# Tikrit University College of Veterinary Medicine

Dept. of. Pathology and Poultry diseases



Class: 3rd stage Subject: pathology

# Questions Bank

## **Lec1: Circulatiory Disturbances**

#### Q1// Define the following:

1-ischemia 2- congestion 3 -Hypostatic congestion 4 -Hemothorax.
5-hematemesis 6- Ecchymosis 7- Primary Shock 8- Secondary
Shock9 - Hypostatic congestion. 10 - Anasarca 11- Fat emboli 12 Gas emboli 13- Shock 14- Hemopericardium 15 - Hyperemia16 Hematuria 17 - Post mortem clot 18 - Embolus 19 - Infarction Heart
failure 20- chicken fat clot 21- Cardiac edema Renal edema
epistaxis 22- Brown induration of lung 23- Nutmeg liver 24Thrombus hematemesis.

## Q2// Fill in the blanks with suitable word(s).

1.Accumulation of increased amount of blood in blood vessels in known
as
2. Presence of blood in urine, sputum and faeces is known as,
and , respectively.
3 haemorrhages in large intestine is example of rinderpest
in animals.

accumulation of fluid in tunica vaginalis.
5 occurs in poultry due to accumulation of fluid in pericardial
sac which is also known as"
6.Shock is circulatory disturbance characterized by decrease in,
and by
7.Agglutination of erythrocytes in blood vessels is known as
, which may act as and leads to, ,
and
8.Discharge of blood from uterus in known as while the
process of blood in versities is called as
presence of blood in vomitus is called as
presence of blood in vornitus is called as
Q3.Write true or false against each statement.Correct the false
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Q3.Write true or false against each statement.Correct the false statement.  1 Epistaxis is bleeding from mouth.  2 Cardiac temponade is failure of heart due to excessive accumulation of blood in pericardial sac.
Q3.Write true or false against each statement.Correct the false statement.  1 Epistaxis is bleeding from mouth.  2 Cardiac temponade is failure of heart due to excessive accumulation of blood in pericardial sac.  3 In arteries the increased amount of blood as known

deposits.
7 Hematoma is the accumulation of blood in spherical
shaped mass.
8 Infarction is local area of necrosis as a result of oedema.
9 Sludged blood is agglutination of RBC after haemorrhage.
10 Hydrothorax is accumulation of fluid in thoracic cavity.
Q4//Select most appropriate word(s) from the four options given
against each statement.
agamst each statement.
1. Petechial haemorrhage are of size.
(a) >1 mm (b) 2 mm (c) 5 mm (d) 10 mm
2. Parasitic emboli are formed in dogs due to
(a) Strongylus spp (b) Dirofilaria immitis (c) Coccidia spp. (d)Sarcoptes
canis
3. Metrorrhagia is haemorrhage from
(a) Intestine (b) Stomach (c) Oviduct (d) Uterus
4. Septic thrombus must have in it.
(a) Virus (b) Parasite (c) Fungi (d) Bacteria
5. Presence of foreign material in blood vessels is known as
(a) Thrombus (b) Emboli (c) Ischemia (d) Infarction

6. ...... Laminated thrombi alternatively have red and grey colour

6. Accumulation of fluid in peritoneal cavity is known as	
(a) Anasarca (b) Hydropericardium (c) Hydrothorax (d) Ascites	
7. Shock is circulatory disturbance characterized by	
(a)Reduced blood volume (b) Reduced blood flow (d	2)
Hemoconcentration (d)All of the above	
8. Active hyperemia is accumulation of blood in	
(a) Veins (b) Lymphatics (c) Arteries (d) Intestines	
9. Escape of all blood constituents through intact blood vessel is know	n
as	
(a) Rhexis (b) Ecchymosis (c) Petechiae (d) Diapedesis	
10. Erythrophagocytosis is a feature of	
(a) Congestion (b) Oedema (c) Sludged blood (d) Infarction	
Q5// The main Factors that essential for thrombus formation are:	
A- b- c-	
Q6// Describe the microscopic pictures for CVC	
A- b- c- d-	
Q7// Give the cause for each of the following:	
a- Local active hyperemia	
b- Local passive hyperemia	
c- General passive hyperemia.	
d- Infarction.	

e- Petecniai nemorrnage
f- Ischemia
Q8// List the following: List 3 of the sequelae of general passive hyperemia.
- List the types of hemorrhages according their color
- The causes of thrombus formation are:
- Types of thrombi according to their location are
- Types of the thrombi according their color
- Infarction may be
- Mention the different types emboli,
- the gross Pictures of chronic local venous congestion are:
-The main causes of an ischemia are: a b
- The fate of an infarction may be: a- b- c-
- Mention the causes of:
a- Acute general passive hypercmia
b- Chronic general venous congestion
c- Chronic local passive hyperemia
- Obstruction of an end artery leads to
- Local anemia is called
- The lesion induced by cardiac weakness is

- 'Damaging of the tunica intima of the blood vessels lead to
- The microscopic pictures of chronic general passive hyperemia are:A b c d
- Causes of edema are: A b c-
- Fate of thrombus are a b c-
- Types of hemorrhage according to their size are.-
- The fate of an infarcted area in the kidney a b c
- Differentiate between thrombus and post mortem clot:

#### Lec2: Inflammation

### Q9// Answer the following questions:

- 1-Tabulate the difference between inflammatory and noninflammatory fluid.
- 2-What are the functions of exudates during an acute inflammation?
- 3-What are the functions of fibrin an area of acute inflammation?
- 4- What are the functions of the following inflammatory cells during inflammation, Neutrophils, Esinophils, Lymphocytes, and macrophages?
- 5-Describe the gross appearance of fibrinous inflammation on mucous membrane.

7- What are the possible fates of fibrinous pericarditis?
8- How an abscess is formed?
9- Describe the fate of an abscess?
Q 10// Fill in the blanks with suitable word(s) to answer thefollowings.  1.The cardinal signs of inflammation are ,
, and
2.Acute inflammation is characterized by, while
" changes are the characteristic feature of chronic
inflammation.
3.Inflammation of mouth cavity is known as, of
palate as,
tongue as and of salivary gland as
4.Inflammation starts with transient, followed by
, resulting in coming out of leucocytes which
reaches in tissues spaces to release antimicrobial factors such
as , , , , and
5. There are three types of lyrnphocytes viz ,
, and

6-Describe the gross appearance of fibrinous inflammation on serous

membranes.

, of which the later is further classified as
, and
6.Giant cells are and formed with fusion of
several to kill acid fast bacteria, and may be of
and types.
7. Arachidonic acid is an acid formed in body by conversion of
to form prostaglandin
through and pathway.
8.Serotnin is also known as and it is present in
tissues of and and
cells and acts on to cause and
but is mild in action in comparison to histamine.
9. LysQsomal granules of neutrophils and macrophages are rich
in and
10. Cytokines are like substances produced by
and mostly and are of " in nature.
11. Chemokines are proteins produced by ,
, , , , and and act as
chemotactic factor for , and
12.Repair is the substitution of tissue by and is
characterized by the presence of

# Q11// Write true or false against each statement and correct the false statement.

- 1. ..... Keratitis is the inflammation of eyelid.
- 2. ..... Inflammation of gums is known as gingivitis.
- 3. ..... Salpingitis is the inflammation of salivary glands.
- 4. ..... Inflammation of pituitary gland is known as posthitis.
- 5. ..... Densinitis is the inflammation of lamina densa of glomerular basement membrane.
- 6. ..... Polymorphonuclear cells are first line of defence in body.
- 7. ..... Giant cells are multinucleated neutrophils formed to kill the bacteria.
- 8. ..... Mast cells have basophilic granules rich in histamine
- 9. ..:... Arachidonic acid is activated by Cs. to form prostaglandin.
- 10. ..... Interleukins are those cytokines which are required for cell to cell interaction among the immunocytes.
- 11...... Bacteria are phagocytosed by macrophages and are destroyed by lysosomal enzymes.
- 12. ..... Nitric oxide produced in phagocytic cells is not toxic to phagocytosed material.

- 13 ...... Catarrhal inflammation is characterized by increased mucous as principal constituent of the exudate on the nucous surface.
- 14. ..... In coli septicemia, there is false membrane formation over liver and heart composed of flbrous cells.
- 15 ...... Suppurative inflammation is characterized by the presence of liquifaction and neutrophils.
- 16. ..... Granuloma consists of central caseative necrosis surrounded by lymphocytes, macrophages, epithelioid cells and giant cells.
- 17. ..... Eosinophilic inflammation is met with bacterial infections.
- 18 ...... Granulation tissue is composed offlbroblasts and small blood vessels.
- 19 ...... Fibrinous inflammation is seen in herpes virus infection.
- 20 ...... Perivascular cuffing is accumulation of neutrophils around the blood vessels.

## Q.12// Define the followings.

- 1. Lampas 13. Cystitis 25. Pavementation
- 2. Glossitis 14. Carditis 26. Diapedesis
- 3. Blepheritis 15. Densinitis 27. Giant cells
- 4. Rhinitis 16. Steatitis 28. Plasma cells
- 5. Encephalomyelitis 17. Posthitis 29. Monokines
- 6. Nephritis 18. Funiculitis 30. Lymphokines

7. Salpingitis 19. Orchitis 31. Chemokines
8. Proctitis 20. Leptomeningitis 32. Chemotaxis
9. Typhlitis 21. Fascitis 33. Phlegmon
10. Cheilitis 22. Spondylitis 34. Granuloma
11.Abscess 23. Balanitis 35. Granulation36 Chemotaxis.37
Organization.
12. Phlebitis 24. Neuritis
Q13// Write short notes on.
1. Cells in inflammation
2. Chemical mediators of inflammation
3. Cytokines
4. Phagocytosis
4. Phagocytosis  Q14// Select appropriate word(s) from four options given with each
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4. Inflammation of ovary is known as
(a) Uveitis (b) Urethritis (c) Oopheritis (d) Metritis
5. Primary granules ofneutrophils contain
(a) Lactoferin (b) Lysozyme (c) Myeloperoxidase (d) Lipase
6. Lecucocytes marginate during vasodilation and come out from
blood vessels through pseudopodia movement; the process is
known as
(a) Diapedesis (b) Rhexis (c) Pavementation (d) Leucopenin
7. Macrophages become elongated with marginal nuclei to kill the acid
fast bacteria and are known as
(a) Giant cells (b) Epithelial cells (c) Epithelioid cells (d) Plasma
cells
8. Langhans type of giant cells are observed in lesions in
(a) Tuberculosis (b) Neoplasms (c) Leukemia (d) Rinderpest
9. Lymphocytes modified to produce antibodies are known as
(a) T- helper cells (b) T-cytotoxic cells (c) Plasma cells (d)
Epithelioid cells
10. Fibroblasts proliferate in inflammation.
(a) Acute (b) Subacute (c) Per acute (d) Chronic
11. C3a, Csa and C4a are the complement components which are also
known as

(a) Anaphylotoxin (b) Prostaglandins (c) Vasoactive amines (d) None
of the above
12. Cytokines are in action.
(a) Autocrine (b) Paracrine (c) Endocrine (d) All of the above
13. Tumor necrosis factor or cytotoxins are produced by macrophages
and T-cells and are associated within tumor.
(a) Necrosis (b) Necrobacillosis (c) Degeneration (d) Apoptosis
14. Coating of foreign particles / bacteria by immunoglobulins to make
it more readily palatable by phagocytic cells is known as
(a) Opsonization (b) Adherence (c) Chemotaxis (d) Digestion
15. Catarrhal inflammation is characterized by increased number of
······································
(a) Goblet cells (b) Neutrophils (c) Giant cells (d) Epithelial cells
16. Fibrinous inflammation is characterized by the presence of as
principal constituent of exudates.
(a) Serum (b) Neutrophils (c) Fibrin (d) Fibroblasts
17. The principal constituent of purulent exudates is
(a) Serum (b) Plasma (c) Neutrophils (d) Eosinophils
18. Granulomatous inflammation is chronic in nature and is found in
(a) Tuberculosis (b) Rinderpest (c) Canine distemper (d) H.S.

- 19. In parasitic and allergic diseases, ...... inflammation is mostly seen.
  - (a) Fibrinous (b) Haemorrhagic (c) Eosinophilic (d) Granulomatous
- 20. Granulation tissue is found in ........
  - (a) Tuberculosis (b) John's disease (c) Repair (d) Rinderpest

# Lec3: Disorders of CELL METABOLISM CALCIFICATION AND PIGMENT METABOLISM

- Q15// Select most appropriate word(s) from the four options given against each statement.
  - 1-Absence of CIIOLINE in the living animal is leading to :
    - a-Amyloidosis'
    - b-Fatly change'
    - c-hydro Pic degeneration'
    - d-Mucoid degeneration'
  - 2- Fatty change in (he hepatic tissue is located in the Centro lobular area in case of:
    - a-Toxicity by alcohol'
    - b-Lack of oxygen in anemia and cardiac failure '
    - c-Mal nutrition'
    - d-All of the Previous'

3- Visceral GOUT is occurred in the bird due to
A -Interfering in the function of the kidney'
b-Dxccssivc intake of Protein '
c-Vitamin A deficiency '
d-All of the Previous'
4- MUCOID Degeneration is occurred physiologically in :
A heart valve'
B Wharton's jelly of the umbilical cord '
C Cachectic animal'
D All of the Previous '
4- ALLERGO-INFECTIOUS condition may leading to :
a-Gout' b -Amyloidosis' c-Fibrinoid degeneration' d-All of
the Previous'
5- Circumscribed round intra cytoplasmic vacuoles are noticed in :
I-Cloudy swelling.
2-Fally change.
3-HydroPic degeneration'
4-All of the Previous
6- ANTTGEN ANTYBODY reaction for along time in living animal is
leading to :
a-Mucoid degeneration.

b. Waxy infiltration. c-Fatty change All of the Previous. 7- FAT PHANEROSIS is a condition leading to: - Fatty degeneration' - fatty infiltration. - All of the previous. 8- RUSSEI,S BODY is: a-Hyalinosis of brain during encephalitis' b-hyalinosis of plasma cell during chronic inflammation ' c-hyatinosis in the kidney during renal affections' d-llyalinosis in mammary gland during nl{stitis' 9- CONGO RED is specific vital stain for detection of : - Mature amyloidosis. - immature amyloidosis -Moderate mature . -All of the Previous--... 10-CORPOIIA AMYLACEA is one of intracellular hyalinosis observed in: a- prostae in chronic prostatitis. b- Mammary gland in chronic mastitis.

c- Involuted Mammary gland.
d- All of the previous.
11- Mitochondrial theory is responsible for :
a - Cloudily swelling .
b- Fatly change.
c - hydropic degeneration.
d- All of the prcvious
12-FAT PHANEROSIS is a condition leading to:
a-FattY degencration.
b-Fetty inliltration.
c-ObcsitY.
d-All of the Previous.
13-Define the following
1 pigmentation
2- infiltration
3-CloudY swelling
4- Hyalinosis
5-Dopa reaction
6.Melanosisc-
7- Anthracnosis

14- Describe 3 microscopic pictures for cloudy swelling in kidneys:
A special stain for hemosiderin is """"""""which give"color
15-Describe 2 microscopic pictures for hydropic degeneration
16-List the types of exogenous pigmentations
17-Describe 2 microscopic changes of amyloidosis in liver
a
b
18-Causesof  fatty change are:
a
b
C
19- Describe 2 microscopic pictures for fatty change in myocardium
A-
B-
20-Describe the microscopic differences between vacuola
degeneration and fatty change in the liver

kidney:			
22- Describe 2 microscopic changes of amyloidosis in liver			
a			
b			
C			
23-The type of calcification which occurs in caseous necrosis is			
and the calcium salts can be stained black with			
24-List the differences between vacuolar degeneration and fatty change in			
the liver			
a- b-			
25- The gross picture of bacon spleen are			
25- The gross picture of bacon spleen are			
26-Special stains for fat are:			
26-Special stains for fat are:  awhich stains fat.,			
26-Special stains for fat are:  awhich stains fat.,  bwhich stains fat.,			
26-Special stains for fat are:  awhich stains fat.,  bwhich stains fat.,  cwhich stains fat.,			

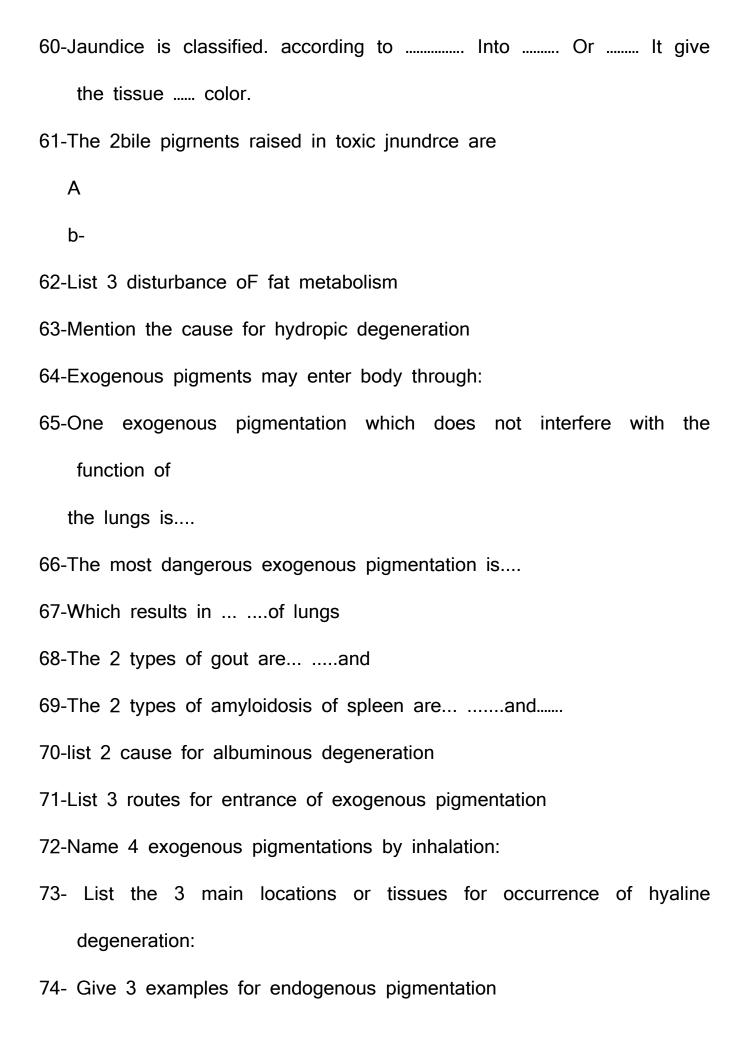
21- Describe 3 of the gross appearance for cloudy swelling in

d-Hemolytic jaundice
29- List the 3 main locations or tissues for occurrence of hyaline
degeneration:
30-List 2 of the microscopic pictures for byaline degeneration of muscle:
31- Mention the types of endogenous pigmentation:,
32-The 2 bile pigments raised in toxic jaundice are
33-List 3 disturbances of fat metabolism
34-Mention the cause for hydropic degeneration
35-Exogenous pigments may enter body through:
36-The most dangerous exogenous pigmentation is
37-The 2 types of gout areandand
38- the 2 types of amyloidosis of spleen are' .,,,,,,,,and
39-List 2 cause for albuminous degeneration
40- List 3 routes for entrance of exogenous pigmentation
41-Name 4 exogenous pigmentations by inhalation:
42- The uric acid is a normal catabolic product of
43-Mucinous degeneration occure in
44- The main target for renal amyloidosis is
45-3 types of disturbances in fat metabolism are , and

b- Asbestosis

c toxic jaundice

46-Gout does not occur in cattle because ttreir liver contains
47- The signet ring appearance is seen in
48- Amyloidosis is deposited inin sago spleen.
49- Describe the gross, picture in each of the following
a-Renal. amyloidosis
b-Hepatic fatty change
c-Serous atrophy of fat
50- A special stain for glycogen is the color produced is
51- the 2 types of calcification are and the
52-One which is caused by hyperparathyroidism
53- Tyrosinase is found in Thus reaction is employed to
differentiate between and
54audare exogenous pigmentation'
55-The pigment, associated with anthracosis, is.,and the one
with silicosis results in
56-Glycogen is normally found in andMicroscopically, it appears
asin the H&8. stained tissue.
57-calcium salt is deposited in the riecrotic tissue ofpH under the
name of AndCalcification .
58-hemosiderosis is pigmentation. It is stained and
59-Two exogenous pigmentations through the skin are and



75-List 2 of the microscopic pictures for hyaline degeneration of muscle:
76- Mention the types of endogenous pigmentation:
77-The type of calcification which occurs in caseous necrosis is and
the calcium salts can be stained black with
78- List the differences between vacuolar degeneration and fatty change
in the liver
79- The gross picture of bacon spleen are.
80-The fine granules in cloudy swelling is in nature and the
chemical structure of amyloid is
81- Describe 2 microscopic changes of amyloidosis in liver
a
b
82- Causes of fatty change are:
83- Describe 2 microscopic pictures for fatty change in myocardium
84- Define the following:
a-Dopa reaction
b- Melanosis.
c-Anthracosis
d- Degeneration
e- Infiltration
f-Cloudy swelling

g- Hyalinosis	
85-Describe 2 microscopic pictures for hydropic degeneration	
86- Describe 3 of the gross appearance for cloudy swelling in kidney:	
87- Describe 3 microscopic picture for cloudy swelling in kidneys:	
88-List the types of exogenous pigmentations	
89-Mention the microscopic changes for amyloidosis in liver	
90- Type of calcification which occurs with hypocalcemia.is	
while in tuberculosis is and in uremia is	
91 Causes of secondary amyloidosis are:	
92- Mention 2 special stains for amyloid substance	
93- Describe the sequela for each of the following	
a-Cloudy swelling	
b-Amyloidosis of kidney	
c-Amyloidosis of spleen	
d-Hydropic degeneration of liver	
- name the pigmentation of the following pathological conditions:	
94-Anthracosis Siderosis silicosis	
95- List 3 of the causes for gout:	
96- Describe 3 gross pictures for amyloidosis of liver	
97-Dystrophic calcification occurs in case of but metastatic	
98-calcification requires	

99-Define each o[ the following
a-Melanophore
b-Signet-ring he1;etocyte
c-tattooing
100-Glycogen storage is depleted form And In diabetes mellitus;
but, glycogen infiltration is seen 1n and and
101-Brown atrophy of II.re myocardium is associated with which is
102-pigmentation, and microscopically it appers as
103-The 2 most harmful exogenous pigmentations areand
104-Macrophage. containing melanin, is called and that containing
hemosiderin is called
105- Raised blood calcium causes calcification,
106-Mucoid degeneration occurs in but mucinous degeneration occurs
In
107-Name one special stain and the associated color in each of the
following:
a- Hemosiderin
b- Amyloid infiltration
c- fat
108- Describe 3 microscopic pictures for hyaline droplet degeneration in
renal tubules.

109- A special stain for amyloid is
110-The two types of gout are and
111-Gout in bird is observed in different forms . Mention these forms
and discuss the causes as well as macro and microscopical finding
112-Discuss the pathogenesis of endogenous pigment which is leading to
different types of icterus
Q113//Write True or False against each statement. Correct the false
statements.
1 Vesicle formation occurs as a result of breaking of cells
due to cloudy swelling.
2 Amyloid is caused by antigen-antibody complexes.
3 Mucinous degeneration occurs in connective tissues with
accumulation of slimy and stringy material.
4 Epithelial hyaline is characterized by the presence of
epithelial pearls.
5 Diabetes mellitus may lead to glycogen storage disease.
6 Hydropic degeneration mostly occurs in prickle cell layer
of skin or mucous membrane.
7 Cachexia due to starvation my lead to mucoid
degeneration.

8 Cloudy swelling is characterized by hazy and cloudy cells
due to swelling ofmitochondria.
9 Mucin is mucus mixed with water and stringy in nature.
10 Glycogen is stained as redish brown by PAS.
11 Bilirubin is produced as a result of reduction of biliverdin.
12 Hyperadrenalism may lead to melanosis.
13 Stercobilin gives colour to urine
14 Hemolytic anernia may give rise to hemosiderosis.
15 The swollen hepatocytes may cause the appearance of
both conjugated and unconjugated biliruibin in blood.
16 Necrosed tissue is after some time calicified due to
hypercalcernia.
17 Excessive hemolysis may cause jaundice.
18 Urobilin gives colour to urine and faeces.
19 Hemosiderin is green or red colour pigment.
20 Anaplasmosis may cause post-hepatic jaundice.
Q114//Select appropriate word(s) from four options given against each
statement.
1. Dystrophic calcification occurs in animals due to
(a) Tuberculosis (b) Parasitic infection (c) Necrosis (d) All of
the above

2.	Melanosis is the brownlblack discolouration of tissue/organ as a
	result of excessive accumulation of melanin due to
	(a) Hyperadrenalism (b) Hyperthyroidism
	(c)Hyperparathyroidism (d)Hypermelanernia
3.	Hemosiderin is colour pigment.
	(a) Green (b) Red (c) Golden Yellow (d) Blue
4.	Urobilinogen is the form of bilirubin.
	(a) Unconjugated (b) Conjugated and reduced (c) Conjugated
	(d) Conjugated and oxidised
5.	Hemolysis may give rise to
	(a) Pre-hepatic icterus (b) Post-hepatic icterus (c) Toxic
	icterus (d) None of the above
6.	Obstructive jaundice occurs as a result of
	(a) Hemolysis (b) Liver necrosis (c) Cholangitis (d
	Prioplasmosis
7.	Indirect Van den Bergh reaction is an indication of
	(a) Obstructive icterus (b) Hemolytic icterus (c) Hepatic
	jaundice (d) None of the above
8.	Deposition of carbon particles in lungs is known as
	(a) Silicosis (b) Asbestoses (c) Pneumoconiasis (d
	Anthracosis

9. Gout is the deposition of in tissues.
(a) Uric acid crystals (b) Oxalate crystals (c) Hemosiderin (d)
Urobilin
10. The absence of in poultry is the main cause of gout.

(a) Trypsin (b) Lymphnodes (c) Amylase (d) Urease