



Questions Bank

Lec1: Avian influenza

Q1// Fill with blanks:

- 1-The term _____ originally referred to epidemics of acute rapidly spreading catarrhal fevers of humans caused by viruses in the family _____
- 2-The surface of AIV is covered by two types of glycoprotein projections (10-14) nm in _____ length and (4-6) nm in diameter which consist of:1-_____ 2-_____.
- 3-AIV responsible for appear the respiratory signs like _____, _____ and _____
- 4-AIV can also be inactivated by heating to _____ for _____.
- 5-Mortality in case of AIV may reach up to _____
- 6-With most HPAI viruses, _____ are common in pancreas, spleen, and heart, and occasionally in liver and kidney.

7- Immunosuppression occur due to atrophied the _____
and _____.

8-Cyanosis of the non-feathered skin have been reported especially in _____ and _____

9-Immune response against viral internal proteins has not been shown to _____ or _____ but may shorten the period of virus replication and shedding.

10- Some of D.D. diseases for Avian influenza are _____,
_____, and _____.

Q2// Choose the true answer:-

1- The viral genome for AIV is composed of eight segments of _____

- a) Single-stranded, negative-sense RNA that code.
- b) Double -stranded, negative-sense RNA that code
- c) Double -stranded, negative-sense DNA that code.
- d) Single -stranded, negative-sense DNA that code.

2- Avian influenza viruses are classified in the family

- a) Adenoviridae
- b) Paramyxoviridae
- c) Orthomyxoviridae
- d) Herpes viridae

3- The incubation period for AIV in poultry extend from -----

- a) Ten to two weeks .
- b)One to 14 hours
- c)One to

three months d) One to seven days

4- Edematous to necrotic combs and wattles may be present in case of -----

a) Uroliths b) LPAI c) Uraliths d) HPAI.

5- Avian Influenza Diagnosis have been done by -----

a) isolation and identification of influenza b) Direct Detection of AIV c) Serology d) All of the above.

6- The control against AIV infection in wild birds occurred by _____

a) Treatment b) Vaccination c) Treatment and Vaccination d) controlled by eradication techniques.

7- All viruses can be classified into two categories _____

a) HPAI b) LPAI c) HPAI & LPAI d) HPIA & LPIA.

8- The virus can survive for up to 23 days if refrigerated and for _____ in carcasses at ambient temperature.

a) several days b) several hours c) several months d) several weeks .

9- Fibrinous inflammation may be noted in the air sacs and coelomic Cavity _____, and -----
----- may be observed

a)The serosal and mucosal surface of viscera b)
Necrotic combs and wattles c) Edematous with
congestion and occasionally hemorrhages d) (“Peritoneal
cavity”) and “egg yolk peritonitis” .

10-Chicken embryos, _____ old, are inoculated by AIV via the
allantoic cavity.

a)12-13 days b) 1-2 days c) 9-11 days d) 5-8 days

**Q3// Put (T) or (F) in the following sentences and corrected
the false term?**

- 1- Fowl plague (most common) is a another synonym for AI.
- 2- Avian influenza Virions are typically spherical to
pleomorphic but can be filamentous.
- 3- Avian influenza viruses can survive for at least 35 days
at 10°C in manure
- 4- The influenza viruses resistant to a variety of chemical
disinfections including sodium hypochlorite, 70% ethanol,
and oxidizing agents.
- 5- In case of AIV infection the sudden death can occurs
without any previous signs.

- 6- LPAI virus infections lead to suppressed the functions of T-cells
- 7- The kidney lesions may be accompanied by urate deposits in case of AIV
- 8- Typhus exudative gallinarum isn't one of synonyme for AI
- 9- The surface of AIV isn't covered by two types of glycoprotein
- 10- Rodents ,dogs and cats which may act as mechanical vectors for AIV

Lec2: Infectious bronchitis (IB)

Q1// Fill with blanks:

1-The causative agent for IB is _____.

2-IBV contains a single-stranded RNA an enveloped virus

Three virus-specific proteins have been identified; Structural proteins include from the _____ , _____ and _____.

3-Generally nephropathogenic IBV strain causes _____, compared with strains infecting only the respiratory or reproductive systems .

4-One of clinical signs in case of IBV infection kidney damage that progresses to _____

5-In case of IBV infection the oviduct have been show _____ and _____

6-Urate deposits may be observed on the viscera may be occurs in case of _____

7-Presence of Russell bodies in Harderian cells has been observed following infection with _____ serotype.

8-Edemaof _____ and granulocytic infiltration has been reported in the collecting ducts and spheroids.

Q2// Choose the true answer?

1- The Structural proteins of IBV is composed of three virus-specific proteins_____

a) Envelope protein [E] b) Matrix protein [M] c) Nucleocapsid protein [N] d) all a, b, c.

2- IB is caused by _____ virus genus in the family Coronaviridae.

a) Alfa corona b) Gammacorona c) Beta corona d) Paramyxo virus

3- Several strains of IB virus have a strong affinity for the kidney is called _____

- a) Renal strains b) H120 strain c) Nephropathogenic strains
d) 52 strain

4- One of clinical sign for chicken infected by IB is -----

- a) Paralysis b) bloody diarrhea c) Uraliths d) False layer.

5- Histological changes of Corona virus characterized by

- a) Interstitial nephritis b) tubular degeneration c) infiltration by heterophils d) All of the above.

Q3// Put (T) or (F) in the following sentences and corrected the false term?

1- It causes no significant economic losses to the poultry industry worldwide

2- Corona virus characterized by fairly labile (fragile), being easily destroyed by disinfectants.

3- Coughing, sneezing and tracheal râles may be observed in case of IB infection

4- Amazon parrot are considered to be natural hosts for IB

5- In case of IB infection the False layer can't be occurs in layers.

- 6- IB virus infection lead to Loss of pigment in brown-shelled eggs
- 7- The rough or irregular shells or soft, misshapen, with watery albumen not appear in case of IBV
- 8- Kidney damage may be significant following infection with nephropathogenic strains
- 9- Urate crystal deposition in the kidney parenchyma and in the ureters and visceral uricosis occurs in IB infections
- 10- Infection of very young chicks may not be result in the development of cystic oviducts in IB infections.

Lec3:- *Salmonellosis*

Q1// Fill with blanks:

- 1-Synonyms for Pullorum disease is _____
- 2-Non-motile bacterium *Salmonella pullorum*. The organism _____ to chicken and turkeys
- 3- _____: the ceca are enlarged and distended with cheesy curd-like cores infecting only the respiratory or reproductive systems .
- 4-In adult hen birds, the characteristic lesion which found are _____ with the irregular, _____

5-_____ is a non-motile bacterium. The organism is sensitive to cold, sunlight, drying and disinfectants, but persists in soil.

6-Liver enlargement and mahogany colored (Metallic sheen) may be occurs in case of _____

7-The cell wall antigens for this organism are identical to those of *Salmonella pullorum*, therefore infected flocks are detected by _____

8- This Paratyphoid occurs by large group of bacteria that are _____

9-In case of Paratyphoid infection may be occurs retained yolk sac and enteritis with _____

10- Specific ELISA-based test kits are available for assaying for _____ antibody

Q2// Choose the true answer?

1- The causative agent for Pullorum disease is _____

- a) *Salmonella pullorum* b) *Salmonella gallinarum* c) *Salmonella typhimurium* d) *Salmonella enteritidis*.

2- In case of Pullorum disease The mortality in extreme cases can be reach to _____.

- a) 40% b) 60% c) 80% d) 100%

3-*Salmonella pullorum* is gram-negative bacillus resistant to_____

- a) cold b) sunlight c) , *drying and disinfectants* d) *all a,b,c*

4- Pale and shrunken combs in older birds may be present in case of -----

- a) Pullorum disease b)Typhoid c) Paratyphoid d) *Salmonella Arizona*

5- In case of _____we can see mahogany colored liver and diarrhea with pasting around the vent

- a) *Salmonella pullorum* b) *S. gallinarum* c) *Salmonella typhimurium* d) All of the above.

6- In case of Typhoid we can see present necrosis in _____

- a) heart b) liver c) lung d) All of the above

7- An administration of live _____*S. gallinarum* vaccine during the rearing period will eliminate outbreaks of clinical disease

- a) 7R strain b) 8R strain c) 9R strain d) 10 R strain

8-The most important types of bacteria which caused Paratyphoid are : _____

- a) Salmonella gallinarum and Salmonella pullorum b)
- Salmonella typhimurium and Salmonella pullorum c)
- Salmonella enteritidis and Salmonella gallinarum d)
- Salmonella typhimurium and Salmonella enteritidis

9- Paratyphoid occurs by large group of bacteria that are _____

- a) non host adapted b) highly host adapted c) non affinity host adapted
- d) affinity host adapted

10-For treatment Paratyphoid we can use_____

- a) Streptomycin 50 - 100 gm./ kg B.W. IM. b) Tylosin 50 - 100 gm./ kg B.W. IM. c) Neomycin 50 - 100 gm./ kg B.W. IM. d) all a,b and c

Q3// Put (T) or (F) in the following sentences and corrected the false term?

1-Non-motile bacterium ,*Salmonella pullorum*. The organism non highly host adapted to chicken and turkeys

2- Excessive numbers of dead-in-shell chicks and deathsShorty before hatching may be appear in case of *Salmonella pullorum*.

- 3- Chalk white feces and pasted vent may be found in case of Pullorum disease.
- 4- The lungs may be congested and the liver dark and swollen with hemorrhages visible on the surface may not be appear in case of *Salmonella pullorum*.
- 5- *Salmonella gallinarum* is a non-motile bacterium. The organism is sensitive to cold, sunlight, drying and disinfectants, but persists in soil..
- 6- Pericarditis with turbid yellow fluid in the pericardial sac and fibrin attached to the surface of the heart appear in case of Pullorum disease .
- 7- Enteritis and slimy (mucopurulent) inflammation of duodenum may not be occurs in case of Pullorum disease .
- 8- Paratyphoid characterized by diarrhea and present focal necrosis of visceral organs.
- 9- An acute outbreaks in young birds 7 to 21 days of age, with peak of mortality from 7 to 14 days of age depending on the activity of the Paratyphoid agents.
- 10- Specific ELISA-based test kits are available for assaying for *S. enteritidis* antibody

Lec4:- Chlamydiosis

Q1// Fill with blanks:

- 1- The disease was called _____ or Parrot fever when it diagnosed in Psittacine (curve-beaked) birds
- 2- Chlamydiosis is called _____ when it diagnosed in all other birds or in humans
- 3- The causative agent for Parrot fever is gram negative bacteria called _____ .
- 4- In case of Chlamydiosis the clinical signs in most birds include _____
- 5- In P.M. lesions of Chlamydiosis we can see Pericarditis, congestion of the lung, airsacculitis, clouding of air sac walls and enlargement of _____.
- 6- Chlamydiosis is diagnosed by isolation and identification of _____ in cell cultures or embryonating chicken eggs.
- 7-Giemsa stain ing used for detection of _____ which has reddish color in the cytoplasm of infected cells.

Q2// Choose the true answer:-

1-Parrot fever when diagnosed in humans is called

- a) Psittacine b)Ornithosis c) Chlamydiosis d) all a, b, c.

2-_____are susceptible, especially older and immunosuppressed individuals who are at a higher risk when infected by Chlamydiosis

- a)Animals b) Humans c)Parrot d) curve-beaked birds

3- In acutely infected turkeys and ducks the serosal surface covered by _____

- a) serous exudate b) purulent exudate c) mucus exudate d) serofibrinous exudate.

4- Giemsa staining used for detection of intracytoplasmic bodies which has _____in the cytoplasm of infected cells.

- a) bluish color b) reddish color c) yellowish color d) grayish color.

5- There is no vaccine, have a good biosecurity program, excluding _____as much as possible

- a)wild birds b) Captive birds c) Aviary birds d) All of the above.

Q3// Put (T) or (F) in the following sentences and corrected the false term?

- 1- Parrot fever called Ornithosis when diagnosed in Psittacine birds
- 2- The causative agent for Parrot fever gram negative bacteria *Chlamydia psittaci*.
- 3- *Chlamydia psittaci* multiple in these organs and arrived to blood stream which transfer it to liver , kidney and spleen at last appear clinical signs .
- 4- Humans are susceptible for *Chlamydia psittaci*, especially older and immunosuppressed individuals who are at a higher risk.
- 5- Recovered birds remain carriers and will continue to intermittently shed the *Chlamydia psittaci* for long periods before clinical signs have subsided
- 6- In turkeys there is also respiratory distress and loose yellow to greenish-yellow colored droppings may not see in case of Psittacosis .
- 7- In acutely infected turkeys and ducks the serosal surface covered by serofibrinous exudate.
- 8- In pigeons and other birds with chronic infection may show splenomegaly and hepatomegaly .

9-Chlamydiosis is diagnosed by isolation and identification of *Chlamydia psittaci* in cell cultures or embryonating chicken eggs

10-Giemsa staining may not be used for detection of intracytoplasmic bodies .

Lec5:- Coccidiosis

Q1// Fill with blanks:

- 1- The term of _____ originally referred to A single, mature oocyte (egg) contains four sporocysts, and each sporocyst contains two sporozoites (eight sporozoites in each oocyte
- 2-Initiated by ingestion of sporulated oocysts (eggs) and usually takes _____ to complete life cycle
- 3- Sporozoites invade epithelial cells and divide to produce numerous _____ (cysts) filled with merozoites at least two generations of asexual development
- 4- Oocysts undergo further _____ in environment to become infectious

- 5- Environmental and management stress such as bad stocking the feed and _____ may be help to Coccidiosis infections.
- 6-Microscopic examination of intestinal and _____ reveals oocysts.
- 7-Lesions scoring the most commonly use system and by this system a score of _____. (Johnson and Reid method)
- 8- Administration of water dispersible vitamin _____ supplements may enhance recovery from Coccidiosis
- 9-Coccidian Oocysts are very resistant to _____ and common disinfectants
- 10- Use the anti- coccidial drugs like : Salinomycin, Monensin, Narasin and Amprolium which _____ of Oocysts, so the birds can build up an immunity to the parasite.

Q2// Choose the true answer.

- 1- A single, mature oocyte (egg) contains _____ sporocysts, and each sporocyst contains two sporozoites .
a) one b) two c) three d) four
- 2- Each sporocyst contains from _____ sporozoites
a) one b) two c) three d) four

3- Coccidiosis one of the most important _____ diseases that infected avian species

- a) protozoan parasitic
- b) tap worms parasitic
- c) helminthes parasitic
- d) flattened parasitic

4- Merozoites are final product of _____

- a) mature stage
- b)zygomatic stage
- c) sexual stage
- d) asexual stage

5- white "tiger-striping" of upper small intestine (duodenum) may be occurs in case of infected by _____

- a)Eimeria necatrix
- b) Eimeria maxima
- c) Eimeria acervulina
- d) Eimeria brunetti

6- Mid and distal small intestines (jejunum and ileum): White spots (large schizonts) in mucosa with mucus and blood in lumen. may be occurs in case of infected by _____

- a)Eimeria necatrix
- b) Eimeria maxima
- c) Eimeria acervulina
- d) Eimeria brunetti

7-the jejunum may look thickened and ballooned with Orange, mucoid material in the lumen may be occurs in case of infected by _____.

a) Eimeria necatrix b) Eimeria maxima c) Eimeria acervulina d)

Eimeria brunetti:

8- Mucus and blood in ileum and colon, Can occasionally see cores of blood in cecum lumen may be occurs in case of infected by _____.

a) Eimeria necatrix b) Eimeria maxima c) Eimeria acervulina d)

Eimeria brunetti

9- Used vaccination coccivac which contains of _____ live Oocysts isolated given 1- 3 days orally or spray.

a) E. acervulina b) E. mevati c) E. tenella and E. maxima, d) All

a, b and c.

10- Coccidiosis is prevented through _____.

a) good sanitation b) litter management c) good sanitation and litter management. d) good sanitation and good ventilation.

Q3// Put (T) or (F) in the following sentences and corrected the false term?

1- Coccidiosis is one of the most important protozoan parasitic diseases that infected avian species.

2- Each sporocyst contains two sporozoites (ten sporozoites in each oocyte).

- 3- Asexual and sexual stages occur in different sites of intestinal tract depending the species of Emirian.
- 4- Oocysts may be undergo further maturation (sporulation) in environment to become infectious.
- 5- Bloody diarrhea is one of clinical signs for Coccidiosis.
- 6- In *Eimeria acervulina*: Mid and distal small intestines (jejunum and ileum): White spots (large schizonts) in mucosa with mucus and blood in lumen.
- 7- In *Eimeria acervulina* : white “tiger-striping” of upper small intestine (duodenum)
- 8- *Eimeria maxima*: the jejunum may look thickened and ballooned with Orange, mucoid material in the lumen.
- 9- *Eimeria hagani*: Mucus and blood in ileum and colon,
Can occasionally see cores of blood in cecum
- 10- Changing types of anticoccidial medications reduces the chance of the coccidian parasite to become resistant to one type of medication.

Q4// Define the following sentences.

Avian influenza , Influenza, Infectious Bronchitis IB,
Salmonellosis, Pullorum disease, Typhlitis, Fowl typhoid,
Paratyphoid, Chlamydiosis, Coccidiosis, Emirian.

Q5// answer the following questions

A-Mention the mainly clinical signs for LPAI

B- Mention the mainly clinical signs for HPAI

C-Write short notes about diagnosis for AI.

D- How can you prevented the farms infections by AI

E- Write short notes about P.M. lesions for AI

F- Write short notes about diagnosis for IB

H-Talk briefly about histological changes for IB infections in chickens

I- How can you controlled of the poultry farms from infections by IB

J- How can you prevented the Poultry farms for infection by Salmonellosis

H- Write short notes about Diagnostic tests for Pullorum disease

K-How can you treat chickens infected by Fowl typhoid

L-Write short notes about treatment chickens infected by Paratyphoid

M-Write short notes about differential diagnosis for Chlamydiosis

N-Talk briefly about diagnosis for Chlamydiosis

O- Write short notes about pathogenesis for Chlamydiosis

P-Mention the factors which contributing to outbreaks of clinical Coccidiosis

Q-List the factors which responsible for released the sporozoites and how We can be classified the Emirian depending on the pathogenicity from most to lose pathogenic

R- Write short notes about treatment chickens infected by Coccidiosis.



First semester Examination

Q1) Fill in the blank the correct choose from bracket. (30 Marks) (10 only)

- 1-Hitchner B1 strain is ----- (Lentogenic, Mesogenic, Velogenic).
- 2-The causative agent of ----- (ND, MD, Avian pox, UE), has tropism of epithelial of skin and mucous membrane causing oval cytoplasmic body (Bollinger body).
- 3-Marek's disease characterized by ----- (Toxins, fluids, mononuclear cell, same cells) infiltration in peripheral nerves in classic forms.
- 4-Man can get infection causing conjunctivitis, headache, and fever in ----- (ND, MD, Avian pox, UE).
- 5-In ----- (ND, MD, Avian pox, UE), After 2 weeks, lesions have areas of inflammation and formation of a scab in skin.
- 6-Transient paralysis of MD result from ----- (Cervical Nerve infection, Middle ear infection, Vasogenic brain edema, Mycotoxin infections).
- 7-Vaccines mode of infections of ----- (ND, MD, Avian pox, UE).
- 8-cell-associated Herpes is causative agent of ----- (ND, MD, Avian pox, UE).
- 9- In Acute ND, duration of disease----- [(20-30 minutes),(3-8 days), (8-20 days), (20-30 days)].
- 10- The mortality in chicken may range from (2-10%), but in young quail high 100% ----- in (ND, MD, UE, NE).
- 11- Petechial hemorrhage in gland of proventriculus in-----(ND, MD, Avian pox, UE).

Q2) Answer the following questions. (Answer 7 only) (70 Marks).

- 1-Enumerate two important clinical signs of ND.

- 2-In case of ND infection, Can we vaccinate? if yes, write Types & Routes.
- 3-Enumerate three forms of Avian pox.
- 4-Mention two clinical signs, when Cervical nerve involves in MD.
- 5-Why ruffled feathers occur in case of MD infection.
- 6-Enumerate one name of vaccine of MD.
- 7-Enumerate two diseases, predisposing to UE.
- 8-Enumerate one important clinical signs of NE.