

REGISTRATION EXAMINATION SAMPLE PAPER¹

Spring 2011 (for examination sittings in 2011)

PART I (CLOSED BOOK)²

Instructions to candidates:

1. For each question there are five options **A, B, C, D** and **E**. Choose only one of the options as your answer for each question.
2. **You should answer the questions as though you were a registered pharmacist, not a pre-registration trainee.**
3. Unless otherwise stated you should answer all questions as though a pandemic situation has **not** arisen and is **not** anticipated.
4. There are 45 questions in this paper i.e. the paper is half the size of the actual registration examination closed book paper.
5. You should score one mark for each correct answer: no marks to be deducted for incorrect answers or omissions.
6. The time allowance for this paper is 45 minutes.

¹All questions in the sample paper have appeared in exam papers over the last few years (**amendments have been made where necessary to ensure that the questions are still contemporary**). The sample paper is matched to the actual examination in terms of word count, syllabus coverage, ratio of question types and overall facility (the fraction of candidates getting the questions correct).

²If you are using this sample paper as part of a "mock" examination, please note that in the "real" examination candidates undertake the **closed book paper first**.

SECTION I
(13 questions)

Directions for questions 1 to 13. Each of the questions or incomplete statements in this section is followed by five suggested answers. Select the best answer in each case.

Questions 1 and 2 concern Mr J who visits your pharmacy to ask for your advice. A recent cold has left him with a blocked nose and frontal headache that has lasted for 3 days. His patient medication record (PMR) shows that he takes Capozide tablets, 1 daily (captopril 50 mg, hydrochlorothiazide 25 mg).

1. Which one of the following is the most appropriate advice for you to give Mr J?
 - A advise that he takes Dolvan tablets (paracetamol, diphenhydramine, ephedrine, caffeine)
 - B advise that he uses a steam inhalation and takes paracetamol tablets
 - C advise that he takes Sudafed tablets (pseudoephedrine) and paracetamol tablets
 - D advise that he takes Beechams All-In-One liquid (paracetamol, guaifenesin, phenylephrine)
 - E advise that he visits his GP for antibiotics

 2. The following month, you receive a telephone call from Mr J's GP. Mr J who has chronic kidney disease has developed acute gout and the GP asks you to recommend a suitable treatment for his gout. Which one of the following is the most appropriate medicine to recommend?
 - A allopurinol tablets
 - B aspirin tablets
 - C colchicine tablets
 - D probenecid tablets
 - E paracetamol tablets
-

Question 3 concerns the information on the following standard NHS prescription which has been issued by a GP for Mr Platt, who experiences erectile dysfunction and has type 2 diabetes. You receive the prescription on 29.3.11:

Pharmacy Stamp <i>Please don't stamp age box</i>	Age 66 D.o.B	Title, Forename, Surname & Address MR NEIL PLATT 1 THE GROVE ANYWHERE TOWNSHIRE AN1 2CD 1234567890
Number of days' treatment N.B. Ensure dose is stated		
Endorsements	Sildenafil tablets 50 mg i mdu x 4	
Signature of Prescriber <i>K Kennedy</i>		Date 29/3/11
For Dispenser No. of Presns. on form <input type="checkbox"/>	Dr K KENNEDY TOWNSVILLE PRACTICE 7 HIGH STREET TOWNSVILLE TEL: 0120 123 4567 Newtown PCT	123456 AN1 1AB 51A PATIENTS – please read the notes overleaf

Which one of the following amendments must be made by the prescriber in order for you to be reimbursed for this prescription by the pricing authority?

- A** the prescription should be endorsed 'ACBS'
- B** the total quantity should be in words as well as figures
- C** the prescription should be endorsed 'SLS'
- D** the prescription should be hand-written by the prescriber
- E** the prescription should state that the patient has diabetes

Questions 4 and 5 concern Mr P aged 50 who visits your pharmacy complaining of indigestion. After asking him to describe his symptoms you suspect that he is suffering from gastro-oesophageal reflux disease (GORD).

4. Which one of the following is a typical symptom of GORD?
- A epigastric pain described as a burning sensation behind the breastbone
 - B epigastric pain relieved by lying down
 - C epigastric pain which is more likely to occur when the stomach is empty
 - D epigastric pain relieved by belching
 - E epigastric pain described as colicky
5. Which one of the following non-prescription medicines is the most appropriate for the treatment of GORD?
- A Buscopan (hyoscine butylbromide) tablets
 - B Wind-eze (simeticone) gel capsules
 - C Colpermin (peppermint oil) capsules
 - D Imodium (loperamide) capsules
 - E Gaviscon Advance (sodium alginate; potassium bicarbonate) suspension
-

6. Regarding continuing professional development (CPD) which one of the following statements is **false**?
- A all pharmacists must complete 9 hours of CPD every year
 - B CPD is a cyclical process involving reflection, planning, action and evaluation
 - C CPD helps individuals to identify their learning needs
 - D work shadowing is a suitable activity to contribute towards CPD
 - E CPD includes all activities that develop professional capabilities
7. Regarding paracetamol, which one of the following statements is true?
- A it has significant anti-inflammatory activity
 - B it inhibits cyclo-oxygenase (Cox) 1 and 2
 - C it is excreted largely unchanged by the kidneys
 - D it can be given by intravenous infusion
 - E it is contraindicated in pregnancy
8. Which one of the following is the average time that it takes for a healthy adult to excrete one unit of alcohol?
- A 30 minutes
 - B 1 hour
 - C 2 hours
 - D 3 hours
 - E 4 hours

9. Mr C is an opioid misuser currently on a methadone programme. On Monday morning he collects his weekly instalment of methadone, but soon returns to say that on his way home he accidentally dropped the bottle, which broke. He asks if you can replace it. Which one of the following is the most appropriate response?
- A dispense the following week's supply of methadone, and ask Mr C to obtain his next prescription 1 week earlier than usual
 - B agree to provide a substitute bottle, and record the details in the Controlled Drug register
 - C indicate that you are able to provide a substitute bottle, but that you first need to notify the local police
 - D advise Mr C that he will have to go to the nearest Accident and Emergency Department for a duplicate supply
 - E advise Mr C that he will have to go back to the doctor who normally prescribes the methadone for him to request a further prescription
10. Emergency supplies are legally permitted for which one of the following Controlled Drugs?
- A temazepam tablets 10 mg
 - B fentanyl '25' patches
 - C morphine sulphate SR tablets 10 mg
 - D codeine phosphate tablets 30 mg
 - E pethidine tablets 50 mg
11. Regarding metformin, which one of the following statements is **false**?
- A it is a biguanide
 - B it can cause diarrhoea
 - C it increases peripheral utilisation of glucose
 - D it may provoke lactic acidosis
 - E it should be taken 30 minutes before food

12. Which one of the following side-effects of hydrocortisone is caused by its mineralocorticoid activity?

- A** osteoporosis
- B** diabetes
- C** muscle wasting
- D** hypertension
- E** depression

13. Regarding NHS Direct / NHS 24 (Scotland), which one of the following statements is true?

- A** nurse advisers at NHS Direct / NHS 24 use decision support software to assist them in making an assessment and in giving advice
- B** all calls from members of the public to NHS Direct / NHS 24 are routinely followed up with a letter to the patients' GPs
- C** NHS Direct / NHS 24 provide decision support software to inform healthcare professionals
- D** NHS Direct / NHS 24 produce a monthly magazine called 'Direct Health' which is distributed to all households
- E** all telephone calls to NHS Direct / NHS 24 are charged at 50p per minute

SECTION II
(11 questions)

Directions for questions 14 to 24. For each numbered question select from the list above it the one lettered option which is most closely related to it. Within each group of questions each lettered option may be used once, more than once, or not at all.

Questions 14 and 15 concern the following Controlled Drugs:

- A** buprenorphine sublingual tablets
- B** pethidine tablets
- C** phenobarbital tablets
- D** secobarbital (quinalbarbitone) capsules
- E** temazepam tablets

Select from **A** to **E**, which one of the above:

- 14.** is subject to safe custody requirements of the Misuse of Drugs Regulations, but prescriptions do **not** have to state the total quantity to be supplied in both words and figures and receipts and supplies do **not** have to be entered in the Controlled Drugs Register
- 15.** is subject to safe custody requirements of the Misuse of Drugs Regulations and prescriptions must state the total quantity to be supplied in both words and figures but receipts and supplies do **not** have to be entered in the Controlled Drugs Register

Questions 16 to 19 concern the following vitamins:

- A** Vitamin A
- B** Vitamin C
- C** Vitamin D
- D** Vitamin E
- E** Vitamin K

Select, from **A** to **E**, which one of the above vitamins is referred to in the following statements:

- 16.** it leads to an increased risk of birth defects if taken in excess during pregnancy
- 17.** a deficiency contributes to the development of osteoporosis
- 18.** it affects the time it takes for blood to clot
- 19.** it is produced by the action of ultraviolet light on the skin

Questions 20 and 21 concern the following actions:

- A** advise the patient that the symptom(s) they have described is/are **not** known to be caused by the medicine
- B** advise the patient to see their GP as the dose of the medicine may need to be increased
- C** advise the patient to see their GP as the dose of the medicine may need to be reduced
- D** advise the patient that they are experiencing a side effect of the medicine. It is safe to continue taking the medicine, but they may wish to see their GP for an alternative
- E** advise the patient to stop taking the medicine straight away, and seek immediate medical assistance

Select, from **A** to **E**, which one of the above would be the most appropriate action for:

- 20.** a patient taking levothyroxine tablets who complains of irritability, sweating and diarrhoea
- 21.** a patient taking hormone replacement therapy tablets who complains of sudden breathlessness

Questions 22 to 24 concern the following cautionary and advisory labels / recommended label wording for dispensed medicines:

- A** Avoid exposure of skin to direct sunlight or sun lamps
- B** ... sucked or chewed
- C** Do not take indigestion remedies or medicines containing iron or zinc at the same time of day as this medicine
- D** ... with or after food
- E** ... an hour before food or on an empty stomach

Select, from **A** to **E**, which one of the above is it recommended that pharmacists add when dispensing:

- 22.** phenoxymethylpenicillin (penicillin V) tablets
- 23.** minocycline capsules
- 24.** metronidazole tablets

SECTION III
(12 questions)

Directions for questions 25 to 36. Each of the questions or incomplete statements in this section is followed by three responses. For each question **ONE** or **MORE** of the responses is (are) correct. Decide which of the responses is (are) correct. Then choose:

- A** if **1, 2** and **3** are correct
- B** if **1** and **2** only are correct
- C** if **2** and **3** only are correct
- D** if **1** only is correct
- E** if **3** only is correct

Directions Summarised				
A 1, 2, 3	B 1, 2 only	C 2, 3 only	D 1 only	E 3 only

- 25.** Regarding penicillins, which of the following statements is/are true?
- 1** they act by interfering with bacterial cell wall synthesis
 - 2** patients who are allergic to one penicillin will be allergic to all penicillins
 - 3** flucloxacillin is a penicillinase-resistant penicillin
- 26.** For which of the following is it clinically useful to monitor the concentration of serum drug levels?
- 1** warfarin therapy
 - 2** carbimazole therapy
 - 3** lithium therapy

Directions Summarised				
A 1, 2, 3	B 1, 2 only	C 2, 3 only	D 1 only	E 3 only

- 27.** Mr L regularly visits your pharmacy to collect his prescriptions so you are aware that he has a serious illness. In which of the following situations would it be permissible to breach confidentiality?
- 1** to a hospital doctor who needs to know what medication Mr L is taking as a child has accidentally taken some of his tablets thinking they were sweets
 - 2** to the presiding officer of a court where Mr L is being tried
 - 3** to the wife of Mr L who is worried about his health
- 28.** You are asked to recommend suitable treatment for the following patients. For which of these patients might it be appropriate for you to recommend a non-prescription preparation in the first instance rather than advise them to see their GP?
- 1** a woman with itchiness on the surface of her eyes
 - 2** a man with blurred vision
 - 3** a woman with pain within her eyes
- 29.** Mr B takes warfarin tablets and at a recent anticoagulant clinic visit it is noted that his international normalised ratio (INR) is lower than usual. He has recently been prescribed some new medicines. Which of these medicines is/are likely to have caused Mr B's INR to decrease?
- 1** rifampicin
 - 2** cimetidine
 - 3** fluconazole

Directions Summarised				
A 1, 2, 3	B 1, 2 only	C 2, 3 only	D 1 only	E 3 only

- 30.** Which of the following is/are contra-indicated in patients with a low heart rate?
- 1** Rinatec (ipratropium bromide) nasal spray
 - 2** Waxsol (docusate sodium) ear drops
 - 3** Betagan (levobunolol) eye drops
- 31.** Which of the following healthcare professionals is/are lawfully permitted to request an emergency supply of a prescription-only medicine (POM) for a patient?
- 1** doctor
 - 2** supplementary prescriber
 - 3** dentist
- 32.** Mr P visits your pharmacy to ask for your advice on the treatment of diarrhoea. He usually has a bowel motion once a day, but recently has needed to open his bowels 3 to 4 times daily. You notice from your patient medication record system (PMR) that he has recently started to take some new medicines. Which of the following medicines can cause diarrhoea?
- 1** misoprostol tablets
 - 2** erythromycin e/c tablets
 - 3** ferrous sulphate tablets
- 33.** Which of the following medicines has/have the potential to cause a patient's serum potassium concentration to fall?
- 1** ramipril capsules
 - 2** spironolactone tablets
 - 3** furosemide tablets

Directions Summarised				
A 1, 2, 3	B 1, 2 only	C 2, 3 only	D 1 only	E 3 only

- 34.** When faced with an ethical dilemma pharmacists must:
- 1** write to their professional indemnity insurance company for advice
 - 2** use their professional judgement in deciding on the most appropriate course of action
 - 3** be able to justify their decisions to their peers
- 35.** Mrs A uses a glyceryl trinitrate spray for angina. Which of the following conditions experienced by her might be caused by the glyceryl trinitrate?
- 1** headache
 - 2** flushing
 - 3** swollen ankles
- 36.** Which of the following medicines requires a dosage reduction in patients with renal impairment?
- 1** lithium
 - 2** gentamicin
 - 3** omeprazole

SECTION IV
(9 questions)

Directions for questions 37 to 45. The following questions consist of a first statement in the left-hand column followed by a second statement in the right-hand column.

Decide whether the **first** statement is true or false.

Decide whether the **second** statement is true or false.

Then choose:

- A** if both statements are true and the second statement is a **correct explanation** of the first statement
- B** if both statements are true but the second statement is **NOT a correct explanation** of the first statement
- C** if the first statement is true but the second statement is false
- D** if the first statement is false but the second statement is true
- E** if both statements are false

Directions Summarised			
	First Statement	Second Statement	
A	True	True	2nd statement is a correct explanation of the first
B	True	True	2nd statement is NOT a correct explanation of the first
C	True	False	
D	False	True	
E	False	False	

37.

FIRST STATEMENT

When it is **not** possible to dispense a prescription in full, the patient, their carer or representative, should be told at the outset

SECOND STATEMENT

If you are unable to dispense a prescription in full you should give the patient, their carer or representative, a legible note detailing the name and quantity of the medication outstanding

Directions Summarised			
	First Statement	Second Statement	
A	True	True	2nd statement is a correct explanation of the first
B	True	True	2nd statement is NOT a correct explanation of the first
C	True	False	
D	False	True	
E	False	False	

38.

FIRST STATEMENT

Use of cyclizine in young adults under 20 years is restricted

SECOND STATEMENT

Use of cyclizine in patients under 20 years of age is associated with an increased risk of dystonic reactions

39.

FIRST STATEMENT

Following extemporaneous preparation of a product any excess quantities of ingredients that have been weighed or measured in error should be returned to their stock bottles

SECOND STATEMENT

Medicines should **not** be disposed of by putting them down the sink

40.

FIRST STATEMENT

The use of loop diuretics in patients taking digoxin can increase the risk of digoxin toxicity

SECOND STATEMENT

Loop diuretics can cause hyponatraemia

Directions Summarised			
	First Statement	Second Statement	
A	True	True	2nd statement is a correct explanation of the first
B	True	True	2nd statement is NOT a correct explanation of the first
C	True	False	
D	False	True	
E	False	False	

Question 41 concerns the following scenario:

A 55-year-old man has been prescribed Gentian Mixture, Alkaline, BP 10 mL tds and you are required to prepare a 10-day supply for him.

Gentian Mixture, Alkaline, BP

Concentrated Compound Gentian Infusion BP	1 mL
Sodium Bicarbonate BP	500 mg
Double-Strength Chloroform Water BP	5 mL
Water	to 10 mL

FIRST STATEMENT

The volume of Concentrated Chloroform Water BP required is 3.75 mL

SECOND STATEMENT

Concentrated Chloroform Water BP needs to be diluted 1 in 40 to prepare Chloroform Water BP

42.

FIRST STATEMENT

Any pregnant woman presenting with the symptoms of vaginal candidiasis should be advised to see her GP

SECOND STATEMENT

Vaginal candidiasis is rare in pregnancy due to a change in cell immunity

Directions Summarised			
	First Statement	Second Statement	
A	True	True	2nd statement is a correct explanation of the first
B	True	True	2nd statement is NOT a correct explanation of the first
C	True	False	
D	False	True	
E	False	False	

Question 43 concerns the following scenario:

It is Saturday afternoon and Mrs G visits your pharmacy to ask for your help. Her 17-year-old son has run out of his regular medication and she wonders if you could let him have some tablets to last until Monday when he can obtain a prescription. You are aware that Mrs G's son is regularly prescribed the medication by a doctor at the dose requested and feel that there is an immediate need for the medication. Your pharmacy is **not** authorised to use a Patient Group Direction (PGD) in this situation.

FIRST STATEMENT

It would be illegal to provide the emergency supply

SECOND STATEMENT

Emergency supplies are only legally permitted for patients aged 18 years and over

Question 44 concerns Mr J who asks you to recommend a suitable treatment for his cough. On questioning him, he tells you that he has had a chesty cough and has been coughing up yellow and green sputum for 6 days.

FIRST STATEMENT

Mr J should be advised to see his GP

SECOND STATEMENT

A patient with a cough which has lasted longer than 5 days should always be advised to see their GP for further investigation

Directions Summarised			
	First Statement	Second Statement	
A	True	True	2nd statement is a correct explanation of the first
B	True	True	2nd statement is NOT a correct explanation of the first
C	True	False	
D	False	True	
E	False	False	

Question 45 concerns the following scenario:

A European wholesaler telephones a superintendent pharmacist to offer her a quantity of medicines for sale at heavily discounted prices. The wholesaler is previously unknown to the superintendent pharmacist.

FIRST STATEMENT

It would be improper of the superintendent pharmacist to place a large order under such circumstances without first checking the credentials of the wholesaler

SECOND STATEMENT

Pharmacies are required to have systems in place to ensure that the supplier and the quality of any medicines obtained are reputable

END OF QUESTIONS

Now go back and check your work