

COMMONWEALTH OF AUSTRALIA

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Family Name	
Given Names	
Student Number	
Teaching Period	Semester 1, 2016

FINAL EXAMINATION	DURATION				
PHA411 – Therapeutics C	<table border="1"> <tr> <td>Reading Time:</td> <td>10 minutes</td> </tr> <tr> <td>Writing Time:</td> <td>180 minutes</td> </tr> </table>	Reading Time:	10 minutes	Writing Time:	180 minutes
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INSTRUCTIONS TO CANDIDATES

Section A: Answer all 100 questions – 1 mark each = 100 marks - Allocated time 100 minutes

Section B: Short Answers Case Studies - Answer all THREE questions – 100 marks - Allocated time 80 minutes

EXAM CONDITIONS

You may begin writing from the commencement of the examination session. The reading time indicated above is provided as a guide only.

This is a RESTRICTED OPEN BOOK examination

Any non-programmable calculator is permitted

No handwritten notes are permitted

Any hard copy, unannotated English dictionary is permitted

ADDITIONAL AUTHORISED MATERIALS	EXAMINATION MATERIALS TO BE SUPPLIED
Lecture Textbook/s (Unannotated)	1 x 8 Page Book 1 x 20 Page Book 1 x 5-Multiple Choice Answer Sheet 1 x Scrap Paper

**THIS EXAMINATION IS PRINTED
DOUBLE-SIDED.**

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Part A – Answer all 100 questions – 1 mark each = 100 marks - Allocated time 100 minutes

Part B – Short Answers Case Studies

Answer all **THREE** questions – Allocated time **80 minutes**

1. Mr. Smith, a 46 year old man complains of shortness of breath on exertion, loss in weight (6.4kg) and increasing tiredness since the past 4 months. He notes fullness in his left upper quadrant and early satiety. He is married and lives with his wife of 25 years, is employed as a manager. He has a history of smoking for past 20 years, quit completely since 4 years, denies alcohol use. On examination, lymphadenopathy is noted in right inguinal area- approx. 1cm, non-tender palpable node. Bone marrow biopsy reveals positive for Philadelphia chromosome. Marrow is hypercellular, 2-3% myeloblasts. There is no history of cancer in his family. He is diagnosed as Chronic myelocytic leukaemia - chronic phase.
 - A. Describe the natural progression of CML
 - B. What is Philadelphia chromosome?
 - C. Suggest an optimal treatment plan for this patient as well as the monitoring parameters. Would stem cell therapy be a viable option for this patient? Briefly explain what this treatment entails?

(10+5+15 = 30 Marks, maximum of two pages = 1000 words)

Case 2

Patient Demographics

Name	WB
DOB	19/03/1938
Age	75 years and 3 months
Sex	Male
Marital Status	Married
Allergies	Amoxil causes angioedema
Smoking Status	Non Smoker
Alcohol	Dinks once fortnight
Weight	89kgs
Height	159cms
Carer Details	XX– Patient’s wife
Treating Doctor	Dr. XX– Attending Physician
Pharmacy	Griffith Pharmacy

Medical Conditions: prostatic cancer with bone metastasis, long term of IDC for several years with several episodes of urinary sepsis, IDC removed one month ago, voiding with difficulty since IDC removal, hematuria and dysuria, no clots.

Medical History: type two diabetes mellitus, ischaemic heart disease, acute myocardial infarction, stent, hypertension, hypercholesterolaemia, osteoarthritis, recurrent UTIs, THR, HOCM. Current Condition: Patient admitted into hospital with urinary sepsis, fever, hematuria and dysuria.

Medications History

Brand/Generic Name and Strength	Dose/Duration/Frequency	Current/Cease Date
Fosinopril (GENRX) 10mg	1 tab daily	Current
Micardis 80mg	1 tab daily	Current
Atorvastatin (APO) 20mg	1 tab mane	Current
Panadol Osteo 665mg	2 tab three times a day	Current
Metoprolol (GENRX) 50	1 tab twice a day	Current
Metformin (APO) 1000mg	Take 1 tab twice daily immediately after food	Current
Hiprex 1g	Take 1 tab twice a day to prevent bladder infection	Current
Cephalexin (GENRX) 500mg	Take one capsule three times a day	Current
Amlodipine 5mg	Take 1 tab daily	Current
Omeprazole (APO) 20mg	1 tab at night	Current
Oxybutynin (Sandoz) 5mg	1 tab TDS PRN	Current
Isosorbide Mononitrate	Swallow whole half a tablet in the morning	Current
Novomix 30 Flexpen INJ 10	44 units twice daily	Current
Cardio Aspirin EC 100mg	Take 1 tab in the morning	Current
Alprim 300mg	Take 1 tab at night	Ceased

He was recently diagnosed with stage III SCLC.

- A. What is the treatment for his first complaint (voiding with difficulty)?
- B. What is the recommended regime for SCLC?
- C. If he moves to palliative what treatment will be required? Justify your answer.

(10+10+20 = 40 Marks, maximum of two pages = 1000 words)

Case 3

BP, a 55-year-old female underwent extensive abdominal surgery for carcinoma of the colon and rectum. Post-operatively, she was prescribed heparin 5000 units SC bd and a morphine infusion (1-3 mg/hour). Eight days post-operatively, BP was able to mobilise well and the heparin was discontinued. By this time her prescribed analgesia was paracetamol and/or diclofenac when required. Two days later, BP became acutely short of breath and developed right sided posterior subscapular pleuritic chest pain which was worse on coughing and deep breathing. A pulmonary embolus was suspected and she underwent a ventilation and perfusion scan which showed a mismatch in her right lung.

BP was started on heparin 5000 units stat followed by an infusion of 24,000 - 40,000 units per day adjusted to keep her APTT within the range of 60-80 seconds. She is also taking treatment for menopause (Hormonal replacement therapy), blood pressure and arthritis. She has stoma for feeding and another for toileting. Five days into this treatment BP developed a generalised petechial rash. She was later diagnosed with metastatic brain and bone cancers.

What the cause of the rash might be, and why now if she was not originally allergic to it?

What is the treatment for brain cancer, and why?

What should her medication be after the last diagnosis?

(10+10+10 = 30 Marks, maximum of two pages = 1000 words)