



Code:

Choose the right answer :

- 1) Which virus is known to be immunosuppressive
A. Avian metapneumovirus
B. Avian leukosis virus
C. Infectious bronchitis virus
D. Chicken anemia virus (CAV)
- 2) Which statement is true regarding the control of Infectious Bronchitis Virus (IBV) in poultry?
A. Only live vaccines are used
B. Cross-protection between serotypes is high
C. All vaccine strains provide life-long immunity
D. Frequent mutations lead to the emergence of new serotypes
- 3) The most reliable method for differentiating between Newcastle Disease Virus (NDV) and Avian Paramyxovirus serotype-1 is:
A. Clinical symptoms
B. Hemagglutination test
C. ELISA
D. Intracerebral pathogenicity index (ICPI)
- 4) The H5 and H7 subtypes of Avian Influenza virus are considered highly pathogenic due to their:
A. Transmission via vertical route
B. Ability to infect mammals
C. Polybasic cleavage site in the HA protein
D. Resistance to antiviral drugs
- 5) Which of the following vaccines is commonly used in the egg for broiler chickens?
A. Newcastle disease live B1 strain
B. Fowlpox virus vaccine
C. Marek's disease HVT vaccine
D. Infectious bronchitis live vaccine
- 6) Which of the following *Salmonella* serotypes is most commonly associated with vertical transmission in poultry?
A) *Salmonella Enteritidis*
B) *Salmonella Typhimurium*
C) *Salmonella Gallinarum*
D) *Salmonella Pullorum*
- 7) Fimbrial antigens are key virulence factors for which avian bacterial pathogen?
A) *Mycoplasma gallisepticum*
B) *Salmonella Gallinarum*
C) *Avibacterium paragallinarum*
D) *Escherichia coli*
- 8) The etiologic agent of ("quail disease") is:
A) *Clostridium septicum*
B) *Clostridium colinum*
C) *Clostridium difficile*
D) *Bacillus cereus*

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- 9) *Ornithobacterium rhinotracheale* (ORT) infection is most commonly associated with which clinical manifestation in poultry?
A) Enteric hemorrhage
B) Ascites
C) Respiratory distress with infraorbital swelling
D) Skin necrosis
- 10) Which vaccination strategy is most effective for preventing *Mycoplasma gallisepticum* in breeder flocks?
A) Killed vaccine in water
B) Live attenuated vaccine in feed
C) Aerosol administration of bacterin
D) In ovo vaccination
- 11) The carrier status of infection is most significant in which of the following viral diseases?
(A) infectious bronchitis
(B) infectious laryngotracheitis
(C) Newcastle disease
(D) infectious bursal disease
- 12) Histopathology is an important diagnostic tool for the diagnosis of which of the following viral diseases?
(A) infectious bursal disease
(B) avian influenza
(C) infectious bronchitis
(D) Newcastle disease
- 13) In chickens affected with chicken infectious anemia, lesions are consistently and characteristically found in the bone marrow and
(A) pancreas
(B) liver
(C) spleen
(D) thymus
- 14) Migratory waterfowl are considered as an important source of infection of poultry with which of the following viral diseases?
(A) avian influenza
(B) Newcastle disease
(C) avian encephalomyelitis
(D) infectious bronchitis
- 15) What are the predominant clinical signs of paramyxovirus serotype 1 infection in pigeons?
(A) respiratory and neurologic signs
(B) neurologic signs and diarrhea
(C) respiratory signs and diarrhea
(D) respiratory signs, neurologic signs, and diarrhea.
- 16) Which of the following diseases is characterized histopathologically by the presence of intranuclear inclusion bodies in the epithelial cells of the trachea?
(A) wet pox
(B) infectious bronchitis
(C) infectious laryngotracheitis
(D) wet pox and infectious laryngotracheitis
- 17) There was a dramatic increase in mortality in a flock of 5-week-old broiler chickens. In 10 days, the mortality dropped significantly but many birds in the flock developed torticollis (twisting of the neck). From this case history, which of the following diseases would be the first on your list of rule-outs?
(A) nutritional encephalomalacia
(B) Newcastle disease
(C) Marek's disease
(D) avian influenza





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- 18) Which of the following is among the factors that would determine the timing of vaccination against infectious bursal disease?
- (A) strain of the vaccine virus
 - (B) route of administration of the vaccine
 - (C) level and uniformity of maternal antibody in chicks
 - (D) strain of the vaccine virus and level and uniformity of maternal antibody in chicks
- 19) With coarse-spray vaccination, the size of the droplet would be
- (A) 250-300 microns
 - (B) 200-250 microns
 - (C) 100-150 microns
 - (D) 50-100 microns
- 20) A flock of broiler breeder hens experienced 25% drop in egg production. A virus that agglutinated the erythrocytes of chickens was isolated from the flock. The isolated virus could be any of the following viruses EXCEPT
- (A) Newcastle disease virus
 - (B) avian influenza virus
 - (C) egg drop syndrome virus
 - (D) avian encephalomyelitis virus
- 21) A representative treatment regime for Aspergillosis consist of :
- a- Amphotericin B administrated intratracheally (1.5 mg/kg)
 - b- Amphotericin B administrated intratracheally (2 mg/kg)
 - c- Amphotericin B administrated intratracheally (2.5 mg/kg)
 - d- Amphotericin B administrated intratracheally (3 mg/kg)
- 22) In budgerigars lipomas are best restricted by strict dietary by added:
- a- L-carnitine 1000mg/kg
 - b- L-carnitine 500 mg/kg
 - c- L-carnitine 1250 mg/kg
 - d- L-carnitine 750 mg/kg
- 23) Prolonged avian anesthesia lead to
- a- Hyperthermia
 - b- Unaffected
 - c- Dehydration
 - d- Increase blood pressure
- 24) Tassel foot it a diseases of canaries caused by mites, characterized by :
- a- Gray- white encrustation around the peak
 - b- Gray- white encrustation around the eye
 - c- Gray- white encrustation involves the skin
 - d- Easily broken feathers
- 25) Feathers duster syndrome in a budgerigar probably due to:
- a- Nutritional deficiency
 - b- Mites infestation
 - c- Herpes virus infection
 - d- Genetic problems

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- 26) Which of the following statements about hyperemia is correct?
A- Active hyperemia involves blood accumulation in veins due to vessel obstruction
B- Passive hyperemia is commonly caused by increased arterial pressure
C- Hyperemia refers to an increased amount of blood in the circulatory system
D- Hyperemia leads to decreased organ size and pale appearance
- 27) Which of the following statements is TRUE regarding thrombosis?
A. Thrombosis only occurs in veins and is never found in the heart
B. A saddle thrombus is found on the valves of the heart
C. Thrombosis involves the formation of a blood clot within a blood vessel wall
D. Septic thrombus is sterile and contains no microorganisms
- 28) Which of the following best describes an embolism?
A-The rupture of blood vessels leading to hemorrhage
B-A clot that forms and remains only in the heart
C-The presence of a foreign body in circulation causing vessel obstruction
D-The thinning of blood due to decreased cell components
- 29) Which of the following best describes ischemia?
A-An increased supply of venous blood to an organ
B-The deficiency of arterial blood supply to a part of an organ
C-A sudden increase in arterial pressure causing vessel rupture
D-Enlargement of the organ due to accumulation of lymph
- 30) Which of the following best describes an infarction?
A-Excessive bleeding caused by rupture of a vein
B-A triangular area of tissue death caused by lack of blood supply
C-Swelling of tissue due to fluid accumulation
D-Thickening of blood vessel walls without tissue damage
- 31) Which of the following best describes shock in the circulatory system?
A-A sudden increase in arterial pressure due to emotional stress
B-A circulatory disturbance marked by decreased blood volume and hemoconcentration
C-The rapid regeneration of blood vessels following injury
D-A localized reaction of tissues to bacterial infection
- 32) Is induced by antigen-antibody complex that produces tissue damage, The antibodies involved in this reaction are IgG, IgM or IgA.
a- Type III hypersensitivity b Type II hypersensitivity
c- Type I hypersensitivity d - Type IV hypersensitivity.
- 33) The concentration of Vit A in the ration of poultry should be highest for which class of birds
A. Laying hens. B. Broiler starter. C. Breeding hens. D. Broiler finishers.
- 34) The deficiency of..... in the diet of poultry leads to lesser intake of water.
A. K. B. Ca. C. Na. D. Mn.





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- 35) The following vitamin is required in higher quantities in breeder diets than in layer diets for chicken.
- A. Biotin B. Vitamin A. C. Vit E. D. Folic acid.
- 36) What is the primary goal of biosecurity measures in poultry farming?
- A- To improve egg production
B-To prevent the introduction and spread of infectious disease.
C- To increase the growth rate of poultry.
D-To reduce feed consumption .
- 37) Which bacterium is associated with causing respiratory diseases such as infectious bronchitis in poultry?
- A-*Mycoplasma gallisepticum* . B- *Escherichia coli* .
C-*Pasteurella multocida*. D-*Salmonella gallinarum*
- 38) Which of the following factors is more important in determining the correct time for IBD vaccination?
- A-MDA. B-Environmental factor. C-Water quality. D-Ventilation.
- 39) Which of the following infectious bronchitis disease virus strains can be used for vaccinating broiler flocks?
- A-Variant strain only. B-Classical strain only. C-Both A and B. D-Inactivated vaccine.
- 40) Which type of vascular response is responsible for increased viscosity of blood during inflammation?
- A. Vasodilation B. Transient vasoconstriction
C. Slowing and stasis of blood flow D. Endothelial contraction
- 41) Which of the following components in the exudate forms a physical barrier?
- A. Albumin B. Water C. Fibrin D. Platelets
- 42) The transcribing enzyme is.....
- a- Ligase b- DNA polymerase c- RNA polymerase d-Amino-acyl transferase
- 43) The first mRNA codon to specify an amino acid is always.....
- a- TAC b- UAA c- UAG d- AUG.
- 44) Transcription and translation of a gene composed of 30 nucleotides would form a protein containing no more than.....
- a-10 amino acids b- 30 amino acids c- 15 amino acids d- 60 amino acids
- 45) Which site of the tRNA molecule binds to the mRNA molecule?
- a- Anticodon b- Codon c- Amino acid d- 5 prime end



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- 46) Which of the following statements about hyperemia is correct?
A- Active hyperemia involves blood accumulation in veins due to vessel obstruction
B- Passive hyperemia is commonly caused by increased arterial pressure
C- Hyperemia refers to an increased amount of blood in the circulatory system
D- Hyperemia leads to decreased organ size and pale appearance
- 47) Which of the following statements is TRUE regarding thrombosis?
A- Thrombosis only occurs in veins and is never found in the heart
B- A saddle thrombus is found on the valves of the heart
C- Thrombosis involves the formation of a blood clot within a blood vessel wall
D- Septic thrombus is sterile and contains no microorganisms
- 48) Which of the following best describes an embolism?
A- The rupture of blood vessels leading to hemorrhage
B- A clot that forms and remains only in the heart
C- The presence of a foreign body in circulation causing vessel obstruction
D- The thinning of blood due to decreased cell components
- 49) Which of the following best describes ischemia?
A- An increased supply of venous blood to an organ
B- The deficiency of arterial blood supply to a part of an organ
C- A sudden increase in arterial pressure causing vessel rupture
D- Enlargement of the organ due to accumulation of lymph
- 50) Which of the following best describes an infarction?
A- Excessive bleeding caused by rupture of a vein
B- A triangular area of tissue death caused by lack of blood supply
C- Swelling of tissue due to fluid accumulation
D- Thickening of blood vessel walls without tissue damage.
- 51) Which of the following best describes shock in the circulatory system?
A- A sudden increase in arterial pressure due to emotional stress
B- A circulatory disturbance marked by decreased blood volume and hemoconcentration
C- The rapid regeneration of blood vessels following injury
D- A localized reaction of tissues to bacterial infection
- 52) Gout is a disease characterized by urate deposition in the visceral organs result from :
A- Increase protein in the diet. B- Increase plant oils. C- Increase vitamins.
D- Increase protein in the diet.
- 53) Cannibalism in mature birds treated by:
A- Conditioning the beaks and increase lighting.

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- B-Conditioning the beaks and increase protein in the diet.
C-Increase birds density.
D-Increasing the number of feeders, conditioning the beaks and reducing lighting and decrease bird density.
- 54) *Histomonas meleagridis* is a protozoa causing a disease called :
A-Black head, B-Brown head. C-White head. D-Cyanotic head
- 55) Dactylariosis is a mycotic disease that causes
A-Digestive problems B- Nervous signs C- Reproductive problems D- Respiratory signs
- 56) Aflatoxicosis in poultry is primarily a disease of the with important ramifications for other body systems.
A-Kidneys B- Liver C- Muscles D- Lung
- 57) *Davainea proglottina* in poultry is treated with
A-Praziquantel B- Piperazine C- Levamisole D-Clopidol
- 58) Pulmonary edema can occur due to all the following except:
A. Left-sided heart failure
B. Increased alveolar permeability
C. Decreased plasma oncotic pressure
D. Bronchial lymph node hyperplasia.
- 59) Apoptosis is a single cell-initiated, gene-directed cellular, seen in.....
A)Atrophy. B) removing "Aged" cells C) Hyperplasia. D) Hypertrophy.
- 60) Hydropic degeneration, swelling of mitochondria, pyknosis and fragmentation of the nucleus, and eventual cell lysis, all these process literally refers to.....
A)Metaplasia. B) Necrotic cell death. C) Neoplasia. D) Pneumonia.
- 61) The necrosis of nerve fibers starts from myelin sheath is called
A)Hydropic degeneration. B) Demyelination.
C) Wallerian Degeneration. D) Meningitis.
- 62) The term "hepatization" of the lungs refers to:
A. Liver metastasis to lung tissue B. Color and consistency change resembling liver
C, Granulomatous reaction in lung D. Formation of fibrotic nodules
- 63) Necrosis of neurons in brain is known as....
A)Infarction B) Embolism C) Myelomalacia D) Encephalomalacia.



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- 64) It is inflammation of the cerebral part of brain.
A) Salpingitis. B) Meningitis C) Granulation. D) Encephalitis.
- 65) The necrosis of neurons in white matter is called as.....
A) Leukoencephalomalacia B) Microscopic lesions. C) Cytopathology. D) Meningoccele.
- 66) Necrosis of neurons in spinal cord is termed as -----.
A) polio encephalomalacia. B) Hydrocephalus. C) Neoplasia. D) Myelomalacia.
- 67) Acute anemia can lead to ----if more than one third of the blood is lost and not replaced.
A-death B-hypertension C-hypotension D-pale mucous membranes.
- 68) Liver disease is one of the causes of.-----
A-lymphoma B-non-regenerative anemia C-Fibroma D-regenerative anemia.
- 69) Increased hemosiderin deposition suggests presence of.-----
A-acute splenitis B-bone marrow hyperplasia
C-Increased erythrocyte destruction D-Increased erythrocyte half-life.
- 70)is accumulation of clear to light yellow, watery, serous fluid in the pericardial sac.
A- Hemopericardium B- Hydropericardium C- Pericarditis D- pneumothorax
- 71) Occurs when saprophytic bacteria are introduced into pericardial sac.....
A- Hemopericardium B- Hydro pericardium
C- Gangrenous pericarditis D- suppurative pericarditis
- 72) To maintain cell number homeostasis in organ systems that have regenerative capacity
A-Necrosis B- apoptosis C- hyperplasia D- degeneration.
- 73)is a process that usually affects groups of cells in contrast to single isolate cells as observed in apoptosis.
A-Degeneration B- Necrosis C- Inflammations D- program cell death.
- 74) Which of the following statements about DNA is TRUE?
A-DNA is a single-stranded molecule composed of amino acids.
B-DNA contains the bases adenine, uracil, guanine, and cytosine.
C-The strands of DNA run in the same direction and pair A with C and T with G.
D-DNA is a double-stranded molecule with complementary base pairing and anti-parallel strands.





75) Which of the following statements is TRUE about RNA?

- A-RNA is double-stranded like DNA and contains the base thymine.
- B-RNA uses adenine, cytosine, guanine, and uracil as its nitrogenous bases.
- C-RNA is more stable than DNA due to its lack of reactive groups.
- D-RNA is produced during translation using a DNA polymerase enzyme.

76) Trichomoniasis characterized by :

- A-Whitish yellow, caseous lesions adherent to the mucosa of the naris.
- B-Whitish yellow, caseous lesions adherent to the mucosa of the eye.
- C-Whitish yellow, caseous lesions adherent to the mucosa of the and wattles
- D-Whitish yellow, caseous lesions adherent to the mucosa of the oropharynx, crop, and esophagus.

77) Which of the following definitions is correct regarding genetic terminology?

- A-A *codon* refers to a single nucleotide that determines the entire gene expression pattern.
- B-A *locus* is a random stretch of DNA unrelated to gene function.
- C-A *wild type* is the naturally occurring gene sequence typically found at a particular locus.
- D-A *gene* is composed of proteins that instruct DNA how to replicate.

78) Which of the following best explains redundancy in the genetic code?

- A-Each amino acid is coded by only one codon to maintain precision.
- B-The third base of a codon can vary without changing the amino acid it codes for, providing resilience against mutations.
- C-All codons with the same first base code for the same amino acid.
- D-Codons that contain cytosine (C) do not contribute to protein synthesis.

79) Ecchymotic hemorrhage is a term for surface hemorrhage ranges from

- a- 1-2 mm in diameter .
- b- ≥ 3 mm in diameter .
- c- $\geq 1-2$ cm in diameter.
- d- ≥ 15 cm in diameter.

80) When a blood vessel is obstructed with thrombotic material carried by the blood stream , it is

- a-Infarction.
- b-Embolism.
- c-Thromboembolism.
- d-Fibrocartilaginous embolism.

81) White infarctions occur in some organs that have no

- a-Collateral circulation.
- b-Radical circulation .
- c-Microcirculation .
- d-lymphatic drainage.

82) Continuous loosing of blood from injury may result in Shock .

- a-Cardiogenic.
- b-Maldistribution.
- c-Hypovolemic.
- d-Undifferentiated.



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- 83) Liquefactive necrosis is seen in?
a. Heart b. Brain c. Lung d. Spleen
- 84) Which of the following is true about acute inflammation?
A. It involves only vascular changes B. It is a chronic response to injury
C. It includes both vascular and cellular responses. D. It does not involve immune cells.
- 85) What does autophagy refer to?
A. The cell eating external material B. The cell committing suicide
C. The cell being killed by something outside its control. D. The cell eating its own internal contents.
- 86) Free radicals cause cell injury by:
a. lipid peroxidation of the membrane b. cross linking of proteins
c. DNA fragmentation d. all of the above.
- 87) In contrast to mammals, _____ play an important role in the avian inflammation:
a. seotonin b. 5 HT c. both a & b d. bradykinin
- 88) In avian inflammation _____ cells are seen in abundance in comparison to mammals:
a. eosinophills b. basophills c. neutrophills d. none
- 89) Bipolarity character of *Pasteurella multocida* usually seen in:
a- Old ordinary culture. b. Fresh culture.
c- None of the above. d- All the above.
- 90) Which of the following disease cannot controlled by inactivated vaccines?
a. Pox. b. IBD. c. ND. d. None of them.
- 91) Diphtheritic yellowish lesions occur on the mucous membranes of the mouth, esophagus, or trachea occur in case of _____ infection.
a. Pox. b. ILT. c. MD. d. None of them.
- 92) Egg shell transmission is the major mode of infection in case of:
a. *Pasteurella multocida*. b. *E-coli*. c. Clostridia. d. None of them.



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Good Luck
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د. فراس محمد عبد

د. سيفان مصطفى هادي


د. احمد محمد هادي

د. احمد محمد هادي