an intern at another pharmacy within the same sector as your training pharmacy
- (b) You may locum as a pharmacist's assistant post-basic at another pharmacy
- (c) You may locum as an intern at another pharmacy as your registration is not sector specific
- (d) You may not practice as an intern or pharmacist's assistant at any other pharmacy



Domain 5:

CS 5.3



Question 81

While you are doing your internship, you want to earn extra money over weekends. Which of the following statements is TRUE?

- (a) You may locum as an intern at another pharmacy within the same sector as your training pharmacy
- (b) You may locum as a pharmacist's assistant post-basic at another pharmacy
- (c) You may locum as an intern at another pharmacy as your registration is not sector specific
- (d) You may not practice as an intern or pharmacist's assistant at any other pharmacy

Reference:

- ▶ GPP Guidelines



Domain 6

CS 6.6



Question 91:

You are a pharmacist intern at a hospital. As part of your project, you would like to conduct a retrospective chart review of the long-term side effects of anti-retroviral therapy . What approvals are needed to conduct this survey?

- (a) Ethical and SAHPRA approval
- (b) Informed consent from the patients and prescriber approval
- (c) Hospital and SAPC approval
- (d) Ethical and hospital approval



Domain 6

CS 6.6



Question 91:

You are a pharmacist intern at a hospital. As part of your project, you would like to conduct a retrospective chart review of the long-term side effects of anti-retroviral therapy. What approvals are needed to conduct this survey?

- (a) Ethical and SAHPRA approval
- (b) Informed consent from the patients and prescriber approval
- (c) Hospital and SAPC approval
- (d) **Ethical and hospital approval**

Reference:

Any research guidelines





Do you have any questions?

Please email

interns@sapc.za.org

Thank you



**South African
Pharmacy Council**

CONTACT US



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@OfficialSAPC



www.sapc.za.org



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Arcadia, Pretoria**

