Tutorial Letter 101/3/2018
CLINICAL PATHOLOGY
BMI3707

Semesters 1 and 2

Department of Life and Consumer Sciences

This tutorial letter contains important information about your module.

BARCODE

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1 INTRODUCTION

Dear Student

Welcome to the biomedical sciences and particularly haematology! I hope that you will have an enjoyable and fruitful academic year. This module is offered in the Department of Life and Consumer Sciences and your lecturer for this module is **Mr M H Mkhombo**. I would like to take this opportunity to wish you success with your academic year.

We would also like to encourage you to register on myUnisa. Please check this site regularly for updates, posted announcements and additional resources uploaded throughout the semester. Rapid communications throughout the semester(s) have been made possible through myUnisa. You can use the myUnisa site to submit assignments and we strongly recommend that you submit your assignment online as this will ensure that you receive rapid feedback and comments, access your official study material, have access to the Unisa Library functions, 'chat' to your lecturers or to fellow students and participate in online discussion forums and obtain access to all manner of learning resources.

If at any stage while you are studying you have any questions or require assistance with problems, we are available to assist you. Our contact details are listed in section 3: Lecturer(s) and contact details in this tutorial letter.

Tutorial matter may include the following:
Tutorial Letters 101 and 201

Some of this tutorial material may not be available when you register. If this is the case, this tutorial material will be posted to you as soon as possible. Please note that tutorial matter is also available on myunisa. PLEASE read the instructions in this tutorial letter carefully and prepare Assignments 01 and 02 ONLY for the semester for which you are REGISTERED. Once you have completed and submitted the assignments you can use the questions in the other assignments as practice or in preparation for the exam. It is very important that your first assignment reaches Unisa on or before the due date. Students who have not submitted this assignment by the due date will not be allowed to write the examination.

2 PURPOSE AND OUTCOMES

2.1 Purpose

Qualifying students are able to know, understand and apply the basic principles and theory relating to systems pathology. The purpose of this module is to enable you, the individual learner, to identify and apply laboratory practices, processes and principles of pathology to solve clinical problems involving diseases.

2.2 Outcomes

The student will be able to:

- define, aetiology, epidemiology, pathogenesis and treatment of systems diseases.
- distinguish between normal endothelium, types and complications of aneurysms.
- discuss the different cardiovascular diseases.
- describe and discuss tuberculosis and its complications.
- describe the relationship between HIV and TB.
- define, causes, pathology of chronic obstructive pulmonary disease (COPD).
- define and describe the characteristics of malabsorption.
- discuss peptic ulcers.
- be knowledgeable with adenomas and polyps.
- understand colorectal cancer and their types.
- understand gynaecological diseases and their symptoms.
- describe ovarian cancer.
- describe germ cell carcinoma, teratomas and dysgerminoma.
- discuss cervical cancer.
- define and explain the risk factors of cervical cancer.
- understand primary and secondary brain tumours.
- define meningitis and types of meningitis, bacterial, viral and fungal meningitis.
- describe Parkinson’s disease and Huntington’s disease.
- describe pituitary diseases.
- understand diabetes insipidus.
- consider pituitary tumours.
- hypothyroidism and hyperthyroidism.
- compare the pathology of Graves' disease and Goitre.
- recognise the types of thyroiditis.
- describe primary and secondary hyperthyroidism.
- describe thyroid neoplasm.
- understand basic physiological functions of the kidneys and the types of kidney diseases.
- describe polycystic kidney diseases.
- differentiate between autosomal dominant and recessive polycystic kidney disease.
- distinguish between acute and chronic kidney diseases.
- define renal agenesis, horse shoe kidney and foetal pelvic kidney.
- describe ureteral duplication?

LECTURER(S) AND CONTACT DETAILS

3.1 Lecturer(s)

Lecturer: Mr M H Mkhombo
Telephone number: +27 11 471 2237 (during office hours 8:00 – 16:00)
Email address: mkhommf@unisa.ac.za

Postal address:
The Lecturer
Department of Life and Consumer Sciences
Private Bag x6
Florida
1710

NOTE: You may enclose more than one letter in an envelope, but do not address enquiries to different departments (e.g. Despatch and Library Services) in the same letter. This will cause a delay in the replies to your enquiries. Please write a separate letter to each department and mark each letter clearly for the attention of that department. **Letters to lecturers may not be enclosed together with assignments**. Always write your **student number and the module code** at the top of your letter.

3.2 Department

The Department of Life and Consumer Sciences is located in the Calabash Building, Unisa Science Campus, Roodepoort, Johannesburg. The Departmental telephone number is +2711 471 2230 and the Departmental fax number is +2711 471 2796.

3.3 University

Should you need to contact the university about matters not related to the content of this module, consult the publication *study @ unisa*, which you received with your study material. This brochure contains information on how to contact the university (e.g. to whom you can write for different queries, important telephone and fax numbers, addresses and details of the opening and closing times of particular facilities).

You can also make use of the following contact routes:
Unisa website http://www.unisa.ac.za & http://mobi.unisa.ac.za
Email (general enquiries) info@unisa.ac.za
International students are urged to make use of the email address info@unisa.ac.za
study-info@unisa.ac.za queries related to application and registration.
assign@unisa.ac.za for assignment enquiries
exams@unisa.ac.za for examination enquiries
despatch@unisa.ac.za for study material enquiries
finan@unisa.ac.za for student account enquiries
myUnisaHelp@unisa.ac.za for assistance with myUnisa
myLifeHelp@unisa.ac.za for assistance with myLife email accounts
SMS 32695 – South Africa only
You will receive an auto response SMS with the various SMS options. The cost per SMS is R1.00.
Fax 012 429 4150

NOTE: Whenever you contact the university, whether in writing or telephonically, always mention the **module code and your student number**.

myUnisa webpage (Unisa's online campus)
Access to the myUnisa website requires a computer that is linked to the internet (internet access is available to you at provincial libraries, internet cafés and Unisa regional telecentres, see myUnisa for a list of these places in your area). You should also note that some of these centres allow free internet access on presentation of your student card.

Go to: https://my.unisa.ac.za/portal/
For module-specific information, log in and click on:
BMI3707-18-S1 (for semester 1)
OR
BMI3707-18-S2 (for semester 2)
With the aid of myUnisa, you will ultimately be able to use the internet to perform all study-related functions which are now normally done by telephone, regular postal service or personal visits to the campus.

If you have online access, you should do the following to get started with this module:

- Go to myUnisa (http://my.unisa.ac.za)
- Log in with your myUnisa login details. If you are not sure how to do this, consult the publication *study @ unisa*. You should have received this with your study material. Alternatively, use the link to access the publication.)
- Once logged in, you will see a link to the module code. If this is not at the top of your screen, click on 'More sites' and select it from the drop-down menu.
- Once you are in the site for this module, read the welcome message.
- Now click on **Additional Resources**, then on the subfolder **Tutorial Matter**, and then on **Tutorial Letter 101**. Read this letter carefully.
- Take particular note of the online links listed in **section 4.3, Electronic Reserves (e-Reserves)**.

You will find that this module requires you to use the internet to access information on aspects of virology. Please take careful note of details of published articles and online links and the information in the associated online articles. NOTE: you will be required in your assignments to accurately refer to articles that you access online.

Library
Unisa Library login
You will be required to provide your login details, i.e. your student number and your myUnisa password, in order to access the library's online resources and services.

This will enable you to:

• Request library material.
• View and renew your library material.
• Use the library's e-resources.

The *study @ unisa* brochure, which is part of your registration package, lists all the services offered by the Unisa Library.

3 RESOURCES

4.1 Prescribed books

There are currently no prescribed textbook for this module, use the study guide to relate to the important section covered. Please refer to the list of official booksellers and their addresses in the Unisa brochure, *study @ unisa*.

If you have difficulty in locating an appropriate textbook at the Unisa Booksellers, please contact the Unisa Prescribed Book Section at Tel: 012 429-4152 or e-mail *vospresc@unisa.ac.za*.

Textbooks can be ordered on the Internet at http://amazon.com or http://www.kalahari.net or http://www.exclusivebooks.com. Note that second-hand books are available at the following Web sites: http://www.amazon.com or http://www.fetchbooks.com. .

4.2 Recommended books

The textbook for BMI3707, which you will be using in conjunction with the online material or study guide, is:

Finlayson, C. J. and Newell, B. A. 2009. Pathology at a glance. Chichester, UK, Wiley-Blackwell. ISBN: 978-1-4051-3650-1

4.3 Electronic reserves (e-reserves)

As indicated on the previous page, you will be required to make use of the internet to access information relating to this module. This is an important learning activity for you as you consider future studies, for example at the Honours level. Thus, please will you enthusiastically adopt this method of learning and include details of your online learning as references at the end of your assignment 2 answers.

An important site to start with for this module is:
http://www.hopkinsmedicine.org/hematology/fellows/summer%20course/schedule.html

This site describes haematology lectures provided to

Note that announcements will be posted on myUnisa as and when required.

Please access the following online sites that will provide a base of knowledge for you. In addition, please then access more recent online sites to update and extend your knowledge of this module.

Please note that there is a formal study guide for this module. Thus, in addition to independent study by you, please read up on and around the study unit areas as outlined below. Please locate these study areas within your textbook as well as according to online links that you may identify. Please then adopt this knowledge and apply it to answering the assignment questions and then continue to add to your knowledge as you prepare for the examination.

4.4 Library services and resources information

For brief information, go to www.unisa.ac.za/brochures/studies

For detailed information, go to http://www.unisa.ac.za/library. For research support and services of personal librarians, click on "Research support".

The library has compiled a number of library guides:

- finding recommended reading in the print collection and e-reserves – http://libguides.unisa.ac.za/request/undergrad
- requesting material – http://libguides.unisa.ac.za/request/request
- postgraduate information services – http://libguides.unisa.ac.za/request/postgrad
- finding, obtaining and using library resources and tools to assist in doing research – http://libguides.unisa.ac.za/Research_Skills
- how to contact the library/finding us on social media/frequently asked questions – http://libguides.unisa.ac.za/ask

5 STUDENT SUPPORT SERVICES

Important information appears in your *study @ unisa* brochure.

6 STUDY PLAN

Use your *study @ unisa* brochure for general time management and planning skills.
This is a semester module over 15 weeks and requires 120 hours of study time. This means that you will have to study 8 hours per week for this module. The following is a recommended time schedule which can be used as a guideline for studying this module. Below this time schedule please see an example of a study plan.

ACTIVITY	**HOURS**
Reading and re-reading study guide	10
Reading relevant chapters in the recommended textbook	35
Completing study guide activities	10
Studying for and completing the Assignments	20
Studying for examination	40
Final revision	5
TOTAL	**120**

Week	Activity (each week represents 8 hours of study time)
1	Read through your study material (your tutorial letter) and, if you have one, skim through a textbook and identify the relevant chapters in the text. Start accessing articles online. This exercise allows you to gain an overall picture of the module.
2	

3	Read through your textbook, using your study guide, and identify all key areas.
4	
5	
6	Complete and submit Assignment 1. Please allow sufficient time for the assignment to reach Unisa before the due date.
7	Begin with your in-depth study of the initial study units. Please prepare study notes whilst reading and learning the material.
8	Start to complete your Assignment 2
9	
10	Complete and submit Assignment 2. Depending on how you will submit the completed assignment, please note that you should allow sufficient time for the assignment to reach Unisa before the due date.
11	
12	Begin with your in-depth study of later study units. Please prepare study notes while reading and learning the material.
13	
14	
15	Revision and preparation for the exam.

7 PRACTICAL WORK AND WORK-INTEGRATED LEARNING

There are no practicals for this module.

8 ASSESSMENT

8.1 Assessment criteria

Systems Clinical Pathology has been completed when the student is able to:

Define, describe, discuss, explain, distinguish and outline the aetiology, epidemiology, diagnosis, pathogenesis, treatment and prognosis of systems diseases.

8.2 Assessment plan

Summary as to how your final mark will be calculated

Formative assessment:

Assignment 01 (10% of year mark)

Assignment 02 (90% of year mark)

} Year mark (30% of final mark)

Summative assessment:

Examination:

} Examination mark (70% of final mark)

} **Final mark**

8.3 Assignment numbers

8.3.1 General assignment numbers

Assignments are numbered consecutively per module, starting from 01.

8.3.2 Unique assignment numbers

Each semester consists of two assignments.

SEMESTER 1
Assignment 01: **841029**
Assignment 02: **881475**

SEMESTER 2
Assignment 01: **770396**
Assignment 02: **895539**

8.4 Assignment due dates

SEMESTER 1
Assignment 01: 16th March 2018
Assignment 02: 26th April 2018

SEMESTER 2
Assignment 01: 17th August 2018
Assignment 02: 21st September 2018

8.5 Submission of assignments

Both the assignments are compulsory and must be submitted on or before the stipulated due date. **To receive quicker, online feedback and comments on your assignments submit your assignment electronically.** If you intend to post your assignment, please complete and post it at least **a week** before the due date to ensure that we receive it in time. Please note that FAILURE TO SUBMIT ASSIGNMENT 01 WILL RESULT IN YOUR NOT BEING ALLOWED ADMISSION TO THE EXAMINATION. In exceptional circumstances, only a **valid** medical certificate associated with a valid long-term illness will be considered as a reason for the late submission of an assignment. In such a case, please notify the lecturer well in advance. Note that if no arrangements were made, the assignment will not be marked. Please attach the medical certificate at the back of your assignment and ensure that you have certified copies of such a certificate.

For detailed information and requirements with regard to assignments, see the brochure entitled *study @ Unisa*, which you received with your tutorial material.
Note: Prepare only the assignments for the semester for which you are registered.

Assignments may not be submitted by fax or email. You may submit written assignments and assignments completed on mark-reading sheets either by regular postal service **or** mobile MCQ submission **or** electronically via myUnisa. Make a copy of your assignment for your own reference and if the original is lost at any stage during the submission process.

Unisa is implementing onscreen marking of assignments to help you receive quicker feedback on your assignments. This will not be the case for all your modules, however, most modules from the Department of Life and Consumer Sciences can be marked in this way.

2. **Submit the PDF document (your assignment) via myUnisa (online).**

For guidance on how to submit an assignment via myUnisa, see section 8.4 of this tutorial letter or the *study @ unisa* brochure.

8.6 The assignments

Assignments are seen as part of the learning process for this module. As you complete the assignment, study the textbook, consult other resources, discuss the work with fellow students or tutors or do research - you are actively engaged in learning. Looking at the assessment criteria (e.g. the action words and the mark allocation) given for each assignment will help you to understand what is required of you more clearly.

There are TWO assignments for this module for each semester. You will find the assignments for:

Semester 01 (January to June) in **Appendix A,** and
Semester 02 (July to December) in **Appendix B** of this tutorial letter.

The **due dates** are given with each assignment in Appendix A and B.

The **first** assignment of each of your courses is **compulsory**. You will qualify for **examination admission** for a course only if you submit the first assignment by the due date. If more than one assignment is set for a course, all the assignments for that course will be taken into consideration when calculating your year mark. Thus, to ensure a good year mark that contributes to improving your final mark, submit all your assignments in time.

8.7 Other assessment methods

Not applicable

8.8 The examination

Use your *study @ unisa* brochure for general examination guidelines and examination preparation guidelines.

This module is offered in a semester period of fifteen weeks. This means that if you are registered for the first semester, you will write the examination in May/June 2018 and the supplementary examination will be written in October/ November 2018. If you are registered for the second semester you will write the examination in October/November 2018 and the supplementary examination will be written in May/June 2019.

For examination admission it is compulsory for you to hand in the first assignment for this module. It is also to your own advantage to do the assignments in order to test your understanding of the subject, and to establish how well prepared you are for the examination. You need to obtain a minimum of 40% in your examination to be able to pass. If you do not obtain at least 40% in the exams, you will fail even if the combination of year and exam mark is more than 50%. You will also need a minimum of 40% in the examination to obtain admission to a supplementary examination.

You require a final mark of 50% to pass this module. Please see the examples below:

- Exam mark below 40% will result in your failing this module.

- Exam mark 40% and Year mark 50% (combination of your first and second assignment marks) = A final mark of 43% - you will be allowed to write a supplementary exam.
  Calculated as:
  40 x 70% (0.70) = 28%
  50 x 30% (0.30) = 15%

- Exam mark 50% and Year mark 60% = A final mark of 53% - you will pass this module
  Calculated as:
  50 x 70% (0.70) = 35%
  60 x 30% (0.30) = 18%

As you can see from these examples it is important to obtain a minimum of 40% for your exam, as well as submitting both your assignments and work hard to obtain a good year mark to ensure that you pass the module.

You will have the opportunity to give an account of your studies in a two-hour examination paper (per module). You will be informed by letter of the dates, places and venues of the examinations. Examination guidelines, posted on myUnisa will give you pointers as to how to prepare for the examination. Revision should be done thoroughly before the examination. Contact us immediately, preferably by direct email, if you encounter any problems. Students can also refer to the *study @ unisa* brochure for general examination guidelines and examination preparation guidelines. The examination paper is a two (2) hour examination and consists of questions such as those requiring you to provide definitions of terms, draw labelled diagrams as well as answering short and longer essay questions.

You will be informed later by letter of the dates, places and venues of the two-hour examination required per module. Exam guidelines, posted on myUnisa will give you pointers on how to prepare for the examination. Revision should be completed before the examination and you should contact us immediately by email if you encounter any problems. Students can also refer to the *study @ unisa* brochure for general examination guidelines and examination preparation guidelines.

The examination paper is a two (2) hour examination and consists of questions such as those requiring you to provide definitions of terms, draw labelled diagrams and/or answering short and longer essay questions.

9 FREQUENTLY ASKED QUESTIONS

The *study @ unisa* brochure contains an A-Z guide of the most relevant study information.

10 SOURCES CONSULTED

Not applicable.

11 IN CLOSING

Not applicable

12 ADDENDUM

Appendix A – Assignments for the first semester
Appendix B – Assignments for the second semester

Plagiarism
It is incumbent of all of us to behave ethically and so I would seriously remind you of a major problem regarding unethical behaviour in education, namely plagiarism.

Plagiarism is the act of taking words, ideas and thoughts of others and passing them off as your own. It is a form of theft which involves a number of dishonest academic activities. The *Disciplinary code for students* (2004) is given to all students at registration. You are advised to study the *Code*, especially sections 2.1.13 and 2.1.4 (2004:3-4). Also read the University's Policy *on (Copyright infringement and plagiarism*).

Avoiding Plagiarism

We cannot place enough emphasis on the seriousness of plagiarism. Please do not plagiarise – it is a form of THEFT. If plagiarism is detected, lecturers cannot determine if the student has learnt the subject material and so it is very difficult to assign a mark. In this case, the assessor must ask the question: "Who is being assessed, the student who prepared the assignment or the author of the plagiarised text?

Ideally, the student should understand and learn the subject matter and write an assignment answer on this material in his/her own words. If, for whatever reason, this is difficult for the student to achieve, we recommend that the student answer the question by:

- Writing down subject material from the text
- Remembering to place this quote within inverted commas
- Ending the quote by supplying a correct reference of the author of this quoted material
- Providing a few personal sentences that indicate that the student has reflected on this material.

Note: This latter reflection indicates that the student has read, understood and can place the answer in an academic, personal, social, research, etc. context.

APPENDIX A: FIRST SEMESTER COMPULSORY ASSIGNMENTS

Department of Life and Consumer Sciences

CLINICAL PATHOLOGY III – BMI3707

Semester code: 01

Assignment 01

Due Date: 16th March 2018

Unique assignment number: 841029

INSTRUCTIONS

1) Use the mark-reading sheet provided to answer these questions.

2) Fill in all your **personal details** on the mark-reading sheet.

3) Indicate the correct answer clearly by shading in the appropriate number on the mark-reading sheet with an HB pencil.

4) If more than one number is shaded in any answer, NO marks will be awarded for that question.

1.1 Which of the following is the "silent killer" because it usually has no symptoms?

1. Stroke.
2. High blood pressure.
3. High cholesterol.
4. Haemophilia.

1.2 Which of the following is associated with atherosclerosis?

1. Increased exercise
2. Including fruit and vegetables in every meal
3. High-fibre diets
4. High salt diet and high cholesterol diet.

1.3 Which of the following changes in lifestyle are recommended to treat or prevent hypertension?

1. limit dietary salt intake
2. do not smoke.
3. exercise regularly.
4. All of the above lifestyle changes are recommended to treat or prevent hypertension.

1.4 Which of the following is released from the kidneys in response to low blood flow?

1. Digitalis.
2. Aspirin.
3. Renin.
4. Nitroglycerine.

1.5 Dyspnea, fatigue, increased pulmonary artery pressure, and decreased cardiac output are indicative of_____.

1. myocardial infarction
2. right sided valve damage
3. left sided valve damage
4. jugular vein distension (JVD)

1.6 A client with mitral stenosis is scheduled for mitral valve replacement. Which condition may arise as a complication of mitral stenosis?

1. Pulmonary hypertension.
2. Left-sided heart failure.
3. Myocardial infarction.
4. Left ventricular hypertrophy.

1.7 All are key manifestations of endocarditis EXCEPT?

1. Janeway's lesion.
2. Fever.
3. Dry, non-productive cough.
4. Systemic embolization.

1.8 What is the best way to treat cardiac tamponade?

1. Diuretics.
2. Chest tube.
3. Pericardiocentesis.
4. Paracentesis.

1.9 Which of the following is least likely to increase the risk for myocardial infarction?

1. Male gender.
2. Being the CEO of a company.
3. Being 30 years old.
4. Hypertension.

1.10 Which respiratory disease causes the airway to become narrow, inflamed and constricted?

1. Emphysema.
2. Chronic bronchitis.
3. Asthma.
4. Chronic obstructive pulmonary disease (COPD).

1.11 Ulcers are common in which region of the gastrointestinal (GI) tract?

1. Jejunum
2. Illium
3. Duodenum
4. Secum.

1.12 The most common cancer of stomach is_____.

1. lymphomas
2. carcinoids
3. hyperplastic
4. adenocarcinoma

1.13 Dysgerminoma of the ovary does not produce_____.

1. placental alkaline phosphatase
2. lactate dehydrogenase
3. AFP (α-fetoprotein)
4. AFP and HCG (human chorionic gonadotropin)

1.14 Malignant tumour in fibrous tissue is called a/an:

1. Liposarcoma.
2. Osteosarcoma.
3. Fibrosarcoma.
4. Rhabdomyosarcoma.

1.15 Signs and symptoms of Parkinson's disease include all but_____.

1. muscle atrophy
2. bradykinesia
3. tremors in hands
4. voice changes

TOTAL MARK: (2x15) = [30]

Department of Life and Consumer Sciences

CLINICAL PATHOLOGY III – BMI3707

Semester code: 01

Assignment 02

Due Date: 26th April 2018

Unique assignment number: 881475

INSTRUCTIONS

1) Type your assignment on a computer. You may print on ordinary white paper and not necessarily the Unisa typing paper provided. Please use 1,5 spacing and Arial or a similar font of 11 or 12 pitch. Leave a line open between questions. If you are not able to type your assignment on a computer, use a black or blue pen and please write neatly.

2) If you want to submit a hard copy of this assignment, use the assignment cover and envelope provided. When stapling your answers inside the cover, staple only in the top left-hand corner.

3) Your student number is the number just below your address. This number must be filled in on the assignment cover and must also be quoted in all correspondence with the university

4) Answer all questions as briefly and clearly as possible in your own words.

5) Number your answers correctly**.**

QUESTION 1 **[26]**

1.1 What are the functions of normal endothelial cells? (5)

1.2 Discuss the functions of injured endothelial cells. (6)

1.3 Name the types and complications of aneurysms. (7)

1.4 Describe the aetiology of congenital heart diseases. (3)

1.5 What is cyanosis? (1)

1.6 Distinguish between acyanotic and cyanotic congenital heart diseases. (4)

QUESTION 2 **[25]**

2.1 Explain the three major causes of hypertension. (3)

2.2 Describe the complications of hypertension. (6)

2.3 What is angina pectoris and discuss the symptoms of angina pectoris. (3)

2.4 Define thrombosis. (2)

2.5 Distinguish between a thrombus and an embolus. (4)

2.6 What are the physiological functions of?

a) von Willebrand factor. (1)
b) Thromboxane A2. (1)
c) Prostacyclin. (1)

2.7 Distinguish between the four types of thromboembolism. (4)

QUESTION 3 **[10]**

3.1 List the causes and risk factors of pulmonary hypertension. (4)

3.2 Define and write down the characteristics of pneumonia. (4)

3.3 Name two main types of pneumonia depending on the site of infection. (2)

QUESTION 4 **[20]**

4.1 List five conditions that can lead to diarrhoea. (5)

4.2 Discuss the characteristics of malabsorption. (3)

4.3 What is an adenomatous polyp? (1)

4.4 Name the three growth patterns of adenomatous polyps. (3)

4.5 Define cervical cancer and list the risk factors of cervical cancer. (4)

4.6 Distinguish between amenorrhoea and dysmenorrhoea. (4)

QUESTION 5 **[22]**

5.1 Explain the causes of central nervous system disorder. (7)

5.2 What are cerebrovascular accidents and list types of cerebrovascular accidents? (3)

5.3 Define encephalitis and distinguish between primary and secondary encephalitis. (2)

5.4 What is meant by a brain abscess? (1)

5.5 Describe the muscle activities affected by motor neuron diseases. (5)

5.6 Distinguish between Parkinson’s and Huntington’s diseases. (4)

QUESTION 6 **[27]**

6.1 Describe the four types of thyroid neoplasia. (4)

6.2 What is pheochromocytoma? (1)

6.3 Distinguish between Cushing's and Addison's disease. (4)

6.4 Give details of acute and chronic kidney injury. (2)

6.5 Explain the factors affecting the kidneys or patterns of kidney disease. (5)

6.6 Distinguish between nephrotic and nephritic kidney diseases. (4)

6.7 Explain what are tubulointertitial diseases. (2)

6.8 Give the names of five types of testicular cancer. (5)

TOTAL MARKS: [130]

APPENDIX A: FIRST SEMESTER COMPULSORY ASSIGNMENTS

Department of Life and Consumer Sciences

CLINICAL PATHOLOGY III – BMI3707

Semester code: 02

Assignment 01

Due Date: 17th August 2018

Unique assignment number: 770396

INSTRUCTIONS

1) Use the mark-reading sheet provided to answer these questions.

2) Fill in all your **personal details** on the mark-reading sheet.

3) Indicate the correct answer clearly by shading in the appropriate number on the mark-reading sheet with an HB pencil.

4) If more than one number is shaded in any answer, NO marks will be awarded for that question.

1.1 Why atherosclerosis is especially dangerous when found in the coronary arteries?

1. It can lead to coronary artery disease.
2. It can cause a heart attack.
3. It can restrict blood flow to the heart muscle.
4. It can cause myocardial infarction.

1.2 Which of the following is NOT a risk factor for cardiovascular disease?

1. Consumption of aspirin.
2. Cigarette smoking.
3. Elevated blood cholesterol.
4. Obesity stress.

1.3 Which of the following decreases blood volume by increasing the excretion of sodium and fluids?

1. renin.
2. digitalis.
3. nitroglycerin.
4. diuretics.

1.4 Which of the following are the symptoms of heart failure.

1. Fatigue.
2. Shortness of breath.
3. Fluid accumulation.
4. All of the above are symptoms of heart failure.

1.5 Atrial fibrillation is a common symptom that only occurs with_____.

1. mitral stenosis
2. mitral regurgitation
3. aortic stenosis
4. aortic regurgitation

1.6 One of the most common causes of valvular heart disease is_____.

1. hypertension
2. tobacco smoking
3. diabetes
4. alcoholism

1.7 All are assessment findings of pericarditis EXCEPT?

1. Ankle oedema.
2. Substernal pain.
3. Friction rubs.
4. Elevated WBC count.

1.8 Which signs and symptoms are present with a diagnosis of pericarditis?

1. Fever, chest discomfort, and elevated erythrocyte sedimentation rate (ESR).
2. Low urine output secondary to left ventricular dysfunction.
3. Lethargy, anorexia, and heart failure.
4. Pitting oedema, chest discomfort, and nonspecific ST-segment elevation.

1.9 What is the name of the tiny balloon-like sacs?

1. Bronchi.
2. Alveoli.
3. Larynx.
4. Tracheas.

1.10 Which two diseases could result in chronic obstructive pulmonary disease?

1. Asthma and chronic bronchitis.
2. Emphysema and chronic bronchitis.
3. Congestive heart failure (CHF) and obstructive sleep apnoea (OSA).
4. Congestive heart failure (CHF) and emphysema.

1.11 What's the most common complication of peptic ulcer?

1. Acid reflux.
2. Vomiting.
3. Bleeding.
4. Burning sensation.

1.12 Which of the following is a benign tumour of small intestines?

1. Adenocarcinoma.
2. Polyp.
3. Mucosa associated lymphoid tissue (MALT).
4. Ulcer.

1.13 Most common pure germ cell tumour of the ovary is:

1. Choriocarcinoma.
2. Dysgerminoma.
3. Embryonal cell tumour.
4. Malignant teratoma.

1.14 Malignant tumour in fat tissue is called a:

1. Fibrosarcoma.
2. Liposarcoma.
3. Osteosarcoma.
4. Rhabdomyosarcoma.

1.15 Signs and symptoms of Huntington's disease include all but_____.

1. Intellectual impairment.
2. Stumbling and falls.
3. Akinesia.
4. Mood swings.

TOTAL MARK: (2x15) = [30]

Department of Life and Consumer Sciences

CLINICAL PATHOLOGY III – BMI3707

Semester code: 02

Assignment 02

Due Date: 21St September 2018

Unique assignment number: 895539

INSTRUCTIONS

1) Type your assignment on a computer. You may print on ordinary white paper and not necessarily the Unisa typing paper provided. Please use 1,5 spacing and Arial or a similar font of 11 or 12 pitch. Leave a line open between questions. If you are not able to type your assignment on a computer, use a black or blue pen and please write neatly.

2) If you want to submit a hard copy of this assignment, use the assignment cover and envelope provided. When stapling your answers inside the cover, staple only in the top left-hand corner.

3) Your student number is the number just below your address. This number must be filled in on the assignment cover and must also be quoted in all correspondence with the university.

4) Answer all questions as briefly and clearly as possible in your own words.

5) Number your answers correctly.

QUESTION 1 **[22]**

1.1 Compare the properties of endothelial cells found in larger vessels and in capillaries. (2)

1.2 Which substances are expressed by activated endothelium cells? (5)

1.3 Describe the three subtypes of capillary endothelium. (6)

1.4 What are congenital heart diseases? (2)

1.5 List five common acyanotic congenital heart diseases. (5)

1.6 Describe two types of cyanotic congenital heart diseases. (2)

QUESTION 2 **[18]**

2.1 Distinguish between atherosclerosis and arteriosclerosis. (4)

2.2 What is accelerated hypertension? (1)

2.3 Explain the characteristics of impaired blood flow to the coronary arteries. (2)

2.4 What is thromboembolism? (2)

2.5 Describe venous and arterial thrombosis. (6)

2.6 What are the physiological functions of?

a) Endothelin-1, (1)
b) Tissue factor, (1)
c) Platelet activating factor. (1)

QUESTION 3 **[22]**

3.1 What is meant by disseminated intravascular coagulation (DIC)? (3)

3.2 Write down the complications of disseminated intravascular coagulation. (5)

3.3 State the three categories of pulmonary diseases. (3)

3.4 Name the four risk factors that increases the chances of blood clot formation? (4)

3.5 Write down the symptoms of pulmonary embolism. (4)

3.6 Define lymphoma and describe two types of lymphoma. (3)

QUESTION 4 **[15]**

4.1 Describe neuroendocrine tumours and gastrointestinal stromal tumours. (2)

4.2 Describe Crohn's disease and its symptoms. (3)

4.3 What is an adenoma? (1)

4.4 Distinguish between colorectal and anal cancer. (4)

4.5 Describe two types of colorectal cancer. (2)

4.6 Distinguish between teratoma, dysgerminoma and germ cell carcinomas. (3)

QUESTION 5 **[25]**

5.1 Define stroke, and list four symptoms of stroke? (5)

5.2 What are the risk factors for stroke? (3)

5.3 Explain what is traumatic brain injury and intercranial haemorrhage. (2)

5.4 What is meningitis? (1)

5.5 List five types of meningitis. (5)

5.6 Describe tuberculous, viral and fungal meningitis. (3)

5.7 Define dementia. (2)

5.8 Distinguish between Alzheimer and Creutzfeldt-Jakob diseases. (4)

QUESTION 6 **[28]**

6.1 Describe the two major forms of diabetes insipidus. (2)

6.2 Distinguish between diabetes insipidus and diabetes mellitus. (4)

6.3 Describe the presenting factors of nephrotic and nephritic kidney diseases? (7)

6.4 What are the causes of interstitial nephritis? (3)

6.5 Distinguish between acute and chronic glomerulonephritis. (4)

6.6 What are the possible causes of glomerulonephritis? (3)

6.7 Describe nephrocalcinosis. (2)

6.8 Write short notes on the following:

a) renal neoplasm, (1)
b) bladder cancer, (1)
c) testicular neoplasm. (1)

TOTAL MARKS: [130]