





# El Menoufia University Faculty of Veterinary Medicine Clinical Veterinary Toxicology Exam, 2020/2021



Date: 6.3.2021

Time allowed: 2 Hours

Choose the correct answer from (a), (b),	(c) or (d) for each of the following 80 questions
1- Toxicity may be classified according to duration of expo	
a) Immediate and delayed toxicity	b) Acute and chronic toxicity
c) Short and long toxicity	d) Sudden and cumulative toxicity
2- Cytochrome P450 enzyme system is responsible for	
a) Glucuronidation	
c) Acetylation	b) Hydrolysis
- Choose the wrong statement from the following.	d) Oxidation
a) Dental amalgam is a source for mercury.	b) Binding of toxicant with albumen decrease its distribution to
c) Hepatic biotransformation of all toxicants	target but prolonged its action.
resulted in decrease their toxicity.	d) Many toxicants exert their toxicity through lipid
	peroxidation process.
4 All of the following are considered as potential source for a) Broken batteries	
c) Paints	b) Commercial sewage sludge
	d) Motor oils
<ul> <li>Acute hemolytic crisis is a toxic condition in sheep cause</li> <li>a) Lead / hyperexcitability , encephalopathy</li> </ul>	
c) Copper / Hemoglobinuria, icterus	b) Arsine gas / hemolysis, anemia
5- Melarsomine is	d) Datura / dry mouth, excitation, mydriasis
a) Organo-arsenical drug	b) Active principle in nerium oleander plant
c) Specific antidote for mercury poisoning	d) None of them
7- Increase urinary level of zinc protoporphyrin is indicatio	
a) True	b) False
B- Lesions as bone resorption, renal failure and testicular d	
a) Chronic oxalate poisoning	b) Chronic fluorosis
c) Chronic cadmium toxicity	d) Chronic ergotism
Is the metabolites of aflatoxins in milk, while	is the metabolite which responsible for hepato-cellular injury.
a) Aflatoxins glucuronides / Aflatoxins G1,G2	b) Aflatoxins B1,B2 / Aflatoxins M1,M2
c) Aflatoxins M1,M2 / Aflatoxicol	d) Aflatoxins M1,M2 / Aflatoxin epoxide
.0 Is considered as ribosomal toxin.	
a) Arsenic trioxide	b) Ricin
c) Pyrethroids	d) Paracetamol in cat
1 In canary grass is responsible for appearance of	
a) Tryptamine alkaloids / ataxia	b) Glycoalkaoid solanine / GIT disturbances
c) Cyanogenic glycosides/ Goiter	d) Gossypol / Dyspnea
.2- Chronic exposure to all of the following is usually assoc	iated with lameness in buffaloes EXCEPT
a) Fluoride	b) Cestrum diurnum plant
c) Nitrite	d) Lead
.3- The main toxic effect of gossypol is in pre-rumin	ant calves, while in adult cows and bulls is related to
a) Hepatic failure / calcification	b) Diarrhea / Heart failure
c) Heart failure / reproductive disorders	d) Pneumonia / cancer formation
4- Signs of acute urea poisoning in cow is	
a) Met Hb, dyspnea and convulsions	b) Hepatic failure salivation and anemia
c) Haemoglobinuria, tympany and diarrhea	d) Salivation, tympany and tremors



15- is effective treatment	of for	
a) Oximes / carbamate in	secticides toxicity	pecially before appearance of symptoms
c) Methylene blue / Cyan	ide naisonina	b) Amm. Tetrathiomolybdate / Copper toxicity
16- Frequent exposure to sub-t	oxic levels of ochratovin	d) Atropine sulfate / Zinc phosphide toxicity A resulted in formation of specific antibodies against it in birds.
a) True	Oxidicació di dell'atoxini	b) False
17- The main target for acute in	organic arconito is	, while for organic pentavalent arsenical is
a) CNS / Liver	iorgame arsemite is	h) Ship / Grind pentavalent arsenical is
c) GIT / peripheral nerves		b) Skin / Spinal cord
18- Glucosinolate glycoside is the	he active principle of	d) Sulfhydryl group / blood capillary
a) Brassica species plants	and the principle of	
c) Apple seeds		b) Onion and garlic plant d) Datura seeds
19- The main characteristic gro	ss lesion of chronic aflat	ovicasis in brailare is
a) Necrotic and caseous fo	oci in hard nalate	
c) Enlarged yellow colored	liver	b) Pale enlarged cecum and kidney d) All of them
20- Main mechanism of acute co	vanide noisoning is	d) All of them
a) Inhibition of cellular cyt	Ochrome oxidase	Andrew Control of the
c) Inhibition of true acetyl	-cholinesterases	b) Formation of cyanomethemoglobin
21- Antidotes for Organophosph	ates toxicity – acute Lea	d) Goiter and demyelination of nerve axons poisoning – enzootic calcinosis – Bromadiolone toxicity are
a) Oximes - BAL – atropine	e - Vit K <sub>1</sub>	b) Ovimos Contractoria Service Contractoria de la contractoria del contractoria del contractoria del contractoria del contracto
c) Atropine - CaNa2EDTA	- Calcium - Sodium nitr	b) Oximes – CaNa2EDTA – Calcitonin – Vit K1
22- A group of different animals	Slive heside gold mines	rite d) Charcoal – BAL – Calcitonin – Vit C shows respiratory manifestation, fever, emaciation, renal failure
and pink colored skin with p	oustules. Your suspended	diagnosis is
a) Mercury toxicity	The state of the s	b) Arsenic toxicity
c) Gold poisoning	A Commission of the Commission	d) All of them
23 gas is the toxic princip	le arises after oral expos	Sure to zinc phochhide
a) Phosphine	The state of the s	b) Phosphide
c) Arsine		d) Both a,b
24- Metallothionein play an impe	ortant role in the toxical	kinetic of
a) Flouride	The toxicon	
c) Cadmium		b) Organophosphates insecticides d) All of them
25- White phosphorus is potent	hepatotoxicant while re	ed phosphorus is pontovia
a) True		h) Falce
26- You are invited to examine a b	ull suffered from chronic	c hind limb lameness. Intense examination revealed swelling belo
Broth ditto presence	of this of uchan all in se	PRINTE Unner het area frame ska diet 1 de 1
not respond to pain test. The	e most likely toxin which	n would be suspected is
a) Foot rot		b) Ergot alkaloids
c) Flouride		d) Trichothecenes
7is used to explore incid	dence of lead accumulat	ion in the hone in live animals
a) Bone fracture test		b) Atomic absorption spectroscope
c) D-ALA dehydratase meas	surement	d) Urinani Ca EDTA noctabolation to i
8is a simple test used to	diagnose zinc phosphic	de poisoning
a) Measurement of B <sub>2</sub> -micr	oglobulin in urine	b) Determination of basophilic stippling
c) Silver nitrate test		d) Determination of zinc protons which is
9 is suspected in a herd of o	lairy cattle have several	cases of abortion, anestrous and repeat breeding.
a) Chronic arsenic toxicity	,	b) Zearalenone toxicity
c) Cyanogenetic glycosides	poisoning	d) None of them
0- Toxicodynamic of ingestion of	oxalates accumulating	plants is
a) Methmoglobinemia and	heart failure	b) Hypocalcemia and renal damage
c) External or internal bleed		d) All of them
1- Na nitrite is efficiently used ag		To the to
a) High binding affinity betv	veen them	
c) Its anti-oxidant effect		b) Formation of metHb which react with cyanide
		d) Increase cyanide excretion rate

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#### Menoufia University

#### Faculty of Veterinary Medicine





Date: 30/1/2021

Time allowed: 2 Hours

- 1			· · · · · · · · · · · · · · · · · · ·
A) Haptoglobin level	B) Spherocytosis	C) Bilirubin level	D) Target cells
50- To confirm this dis	order in puppy's blood:		D) Target cens
A) TIBC	B) Cross matching test	C) DAT	D) IAT
	III. Identify the True (	(A) or False (B) senten	ices
51- Spherocytes are di	fficult to be detected in some a	nimals like horse and ca	attle.
52- Bovine milk fever a	accompanied with hypocalcem	ia and hypoglycemia.	
53- Serum haptoglobin	and hemopexin concentration	ns are reduced in intern	al hemolysis.
54- Degenerative left s	hift (DLS) is considered a bad	prognostic sign in most	species except cat.
55- Thrombocytosis co	uld be seen with hypersplenisn	n.	-
56- Anisocytosis can be	seen as a normal feature in th	e blood of sheep	
57- Creatinine is more	sensitive and specific than BU	N to reflect changes in C	FR.
58- Abnormal RBCs in	dices occur when there is depi	ression of erythropojesis	S
59- Bilirubin'uria can o	ccur in dog without hyperbilir	ubinemia.	
	occur in the extreme early and		
61- The ALT enzyme is	s usually increased more than.	ALP enzyme in extra-h	enatic hiliary obstruction
62- Dog with degenerat	ive myopathy may be associat	ed with elevated GOT a	and CK2
63- Release of segments	ed cells from postmitotic pool	is orderly and age relate	ed.
64- RDW increased in	early IDA due to presence of r	eticulocytes.	
65- Serum total bilirub	in could be increased more tha	an 10mg/dl in anorexic l	horse
66- Basophilic stippling	is the most common RBC incl	lusion seen in anemic sh	een.
67- Ceruloplasmin oxid	lizes iron from ferric to ferrou	s to be transported by t	ransferrin to hone marroy
68- Renal azotemia asse	ociated with increase of amyla	se and linase.	tansierim to bone marroy
69- Cat tends to have r	nore pronounced stress leukoc	evtosis than other anima	ls.
70- Elevated LDH can	be used as a biochemical evide	nce of RBC turnover.	
71- Pseudopelger-Huet	anomaly is inherited case caus	se hyposegmentation of	neutrophil in cattle.
72- Hemolysis inhibits t	he activity of lipase enzyme.		
73- Life span of neutro	ohil in tissue is 10 hours in ave	erage.	
74- Anorectic cattle wit	h nephritis associated with inc	creased blood urea nitro	ogen.
75- OGTT in ruminant	is used to evaluate persistent l	hyperglycemia with no	glucosuria.
			<b>-</b>

Good luck

Dr. Tamer Allam Allan





#### Menoufia University

#### **Faculty of Veterinary Medicine**



Date: 30/1/2021



Time allowed: 2 Hours

32- The disorder	could be appear foll	lowing to gre	y platelet syndror	ne?	21.	
A) vWD	B) CHS		nn thrombasthenia		D) BSS	
33- On blood film	n the following cells	are seen in li	pid abnormalitie	s:		
A) Stomatocytes	B) Spur cells	\$	C) Sickle cells		D) A & B	3
34- Bone marrow	M/E ratio in dog v	with IDA is:				
A) Reduced	B) Increased		C) Variable		D) Not ch	nanged
35- Dog that inhe	erited with Chediak	Higashi synd				
A) Recurrent infec	ctions B) Bleeding		C) Thrombocyto	penia	D) A & F	3
36- Peripheral bl	ood smear declared			ld indicate:		
A) Extreme LS	B) Moderate	LS	C) Marked LS		D) Slight	LS
37- Choose the o	dd sentence regardi	ng evaluation	of ALP in cats:			
	ase in ALP indicate of				nyperbilirubinemia	I D Dag d
C) Serum ALP half life is 3 days  D) Hepatobiliary tissue has a limited capacity for ALP Prod.						
	odd sentence regard			R) It is less t	egenerative than he	emolysis
A) Hypoproteinen	nia and reticulocytosicukocytosis occurs w	ithin hours fro	m the onset of		est Hct value is reco	
blood loss	curocytosis occurs wi	ium nouis no	in the onset of	_	the onset of bleeding	
	following conditions	ia considóro	d nhysiological n			8
	, increased TRBCs r		B) Increased PC	V. Normal TR	BCs mass, Normal	l protein,
Increased protein,		***	Normal EPO	. 4		
	, Normal TRBCs ma	ss, Increased	D) Increased PC	V, Normal TI	RBCs mass, Norma	1 protein,
protein, Normal E	51		High EPO		,	
	following is WRON	G about Me	galoblastic anemi	a?		
	st causes are vitamin		B) Megaloblasts	are large red	cells with a large n	ucleus in the
folate deficiencie	S		blood	u .		
C) Intrinsic factor	r deficiency usually in	nterrupts	D) Unconjugate	d hyperbilirub	inemia due to intra	medullary
vitamin B12 abso	rption		cell death			
	II. Choose the co	rrect answe	r according to t	he following	case study	



# Menoufia University Faculty of Veterinary Medicine Clinical Pathology First Year Exam, 2020/2021





Date: 30/1/2021

Time allowed: 2 Hours

A puppy was presented to hospital with lethargy and marked icterus. On examination it has weak pull heavy, fast breathing and general weakness. The owner reported that its mother had an accident one years ago and received blood transfusion.

## Laboratory findings as follow:

parameters	Result	Reference range
Het (%)	36	45-54
Hb (g/dl)	12	14-18
RBCs (x10 <sup>6</sup> )	4	5.5-6.5
MCV (fl)	?	75-85
MCH (pg)	? 1	22-27
MCHC (%)	?	35-38
WBCs $(x10^3)$	14	4-11
Neutrophils (x10 <sup>3</sup> )	7	3-6
Total bilirubin (mg/dl)	3	0.1-1.2
ALT (U/L)	22	5-40
AST(U/L)	17	5-35

		1 3- 3	J	
41- The values of Hct, H	and RBCS can indicate:	400		
A) Anemia	B) Polycythemia	C) No	ormal	D) Insignificance
42- Calculate the value o	f MCV (fl):			2) Insignificance
A) 90	B) 92	C) 7:	5	D) 85
43- Calculate the value of	MCH (pg):			2) 00
A) 33	B) 30	C) 27	7	D) 22
44- Calculate the value of	MCHC (%):			
A) 33.30	B) 35	C) 33	3.33	D) 38
45- What is the morpholo	gical classification of the det	1		(D) 38
A) Macrocytic hypochrom	ic	ecteu u	B) Macrocytic no	rmachramia
C) Microcytic hypochromi	C		D) Normocytic no	
46- What is the suspected	case of the Puppy?		2) Ivolinocytic ne	31mocm offic
<ul> <li>A) Neonatal isoerythrolysi</li> </ul>	s IMHA	B) Inc	compatible blood tra	ansfision IMHA
C) Bleeding diathesis due to		D) He	moglobinopathies	and to state the state of the s
47- What is the type of de			V	
A) Toxic	B) Prehepatic	C) He	emolytic	D) B & C
48- The etiology of increa	sed total bilirubin is:			
A) Conjugated bilirubin	B) Unconjugated bilirubin	C) Di	rect bilirubin	D) A & C
49- The hall mark for dete	ection of this disorder is:			



Date: 30/1/2021

Menoufia University

**Faculty of Veterinary Medicine** Clinical Pathology First Year Exam, 2020/2021



Time allowed: 2 Hours

### Please answer all the following questions الإجابة في نموذج الإجابة الالكتروني (75 questions/25 points)

				THE RESERVE OF THE PERSON NAMED IN		
I. Choose the correct answer						
1- Leukomoid reaction of	can be associated with:			<b>.</b>		
A) Absence of alkaline pl	osphatase activity	B) Absence	e of absolute basop	hilia		
C) Absence of toxic neutr	ophil	D) Absence	e of left shift			
2- Measuring of the follo	wing factors can be usefu	l in diagnos	is of Vitamin-K de	eficiency	,	
A) Factors II, VIII, IX, X			ctors II, VII, IX, X		actors II, VII, X, XII	
3- CBC of excited cats	nay not show:					
A) Thrombocytosis	B) Expanded TBNP	C) Lympho	cytosis D)	Neutropl	nilia without left shift	
	s may be reduced in dog	with acute b	epatitis except:	· · · · · · · · · · · · · · · · · · ·		
A) Albumin	B) Clotting factors	C) Gamma	globulins		D) B & C	
	pattern of abnormal leuk					
A) Acute inflammation	B) Administration of gluce	ocorticoids	C) A & B	D) Chr	onic inflammation	
6- Azotemic dog due to	glomerulonephritis chara	cterized by:				
A) BUN/ SCr > 20:1	A) BUN/ SCr > 20:1 B) BUN/ SCr > 10:1 C) BUN/ SCr < 20:1 D) BUN/ SCr < 10:1					
7- Macrocytosis without	pancytopenia is hematol	ogical findir	ig characteristic f	or:		
A) Acute blood loss aner	A) Acute blood loss anemia B) Megaloblastic anemia C) Iron deficiency anemia D) Aplastic anemia					
8- Four fold abnormal i	ncrease in lipase activity	nay be repo	rted in:		* 18	
A) Gastrointestinal diseases B) CRF C) Acute pancreatitis D) Pancreatic insufficiency						
9- One of the following s	entences is TRUE about 1	Polychroma	sia?			
A) They are RBCs visual	ized by Wright stain	B) They are	e reticulocytes visu	alized by	new Methylene blue	
Try They are Ribes visual	zed by Wright stam	stain				
C) They are polymorphor	nuclear cells visualized by	D) They are	e reticulocytes visu	alized by	Wright stain	
Wright stain		D) They are		anzed by	wright stant	
10- Detection of bilirubi	nuria with absence of uri	ne urobilino	gen may be indica	ative of:		
A) Excessive hemolysis	B) Acute hepatitis	C) Cholesta	asis		D) A & B	
11- Lymphocytosis coul	d be seen in dog suffers fr	om the follo	wing <b>EXCEPT</b> :		-	
A) Fear	B) Bone fracture	C) Blood p	arasites	(8)	D) Tuberculosis	
12- All the following abo	normalities produce hypo	glycemia ex	cept:		V.0	
A) Hyperinsulinism	B) Hyperadrenocorticism	C) Hy	popituitarism		D) Hypothyroidism	
13- In dog eosinophilia	& basophilia could be see	n together ii	n:			
A) Mast cell tumor	B) Leukomoid reaction		drenocorticism		D) A & C	
14- VWF considered a c	arrier for clotting factor	number:				
A) VIII	B) IV	C) VII			D) II	



# Menoufia University Faculty of Veterinary Medicine Clinical Pathology First Year Exam, 2020/2021



Date: 30/1/2021

Time allowed: 2 Hours

	s of cattle suffered from	copper	poisoning may invo	olve:	
	Reticulocytosis	C) Eleva	ation of ALT		D) A, B & C
16- The following abnorma	lities could be followed	with th	rombocytopenia exc	ept:	
A) Aplastic anemia B)	) Myelophthisic anemia	C	) Megaloblastic anem	nia	D) IDA
17- Dogs commonly affecte	ed with DM type 1 may	associat	ted with following e	xcept:	P
	) Hyperlipemia	C) Conj	ugated hyperbilirubir	nemia	D) Hypokalemia
18- The following cells are	insulin dependent excep	ot:			
	) Leukocytes	C) Thro	mbocytes Bo	eta cells of	islets of Langerhans
19- The reliable indicator f				age and the second seco	
		C) TLI			D) B & C
20- Hypersegmented neutr					
A) Late stage of chronic dise	eases B) Addison diseas	e	C) Gastritis	(D)	Pernicious anemia
21- In dog with severe diar		al absor	ption of urea may b	e up to:	TD) 1000/
1 - 2 / - 2 / 2	) 40%	C) 70%			D) 100%
22- Leukocyte morphologi		lue to re	etention of acid muc	opolysacc	harides:
1-1) - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	) Howell –jolly bodies	_	ophilic stippling		D) Toxic granulation
23- OGTT reveals that glu	cose fails to return to b	aseline <b>y</b>	values in the expect	ed time m	ay indicate:
A) Diabetic mellitus B	3) Hyperinsulinism	C) Gluc	cose intolerance		d) A & C
24- When AIGR < 30 this	indicates:			and the second s	
A) Glucose intolerance B	B) Hyperinsulinism	C) Nor	ma1		D) Hypoinsulinism
25- Heinz body anemia occ	curs in:		A STATE OF THE STA		
	cuis in.				
	B) Copper deficiency	C) Cen	uloplasmin deficienc	у	D) A & C
A) G6PD deficiency B	3) Copper deficiency				
	B) Copper deficiency  I be reported in the following the following the second control of				D) A & C D) APRA
A) G6PD deficiency B  26- Hypochromasia could A) Acute blood loss anemia	B) Copper deficiency  I be reported in the following B) IDA	owing a	abnormalities excep		
A) G6PD deficiency B  26- Hypochromasia could A) Acute blood loss anemia  27- Hepatitis in cattle indi	B) Copper deficiency  I be reported in the following B) IDA	owing a	abnormalities excep C) ACD of:		
A) G6PD deficiency  26- Hypochromasia could A) Acute blood loss anemia  27- Hepatitis in cattle indi A) ALT  B	B) Copper deficiency  I be reported in the following B) IDA  icated by elevation the a  ) AST	owing a	abnormalities excep C) ACD of:	t:	D) APRA
A) G6PD deficiency  26- Hypochromasia could A) Acute blood loss anemia  27- Hepatitis in cattle indi A) ALT  B  28- The most specific enzy	B) Copper deficiency  I be reported in the following B) IDA  icated by elevation the a  ) AST	owing a	abnormalities excep C) ACD of: P cele disease in horse	t:	D) APRA
A) G6PD deficiency  26- Hypochromasia could A) Acute blood loss anemia  27- Hepatitis in cattle indi A) ALT  B:  28- The most specific enzy A) CK3	B) Copper deficiency  I be reported in the following in the following is because the second in the following it is because the second in the s	owing a ctivity (C) ALI	abnormalities excep C) ACD of: P cele disease in horse	t:	D) APRA D) GGT
A) G6PD deficiency  26- Hypochromasia could A) Acute blood loss anemia  27- Hepatitis in cattle indi A) ALT  B  28- The most specific enzy A) CK3  E  29- Primary renal glucosu	B) Copper deficiency  I be reported in the following in the following is because the second in the following it is because the second in the s	owing a cetivity (C) ALI etal mus	abnormalities excep C) ACD of: P cele disease in horse	t:	D) APRA D) GGT D) CK2
A) G6PD deficiency  26- Hypochromasia could A) Acute blood loss anemia  27- Hepatitis in cattle indi A) ALT  B:  28- The most specific enzy A) CK3  B:  29- Primary renal glucosu A) Hypoglycemia B) Hy	B) Copper deficiency  I be reported in the following B) IDA  icated by elevation the at a second control of the second control of th	owing a ctivity (C) ALL ctal mus (C) LD vith:	abnormalities excep C) ACD of: cle disease in horse H	is:	D) APRA D) GGT D) CK2
A) G6PD deficiency  26- Hypochromasia could A) Acute blood loss anemia  27- Hepatitis in cattle indi A) ALT  B:  28- The most specific enzy A) CK3  29- Primary renal glucosu A) Hypoglycemia B) Hy  30- Prerenal azotemia ma	B) Copper deficiency  I be reported in the following B) IDA  icated by elevation the at a second control of the second control of th	owing a cetivity of C) ALI cetal must C) LDi vith:	abnormalities excep C) ACD of: cle disease in horse H	is:	D) APRA D) GGT D) CK2
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A) G6PD deficiency  26- Hypochromasia could A) Acute blood loss anemia  27- Hepatitis in cattle indi A) ALT  B:  28- The most specific enzy A) CK3  29- Primary renal glucosu A) Hypoglycemia B) Hy  30- Prerenal azotemia ma	B) Copper deficiency  I be reported in the following B) IDA  icated by elevation the a  ) AST  yme for evaluating skele B) GOT  uria may be associated way perglycemia  ny be secondary to the following by:  ized by:	owing a ctivity of C) ALI etal mus C) LDI vith:  C) Non C) Hyper C) Hyper C) Hyper C) Hyper C) Hyper C) The collaboration of the collab	abnormalities excep C) ACD of: P cele disease in horse H rmoglycemia g disorder:	is:  D) A  D) Ruj	D) APRA D) GGT D) CK2

Menoufia University
Faculty of Vet Med
Animal Medicine Dept
Veterinary Internal Medicine





# Final Exam for the 4<sup>th</sup>. Year (Pet-animal medicine) Time allow: 2 hours 2020 - 2021

# Group- A (Time required 50 minutes) Ouestion No-1

a- Plan your diagnosis about the Pyothorax in dog

(8 points)

b- What are the main etiological factors and clinical signs of Cardiomyopathy?

(8 points)

c- Treatment plan of FURI

(8 points)

d- Treatment chronic bronchitis in dogs

(8 points)

#### Question No-2

#### Case No -1

You are called to exmine a dog with complaint of increased sized abdomen, difficult breathing, cyanosis in the mucous membrane with history of exercise intolerence and clinical examination revealed abnormal heart sound. What are your diagnosis, differential diagnosis, treatment and recommendations and what about the needed laboratory tests for confirmation and monitoring such cases?

(15 ppoints)

# Group-B (Time required 70 minutes) Question No-3

a- What are the main concepts of Hyperparathyroidism in pet animals?

(10 points)

b- Tabulate the differentiation between DM and DI

(12 points)

c- What is your diagnostic approach of gastric dilatation?

(8 points)

d- What is your therapeutic approach of gastritis in dogs?

(8 points)

#### Question No-4

#### Case No -2

A 6-year old Mastiff dog was admitted to your clinic with history of insomnia, polyuria, and skin affections with problems in vision with abdominal distension. Ultrasonographic evaluation revealed hepatomegally as well as previous laboratory monitoring reveled hypercholesterolemia, increased liver function tests and hyperglycemia. What are your diagnosis, differential diagnosis, treatment and recommendations and what about the needed laboratory tests for confirmation and monitoring such cases? (15 ppoints)

NB Each 4 points equal 1 mark

Best wishes

Dr. Abdelghany Hefnawy



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Menoufia University

Faculty of Veterinary Medicine

General Veterinary Surgery- Fourth Year Exam, 2020/2021

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Date: 16.3.2021

Time Allowed: 2 Hours

# Please answer the all of Following Questions

## - Please answer the following cases:- (7 marks)

- 1- A three months old donkey admitted to the clinic suffering from firm painful fleshy like swelling at the level of knee joint with history of lacerated wound at this site, diagnosis, differential diagnosis and treatment.
- 2- A buffalo admitted to the clinic suffering from painless uniform fluctuating swelling at the point of elbow. Diagnosis, differential diagnosis and treatment.

## II- How can you deal with the followings:- (6 marks)

- 1- Single transverse diaphyseal fracture of femur in a bitch?
- 2- Distracted fracture of the olecranon tuberosity in a foal?

## III-Answer only 3 points of the followings: (6 marks)

- 1- Firing as a counter irritant.
- 2- Crepitation and pseudo-crepitation.
- 3- Classification of haemorrhage according to the time of occurrence.
- 4- Surgical correction of incarcerated ventral abdominal hernia in a lamb.

# IV- Answer only 3 points of the followings: (6 marks)

- 1- Diagnosis and treatment of DJD.
- 2- Causes of continuous discharge of bus from an abscess.
- 3- Role of ultrasonography in diagnosis of tendinitis.
- 4- Retention cyst.

Good luck
Our Best Wishes



a- Taenia solium b- T. saginata c- T. taeniaeformis d.T.hyadatigena Q30- Oestrus ovis is an example of..... a-Cutaneous myiasis b-Intestinal myiasis c-Atrial myiasis d- External myiasis Q31- Sarcoptic Mange cause deep folliculitis and dermatitis while Demodectic Mange cause hyperkeratosis and acanthosis due to severe itching. a- True b- false Q32- Transitioning from mold to yeast is a requirement for fungal pathogenicity a- True b- false Q33- Mastitis, chronic pneumonia, abortion and mycotic esophagitis can be caused by.... a- Aspergillus fumigates b- Candida albicans c- Cryptococcus d- none of them Q34- Whitish pseudo-membranous lesions over the mucosa of esophagus and rumen can be seen in gross lesion of moniliasis a- True b- false Q35- Both Candidiasis and Aspergillosis can cause abortion in cattle a- True b- false Q36-..... Is fungal disease of animals characterized by granulomatous pulmonary lesions, abortion and lobar pneumonia in fetus a- Candidiasis b-Aspergillosis c-Dermatophytosis d-Histoplasmosis Q37- The major changes of septicemia include..... a-Retrogressive changes and necrosis. b-Defensive reaction. c-Local effect of the bacteria. d- all of them Q38- Beaded appearance of interlobular septa in CBPP is due to dilation and thromboses of a-lymph vessels. b- blood vessels c- none of them d- both of them Q39 Hemorrhagic septicemia in cattle caused by a- P. multocida b-Manheimia hemolytica Q40 shipping fever caused by Q41 Sheep Pasteurellosis caused by Q42 The wall of gallbladder is thickened and inflamed in .......................salmonellosis in cattle b-Subacute and Chronic c-chronic d-subacute Q43 The primary target organs of the infection in Listeriosis is..... a- liver and spleen b-brain c- intestine d-uterus Q44 The primary target organs of the infection in strangles is ...... a. retropharyngeal ln b. maxillary ln c. parotid ln d. mesenteric ln a- enteropathogenic b-Septicemic c- enterotoxigenic d-enteroinvasive

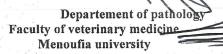
Q46 Spleen is filled with many erythrocytes and appear like blood island is seen in gross examinated a- True b- false Q47 Cl. perfringens Type A cause, Struck b. Enterotoxemia in lamb Q48 Cl. Hemolyticum cause c. Red water disease Q49 Cl. perfringens Type C cause d. Black disease Q50 Cl. Novyi type B cause e. Black leg II-Complete the following: (7.5 marks) 1- Swine Erysipelas Caused by ....., after septicemia the organisms localized organs as ...... 2- pannus mean ..... 3- Pitted surface of kidney in chronic leptospirosis caused by ..... 4- Leptospira are demonstrated in the hepatic sinusoids and within liver cells by ..... is....,bull 6-Focal necrosis in the liver seen in cattle in disease as....., in sheep seen Cause of abortion in Sarcosporidiosis is due In pulmonary artery producing, ..... 9-The pathognomonic lesion of Pseudotuberculosis is ......and Paratuberculosis is ..... 10-In respiratory Form of glander in the early stage, the lungs feel as ...... while in the last stage, the lungs show ..... 11-The TB in cattle has 3 forms according to the tissue reaction in Lungs .......form. In Udde ..... form. In Pericardium ......form. 12- In Bangle's Disease In pregnant uteri, the organism attracted the uterus by the effect of ...... substance, secreted from ..... 13- The cause of Vibriosis is ..... The pathognomonic lesion of vibriosis in aborted fetus..... 15- Pipe-stem liver is .....

#### III- (5 mark)

- 1-Mention Pathogenesis of contagious Bovine Pleuropneumonia (CBPP)
- 2-Mention Complication of Strangle
- 3-Mention cause and lesion of Equine Farcy and Bovine Farcy
- 4-Mention three cutaneous lesion in leg of horse
- 5- Mention pathogenesis and gross lesion of dermophytosis

Good luck

اورس زراب







Course name (code)	Specific pathology (417)
Program	BVSc
Date	March 2021
Time allowed	2 hours
Total score	25 Marks

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AH	questions	SHEGORDER	11 96-	MUSWELE	4 1 .
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#### I-Choose the correct answer

(12.5 marks)

Q1-It is the circulation of bacteria in the blood stream without multiplication or their production of toxins and without production of lesions or clinical signs.

a-Bacteremia

b-septicemia

c-pyemia

d-Sapremia

Q2- It is infectious or non-infectious disease limited to a particular area

a-Enzootic disease

b-Epizootic disease

c-infectious disease

d-contagious disease

Q3- Dissociation of the hepatic cells (individualization). Seen in liver of dog affected by acute leptospirosis

a- True

b- false

Q4- Mycoplasma cause their effect by combination of several mechanisms one of them is Production of leukotoxin

a- True

b- false

Q5-Calf diphtheria caused by Fusobacterium necrophorum, the formed diphthertic membrane is false type

a- True

b- false

Q6-Necrobacillosis in horse associated with Fistulus withers

a- True

b- false

Q7- Ulcerative colitis (Button-like) seen in Chronic Salmonellosis in sheep

a- True

b- false

Q8- Diamond-skin disease, Vegetative endocarditis and ankylosis seen in septicemic form of Swine Erysipelas

a- True

b-false

9-Adenitis equorum is one of pyemic disease of equines and caused by.....
 a-Streptococcus equi b-Fusobacterium necrophorum c-S.abortus equi d-Burkholderia mallei

◆10-The clostridium induced diseases through tissue invasion or production of toxins

a- True

b- false

**Q11-** C. chauvoie, C. novyi, C. hemolytic induce diseases through tissue invasion while C. botulinum and C. tetani induce diseases production of toxins

a- True

b- false

Q12- Clostridium tetani produce two types of toxins include Tetanolysin and Tetanospasmin.

a- True

b- false

Q13- In Lockjaw no lesions are noticed but the animal die from asphyxia due to interference with respiratory and cardiac functions by tonic spasm

a- True

b- false



$ar{x}^{(1)}$ . The first section $X$			
Q14- Clostridia perf	fringens type D affect C.	gan tg	nd calves. The bacteria produce protox
which is converted to	o epsilon toxin by trypsin.	ning sheep, goats, ar	nd calves. The bacteria produce process
o- mue	h folos		
	Caused by Mass 1		
inflammation of the	skin, lymphatics and drainin	oids occurs as a cl	nronic suppurative and granulomatous
a- True		g L.ns.	Practice and granulomatous
	b- false		
granulomatous reacti	sep snowed large granulon	natous nodules in in	testine while in cattle produce diffuse
a- True	on t A.		me in cause produce diffuse
	b- false		
inflammatory cells in	s characterized by Tissue	e cysts (containing	more than 50 bradyzoites without
a- True	brain of cat.		oradyzoites without
O18-	b- false		
a- Dourine	characterized by Ulceration b- Nagana	on (ulcerous plaques)	in the cenitalia and alsia
" Dourne	b- Nagana	c- Surra	d- Chagas disease
O19- Pironlasmosia is			d Chagas alsease
a- B. bovis,	cattle caused by		
α D. υυνιο,	b-B. bigemina,	c- B. major	d- all of them
O20-Incoordination			u- an of them
to thrombosis (DIC)	nania, convulsions, paraple	gia and coma are obs	served in early stages of babesiosis due
a- True	L C.1.		stages of babesiosis que
	b- false		
nodes, spleen and bloo	les (macroschizonts, contai	n 8 or more nuclei)	are seen in the lymphocytes in lymph
option and bloo	ed in Turning Disease in catt	le	in the lymphocytes in lymph
a- True			
	b- false		
cells.	play a major role in the body	y defense against heli	minths besides the basophils and mast
a- True			sestates the basophins and mast
	b- false		
a- Dirofilaria immit	een in		
	is b- Hookworm	c- Toxocara canis	d- none of them
Q24- Strongylus vulgar	in lawres for 1.		of month
in equines	is larvae found in anterior m	nesenteric artery bran	ches leading to infarction of intestine
a- True	L C.1		so interection of intestine
Q25- Spirocerca luni	b- false		[10] 11 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1
ossification are seen in t	has nodular	og which cause tum	or-like nodules, mineralization and
a- True			and and
	b- false		
the liver lungs and other	mediate stages of Echinococ	cus species are know	vn as hydatid cysts, v hich localize in
a- True		o, swine and goat.	The oyoto, which localize in
	D= 19166		
a- Acute form	en inof.	hepatic distomiasis	
" Troub form	b- chronic form c-		d-both of them
O28- C cellulosae is the			
a- Taenia solium	larval stage ofb- T. saginata	which found	d in Skm heart of swins
a rachta sonam	b- T. saginata	c- T. taeniaeformis	d.T.hyadatigena
			James Sollar
Q29- C. bovis is the larva	al stage of		
	al stage of	which found in Sk	m, heart of cattle
	And the second of the second o		

Menoufia University
Faculty of Vet Med
Animal Medicine Dept
Veterinary Internal Medicine





# Final Exam for the 4<sup>th</sup>. Year (Pet-animal medicine) Time allow: 2 hours 2019

Question No 1 (Time required 20 minutes)

Tabulate the different points between

A. DI and DM. (10 points)

B. Diarrhea due to affection in SI and LI. (5 points)

C. Cushion and Addison syndrome. (5 points)

Question No 2 (Time required 20 minutes)

How can you make a diagnosis of the following diseases from its history and clinical signs?

D. GDV (5 points)

E. Constipation (5 points)

F. Kennel cough (5 points)

Question No 3 (Time required 20 minutes)

- Treatment of the following diseases

G. Tonsillitis (5 points)

H. Stomatitis (5 points)

I. Pyothorax (5 points)

Question No 4 (Time required 20 minutes)

A. How does kidney diseases can be considered as predisposing factors of many of the endocrinological disorders (DI and secondary HPTH). (10 points)

B. What is your interpretation of the following?

(I) Cataract in case of DM. (5 points)

(III) Some cases of constipation may be associated with watery diarrhea. (5 points)

Question No 5 (Time required 30 minutes)

Case No 1

A 5-year old German shepherd dog is brought to your hospital with intense pruritus and the lesions had begun on the face, abdomen, and feet as diffuse erythema and pruritus. The dog had a history of seasonal pruritus in the fall, and based on that history as well as some area of the abdomen had small pustules. What are your diagnosis, differential diagnosis, treatment and recommendations and what about the needed laboratory tests for confirmation and monitoring such cases?

(15 points)

Case No 2

You are called to exam a Doberman dog suffering from soft fecal matter, excessive salivation and Melena with history of dental health problems and sometimes looking for cold area with paddling. What your diagnosis, preventive and therapeutic measures. (15 points)

Best wishes

Dr. Abdelghany Hefnawy

الفرح لمرابع

Menoufia University

Faculty of Veterinary Medicine

Theriogenology Department



	Final Examination of Gynae	cology	
4 <sup>th</sup> year, first term	Date: Sat. 20. 2. 2020	Time allowed: 2 hour	
Model (	B)	Total: 25 Marks	

## 1. Choose the correct answer:

a) Pre-pubertal changes	h) Onset of nuberty		
c) Onset of maturity	b) Onset of puberty		
2. dictyotene phase is of	d) Pre-ovulation changes		
a) Cytoplasm growth, mitosis	b) Nuclear arrest, mitosis		
c) Cytoplasm growth, miosis	d) Nuclear arrest, mitosis		
3.The vascular breakage after ovulation	results in the formation of		
a) Corpus albicanis	b) Corpus hemorrhagicum		
c) Corpus luteum			
4. Surge center develops after puberty in	d) Accessory corpora lutea		
a) Male	b) Female		
c) Both male and female	d) Neither male nor female		
	(a) Neither male nor female		
a) local lympho-venous-arterial diffusion	nsported to the ipsilateral ovary through		
c) Systemic circulation	b) Vascular countercurrent-exchange system		
6. Rubin's insufflation technique is used	d) All of them		
a) Nymphomania			
c) Endometritis	b) Salpingitis		
7. A slight increase in estrus mucus with	d) Tubal patency		
a) Acute endometritis	b) Character to		
c) Subclinical endometritis	b) Chronic catarrhal endometritis		
8 is used for anovulation i	d) All of them		
a) FSH			
c) LH	b) PMSG		
9. High incidence of ovarian cyst occurs	d) PGF2α		
a) Cystic corpora lutea			
c) Luteal cyst	b) Follicular cyst d) All of them		
10. In Adrenal virilism the ovaries are	a) All of them		
a) Small, small	and the external genitalia		
c) Large, small	b) Large, large		
11. A closed pyometra is	d) Small, large		
a) Typical pyometra			
b) Post-coital pyometra	c) Associated with fetal maceration		
	d) All of them		
	end of follicular phase by		
a) Dominance, High LH and High inhibin b) Metrorrhagia, High E2	b) Ovulation, high LH, High E2		
The synongistic activity of the synonymic activity of the synonymi	d) All of them		
3. The synergistic activity of estradiol in	conjunction with progesterone on		
endometrium for implantation appears d			
) Estrus phase	b) Diestrus phase		
2) Parturition	d) Pregnancy		

3.3	41		
14is considered a			
i) Goat	b) Sheep		
e) Mare	d) Cow		
5 is present at the ape	x of the follicle at which ovulation occurs		
a) Ovulation fossa	b) Stigma		
c) Smegma	d) Cumulus cells		
6. Bloody discharge for 9 days is cl			
a) Cow at metestrus	b) Bitch at proestrus		
c) Bitch at estrus	c) Bitch at abortion		
17. Female receptivity occurs due to			
a) High E2, Low P4	b) Low E2, Low P4		
c) High E2, High P4	d) Low E2, High P4		
18. Manipulation of delayed ovulati			
a) Good estrus detection	b) 2 <sup>nd</sup> rectal exam after 48 hrs of heat		
c) GnRH administration	d) All of them		
19 precedes recruitme	ent of follicles initiates is growing		
a) LH	b) GnRH		
c) FSH	d) Inhibin		
20. Pergonal dose in large animals i	s and used for		
a) 10 IU, induction of parturition	b) 25-30 μg, induction of luteolysis		
c) 10 mg, induction of estrus	d) 5000 IU, treatment of luteal cyst		
21. Oxytocin is can be	administered		
a) A large MW hormone, orally	b) Small MW hormone, parenterally		
c) Small MW hormone, orally	d) A large MW hormone, parenterally		
22. Mare is classified as	animals		
a) Polyestrus	b) Monoestrus		
c) Seasonal polyestrus	d) None of them		
23. CIDR is used for estrus synchro	onization depending on		
a) Prolongating of luteal phase	b) Controlling of follicular wave		
c) Shortening of luteal phase	d) All of them		
24. The duration of luteal phase in	cows is		
a) > 16 days	b) < 16 days		
c) =16 days	d) 16-20 days		
25. The duration of luteal phase in			
a) > 16 days	b) < 16 days		
c) =16 days	d) 16-20 days		
26 is used as an indicato			
a) Estradiol cypionate	b) Estrone sulphate		
c) Estradiol benzoate	d) None of them		
27 is used as an indicato			
a) Estradiol cypionate	b) Estrone sulphate		
c) Estradiol benzoate	d) None of them		
28. In this pic, estrogen hormone is			
20. In this pic, estagen not more is	US ESTRUS METESTRUS		
Concentrations Concentrations			
Concentration			
13			
	2 3 4		
-6 -5 -4 -3 Days Re	elative to Estrus (0)		
a) Line (A)	b) Line (B)		
c) Line (C) d) Line (D)			

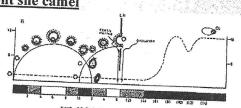
b) Ovarian cyst d) All of them		
b) Ovarian cyst d) All of them		
b) Ovarian cyst d) All of them		
b) Ovarian cyst d) All of them		
b) Ovarian cyst d) All of them		
b) Ovarian cyst d) All of them		
b) Ovarian cyst d) All of them after P4 reach 5-8 ng/ml		
b) Ovarian cyst d) All of them		
b) Ovarian cyst		
b) Ovarian cyst		
n diameter nersistent on the overvie		
- J.		
d) Thyrotropin hormone		
b) GnRH		
of agalactia		
d) Miotic inhibition removal, Fertilization		
b) Mitotic inhibition removal, Fertilization		
n indication of and is a pre-request for		
a) All of them		
d) All of them		
b) Puberty, estrous cycle, pregnancy, parturition		
The state of the s		
d) Testosterone		
b) Estrogen d) Testasterone		
1.77.77 M. SKONSKOWIC CON ON ASTRON		
d) All of them   of		
d) All of them		
b) Estradiol		
nctioning as the primary female sex		
d) Pregnecol 6000		
b) CIDR		
on of puberty in heifers.		
d) Secretion of B endorphin, fol. growth		
b) Secretion of FSH, fol. growth		
t length by		
d) All of them		
b) hCG		
d) Day after day from the middle of estru		
b) Day after day after the end of estrus		
100 St. 100 St		
d) None of them n mare		
b) Before parturition		
nel		
d) Metabolic, Progesterone		
b) Ecbolic, PGE2		
with oxytocin and PGF2a, and is done by		
d) 2 months, 9 months		
b) 11 months, 5 months		

45. The expected synchronization resp	onse to one shot PGF2α (Program I) is		
a) 50%	b) 90%		
c) 75%	d) < 50%		
46 activation is respon	nsible for basal LH release		
a) Tonic centre of hypothalamus	b) Surge centre of hypothalamus		
c) Anterior pituitary gland	d) Posterior pituitary gland		
47. The stage of follicle selection is cha	racterized by		
a) Low inhibin	b) High FSH		
c) High inhibin	d) Low LH		
48. Blind system of estrus synchroniza	tion with PGF2a means		
a) One shot without heat detection	b) Two shots with heat detection		
c) Two shots without heat detection	d) One shot with heat detection		
49. The pre-ovulatory LH surge causes	s series of events lead to ovulation include		
a) Break down of connective tissue	b) Elevated blood flow to ovary		
c) Ovarian contraction	d) All of them		
50 hastens ovulation in n	nares exhibit estrus		
a) FSH	(b)GnRH		

loites210	I Novin	1
51. Crestar ear implant shortens t	he synchronization period due to its content of	
a) Norgestomet and estradiol	b) PCF2	
c) Norgestomet and PGF2a	b) PGF2α and estradiol	
52. — works to i	d) Both (a) and (b)	
a) B blockers	icrease myometrial activity	
c) PGF2a	b) Relaxin	1
53. The ovulatory wave is the wave	d) PGE2	1.
a) Low P4		
c) Moderate P4	b) High P4	
54. Pressure sensor is used for	d) All of them	. 1
a) Detection of pregnancy		
c) Estrus synchronization	b) Detection of estrus	
55 She camal faces devices a	d) All of them	
body weight	is bred before they reach ———— of their adult	
a) 50%		
c) 70%	b) 60%	ESPENIE .
	d) 100%	- 1
ol III	onsible for the production of testosterone in ma	ما
c) TRH	b) FSH	10
	d) Prolactin	- 33
37. The size of mature graafian folli	cle in camel is in diameter	ALM M
4) 2 0111	b) 1.5-2.0 cm	2.00
c) < 1.5 cm	d) Roth (a) and (b)	
58. Mare exhibits irregular estrus d	uring	
a) Dormant season	b) Breeding season	99. C.
c) Vernal transition	d) Frame late C. II.	<u> </u>
59. Reduces conception rate at the 1	st synchronized estrus after CIDR usage is due	25.70
a) Reduced sperm transport	b) Retarded embryonic development	
c) Altered follicular dynamics	d) All of thom	
60. Ovulation in she-camels occurs d	le to	(1968) (1968)
a) Copulation	b) LH release	<b>是</b>
c) Neuro-endocrine mechanism	d) All of them	
	G An or them	

	onse to one shot PGF2a (Program I) is	
a) 50%	b) 90%	
e) 75%	d) < 50%	
46. ——— activation is respon		
a) Tonic centre of hypothalamus	b) Surge centre of hypothalamus	4
c) Anterior pituitary gland	d) Posterior pituitary gland	
47. The stage of follicle selection is cha	racterized by	
a) Low inhibin	b) High FSH	
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) One shot without heat detection	b) Two shots with heat detection	
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) Break down of connective tissue	b) Elevated blood flow to ovary	**********
) Ovarian contraction	d) All of them	
50 hastens ovulation in n		With the
n) FSH	b) GnRH	gggtar and
E) Estradiol	d) PGF2a	<u></u>
	ynchronization period due to its content of	
a) Norgestomet and estradiol	b) PGF2α and estradiol	and the
c) Norgestomet and PGF2α	d) Both (a) and (b)	_
52 works to incre		100
a) B blockers	b) Relaxin	and the second
p) PGF2α	d) PGE2	
53. The ovulatory wave is the wave em		1470
a) Low P4	b) High P4	
Moderate P4	d) All of them	
54. Pressure sensor is used for	d) All of them	
a) Detection of pregnancy	b) Detection of estrus	9446
c) Estrus synchronization	d) All of them	
	red before they reach of their adu	12
body weight	red before they reach of their add	Щ.
	b) 600/	
a) 50%	b) 60%	
2) 70%	d) 100%	(356.4)
	ble for the production of testosterone in m	<u>1ale</u>
a) LH	b) FSH	
TRH	d) Prolactin	10.000000
57. The size of mature graafian follicle		
a) > 2 cm	b) 1.5-2.0 cm	-
c) < 1.5 cm	d) Both (a) and (b)	1000
58. Mare exhibits irregular estrus dur		
a) Dormant season	b) Breeding season	1
c) Vernal transition	d) From late fall to winter.	Var. 1.00
59. Reduces conception rate at the 1st	synchronized estrus after CIDR usage is d	lue
to		Nor.
a) Reduced sperm transport	b) Retarded embryonic development	į
c) Altered follicular dynamics	d) All of them	
60. Ovulation in she-camels occurs due	<u>e to</u>	
a) Copulation	b) LH release	3
c) Neuro-endocrine mechanism	d) All of them	

61. Voluntary postpartum period in cow	
a) Wait 25-45 days after calving	
c) Wait until 60 days postpartum (PP)	b) Completed at 45 days postpartum (PP
62. The long half-life of FSH is due to it	
62. The long half-life of FSH is due to its a) Phospholipids contain arachidonic acid	content of
c) Peptide contains arginine	b) Oligosaccharides contain sialic acid
63 Winking well .	d) None of them
63. Winking reflex is common in	during
a) Mare, estrus	b) Cow, estrus
c) Cow, late diestrus	d) Mars Let 15
64. For detection of estrus in mare, she is	teased
and the last near	b) > 16 days after the last heat
c) at 15-16 days after last heat	d) All of them
65. The proper breeding time in cow is	1 d) in or them
a) At the middle of estrus phase	h) At the begin of the
c) After end of estrus phase	b) At the begin of the estrus phase
66. MAP is used for estrus synchronization	d) At the end of proestrus phase
a) Injection	n through route
c) Oral	b) Implant
67. Hyaluronic acid produced b. 6	d) Pessary
67. Hyaluronic acid produced before ovul a) LH, cumulus expansion	ation is due to and cause
	b) FSH, cumulus expansion
c) LH, resumption of myosis	(d) ECH
68. ——— subunit is responsible for a) α	r LH binding to theca cells recentors
	b) B
c) <i>γ</i>	d) δ
69. This figure represent she camel	



a) Mating with a sterile bull	THE POLLOCOR WAVE AND CL STAGE
c) Mating with a fertile bull	b) Mating with a infertile bull
70 Toll-	d) A11 - C41
70. Tail wagging characterizes -	in estrus
a) waie	b) Cow
c) Camel	d) Bitch
71. Activin is	
a) Steroid hormone	b) De dil d
c) Glycoprotein hormone	b) Peptide hormone
72. The inter-estrus inter-1:	d) Fatty acid hormone
a) 7 months 10.1	in bitch, but in queen
The days	b) 10 days, 7 months
c) 2 months, 45 days	d) Non- Cu
73. Ovulation occurs during estr	us in domestic animals except
tr) IVILLIO	b) Buffalo
c) Camel	d) Bitch
74. When the overy reach a child	Lhood distribution
texture, the expected cause is	l head size with an irregular surface and fleshy
a) GCT tumor	
	b) PVT tumor
c) Luteal cyst	d) All of them
75 is responsible for ke	ratinization of the vaginal mucosa in queen
The state of the s	b) Estrogen
c) Progesterone	d) All of them
	(a) All of them

76. The presence of two gonads on bo	th sides is hermaphroditism
a) Unilateral	b) Bilateral
c) Lateral	d) False
77. The β subunit is responsible for the	ne specific biologic function of hormone
a) LH	b) Estriol
c) PGF	d) Prolactin
78.——— is produced from the ——	is important for relaxation of pelvic
ligaments	
a) Progesterone, Placenta in mare	b) Estrogen, Corpus luteum in cows
c) LH, pituitary gland in mammals	d) Relaxin cornus luteum in goats
79. The dose of estradiol cypionate for	r treatment of pyometra in cows is
a) 5 mg	b) 10 mg
c) 15 mg	d) All of them
80. Variation of response to prostagla	ndin synchronization regimens is due to
a) Anestrum	b) Age
c) Stage of follicular wave	d) All of them





Food Hygiene and Control Department

4<sup>th</sup> year students, 1<sup>st</sup> Semester

Milk Hygiene and Control Exam	Time: 2Hrs	Date: 31/12/2019		
I- Choose the true answers (A) or false answers	(B) of the followin	g sentences:- (10 M)		
1- The UHT milk is a heat treated milk at 120 / 12	min.		(	)
2- Na- carbonate is the most powerful alkaline dete	ergent.		(	)
3- Cow pox is a viral epidemic disease characterize	d by milker's nodu	les	(	
4- The highest count of bacteria is found in fore mi	lk.		(	)
5- Copper, Ca. and P. are all responsible for casein	micelles stability.		(	
6- Cream line formation can be enhanced by homo	genization.		(	)
7- Elevated catalase enzyme level in milk is used as	indicator for detect	ion of mastitis.	(	>
8- Iodophor is the most popular sanitizers for teat	dipping.		(	,
9- Cold pasteurization is a thermal treatment of m	ilk to extend its shelf	f life.	(	,
10-The more fat % in milk, the higher specific grav	vity.		(	,
11-Somatic cell content of milk is used to detect the	type of milk of diffe	erent animals.	(	,
12-Refractive index of milk can be measured using	its serum.		(	
13- Cow's milk has lower lactoferrin and lysozyme b	out higher LPS than	human milk.	(	
14- Choline is responsible for fishy flavor of milk.			(	
15-Enteric dairy fever epidemics includes typhoid,	cholera and amoebio	c dysentery, cholera	(	
16-Lipase enzyme increase in late stage of lactation	and in case of cystic	c ovary.	(	
17- B.cereus enterotoxins are released upon lysis of	its cells in the intest	inal tract.	(	
18- External milk contamination can add larger nu	mber of M.Os to mi	lk than internal one.	(	10
19- Cooked flavor of heat treated milk may due to	hydroxyl methyl fur	fural from lactose.	(	
20- Staph. aureus enterotoxins are less heat stable t	han that of <i>C. botuli</i>	num.	(	
21-k-casein is the site of attack by rennet so the mid	celles will lose stabili	ty and casein ppt.	(	

22-  $\alpha_1$  casein which is abundant in goat milk is the cause of milk allergy.

23- The minimum <sup>a</sup>w for microbial growth is 0.60 - 0.61.

24-Lactobacilli is an example of thermophilic bacteria.

25- Heterofermentative bacteria produce only lactic acid.





- 26- The efficiency of CIP system depends on type and concentration of detergent used.
- 27- Blue color of milk may be caused by pseudomonas cyanogens.
- 28-Coliforms re a good indicator for sanitary quality of milk.
- 29- Rancid flavor in milk may be due to proteolytic bacteria.
- 30- Acid phosphatase enzyme may be used for detection of pasteurization efficacy.

# II- Answer the following questions:

# 1) Write the scientific term for the following: (3M)

- 1. They are agents added to detergent formula to prevent precipitation of hard water.
- 2. They are group of bacteria can grow at 45-60°C and can't withstand pasteurization.
- 3. It is a phenomenon of some people whom can't digest lactose and suffering from diarrhea, a flatulence and colic.
- 4. A form of spoilage at which microorganisms which attack salts of milk and change them into carbonates.
- 5. It is a process done on cold raw milk to remove foreign matters, leucocytes and large bacterial clusters.
- 6. Phenomenon caused by milk casein that react with acid and alkaline conditions.

# 2) Compare between: (4M)

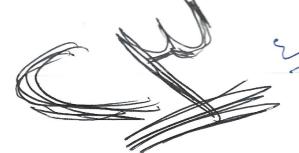
- A. Food infection and food intoxication food poisoning.
- B. Ropiness and frothiness of milk.

# 3) Explain: (8 M)

- 1. Toxico infection food poisoning is a conditioned type of food poisoning.
- 2. Some of milk enzymes may be used as an index of milk heat treatment.
- 3. O/R potential of milk determines the type of M.Os that can grow in milk.
- 4. Produced milk should be chilled, maximum 2 hours after production
- 5. All bovine milk fat coprise the same spectrum of fatty acids
- **6.** The mechanism of *C. perfringins* enterotoxins in affected persons.
- 7. Milk allergy.

With My best wishes







Food Hygiene and Control Department Milk Hygiene and control Exam. 4<sup>th</sup> Year students, 1<sup>st</sup> Semester

Time: 2Hrs Date: 2/3/2021

## I- Choose the true answers (A) or the false answers (B) of the following sentences: (10M)

- 1- Streptococcus pyogenes is mainly a cause of mastitis.
- 2- UHT milk is a good source of Calcium for children.
- 3- Thermophilic bacteria can withstand pasteurization.
- 4- The highest count of bacteria is found in fore milk.
- 5- Cow pox is a viral epidemic disease characterized by milker's nodules.
- 6- Copper, Ca. and P. are all responsible for casein micelles stability.
- 7- The more fat % in milk, the higher specific gravity.
- 8- Enteric dairy fever epidemics include typhoid, cholera and bacillary dysentery.
- 9- Cream line formation can be enhanced by homogenization.
- 10- Cow's milk has lower lactoferrin and lysozyme but has higher LPS than human milk.
- 11- Refractive index of milk can be measured using its milk serum
- 12- Cooked flavor of heat treated milk may be due to sulpha hydryl group from lactose.
- 13- Casein % of milk in subclinical mastitis is higher than that of normal milk.
- 14- The minimum aw of most bacterial species is ranged from 0.90 to 0.99.
- 15- Morning milk is usually higher in fat % than evening one.
- 16- Vitamin B2 in milk is mainly inactivated by pasteurization
- 17- Sodium hypochlorite is the most widely used sanitizer in dairy plants.
- 18- Milk allergy may occur in some cases of infants on consuming goat milk
- 19- Age of animal and stage of lactation are the physiological factors affecting milk yield.
- 20- External milk contamination can add larger number of M.Os to milk than internal one.

### II-Answer the following questions:

## 1- Compare between: (6M)

- a- Sliminess of milk and sweet curdling.
- b- O/R potential of milk and aw as factors affecting microbial growth in milk.

2-	Write the scientific terms for the following sentences: (3 M)
1.	
ba	acterial cluster (
2.	It is an immune- compromised disease characterized by meningitis, still birth and
tra	ansmitted through milk. (
3.	A process at which microorganism ferment lactose and produce acid mainly with few
an	nount of volatile products. (
4.	It is a phenomenon of some people whom can't digest lactose and suffering from
dia	arrhea, a flatulence and colic. (
5.	It is a process of destruction of most microorganisms that present on the surface of
equ	uipment but not necessary bacterial spores. (
6.	Phenomenon caused by milk casein that react with acid and alkaline conditions
3-	Discuss: ((6M)
1-	The phases of natural fermentation of milk.
2-	Milk allergy.

GOOD LUCK

64-Dopamine receptors antagonists give some therapeution	benefit in mares consumed
a) Dopamine containing plants	b) Sclerotium infected barley
c) Nitrite accumulating plants	d) Cyanogenic glucosides containing plants
55- All of the following are associated with diphacinone ex	posure in dog EXCEPT
a) Prolonged prothrombin time	b) Decrease platelets count
c) Bleeding	d) Inhibition of vit. K activation
66- Sulfate conjugation is considered as one of phase II bio	
a) True	b) False
57- Ricin is	
a) Alkaloid present in caster bean seeds	b) Glycoside present in Datura plant
c) Toxalbumin, water soluble toxin consists of 2 chai	
58-Cows are less susceptible to poisoning by ochratoxin A	
a) OA is inactivated by stomach acidity	b) Ruminal flora detoxify OA
c) Rapid liver microsomal hydrolysis	d) All of them
9 means the understanding of mechanisms of toxi	
a) Toxicodynamic	b) Toxic effect
c) Toxicokinetics	the second secon
	d) Biotransformation
70- Aging phenomena of AchE enzyme is expected after t	
a) Organophosphates	b) Carbamates
c) OPIDN	d) Organochlorines
	dy cells at the same direction of concentration gradient withou
the need of energy or carrier protein.	
a) Active transport	b) Facilitated diffusion
c) Absorption	d) Simple diffusion
72- Shell fish from polluted water was a potential danger	ous source for poisoning outbreaks as in Minamata.
a) Methyl mercury	b) Cupper sulfate
c) Fluoride	d) Arsenic trioxide
73 means that one chemical does not have toxic	effect but when administered in combination with other chemica
increase its toxicity.	
a) Additive effect	b) Potentiation
c) Synergism	d) Functional antagonism
74- Acute lead poisoning in ruminants is usually associated	
a) Salivation, diarrhea and hypotension / cholera,	b) Dyspnea, heart failure and cough / oleander poisoning
enteritis and corona virus	gossypol poisoning and pneumonia
c) Aggressiveness, hyperexcitation and tremors /	d) Lameness, osteoporosis, brown pitted teeth / Fluorosis
rabies, hypomagnesemia and meningitis	osteomalacia and hypocalcemia
75- Choose from the following the most suitable condition	
a) High environmental temperature, low substrate	b) Fluctuating environmental temperature, high substrat
moisture content and 70% relative humidity.	moisture content and high carbohydrate substrate as corn
c) Low environmental temperature, high substrate	d) Bad ventilated storage places, presence of Aspergillus flavu
moisture content and damage seeds coat.	contamination and high substrate moisture content.
	comes from cows exposed to Lupinus plant during pregnancy
a) True	b) False
	1
77- Change of hydroxy apatite crystalline structure of bon	
a) True	b) False
78- Thin egg shell phenomenon is associated with organoc	
a) True	b) False
'9- Aflatoxins content in the ration of lactating dairy cattle	
a) True	b) False
O- Toxicodynamic of Thiamethoxam is related to its inhib	itory effect on glycine amino acid in spinal cord.
a) True	b) False

2- All of the following plants able to cumulate high levels	of nitrate or nitrite EXCEPT
a) Bracken fern	b) Zea mays (corn)
c) Avena sativa (oats)	d) Chenopodium
3- Ingestion of usually associated predominantly v	
	b) Nicotiana gluca plants
a) Hyoscyamus seeds	d) Nerium oleander
c) Ricinus communis  4- Sweet clover disease is toxic condition in cattle due to	
a) Warfarin / extensive bleeding	b) Cholecalciferol / metastatic calcification
	d) Both a,c
c) Decayed melilotus sp. plants / Coagulopathy	· ·
5- All of the following signs are observed in cows poisone	b) Tremors
a) Frothy salivation	d) Dark blood
c) Dyspnea	
6- Urine is the main route of excretion of lipophilic toxic	
a) True	b) False
7- Choose the correct statement from the following.	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
a) Acute lead poisoning characterized by anemia	b) Fructose diphosphate is useful in Nerium oleander toxici
c) Methyl mercury is inorganic form affect kidney	d) Leek and onion contains high level of cyanogenic glucosi
8- Acetic acid is used to treat urea poisoning in cattle bec	ause
a) It acidify rumen and convert NH3 to NH4	b) It increase urinary excretion of urea
c) It inactivate urease enzyme which increase NH3	d) All of them
89- Repeated exposure to small doses of some toxicants for	
a) Tolerance	b) Immunity
c) Idiosyncrasy	d) Aging phenomena
0 is the main character to venomous snake.	L. D. San
a) Biting ability	b) Presence of telson gland
c) Large body size	d) Presence of fangs
11- Strychnine is concentrated in of strychnus nux v	
a) Stem / Brain	b) Fruits / liver
c) Leaves / Spinal cord	d) Seeds / Spinal cord
42- Hydrated sodium calcium aluminosilicate is	b) Bind to aflatoxins rendering them unabsorbed from gut
a) Convert aflatoxins to easily eliminated form with the urine	
c) Increase activity of liver enzymes to detoxify aflatoxins	
	luoride content for prolonged period. Expected symptoms is
a) Diarrhea, colic and liver damage	b) Salivation, hyper excitability, dyspnea and convulsions
c) Brown-discolored teeth, decrease milk yield,	
lameness and emaciation	manifestations
44is considered a potential source for fluoride in	the environment
a) Super phosphate factories	b) Pesticides factories
c) Batteries factories	d) All of them
45- Anaerobic bacteria in sediment of aquatic environme	
a) Convert insoluble cadmium to soluble form	b) Convert organic arsenic to trivalent form
c) Convert inorganic mercury to methyl form	d) Convert metallic lead to tetra-ethyl form
<b>46-</b> Severity of signs seen after acute organophosphates t	oxicity is related to degree of
a) Plasma cholinesterases inhibition	b) Impairment of neuronal Na-channel
c) Neuro-toxic esterase inhibition	d) True cholinesterase inhibition
47- Deltamethrin is and exert its toxic effect thro	ugh in animals
	b) Synthetic pyrethroid / Interference with neural Na-cha
a) Anti-coagulant rodenticide./ inhibition of vit k	
<ul> <li>a) Anti-coagulant rodenticide, / inhibition of vit k</li> <li>c) Neonicotinoid / inhibition of nACh receptors</li> <li>48- Rabbit is the most sensitive species to fipronil poison</li> </ul>	d) Carbamate insecticide / inhibition of Acetyl cholinester

49- Gastric evacuation in horse is preferable by using	
a) Apomorphine injection	b) Ipecac syrup orally
c) Hydrogen peroxide 3% orally	d) Nasogastric intubation
50- GIT disturbances followed by acute hepatic failur	re are the main symptoms of acute oral poisoning.
a) Solanine	b) White phosphorous
c) Warfarin	d) Fipronil
51- A group of stray dogs suddenly shows hypere	xcitability muscular tremors running fits and generalized
followed by generalized paralysis. Hind limb pa	aralysis and anorexia developed several days later in survival anim
Histopathology revealed presence of cerebral e	edema. Expected toxicant is
a) Strychnine	b) Bromethalin
c) Zinc phosphide	d) Diazinon
2- Removal of absorbed toxicant could be accelerate	ed by
a) Activated charcoal	b) Cathartics
c) Gastric lavage	d) Divretics
3 is a diseased toxic condition seen in poultry	r characterized by feed refusal, bloody feces, decrease growth, wh
necrotic oral lesions and immunosuppression.	with with the second state of the second sec
a) Trichothecenes toxicosis	b) Ochratoxicosis
c) Aflatoxicosis	d) Acute Ricin poisoning
4is one of early urinary biomarkers for renal	tubular dysfunction associated with cadmium exposure.
a) N-acetyl-B-D-glucosaminidase enzyme	b) Delta-aminolevulinic acid dehydratase enzyme
c) Pyrimidine-5-nucleotidase enzyme	d) Both a,b
5- C.N.S is primary target for many biological zootoxi	ns as
a) Lead	b) Elapidae venom
c) Vipridae venom	d) All of them
5-The main toxic component in snake venom is	a a a a a a a a a a a a a a a a a a a
a) Coagulant factors	b) Toxic hormones
c) Digestive enzymes	d) lons as phosphate, chlorine and magnesium
7- A group of mature camels were returned to owne	r after grazing in new area shows colic, salivation and diarrhea. Clini
examination revealed normal body temperat	ure, dysonea and tremore Some animals were suffered to
bradyarrhythmias and hypokalemia, while other	s were suffered from tachyarrhythmias and hyperkalemia. Expect
alia ana ani di di	expect
alagnosis is the consumption of	The state of the s
a) Whole cotton seeds	
a) Whole cotton seeds	b) Nerium oleander plants
a) Whole cotton seeds c) Large amount of solanum tuberosum	b) Nerium oleander plants d) Well water contains high concentration of mercury
a) Whole cotton seeds c) Large amount of solanum tuberosum	b) Nerium oleander plants d) Well water contains high concentration of mercury t toxicity.
a) Whole cotton seeds c) Large amount of solanum tuberosum  B-Atropine sulfate injection alone is sufficient to trea a) Chronic carbamates	b) Nerium oleander plants d) Well water contains high concentration of mercury t toxicity. b) Acute carbamates
a) Whole cotton seeds c) Large amount of solanum tuberosum  3-Atropine sulfate injection alone is sufficient to trea a) Chronic carbamates c) Acute organophosphates	b) Nerium oleander plants d) Well water contains high concentration of mercury t toxicity. b) Acute carbamates d) Chronic pyrethroids
a) Whole cotton seeds c) Large amount of solanum tuberosum  3-Atropine sulfate injection alone is sufficient to trea a) Chronic carbamates c) Acute organophosphates  3- Zearalenone is	b) Nerium oleander plants d) Well water contains high concentration of mercury t toxicity. b) Acute carbamates d) Chronic pyrethroids rough
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