

Question **16**

Correct

Mark 1.00 out of 1.00

🚩 Flag question

Churukian-Schenk method

Select one or more:

- a. For demonstrating argentaffin granules
✓
- b. For demonstration of argyrophil granules
✓
- c. The preferred fixative is picric acid
- d. Granules are stained blue

The correct answers are: For demonstrating argentaffin granules, For demonstration of argyrophil granules

Question **5**

Correct

Mark 1.00 out of 1.00

 Flag question

A special stain for phospholipids

Select one:

- a. Nile red ✓
- b. Sudan IV
- c. Osmium tetroxide
- d. Sudan II

The correct answer is: Nile red

Question **6**

Correct

Mark 1.00 out of 1.00

 Flag question

Question 6

Correct

Mark 1.00 out of 1.00

 Flag question

Resinous mounting media

Select one or more:

- a. Canada balsam is used routinely
- b. Rarely used
- c. Require ringing
- d. Are hydrophobic ✓

The correct answer is: Are hydrophobic

Question **16**

Partially correct

Mark 0.50 out of 1.00

🚩 Flag question

Left-to-right shunts

Select one or more:

- a. Are a rare type of congenital heart disease
- b. Results in right ventricular atrophy
- c. An example is patent ductus arteriosus
✓
- d. Increases lung vascular resistance

Your answer is partially correct.

You have correctly selected 1.

The correct answers are: Increases lung vascular resistance, An example is patent ductus arteriosus



Question 3

Correct

Mark 1.00 out of 1.00

🚩 Flag question

Ammoniacal silver methods include the following

Select one or more:

- a. Gordon and sweet's stain ✓
- b. Movat's pentachrome stain
- c. Jones periodic acid methanamine silver ✓
- d. Martius scarlet blue

The correct answers are: Jones periodic acid methanamine silver, Gordon and sweet's stain

Question **7**

Complete

Mark 1.50 out of 5.00

 Flag question

Briefly describe gross morphology of an atheromatous plaque.

An atheromatous plaque has a lipid cap and a lipid core.

Comment:

What is the composition of lipid core and fibrous cap??

Question **8**

Correct

Mark 1.00 out of 1.00

 Flag question

Congenital heart diseases associated with left-to-





Started on Thursday, 20 August 2020,
2:00 PM

State Finished

Completed on Thursday, 20 August 2020,
2:58 PM

Time taken 58 mins 22 secs

Grade 35.72 out of 50.00 (71%)

Question 1

Correct

Mark 1.00 out of 1.00

Flag question

Acute pyelonephritis is the important manifestation of urinary tract infection.

Select one:

- True ✓
- False

The correct answer is 'True'.

Question 2

Complete



Periodic acid Schiff (PAS) technique is the most commonly used method for demonstrating glycogen in tissue sections.

- a) State the principle for this technique (2 marks)
- b) PAS detects other carbohydrate containing molecules, outline the steps you can use to verify specificity for glycogen (8 marks)

A). PAS principle:

Periodic acid reagent will oxidize the hydroxyl groups in the carbohydrate leading to free aldehyde groups which will react with the Schiff reagent to give a red magenta colour results seen under microscope.

B). Method to verify specificity for glycogen. An enzyme digestion technique is used. In this case which is diastase.

First two sections will be prepared of which one will be treated with the diastase enzyme which digests glycogen and the other will not.

Secondly the two sections will then be stained the normal way with the standard PAS technique.

Results: glycogen staining in the diastase treated tissue =absent ,

Glycogen staining in the untreated slide=magenta colour.

Interpretation: this results demonstrates that the

A). PAS principle:

Periodic acid reagent will oxidize the hydroxyl groups in the carbohydrate leading to free aldehyde groups which will react with the Schiff reagent to give a red magenta colour results seen under microscope.

B). Method to verify specificity for glycogen. An enzyme digestion technique is used. In this case which is diastase.

First two sections will be prepared of which one will be treated with the diastase enzyme which digests glycogen and the other will not.

Secondly the two sections will then be stained the normal way with the standard PAS technique.

Results: glycogen staining in the diastase treated tissue =absent ,

Glycogen staining in the untreated slide=magenta colour.

Interpretation: this results demonstrates that the loss of the magenta colour in the first slide was due to the loss of glycogen which was digested by the enzyme diastase.

Question **14**

Partially correct

Mark 0.50 out of 1.00

🚩 Flag question

Dilated cardiomyopathy

Select one or more:

- a. Characterised by systolic dysfunction
- b. All heart chambers are dilated ✓
- c. Rare type of cardiomyopathy
- d. Always due to genetic mutations

Your answer is partially correct.

You have correctly selected 1.

The correct answers are: Characterised by systolic dysfunction, All heart chambers are dilated

Question **15**

Partially correct



Question 11

Partially correct

Mark 0.50 out of 1.00

🚩 Flag question

Stable angina

Select one or more:

- a. Is a continuous chest pain
- b. Most common type of angina ✓
- c. Is associated with plaque disruption
- d. Occurs due to myocardial ischemia

Your answer is partially correct.

You have correctly selected 1.

The correct answers are: Most common type of angina, Occurs due to myocardial ischemia

Question 10

Partially correct

Mark 0.50 out of 1.00

🚩 Flag question

Abdominal aortic aneurysms

Select one or more:

- a. Often occur in the thoracic aorta
- b. Mainly develops before 50 years ✖
- c. Major cause is atherosclerosis ✔
- d. Can cause renal ischemia

Your answer is partially correct.

You have correctly selected 1.

The correct answers are: Major cause is atherosclerosis, Can cause renal ischemia

Question 2

Partially correct

Mark 0.50 out of 1.00

 Flag question

Which of the following are true

Select one or more:

- a.
Metachromatic dyes- stains a tissue component a different colour to the dye solution ✓
- b.
Amphoteric dyes- stain both the nucleus and cytoplasm in a single dye bath ✗
- c.
Natural dyes- extracted from natural sources
- d.
Basic dyes- used to stain proteins in the cytoplasm and connective tissues

The correct answers are:

Metachromatic dyes- stains a tissue component a different colour to the dye solution,



✓ Flag question

A) Outline two (2) causes of right sided heart failure.

B) Describe the gross morphology of the heart in right sided heart failure.

C) State three (3) clinical complications of right sided heart failure.

(A). It occurs mostly as a result of left sided heart failure. This is so when there is left sided heart failure which could be intrinsic..this leads to backward flow of blood resulting in congestion and arterial hypertension which eventually leads to right side heart failure which manifests as right ventricular hypertrophy.

(B). There is right ventricular hypertrophy and even right atrium hypertrophy in chronic states.

(C).

1. Peripheral pitting oedema

2. Ascitis

3. hepatomegaly.

Comment:



Question **15**

Partially correct

Mark 0.30 out of 1.00

🚩 Flag question

Obstructive congenital cardiac diseases

Select one or more:

- a. Due to stenosis of valves ✓
- b. Females with Turner syndrome often have coarctation
- c. Seen in teratology of Fallot
- d. The most common is pulmonic valve stenosis

Your answer is partially correct.

You have correctly selected 1.

The correct answers are: Due to stenosis of valves, Seen in teratology of Fallot, Females with Turner syndrome often have coarctation

Question 19

Incorrect

Mark 0.00 out of 1.00

Flag question

Wegener granulomatosis mostly affects medium sized blood vessels of the lungs and upper respiratory tract

Select one:

- True
- False **x**

The correct answer is 'True'.

Chronic bronchitis

Select one or more:

- a. Cause chronic outflow obstruction
- b. Important risk factor is smoking
- c. Can coexist with emphysema ✓
- d. Patients can develop heart failure

Your answer is partially correct.

You have correctly selected 1.

The correct answers are:

Important risk factor is smoking,
Can coexist with emphysema, Cause chronic
outflow obstruction,
Patients can develop heart failure



Methods of staining

Select one or more:

- a. Vital staining- application of simple dye to stain tissue in varying shades of colour
- b. Impregnation- deposition of salts of heavy metals on or around tissue constituents 
- c. Indirect staining- use of accentuator to improve either the selectivity or intensity of stain
- d. Direct staining- mixing the stain with living tissue

The correct answers are: Indirect staining- use of accentuator to improve either the selectivity or intensity of stain,
Impregnation- deposition of salts of heavy metals on or around tissue constituents

BMS 3330 CELLULAR PATHOLOGY

Dashboard / My courses / BMS 3330

/ Histochemistry of Connective Tissue and Muscle fibres

/ Assessment II

Started on Thursday, 3 September 2020, 2:00 PM

State Finished

Completed on Thursday, 3 September 2020, 2:38 PM

Time taken 37 mins 47 secs

Grade 28.42 out of 35.00 (81%)

Question **1**

Partially correct

Mark 0.67 out of 1.00

🚩 Flag question

Alum hematoxylin



Question **24**

Correct

Mark 1.00 out of 1.00

 Flag question

Complications of myocardial infarction

Select one or more:

- a. Cardiogenic shock ✓
- b. Pericarditis ✓
- c. Arrhythmias ✓
- d. Ventricular aneurysms ✓

Your answer is correct.

The correct answers are: Ventricular aneurysms, Arrhythmias, Cardiogenic shock, Pericarditis



BMS 3310 GENERAL AND SYSTEMIC PATHOLOGY

Dashboard / My courses / BMS 3310 / Pulmonary Pathology / Assessment II

Started on Thursday, 20 August 2020, 2:00 PM

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Completed on Thursday, 20 August 2020, 2:58 PM

Time taken 58 mins 22 secs

Grade 35.72 out of 50.00 (71%)

Question **1**

Correct

Mark 1.00 out of 1.00

🚩 Flag question

Acute pyelonephritis is the important manifestation of urinary tract infection.

Question **12**

Correct

Mark 1.00 out of 1.00

🚩 Flag question

Infective endocarditis

Select one:

- a.
Friable vegetations are absent
- b.
Only the valves are infected
- c.
Systemic embolism can cause septic infarcts
✓
- d.
Acute endocarditis is caused by microbes of low virulence

Your answer is correct.

The correct answer is:

Systemic embolism can cause septic infarcts



Question **23**

Correct

Mark 1.00 out of 1.00

🚩 Flag question

Acute respiratory distress syndrome

Select one or more:

- a. Can cause renal failure ✓
- b. Can be due to pneumonia ✓
- c. Alveoli are filled with exudates ✓
- d. Characterised by diffuse alveolar damage ✓

Your answer is correct.

The correct answers are: Characterised by diffuse alveolar damage, Can be due to pneumonia, Alveoli are filled with exudates, Can cause renal failure

Question 6

Correct

Mark 1.00 out of 1.00

🚩 Flag question

Complications of hypertension

Select one or more:

- a. Heart failure ✓
- b. Stroke ✓
- c. Renal failure ✓
- d. Atherosclerosis ✓

Your answer is correct.

The correct answers are: Stroke, Renal failure, Heart failure, Atherosclerosis

Question 21

Correct

Mark 1.00 out of 1.00

 Flag question

Atopic asthma

Select one:

- a. Positive family history is absent
- b. IgE levels in serum are normal
- c. Triggered by environmental antigens ✓
- d. Airway obstruction is irreversible

Your answer is correct.

The correct answer is: Triggered by environmental antigens

Question 8

Correct

Mark 1.00 out of 1.00

 Flag question

Congenital heart diseases associated with left-to-right shunts are characterised by early cyanosis.

Select one:

- True
- False ✓

The correct answer is 'False'.

Question **5**

Partially correct

Mark 0.50 out of 1.00

🚩 Flag question

Pulmonary hypertensive heart disease

Select one or more:

- a. Caused by primary disorders of vasculature
- b. Rarely accompanied by right sided heart failure
- c. Also known as cor pulmonale ✓
- d. Only characterised by right ventricular hypertrophy

Your answer is partially correct.

You have correctly selected 1.

The correct answers are: Also known as cor pulmonale, Caused by primary disorders of vasculature

Discuss pathophysiology of nephrotic syndrome.

Glomerular damage or injury leads to increased permeability of the glomerular capillaries to proteins. This results in reduced osmotic pressure due to increased loss of body proteins . Then there is hyperlipidemia to compensate lost proteins. The reduced plasma volume also leads to activation of RAAS this together with lost fluids in tissue lead to retention of fluids leading to oedema. There is an increase in lost proteins through urine. Greater than 3.5 g/24hrs.

Comment:

Question 13

Correct

Mark 1.00 out of 1.00

🚩 Flag question

Congo red

Select one or more:

- a. Gives a more intense staining reaction than Sirius red
- b. Stains amyloid blue
- c.
It is not specific for amyloid ✓
- d. Gives red to green birefringence with polarized light ✓

The correct answers are:

It is not specific for amyloid, Gives red to green birefringence with polarized light

Question **14**

Incorrect

Mark 0.00 out of 1.00

 Flag question

The following stains can be used to demonstrate only DNA

Select one or more:

- a. Acridine orange **✘**
- b. Quinacrine
- c. Feulgen
- d. Gallocyanin-Chrome alum

The correct answers are: Feulgen, Quinacrine

Question **15**

Correct

Mark 1.00 out of 1.00

 Flag question

Question 9

Complete

Mark 8.00 out of 10.00

🚩 Flag question

State the purpose, principle and staining characteristic of Ziehl-Neelsen technique.

Purpose:

to demonstrate Alcohol-acid fast bacillus e.g mycobacterium tuberculosis.

Principle:

Lipoid capsule if the acid fast organism takes up the carbol fuchsin and resists discolourisation with an acid alcohol rinse. Phenol in the solution helps to reduce the surface tension provided by the lipid envelop.

Staining characteristics:

Acid fast bacillus =deep red

Nuclei=blue.

Question **20**

Incorrect

Mark 0.00 out of 1.00

🚩 Flag question

Tuberculosis

Select one:

- a. Only secondary tuberculosis results in systemic dissemination
- b. Reactivation tuberculosis mostly manifests as cavitary lesions
- c. Characterised by formation of granulomas in immunocompromised patients
✘
- d. Only affects lungs

Your answer is incorrect.

The correct answer is: Reactivation tuberculosis mostly manifests as cavitary lesions

Question 15

Correct

Mark 1.00 out of 1.00

🚩 Flag question

The following techniques can be used for demonstrating calcium in tissue

Select one or more:

- a. Hall's stain
- b. Rhodanine
- c. Von Kossa ✓
- d. Alizarin Red S ✓

The correct answers are: Von Kossa, Alizarin Red S

Question **12**

Incorrect

Mark 0.00 out of 1.00

 Flag question

The following stains are used for demonstrating RNA

Select one or more:

- a. Quinacrine
- b. Feulgen **×**
- c. Methyl green pyronin Y
- d. Ethidium bromide

The correct answers are: Methyl green pyronin Y, Ethidium bromide

Question **13**

Correct

Mark 1.00 out of 1.00

 Flag question

Question 7

Correct

Mark 1.00 out of 1.00

🚩 Flag question

Silver impregnation

Select one or more:

- a. The mechanism is similar to the effects of dyes
- b. Can give nonspecific background deposits ✓
- c. Gives good contrast ✓
- d. Very sensitive method ✓

The correct answers are: Can give nonspecific background deposits, Very sensitive method, Gives good contrast

Question 10

Correct

Mark 1.00 out of 1.00

 Flag question

Best fixative for demonstrating lipids is:

Select one:

- a. Gluteraldehyde
- b. Neutral buffered formalin 
- c. Mercuric chloride
- d. Picric acid

The correct answer is: Neutral buffered formalin

Question 4

Correct

Mark 1.00 out of 1.00

🚩 Flag question

Ammoniacal silver methods include the following

Select one or more:

- a. Martius scarlet blue
- b. Jones periodic acid methanamine silver ✓
- c. Gordon and sweet's stain ✓
- d. Movat's pentachrome stain

The correct answers are: Jones periodic acid methanamine silver, Gordon and sweet's stain

Question **2**

Complete

Mark 3.00 out of 3.00

 Flag question

State three (3) complications of atherosclerosis.

Blood vessels occlusion

Plaque disruption

Aneurysm

Comment:

Question **3**

Partially correct

Mark 0.50 out of 1.00

 Flag question



Question **3**

Partially correct

Mark 0.50 out of 1.00

🚩 Flag question

Causes of Ischaemic heart disease.

Select one or more:

- a. Hypertrophy of the myocardium
- b. Vasoconstriction ✓
- c. Systemic hypotension
- d. Emboli ✓

Your answer is partially correct.

You have correctly selected 2.

The correct answers are: Hypertrophy of the myocardium, Emboli, Vasoconstriction, Systemic hypotension

Question **22**

Correct

Mark 1.00 out of 1.00

🚩 Flag question

The following are true regarding Silicosis EXCEPT

Select one:

- a. Most common chronic occupational disease in the world
- b. Patients can develop cor pulmonale
- c. Is an obstructive lung disease ✓
- d. Causes scarring of lungs

Your answer is correct.

The correct answer is: Is an obstructive lung disease

Question **23**



Question **18**

Correct

Mark 1.00 out of 1.00

 Flag question

The following are true regarding atelectasis
EXCEPT

Select one:

- a.
Can give rise to hypoxia
- b.
Contraction atelectasis can be reversed ✓
- c.
Can be seen in a patient with congestive
heart failure
- d.
Complicates acute lung injury

Your answer is correct.



Question 8

Partially correct

Mark 0.75 out of 1.00

🚩 Flag question

Verhoeff's-Van Gieson stain

Select one or more:

- a. Regressive staining is employed ✓
- b. Stain elastic fibers blue-black to black ✓
- c. For staining elastic fibers only
- d. Ferric chloride serves as a dye trapping agent ✗

The correct answers are: Regressive staining is employed, Stain elastic fibers blue-black to black

Mark 3.00 out of 3.00

Flag question

State three (3) complications of atherosclerosis.

Blood vessels occlusion

Plaque disruption

Aneurysm

Comment:

Question **3**

Partially correct

Mark 0.50 out of 1.00

Flag question

Causes of Ischaemic heart disease.

Select one or more:



Question 26

Partially correct

Mark 0.67 out of 1.00

🚩 Flag question

Calcific aortic stenosis

Select one or more:

- a. Mostly seen in patients aged 20
- b. Causes myocardial hypertrophy ✓
- c. Common cause of aortic stenosis ✓
- d. Is calcification of cuspal valves

Your answer is partially correct.

You have correctly selected 2.

The correct answers are: Is calcification of cuspal valves, Common cause of aortic stenosis, Causes myocardial hypertrophy

Question 17

Correct

Mark 1.00 out of 1.00

 Flag question

Emphysema

Select one:

- a. Most common type is irregular emphysema
- b. Characterized by scarring
- c. Reversible enlargement of air spaces
- d. There is loss of elastic recoil ✓

Your answer is correct.

The correct answer is: There is loss of elastic recoil

Question 1

Partially correct

Mark 0.67 out of 1.00

🚩 Flag question

Alum hematoxylin

Select one or more:

- a. Produces good nuclear staining ✓
- b. The mordant is in the form of 'potash ammonium'
- c. Stains the nuclei a red colour
- d. Comprises most of the stains used routinely ✓

The correct answers are: Comprises most of the stains used routinely, Produces good nuclear staining, Stains the nuclei a red colour

Question 9

Correct

Mark 1.00 out of 1.00

🚩 Flag question

Modifiable risk factors of atherosclerosis

Select one or more:

- a. Diabetes ✓
- b. Family history
- c. Hypertension ✓
- d. Increasing age

Your answer is correct.

The correct answers are: Diabetes, Hypertension

Complete

Mark 9.00 out of 10.00

Flag question

Periodic acid Schiff (PAS) technique is the most commonly used method for demonstrating glycogen in tissue sections.

- a) State the principle for this technique (2 marks)
- b) PAS detects other carbohydrate containing molecules, outline the steps you can use to verify specificity for glycogen (8 marks)

A). PAS principle:

Periodic acid reagent will oxidize the hydroxyl groups in the carbohydrate leading to free aldehyde groups which will react with the Schiff reagent to give a red magenta colour results seen under microscope.

B). Method to verify specificity for glycogen. An enzyme digestion technique is used. In this case which is diastase.

First two sections will be prepared of which one will be treated with the diastase enzyme which digests glycogen and the other will not.

Secondly the two sections will then be stained the normal way with the standard PAS technique.





Time taken 37 mins 47 secs

Grade 28.42 out of 35.00 (81%)

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Partially correct

Mark 0.67 out of 1.00

Flag question

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- c. Stains the nuclei a red colour
- d. Comprises most of the stains used routinely ✓

The correct answers are: Comprises most of the stains used routinely, Produces good nuclear staining, Stains the nuclei a red colour

Dr. Ashutosh Singh
DR. ASHUTOSH SINGH PHOTOS

