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PRACTICE EXTERNAL INTEGRATED SUMMATIVE ASSESSMENT FOR PHARMACIST'S ASSISTANT (BASIC) PAPER (ALL SECTORS)

TIME ALLOWED: 210 Minutes (3.5 hours)

MAXIMUM MARKS: 100 Marks NUMBER OF PAGES: 17 Pages

PASS MARK: 50% and 50% subminimum for calculations

Examination Instructions

- (a) All questions are worth one mark. There is no negative marking for selecting an incorrect answer.
- (b) There are four (4) answer options per question. There is only ONE CORRECT answer per question.
- (c) This is an open-book examination. Candidates may use textbooks or personal notes. The following online reference materials can be accessed on the online exam page: Good Pharmacy Practice manual (GPP), National Drug Policy (NDP), Good Manufacturing Practice (GMP) and Essential Medicine Lists (EML)

ELO 1: APPLY BASIC SCIENTIFIC KNOWLEDGE TO PROVIDE TECHNICAL SUPPORT IN DELIVERING PHARMACEUTICAL SERVICES

- 1. Which of the following can a pharmacist's assistant (basic) do under the direct supervision of a pharmacist in a community pharmacy?
 - (a) Check the legality of a prescription
 - (b) Explain to a patient how to take their medication correctly
 - (c) Repackaging of a medicine
 - (d) Document a patient history
- 2. What is the maximum ratio of pharmacist's assistants to pharmacist in a community pharmacy?
 - (a) 2
 - (b) 3
 - (c) 4
 - (d) 5
- 3. Which of the following can supervise a qualified pharmacist's assistant (basic) in a community pharmacy?
 - (a) Pharmacist's assistant (post-basic)
 - (b) Pharmacist intern
 - (c) Pharmacy technician
 - (d) Pharmacist
- 4. What does the abbreviation CPD stand for?
 - (a) Communication Personal Development
 - (b) Continuing Professional Development
 - (c) Continuing Pharmacy Development
 - (d) Communication Professional Development
- 5. Which of the following tasks MAY a pharmacist's assistant (basic) perform under the direct supervision of a pharmacist?
 - (a) Compounding of sterile medicine
 - (b) Manufacturing of sterile medicine
 - (c) Injection of non-sterile medicine
 - (d) Preparation of a non-sterile medicine
- 6. The legislation allows a pharmacist's assistant (basic) to:
 - (a) Assist with the manipulation of a sterile medicine according to an SOP
 - (b) Assist with the manufacturing of a non-sterile medicine according to an SOP
 - (c) Perform the distribution and control of all pharmaceutical stock according to an SOP
 - (d) Perform the re-packaging of a schedule 6 medicine according to an SOP
- 7. Which of the following statements is TRUE regarding re-packaging of a medicine?
 - (a) Re-packaged veterinary medicine is not allowed

- (b) Re-packaging of medicine must be carried out in compliance with Good Laboratory Practice
- (c) Re-packaged medicine must have a batch number and expiry date
- (d) Re-packaging of medicine shall only be carried out by a pharmacist or intern
- 8. Which of the following are provided for in the Medicines and Related Substances Act, 101 of 1965?
 - (a) Generic substitution of medicines
 - (b) Pharmacy education and training
 - (c) Registration of pharmacists
 - (d) Practice of pharmacy
- 9. With reference to the Essential Medicine List Clinical Guide, which of the following is TRUE?
 - (a) Available on a mobile application
 - (b) Provides dosing guidelines only for paediatrics
 - (c) Restricts referral to higher centres of care
 - (d) Used only by registered prescribing nurses
- 10. The South African National Department of Health has compiled a set of National Core Standards (NCS) for health establishments in the country. Which of the following statements is TRUE?
 - (a) NCS cover services in hospitals and clinics in the public sector only
 - (b) NCS has six domains and six priorities
 - (c) Pharmaceutical Services falls under the clinical and support services domain
 - (d) Pharmaceutical Services falls under the public health domain
- 11. Which category of pharmacist's assistant may work under INDIRECT supervision in a primary health care clinic dispensary?
 - (a) Learner basic
 - (b) Basic
 - (c) Learner post-basic
 - (d) Post-basic
- 12. Several pieces of legislation (Act) govern the provision of health to society. Which Act focuses on the registration of medicines to ensure effective and appropriate use of these substances?
 - (a) Pharmacy Act 53 of 1974
 - (b) Medicines and Related Substance Act 101 of 1965
 - (c) National Health Act 61 of 2003
 - (d) Consumer Protection Act 68 of 2008
- 13. One of the mandates of the South African Pharmacy Council is to ensure registration of relevant persons. Which of the following categories of persons are EXCLUDED from registration with the South African Pharmacy Council?
 - (a) Pharmacy owners
 - (b) Pharmacy students
 - (c) Pharmacist's assistants
 - (d) Council members appointed by minister

- 14. When MUST the name of registered personnel be removed from the SAPC register?
 - (a) A person has been absent from the republic for 1 year
 - (b) A person has requested to have their name removed
 - (c) A person is no longer practising
 - (d) A person's marital status changes
- 15. Which of the following personnel is permitted to open and operate a hospital dispensary in the absence of the responsible pharmacist?
 - (a) Pharmacist's assistant (basic)
 - (b) Pharmacist's assistant (post-basic)
 - (c) Pharmacist intern
 - (d) Locum pharmacist
- 16. A friend asks you about the medical condition of another patient who is speaking to the pharmacist. What is the MOST appropriate response?
 - (a) You will inform him that he should kindly ask the patient himself
 - (b) You inform him that you don't know everything, but he comes in frequently
 - (c) You will inform him to wait and ask the pharmacist, as he has the correct information
 - (d) You tell him a story so that the real reason for the patient's visit is not known by the community
- 17. Which of the following actions MAY be performed by a pharmacist's assistant (basic)?
 - (a) Perform a blood pressure reading supervised by the pharmacist
 - (b) Prepare the S6 cupboard for the pharmacist before stock take
 - (c) Make appointments for patients to see the clinic sister
 - (d) Sell cetirizine under the direct supervision of a pharmacist
- 18. A patient asks you, as a pharmacist's assistant (basic), information on an HIV home test kit. What is the MOST appropriate action to take?
 - (a) Explain to the patient how it works
 - (b) Refer the patient to the pharmacist
 - (c) Refer the patient to the pharmacist's assistant (post-basic)
 - (d) Ask the patient why he wants to know about the test
- 19. You answer the phone in the pharmacy and the patient insists on talking to the pharmacist, but the pharmacist is too busy to talk to the patient at the moment. Which of the following is the MOST appropriate action to take?
 - (a) Ask the patient to hold on for the pharmacist as he is very busy
 - (b) Tell the patient the pharmacist is too busy and end the call
 - (c) Ask the patient to call back later when it is not so busy
 - (d) Ask for the patient's details so that the pharmacist can call them back
- 20. Rules relating to the Code of Conduct for pharmacists and other persons registered in terms of the Pharmacy Act have been published. Which of the following statements is TRUE?

- (a) A person registered in terms of the Pharmacy Act who has attained a doctorate degree as an additional qualification may lead the public to believe that the/she is a medical doctor
- (b) Pharmacist's assistant may stock the shelves with medicines previously returned by another patient, which has been in that person's possession, if it is unopened and sealed and not expired
- (c) A pharmacist who also has a qualification as a radiographer may be registered with Pharmacy Council and Health Professions Council
- (d) Persons registered in terms of the Pharmacy Act may advertise outside the pharmacy by way of flashing lights and moving signs
- 21. Which of the following tasks may a pharmacist's assistant (basic) registered with the South African Pharmacy Council perform under certain specified conditions?
 - (a) Work under supervision of any health professional
 - (b) Dispense under indirect supervision of a pharmacist
 - (c) Dispense under direct supervision of a pharmacist
 - (d) Assist with the preparation of a non-sterile medicine
- 22. Which of the following may be performed by a registered, pharmacist's assistant (basic), under the direct personal supervision of a pharmacist?
 - (a) Dispensing of schedule 1 and 2 medicines
 - (b) Provide instruction on correct use of medicine
 - (c) Distribution of Schedule 1-5 medicines
 - (d) Sale of schedule 2 medicine
- 23. Under which condition is a pharmacist's assistant (basic) allowed to disclose patient information to a third party?
 - (a) Upon written consent by the patient
 - (b) Upon verbal request by the police
 - (c) When the patient is on chronic medication
 - (d) When the third party is a pastor
- 24. Honour and dignity of the profession should be upheld at all times. Which activity may be regarded as bringing the profession into disrepute and could lead to disciplinary action by Council?
 - (a) Breach of any law
 - (b) Long sick leave periods
 - (c) Drinking of moderate amounts of alcohol while off duty
 - (d) Minimal absenteeism from work
- 25. Co-operation amongst health professions is encouraged for better quality of care for patients. How can this be achieved in a work environment?
 - (a) Respecting other healthcare professionals
 - (b) Only assisting colleagues that you know
 - (c) Participating in less meetings to avoid arguments
 - (d) Criticising the colleagues without getting caught
- 26. What is meant by the term "shrinkage"?
 - (a) Vacuum packing an item to preserve its integrity

- (b) Stock lost due to damage, theft, or capturing errors
- (c) Wrapping pallets in plastic to protect cartons of stock
- (d) Keeping an extra level of stock to prevent stock outs
- 27. If a medicine is *hygroscopic*, which of the following is TRUE?
 - (a) It must contain an antioxidant
 - (b) It must be stored in the refrigerator
 - (c) It must be stored in an airtight container
 - (d) The particles are only visible under a microscope
- 28. Which of the following describes a suspension?
 - (a) It is a mixture of oil in water
 - (b) It is a mixture of water in oil
 - (c) It is a mixture of liquid with small particles of solid matter
 - (d) It is a mixture where solid material is dissolved in a liquid
- 29. How many millilitres is a medicine measure?
 - (a) 1 ml
 - (b) 2.5 ml
 - (c) 5 ml
 - (d) 10 ml
- 30. You mix a non-sterile preparation in the form of a cream. What would the MOST likely route of administration be?
 - (a) Anal
 - (b) Oral
 - (c) Nasal
 - (d) Topical
- 31. Which of the following liquid would be the MOST appropriate to use when an antibiotic suspension needs to be reconstituted?
 - (a) Tap water
 - (b) Distilled water
 - (c) Mineral water
 - (d) Saline solution
- 32. Which of the following equipment would you use in the dispensary of a community pharmacy?
 - (a) Skinfold calliper
 - (b) 1000 L measuring cylinder
 - (c) 100 kg scale weighing
 - (d) 100 ml measuring cylinder
- 33. What would you MOST likely do with a reconstituted suspension after you added the required amount of water in the bottle?
 - (a) Put it in the fridge
 - (b) Stir in water
 - (c) Shake the bottle

	(d)	Taste the mixture	
34.	A pharmacist's assistant (basic) can recommend scheduled 2 pain medication to a patient in which of the following scenarios?		
	(a) (b) (c) (d)	If the patient is 12 years old and his mother is present If the patient is an adult and the pharmacist is supervising you If the patient is 18 years and older, as the patient can consent They are not allowed to recommend medication to a patient	
35.	Which of the following statements is TRUE regarding compounding equipment?		
	(a) (b) (c) (d)	A measuring cylinder is used for measuring creams and ointments A measuring cylinder is used to transfer and measure powders A spatula is used to transfer liquids from a container to a glass beaker A mortar and pestle are used for grinding tablets into a fine powder	
36.	One (1) milligram is equal to how many micrograms?		
	(a) (b) (c) (d)	1 100 1000 10 ⁶	
37.	How many millilitres (ml) is equivalent to 50 medicine measures?		
	(a) (b) (c) (d)	125 170 250 750	
38.	Which percentage correctly expresses the decimal 0.87?		
	(a) (b) (c) (d)	0.87% 8.7% 87% 870%	
39.	Which unit is the MOST appropriate when expressing a measurement of a powder in extemporaneous compounding?		
	(a) (b) (c) (d)	mg ml kg lux	
40.	Which fraction is equivalent to 25%?		
	(a) (b) (c) (d)	1/2 1/4 1/25 1/50	

- ELO 2: PROVIDE TECHNICAL SUPPORT FOR THE RECEIVING, STORING, PICKING, PACKING AND DISTRIBUTING ORDERS. TO PERFORM STOCK COUNTS AND PARTICIPATE IN STOCK-TAKING IN COMPLIANCE WITH CGMP, GWDP AND GPP REQUIREMENTS
- 41. Which of the following items needs to be transported with ice packs to maintain the cold chain?
 - (a) Loratadine tablets
 - (b) Insulin glulisine vials
 - (c) Noscapine syrup
 - (d) Diclofenac injection
- 42. What would be the MOST appropriate place to store parcels (containing medicines) before collection by the patient in a community pharmacy?
 - (a) At the cash register under the care of the cashier
 - (b) In the storeroom under the care of the store clerk
 - (c) In the dispensary under the care of the pharmacist
 - (d) In the clinic under the care of the nursing sister
- 43. A pharmacist's assistant (basic) is allowed to distribute and control the following stock:
 - (a) Only solid dosage forms
 - (b) Only non-prescription medicines
 - (c) Schedule 1 to 5 medicines
 - (d) Schedule 6 medicines
- 44. What would you do if you see the amount of stock on the shelf is more than the amount of stock on the stock card?
 - (a) Remove the extra stock on the shelf and keep separate until after stock take
 - (b) Ask the person responsible for stock control to order the additional stock
 - (c) Report it to the person responsible for stock control to investigate
 - (d) Change the amount of stock on the stock card to reflect the correct level
- 45. A medicine delivery of 112 boxes arrives half an hour before end of day. Off-loading is fast and the boxes are stacked in the passage outside the pharmacy. You notice there are 3 boxes marked "FRIDGE". Which of the following would be the MOST appropriate action to take?
 - (a) You leave the boxes in the passage until the next day
 - (b) You can leave the fridge items in the casualty department fridge overnight
 - (c) You follow standard operating procedure for receiving of medicine
 - (d) You sign the delivery note without checking the number of boxes
- 46. Which of the following statements is TRUE concerning standard operating procedures (SOPs)?
 - (a) Good Pharmacy Practice (GPP) stipulates SOP requirements for all sectors of pharmacy except in the public sector
 - (b) Institutional pharmacies do not require an SOP for compounding operations
 - (c) SOP explains the steps that need to be followed to complete a specific task
 - (d) SOP is the same for all pharmacies, in all sectors, for a specific task

- 47. In which section/area should hazardous liquid products be kept in the pharmacy?
 - (a) In a Schedule 6 cupboard
 - (b) In an inflammable steel storage cabinet
 - (c) On a top shelf out of reach from people
 - (d) On a shelf with other liquids
- 48. In stock management, stock should be packed and handled as per set protocol. Which statement BEST describes the principle that you would follow when packing medicines on the shelves?
 - (a) Regardless of the expiry date, stock should be packed according to FIFO
 - (b) When expiry dates are the same, stock should be packed according to FEFO
 - (c) Regardless of the expiry date, stock should be packed according to the batch number
 - (d) When expiry dates are the same, stock should be packed according to FIFO
- 49. Which of the following would be the MOST appropriate label to attach on the outside of a parcel containing glass bottles?
 - (a) Store in the fridge
 - (b) Flammable
 - (c) Fragile
 - (d) Do not bend
- 50. Which of the following would you check when assisting in picking an order in a community pharmacy?
 - (a) Price
 - (b) Date of manufacturing
 - (c) Expiry date
 - (d) Humidity
- 51. Which stock should be EXCLUDED from picking, packing, and issuing in a pharmaceutical environment?
 - (a) Slow moving products
 - (b) Overstocked products
 - (c) Expired products
 - (d) Surgical products
- 52. You discover that of a delivery of 50 boxes signed for the previous day, only 5 boxes are for your facility. What is the MOST appropriate action to take?
 - (a) Return only medicines that you cannot use in your hospital
 - (b) Without notifying the pharmacist complete a goods return note
 - (c) Discuss with the pharmacist on what steps to take
 - (d) Keep all the stock and pack it onto the shelves
- 53. Which of the following statements is TRUE with regards to packing for distribution of thermolabile medicine?
 - (a) They can be packed any time during the picking process of that order
 - (b) they should only be used in the pharmacy
 - (c) They should be packed to maintain cold chain

- (d) They should only be packed by a pharmacist
- 54. In accordance with Good Pharmacy Practice, how many years should documents relating to orders be kept in the pharmacy?
 - (a) 2
 - (b) 3
 - (c) 4
 - (d) 5
- 55. What documentation should be completed at the time of delivery when boxes are missing?
 - (a) A purchase order
 - (b) A discrepancy form
 - (c) An invoice
 - (d) A delivery note
- 56. You receive telephonic confirmation that vaccinations received are urgently required in the paediatric ward for a vaccination campaign. Which of the following statements is TRUE?
 - (a) You may pick, pack and distribute the telephonic order on your own
 - (b) You may sign the ward order on behalf of the ward sister
 - (c) The pharmacist does not have to authorise a telephonic order
 - (d) The pharmacist must authorise any order before distribution
- 57. When receiving stock from the wholesaler, what do you check for, on the delivery note?
 - (a) Check that the items received match what was ordered
 - (b) Check that all items are suitable to retain and use
 - (c) Check the delivery address and the number of parcels
 - (d) Check the batch number and expiry date
- 58. Which of the following needs to be matched to the medicines in the receiving process?
 - (a) Lead times
 - (b) Stock holding
 - (c) Invoices
 - (d) Essential Medicine List
- 59. You are required to assist in keeping stock cards up to date in your pharmacy. Which of the following statements is TRUE?
 - (a) All receipts and issues should be recorded on the stock card and preferably there should not be a running balance
 - (b) Stock cards should be updated and the quantity on hand should correspond
 - (c) Stock cards do not form part of the inventory control system for pharmaceutical stock of your facility
 - (d) Ward and clinical pharmaceutical stock are not part of the pharmacy inventory control system
- 60. What information should be recorded on a stock card when receiving stock?
 - (a) Expiry dates

- (b) Manufacturing date
- (c) Bar code
- (d) Date for next order
- 61. A wide range of documents are used in stock control and distribution. Which document gives information that could directly impact on quality of medicines as far as storage conditions are concerned?
 - (a) Invoice order trail
 - (b) Discrepancy report
 - (c) Stock take sheets
 - (d) Temperature charts
- 62. Metoclopramide tablets are packed in containers of 500 tablets. The number of tablets in stock is 320 tablets. Express the amount of metoclopramide tablets in stock as a percentage.
 - (a) 50%
 - (b) 46%
 - (c) 64%
 - (d) 73%
- 63. When doing a stock take in a community pharmacy, how would you determine the quantity of tablets in an open container?
 - (a) Weighing the contents of the container
 - (b) Counting the tablets in the container
 - (c) Making an estimate of the quantity by looking at the contents
 - (d) Using the quantity recorded on the system
- 64. During a monthly stock count of fluticasone nasal sprays, you count 65 units on the shelf. The stock card shows a starting balance of 32 units, zero stock issued, and 64 units received during the month. Calculate the stock shortage.
 - (a) 31
 - (b) 32
 - (c) 65
 - (d) 96
- 65. What stock needs to be written off prior to stocktake?
 - (a) Obsolete medicine
 - (b) Short-dated medicine
 - (c) Over stocked medicine
 - (d) Expired medicine
 - ELO 3: PROVIDE TECHNICAL SUPPORT FOR THE MANUFACTURE, PACKAGING AND RE-PACKAGING OF NON-STERILE MEDICINES AND SCHEDULED SUBSTANCES
- 66. The approval and monitoring of suppliers of materials is a shared responsibility of the Head of quality control and Head of quality assurance. Who is the third responsible person?

- (a) The Head of logistics
- (b) The Head of procurement
- (c) The Chief Executive Officer
- (d) The Head of production
- 67. To whom must the manufacturer provide training?
 - (a) Quality control personnel of raw material suppliers
 - (b) Cleaners involved in the production process
 - (c) Truck drivers of wholesalers collecting medicines
 - (d) Human resources personnel of recipient suppliers
- 68. Which of the following statements is TRUE with regards to the hygiene principle of personnel in a manufacturing environment?
 - (a) Any infectious diseases should be reported
 - (b) Medical examinations should only be carried out when necessary
 - (c) Eating, drinking, and chewing is only permitted in the receiving area
 - (d) Direct contact between operators is allowed when operators are wearing PPE
- 69. For which of the following products will a dedicated area be required in a manufacturing facility?
 - (a) Ibuprofen tablets
 - (b) Amoxicillin suspension
 - (c) Distilled water
 - (d) Diclofenac suppositories
- 70. Which of the following statements is TRUE regarding sampling in the storage area?
 - (a) Sampling cannot be performed in the storage area
 - (b) Sampling should be done in such a way to prevent cross contamination
 - (c) Sampling can only be carried out at the receiving area
 - (d) Storage areas are only designed to store raw materials
- 71. Which statement is TRUE regarding the procurement of active raw materials?
 - (a) Any supplier can be used
 - (b) Only approved suppliers for any active ingredient can be used
 - (c) Only approved suppliers for specific active ingredient can be used
 - (d) Non-approved suppliers can be used in case of out of stock ingredients
- 72. If an active ingredient delivery is made up of two different batches, which of the following needs to be done?
 - (a) Both batches can be released as long as one is tested
 - (b) A mixed sample from both batches should be tested before release
 - (c) Both batches should be released by the quality assurance department before it is used
 - (d) Batches from reliable suppliers do not need to be tested
- 73. What information needs to be included on a label of starting materials in the storage area?
 - (a) Name of the manufacturer

- (b) Status of the contents
- (c) Date of receipt
- (d) Date of manufacture
- 74. What is the first step to be taken before processing operation is started?
 - (a) Line opening
 - (b) Weighing of materials
 - (c) Line clearance
 - (d) Picking of raw materials
- 75. What steps should be taken when a deviation is observed during the manufacturing process?
 - (a) Continue with the manufacturing process
 - (b) Stop and discard the batch
 - (c) Stop, record and investigate
 - (d) Release the batch
- 76. Which of the following statements is TRUE regarding packaging materials?
 - (a) Secondary packaging material must be in a secure area
 - (b) Primary packaging material must be in a secure area
 - (c) Primary packaging material should be kept in the production area
 - (d) Secondary packaging material should be kept in the production area
- 77. When setting up a programme for the packaging operations, particular attention should be given to minimising the risk of mix-ups. Which of the following statements is TRUE?
 - (a) Line clearance should only be performed if it is a different product
 - (b) Different products cannot be packaged in close proximity unless there is physical segregation
 - (c) Different products can be packed in close proximity as long as there are proper checks
 - (d) Line clearance should only be performed for scheduled medicine
- 78. Which of the following in-process control checks should take place during product packaging?
 - (a) Check if the line monitors function to the set SOP
 - (b) Check that all samples are returned to the stores as per the SOP
 - (c) Checks on over-printing is not needed during packing
 - (d) Checks on embossed information is not needed during packing
- 79. Which document describe the GMP related activities of the manufacturer?
 - (a) Records
 - (b) Reports
 - (c) Site Master File
 - (d) Technical agreement
- 80. Which statement is TRUE with regards to good documentation practices?
 - (a) Handwritten records should be made after manufacture of medicinal products
 - (b) Any alteration to the entry on a document is not permitted

- (c) Handwritten entries should be clear, legible and indelible
- (d) Alteration should not permit the reading of the original information
- ELO 4: PROVIDE TECHNICAL SUPPORT FOR THE COMPOUNDING, MANIPULATION AND PREPARATION OF NON-STERILE MEDICINES AND SCHEDULED SUBSTANCES (EXTEMPORANEOUS COMPOUNDING) IN COMPLIANCE WITH STANDARDS AS DESCRIBED IN THE GPP RULES AND GMP GUIDELINES UNDER THE SUPERVISION OF A PHARMACIST
- 81. Upon whose instructions would a pharmacist's assistant (basic) compound a topical cream?
 - (a) Doctor who wrote the prescription for the cream
 - (b) Nursing sister from the clinic
 - (c) Pharmacist's assistant (post-basic)
 - (d) Pharmacist on duty
- 82. What would you use to measure 5 grams of an active ingredient for a mixture?
 - (a) Medicine measure
 - (b) Weighing scale
 - (c) Kitchen scale
 - (d) Measuring cylinder
- 83. Which of the following statements is TRUE regarding the functions that a pharmacist's assistant may perform during the compounding process?
 - (a) Calculate quantities for the required ingredients as per the formula provided
 - (b) Update the pharmacy's Standard Operating Procedure for compounding
 - (c) Adjust the steps in a formula for compounding a specific medicine
 - (d) Co-sign records as compounder with the signature of the supervising pharmacist
- 84. Which of the following statements accurately describes the design of equipment needed for non-sterile extemporaneous compounding?
 - (a) Equipment that is suitable for its intended use
 - (b) Equipment that does not require cleaning
 - (c) Equipment that is transparent
 - (d) Equipment that is made from permeable plastic
- 85. You have to compound 150 g of cream containing hydrocortisone and cetomacrogol. If you are using 50 g of hydrocortisone, how much cetomacrogol is needed?
 - (a) 50 g
 - (b) 75 g
 - (c) 100 g
 - (d) 150 g
- 86. You have to make a mixture of chlorhexidine and water according to a formula. The formula states that you need to add 240 ml of distilled water to chlorhexidine to produce a total volume of 500 ml. How much chlorhexidine do you need?
 - (a) 160 ml

- (b) 240 ml
- (c) 260 ml
- (d) 340 ml
- 87. How many packets of 20's can be packed from a bulk container of a 1000 paracetamol 500 mg tablets?
 - (a) 5
 - (b) 20
 - (c) 50
 - (d) 200
- 88. What equipment will you require to compound a 100 g hydrocortisone cream and aqueous cream?
 - (a) Cone blender
 - (b) Ointment tile
 - (c) Mortar and pestle
 - (d) Ointment jar
- 89. A medicine label states that a patient should use a compounded cream within 30 days. Compounding date is 10 March. By which date should the cream be discarded?
 - (a) 17 March
 - (b) 24 March
 - (c) 09 April
 - (d) 30 April
- 90. A pharmacist's assistant (basic) is assisting to make 3 litres of simple linctus. How many 200 ml bottles do you need for packaging the linctus?
 - (a) 5
 - (b) 10
 - (c) 15
 - (d) 20
- 91. A prescription for a 3-year-old requires the compounding of caffeine citrate 10 mg/ml using the formula shown in the table below:

Ingredients	Quantity
Caffeine citrate powder	1 g
Mist Pot Cit	10 ml
Distilled Water	Add up to 100 ml

How much caffeine citrate powder will be needed to make 50 ml of the required formulation?

- (a) 0.5 g
- (b) 1.0 g
- (c) 5.0 g
- (d) 10.0 g
- 92. There is 2 g of zinc oxide in 25 g of a formulation, calculate the amount of zinc oxide in mg.

- (a) 200 mg
- (b) 250 mg
- (c) 2000 mg
- (d) 2500 mg
- 93. Which of the following MUST be recorded on a patient's profile when a cream is compounded in a community pharmacy?
 - (a) Batch number of each ingredient
 - (b) Type of container used
 - (c) Date of dispensing
 - (d) Expiry dates of ingredients
- 94. The label of an extemporaneously prepared cream for a patient MUST contain which of the following?
 - (a) Batch number of each active ingredient of the medicine
 - (b) Expiry date of each active ingredient of the medicine
 - (c) Name of the person for whom the treatment is intended
 - (d) Name of the prescriber
- 95. What would the MOST correct action be if a tablet counter and its spatula are dirty?
 - (a) Leave the tablet counter as it is the cleaner's responsibility
 - (b) Continue using if the residue is the same colour as the tablets you are counting
 - (c) Clean the tablet counter and spatula according to the SOP
 - (d) Clean it with an old piece of cloth, before continuing
- 96. Which of the following water basins is ideal for the cleaning of equipment for non-sterile preparations?
 - (a) Kitchen basin
 - (b) Compounding area basin
 - (c) Rest room basin
 - (d) Dispensary basin
- 97. Which of the following SOP's would you use as the MOST appropriate guideline when cleaning the compounding area in a community pharmacy?
 - (a) Effective stock rotation SOP
 - (b) Housekeeping SOP
 - (c) Pest control SOP
 - (d) Storage of medicines SOP
- 98. At least how often must the medicine fridge be cleaned and defrosted?
 - (a) Weekly
 - (b) Monthly
 - (c) Quarterly
 - (d) Yearly
- 99. Which of the following quick keys (shortcut keys) in Microsoft Excel is TRUE?
 - (a) Ctrl+a = select all
 - (b) Ctrl+v = volume

- (c) Ctrl+b = back
- (d) Ctrl+c = cut
- 100. Which of the following Microsoft (MS) programmes is best for typing letters and documents?
 - MS Teams (a)
 - (b) MS PowerPoint
 - (c) MS Office (d) MS Word

END OF PAPER