

24 Veterinary Microbiology ICAR SEPT 2022

Topic:- GEN KNOW COMMON PHD

1) Colour of the tag used on certified seed bags is[Question ID = 16958][Question Description = 101_221_GKD_SEP22_Q01]

1. Blue [Option ID = 37829]
2. Purple [Option ID = 37830]
3. White [Option ID = 37831]
4. Golden Yellow [Option ID = 37832]

2) Following are the statements regarding the Usar soil -

- A. It is reclaimed by adding lime.
- B. This soil has pH more than seven.
- C. Paddy crop can be grown in this soil.

Choose the *correct* answer from the options given below:

[Question ID = 16959][Question Description = 102_221_GKD_SEP22_Q02]

1. A and B only [Option ID = 37833]
2. B and C only [Option ID = 37834]
3. C only [Option ID = 37835]
4. A only [Option ID = 37836]

3) When total utility of a commodity increases, marginal utility will be

[Question ID = 16960][Question Description = 103_221_GKD_SEP22_Q03]

1. Negative but increasing
[Option ID = 37837]
2. Positive but decreasing
[Option ID = 37838]
3. Constant
[Option ID = 37839]
4. Either positive or negative
[Option ID = 37840]

4) Where is the headquarter of International Fund for Agriculture Development located?

[Question ID = 16961][Question Description = 104_221_GKD_SEP22_Q04]

1. Vienna, Austria
[Option ID = 37841]
2. Rome, Italy
[Option ID = 37842]
3. New York, USA
[Option ID = 37843]
4. Berlin, Germany
[Option ID = 37844]

5) Mid-Oceanic Ridges are one of the important divisions of the ocean floor. In this respect, point out the incorrect statement regarding the 'Mid-Oceanic Ridges'. [Question ID = 16962][Question Description = 105_221_GKD_SEP22_Q05]

1. It is the largest mountain chain on the surface of the earth [Option ID = 37845]
2. It is a series of interconnected chain within the ocean. [Option ID = 37846]
3. It is characterised by a central rift system [Option ID = 37847]
4. The rift system at the crest is the zone of very low volcanic activity. [Option ID = 37848]

6) Consider the following facts about the union territory of India and point out the one which is incorrect in relation to union territory.[Question ID = 16963][Question Description = 106_221_GKD_SEP22_Q06]

1. These are the areas under the direct control of central government. [Option ID = 37849]
2. Also known as the 'centrally administered territories. [Option ID = 37850]

3. These territories constitute a conspicuous departure from the unitary feature of India. [Option ID = 37851]
4. There is no uniformity in their administrative systems. [Option ID = 37852]

7) Variety of flora and fauna are found in the different types of forest in India. In this regard, species of trees like teak, *sal shisham*, *sandalwood*, etc. are found in which of the following type of forests in India?[Question ID = 16964][Question Description = 107_221_GKD_SEP22_Q07]

1. Tropical evergreen forests [Option ID = 37853]
2. Tropical thorn forests [Option ID = 37854]
3. Tropical deciduous forests [Option ID = 37855]
4. Montane forests [Option ID = 37856]

8) The Marginal Preference Theory of consumption behaviour was proposed by

[Question ID = 16965][Question Description = 108_221_GKD_SEP22_Q08]

1. Armstrong
[Option ID = 37857]
2. J.K.Hicks
[Option ID = 37858]
3. Neumann
[Option ID = 37859]
4. Edmund Cannon
[Option ID = 37860]

9) Point out the incorrect statements regarding the service sector in India.[Question ID = 16966][Question Description = 109_221_GKD_SEP22_Q09]

1. It is the highest contributor to GDP [Option ID = 37861]
2. It requires skilled labour [Option ID = 37862]
3. It is the fastest growing sector [Option ID = 37863]
4. It is restricted to very few sectors. [Option ID = 37864]

10) Consider the statements regarding the agriculture sector in India and point out the incorrect statement.[Question ID = 16967][Question Description = 110_221_GKD_SEP22_Q10]

1. Agriculture sector is the largest employer of workforce [Option ID = 37865]
2. It has contributed to the Gross Value Added (GVA) [Option ID = 37866]
3. Growth in allied sectors is the major drivers of overall growth in the sector. [Option ID = 37867]
4. Minimum Support Price (MSP) policy is used as to promote crop uniformity. [Option ID = 37868]

11) In case of related goods, the cross elasticity of demand is[Question ID = 16968][Question Description = 111_221_GKD_SEP22_Q11]

1. Low [Option ID = 37869]
2. High [Option ID = 37870]
3. Zero [Option ID = 37871]
4. Unity [Option ID = 37872]

12) With reference to organic farming in India, consider the following statements :

- A. The National Programme for Organic Production' (NPOP) is operated under the guidelines and directions of the Union Ministry of Rural Development.
- B. The Agricultural and Processed Food Products Export Development Authority' (APEDA) functions as the Secretariat for the implementation of NPOP.
- C. Sikkim has become India's first fully organic state.

Choose the *correct* answer from the options given below:

[Question ID = 16969][Question Description = 112_221_GKD_SEP22_Q12]

1. A and B only
[Option ID = 37873]
2. B and C only
[Option ID = 37874]
3. C only
[Option ID = 37875]
4. A, B and C

[Option ID = 37876]

13) With reference to the circumstances in Indian agriculture, the concept of "Conservation Agriculture" assumes significance. Which of the following falls under the Conservation Agriculture ?

- A. Avoiding the monoculture practices.
- B. Adopting minimum tillage.
- C. Avoiding the cultivation of plantation crops.
- D. Using crop residues to cover soil surface.
- E. Adopting spatial and temporal crop sequencing/ crop rotations.

Choose the *correct* answer from the options given below:

[Question ID = 16970][Question Description = 113_221_GKD_SEP22_Q13]

- 1. A, C and D only [Option ID = 37877]
- 2. B, C, D and E only [Option ID = 37878]
- 3. B, D and E only [Option ID = 37879]
- 4. A, B, C and E only [Option ID = 37880]

14) Consumers are likely to get a variety of goods in which kind of market competition[Question ID = 16971][Question Description = 114_221_GKD_SEP22_Q14]

- 1. Monopoly [Option ID = 37881]
- 2. Duopoly [Option ID = 37882]
- 3. Oligopoly [Option ID = 37883]
- 4. Monopolistic [Option ID = 37884]

15) What is the correct chronological order of the following laws enacted for the conservation and protection of environment ?

- A. Environment (Protection) Act.
- B. Water (Prevention & Control of Pollution) Act.
- C. Air (Prevention & Control of pollution) Act.
- D. National Green Tribunal Act.

Choose the *correct* answer from the options given below:

[Question ID = 16972][Question Description = 115_221_GKD_SEP22_Q15]

- 1. B, C, A, D [Option ID = 37885]
- 2. A, B, C, D [Option ID = 37886]
- 3. C, B, A, D [Option ID = 37887]
- 4. D, C, B, A [Option ID = 37888]

16) The scientific study of soil is[Question ID = 16973][Question Description = 116_221_GKD_SEP22_Q16]

- 1. Earth Study [Option ID = 37889]
- 2. Soil Science [Option ID = 37890]
- 3. Pedology [Option ID = 37891]
- 4. Soil Chemistry [Option ID = 37892]

17) *Triticum aestivum*, the common bread wheat is -

[Question ID = 16974][Question Description = 117_221_GKD_SEP22_Q17]

- 1. Tetraploid
[Option ID = 37893]
- 2. Hexaploid
[Option ID = 37894]
- 3. Haploid
[Option ID = 37895]
- 4. Diploid
[Option ID = 37896]

18) Sectoral inflation refers to[Question ID = 16975][Question Description = 118_221_GKD_SEP22_Q18]

- 1. Running inflation [Option ID = 37897]

2. Comprehensive inflation [Option ID = 37898]
3. Sporadic inflation [Option ID = 37899]
4. Creeping inflation [Option ID = 37900]

19) Keynes Liquidity trap refers to[Question ID = 16976][Question Description = 119_221_GKD_SEP22_Q19]

1. Speculative demand for money [Option ID = 37901]
2. Transactions motive of money is inelastic [Option ID = 37902]
3. Precautionary motive of money is inelastic [Option ID = 37903]
4. Transactions motive of money is constant [Option ID = 37904]

20) A business is solvent if[Question ID = 16977][Question Description = 120_221_GKD_SEP22_Q20]

1. Total receipts exceed total expenditures [Option ID = 37905]
2. Total debt exceeds total equity [Option ID = 37906]
3. Total sales exceed total cash expense [Option ID = 37907]
4. Total assets exceed total liabilities [Option ID = 37908]

Topic:- Veterinary and Animal Sciences 2_PHD

1) Migration of larval stage of parasite through various organs of definitive host during its development is termed as:

[Question ID = 3701][Question Description = 101_119_BVA_SEP22_Q01]

1. Diapause [Option ID = 14801]
2. Histotrophic phase [Option ID = 14802]
3. Hypobiosis [Option ID = 14803]
4. Hibernation [Option ID = 14804]

2) The same host acting as both definitive and intermediate host due to auto-infection or reinfection is better termed as:

[Question ID = 3702][Question Description = 102_119_BVA_SEP22_Q02]

1. Monoxenous parasite [Option ID = 14805]
2. Heteroxenous Parasite [Option ID = 14806]
3. Facultative heteroxenous parasite [Option ID = 14807]
4. Autoheteroxenous Parasite [Option ID = 14808]

3) Which of the following nematode does not bear any spicule?

[Question ID = 3703][Question Description = 103_119_BVA_SEP22_Q03]

1. *Oxyuris equi* [Option ID = 14809]
2. *Trichuris ovis* [Option ID = 14810]
3. *Trichinella spiralis* [Option ID = 14811]
4. *Dictyocaulus filaria* [Option ID = 14812]

4) Which one among the following tapeworms has operculated egg?

[Question ID = 3704][Question Description = 104_119_BVA_SEP22_Q04]

1. *Echinococcus granulosus* [Option ID = 14813]
2. *Taenia solium* [Option ID = 14814]
3. *Hymenolepis nana* [Option ID = 14815]
4. *Diphyllbothrium latum* [Option ID = 14816]

5) Winter coccidiosis in cattle is caused by the following protozoan parasite:

[Question ID = 3705][Question Description = 105_119_BVA_SEP22_Q05]

1. *Eimeria zuernii* [Option ID = 14817]
2. *Theileria annulata* [Option ID = 14818]
3. *Babesia bigemina* [Option ID = 14819]
4. *Babesia bovis* [Option ID = 14820]

6) Moniliform antenna is seen in:

[Question ID = 3706][Question Description = 106_119_BVA_SEP22_Q06]

1. Horse fly [Option ID = 14821]
2. Sand fly [Option ID = 14822]
3. Tiger mosquito [Option ID = 14823]
4. Deer fly [Option ID = 14824]

7) Given below are two statements

Statement I: Blackflies breed only in running water.

Statement II: Both male and female black flies suck blood.

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 3707][Question Description = 107_119_BVA_SEP22_Q07]

1. Both Statement I and Statement II are true [Option ID = 14825]
2. Both Statement I and Statement II are false [Option ID = 14826]
3. Statement I is true but Statement II is false [Option ID = 14827]
4. Statement I is false but Statement II is true [Option ID = 14828]

8) Match List I with List II

List I	List II
(Name of the vector)	(Pathogen transmitted)
A. <i>Blatella germanica</i>	I. <i>Gongylonema pulchrum</i>
B. <i>Formica fusca</i>	II. <i>Dicrocoelium dendriticum</i>
C. <i>Tabanus striatus</i>	III. <i>Dipylidium caninum</i>
D. <i>Ctenocephalides canis</i>	IV. <i>Trypanosoma evansi</i>
	V. <i>Trypanosoma brucei</i>

Choose the correct answer from the options given below:

[Question ID = 3708][Question Description = 108_119_BVA_SEP22_Q08]

1. A - I , B - II , C - III, D - IV

[Option ID = 14829]

2. A - I, B -II , C -V , D - III

[Option ID = 14830]

3. A - II, B -I , C - IV, D - III

[Option ID = 14831]

4. A - I, B -II , C -IV , D - III

[Option ID = 14832]

9) Match List I with List II

List I	List II
(Disease)	(Causative agent)
A. Infectious catarrhal enteritis	I. <i>Histomonas meleagridis</i>
B. Dumdum fever	II. <i>Trypanosoma gambiense</i>
C. Sleeping sickness	III. <i>Leishmania donovani</i>
D. Infectious enterohepatitis	IV. <i>Hexamita meleagridis</i>
	V. <i>Trypanosoma evansi</i>

Choose the correct answer from the options given below:

[Question ID = 3709][Question Description = 109_119_BVA_SEP22_Q09]

1. A - I, B -II , C -IV , D - III [Option ID = 14833]
2. A -I , B -IV , C -II , D -III [Option ID = 14834]
3. A - IV, B -III , C -II , D - I [Option ID = 14835]
4. A - IV, B -III , C - V, D - I [Option ID = 14836]

10) Brood capsule is found in one of the following metacestode stage:

[Question ID = 3710][Question Description = 110_119_BVA_SEP22_Q10]

1. Hydatid cyst [Option ID = 14837]
2. *Cysticercoid* [Option ID = 14838]
3. *Strobilocercus* [Option ID = 14839]
4. *Cysticercus* stage [Option ID = 14840]

11) Acid fast staining is used for the identification of oocysts of following parasite:

[Question ID = 3711][Question Description = 111_119_BVA_SEP22_Q11]

1. *Toxoplasma gondii* [Option ID = 14841]
2. *Cryptosporidium parvum* [Option ID = 14842]
3. *Eimeria zuernii* [Option ID = 14843]
4. *Neospora caninum* [Option ID = 14844]

12) Scientific name of 'red mite of poultry' is:

[Question ID = 3712][Question Description = 112_119_BVA_SEP22_Q12]

1. *Ornithonyssus bursa* [Option ID = 14845]
2. *Dermanyssus gallinae* [Option ID = 14846]
3. *Cnemidocoptes mutans* [Option ID = 14847]
4. *Cnemidocoptes gallinae* [Option ID = 14848]

13) Following are the narrow spectrum anthelmintics except:

[Question ID = 3713][Question Description = 113_119_BVA_SEP22_Q13]

1. Imidazothiazole [Option ID = 14849]
2. Salicylanilides [Option ID = 14850]
3. Arsenicals [Option ID = 14851]
4. Organophosphates [Option ID = 14852]

14) An acute, highly contagious and immunosuppressive disease of young chicks characterized by haemorrhages in bursa of Fabricius, thigh and pectoral muscles is diagnosed as:

[Question ID = 3714][Question Description = 114_119_BVA_SEP22_Q14]

1. Avian pox [Option ID = 14853]
2. Avian infectious bronchitis [Option ID = 14854]
3. Gumboro disease [Option ID = 14855]
4. Infectious laryngotracheitis [Option ID = 14856]

15) Rhomboid or diamond shaped areas of intense erythema in skin of pigs is characteristically observed in:

[Question ID = 3715][Question Description = 115_119_BVA_SEP22_Q15]

1. African swine fever [Option ID = 14857]
2. Classical swine fever [Option ID = 14858]
3. Swine influenza [Option ID = 14859]
4. Swine erysipelas [Option ID = 14860]

16) Mushy chick disease is also known as:

[Question ID = 3716][Question Description = 116_119_BVA_SEP22_Q16]

1. Salmonellosis [Option ID = 14861]
2. Colibacillosis [Option ID = 14862]
3. Pasteurellosis [Option ID = 14863]
4. Mycoplasmosis [Option ID = 14864]

17) Which of the following is the immune complex mediated nephritis?

[Question ID = 3717][Question Description = 117_119_BVA_SEP22_Q17]

1. Embolic nephritis [Option ID = 14865]
2. Glomerulonephritis [Option ID = 14866]
3. Interstitial nephritis [Option ID = 14867]
4. Pyelonephritis [Option ID = 14868]

18) Which of the following is not an epithelial tumour?

[Question ID = 3718][Question Description = 118_119_BVA_SEP22_Q18]

1. Papilloma [Option ID = 14869]
2. Adenoma [Option ID = 14870]
3. Carcinoma [Option ID = 14871]
4. Sarcoma [Option ID = 14872]

19) Which among the following could be the reasons for increased eosinophilia of cytoplasm of necrotic cells?

- A. Enzymatic degradation of cytoplasmic RNA
- B. Denaturation of cytoplasmic proteins giving rise to increased numbers of reactive sites for eosin
- C. Depletion of cytoplasmic glycogen
- D. Changes in concentration of intracellular ions
- E. Enzymatic degradation of cytoplasmic DNA

Choose the *correct* answer from the options given below:

[Question ID = 3719][Question Description = 119_119_BVA_SEP22_Q19]

1. A, B and C only [Option ID = 14873]
2. C and D only [Option ID = 14874]
3. A and B only [Option ID = 14875]
4. C, D and E only [Option ID = 14876]

20) Which among the following are associated with strangles in horses?

- A. Equine distemper
- B. Stellate (star-shaped) lesions in nasal cavity
- C. Guttural pouch empyema
- D. Purpura haemorrhagica
- E. Melioidosis

Choose the *correct* answer from the options given below:

[Question ID = 3720][Question Description = 120_119_BVA_SEP22_Q20]

1. A, B and C only [Option ID = 14877]
2. A, C and D only [Option ID = 14878]
3. B, D and E only [Option ID = 14879]
4. C, D and E only [Option ID = 14880]

21) Match List I with List II

List I	List II
Name of Inflammation	Organ
A. Spondylitis	I. Spinal cord
B. Myelitis	II. Caecum
C. Typhlitis	III. Vein
D. Phlebitis	IV. Vertebrae
	V. Rectum

Choose the correct answer from the options given below:

[Question ID = 3721][Question Description = 121_119_BVA_SEP22_Q21]

1. A - II, B - III, C - IV, D - I [Option ID = 14881]
2. A - III, B - V, C - I, D - II [Option ID = 14882]
3. A - IV, B - I, C - II, D - III [Option ID = 14883]
4. A - I, B - II, C - V, D - IV [Option ID = 14884]

22) Match List I with List II

List I	List II
A. Ulcerative lymphangitis	I. <i>Clostridium piliforme</i>
B. Epizootic lymphangitis	II. <i>Corynebacterium pseudotuberculosis</i>
C. Tyzzer's disease	III. <i>Haemophilus parasuis</i>
D. Glasser's disease	IV. <i>Histoplasma farciminosum</i>
	V. <i>Histomonas meleagridis</i>

Choose the correct answer from the options given below:

[Question ID = 3722][Question Description = 122_119_BVA_SEP22_Q22]

1. A - II, B - IV, C - I, D - III [Option ID = 14885]
2. A - III, B - II, C - V, D - I [Option ID = 14886]
3. A - III, B - IV, C - I, D - II [Option ID = 14887]
4. A - I, B - V, C - II, D - IV [Option ID = 14888]

23) Which of the following sequence is correct?

- A. Prorubricyte, Rubricyte, Rubriblast, Metarubricyte, Reticulocyte, Erythrocyte
- B. Rubriblast, Prorubricyte, Rubricyte, Metarubricyte, Reticulocyte, Erythrocyte
- C. Rubriblast, Prorubricyte, Rubricyte, Reticulocyte, Metarubricyte, Erythrocyte
- D. Rubricyte, Metarubricyte, Rubriblast, Prorubricyte, Metarubricyte, Erythrocyte
- E. Metarubricyte, Reticulocyte, Erythrocyte, Rubriblast, Prorubricyte, Rubricyte

Choose the *correct* answer from the options given below

[Question ID = 3723][Question Description = 123_119_BVA_SEP22_Q23]

1. E only [Option ID = 14889]
2. B only [Option ID = 14890]
3. A only [Option ID = 14891]
4. D only [Option ID = 14892]

24) Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R
Assertion A : Turkey egg appearance of kidneys is characteristic lesion observed in Hog cholera.

Reason R : This is due to necrosis and presence of miliary nodules in kidneys.

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 3724][Question Description = 124_119_BVA_SEP22_Q24]

1. Both A and R are true and R is the correct explanation of A [Option ID = 14893]
2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 14894]
3. A is true but R is false [Option ID = 14895]
4. A is false but R is true [Option ID = 14896]

25) Given below are two statements:

Statement I: *Babesia* infection causes haemolytic anaemia.

Statement II: The infected red blood cells are destroyed by antibody dependent cell mediated cytotoxicity. It leads to haemolytic anaemia.

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 3725][Question Description = 125_119_BVA_SEP22_Q25]

1. Both Statement I and Statement II are true [Option ID = 14897]
2. Both Statement I and Statement II are false [Option ID = 14898]
3. Statement I is true but Statement II is false [Option ID = 14899]
4. Statement I is false but Statement II is true [Option ID = 14900]

26) The new name of causative agent of infectious coryza in chicken is:

[Question ID = 3726][Question Description = 126_119_BVA_SEP22_Q26]

1. *Pasteurella paragallinarum* [Option ID = 14901]
2. *Haemophilus paragallinarum* [Option ID = 14902]
3. *Avibacterium paragallinarum* [Option ID = 14903]
4. *Avibacter paragallinarum* [Option ID = 14904]

27) Which of the following is a liquid medium?

[Question ID = 3727][Question Description = 127_119_BVA_SEP22_Q27]

1. Baird Parker medium [Option ID = 14905]
2. Stonebrinks medium [Option ID = 14906]
3. Lowenstein-Jensen (LJ) medium [Option ID = 14907]
4. EMJH medium [Option ID = 14908]

28) A confirmatory test that is considered to be the gold standard worldwide for the diagnosis of scrapie in sheep is:

[Question ID = 3728][Question Description = 128_119_BVA_SEP22_Q28]

1. Immuno histo chemical (IHC) test [Option ID = 14909]
2. Fluorescent antibody test (FAT) [Option ID = 14910]
3. Electron microscopy [Option ID = 14911]
4. SDS-PAGE [Option ID = 14912]

29) Given below are two statements

Statement I: McFadyean reaction is done for the diagnosis of brucellosis.

Statement II: Loeffler's methylene blue is used for McFadyean reaction.

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 3729][Question Description = 129_119_BVA_SEP22_Q29]

1. Both Statement I and Statement II are true
[Option ID = 14913]

2. Both Statement I and Statement II are false

[Option ID = 14914]

3. Statement I is true but Statement II is false

[Option ID = 14915]

4. Statement I is false but Statement II is true

[Option ID = 14916]

30) Which among the following bacteria are catalase negative?

A. *Streptococcus* and *Enterococcus*

B. *Brucella* and *Bacillus*

C. *Eubacterium suis* and *Fusobacterium*

D. *Clostridium* and *Borrelia burgdorferi*

E. *Pseudomonas* and *Pasteurella*

Choose the *correct* answer from the options given below:

[Question ID = 3730][Question Description = 130_119_BVA_SEP22_Q30]

1. A, B, C and D only [Option ID = 14917]

2. A, B, D and E only [Option ID = 14918]

3. A, C and D only [Option ID = 14919]

4. A, B and E only [Option ID = 14920]

31) Match List I with List II

List I	List II
(Type of inclusion bodies)	(Type of viruses producing them)
A. Bollinger bodies	I. Smallpox virus
B. Guarnieri bodies	II. Herpes simplex virus
C. Cowdry type B bodies	III. Yellow fever virus
D. Cowdry type A bodies	IV. Poliovirus
	V. Fowlpox virus

Choose the correct answer from the options given below:

[Question ID = 3731][Question Description = 131_119_BVA_SEP22_Q31]

1. A - V, B - I, C - II, D - III [Option ID = 14921]

2. A - II, B - I, C - V, D - III [Option ID = 14922]

3. A - III, B - V, C - II, D - I [Option ID = 14923]

4. A - V, B - I, C - IV, D - II [Option ID = 14924]

32) Find the odd one out from the following:

[Question ID = 3732][Question Description = 132_119_BVA_SEP22_Q32]

1. *Microsporum* [Option ID = 14925]

2. *Trichosporon* [Option ID = 14926]

3. *Trichophyton* [Option ID = 14927]

4. *Epidermophyton* [Option ID = 14928]

33) Which of the followings is not a dimorphic fungi?

[Question ID = 3733][Question Description = 133_119_BVA_SEP22_Q33]

1. *Trichophyton verrucosum* [Option ID = 14929]

2. *Blastomyces dermatitidis* [Option ID = 14930]

3. *Histoplasma capsulatum* [Option ID = 14931]

4. *Coccidioides immitis* [Option ID = 14932]

34) Which of the followings is not true about canine distemper virus?

[Question ID = 3734][Question Description = 134_119_BVA_SEP22_Q34]

1. Closely related to measles and rinderpest virus. [Option ID = 14933]

2. Single stranded RNA virus. [Option ID = 14934]

3. Naked virus. [Option ID = 14935]

4. Relatively unstable outside the host. [Option ID = 14936]

35) Given below are two statements

Statement I: MHC-I molecules present epitopes to the TCRs of CD4+ T lymphocytes.

Statement II: Two domains of the same chain (alpha) of MHC-I molecule are involved in presenting epitopes to TCRs.

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 3735][Question Description = 135_119_BVA_SEP22_Q35]

1. Both Statement I and Statement II are true [Option ID = 14937]
2. Both Statement I and Statement II are false [Option ID = 14938]
3. Statement I is true but Statement II is false [Option ID = 14939]
4. Statement I is false but Statement II is true [Option ID = 14940]

36) Which among the following pairs are matching?

- A. Papovaviruses - circular, ds DNA
- B. Reoviruses - linear, 10 to 12 segments of ss RNA
- C. Circoviruses - circular, ss DNA
- D. Parvoviruses - linear, ss DNA
- E. Retroviruses - linear, two identical, negative-sense ssRNA

Choose the *correct* answer from the options given below:

[Question ID = 3736][Question Description = 136_119_BVA_SEP22_Q36]

1. A, B and D only [Option ID = 14941]
2. A, C and D only [Option ID = 14942]
3. A, C, D and E only [Option ID = 14943]
4. B, C and D only [Option ID = 14944]

37) Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A : *Brucella abortus* is partial acid fast bacteria so is usually stained by dilute carbol fuchsin (DCF) stain.

Reason R : *Brucella abortus* has little mycolic acids in their cell wall so it resists decolorization by weak acids only.

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 3737][Question Description = 137_119_BVA_SEP22_Q37]

1. Both A and R are true and R is the correct explanation of A [Option ID = 14945]
2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 14946]
3. A is true but R is false [Option ID = 14947]
4. A is false but R is true [Option ID = 14948]

38) Dilute carbol fuchsin (DCF) staining is used for:

[Question ID = 3738][Question Description = 138_119_BVA_SEP22_Q38]

1. *Fusobacterium necrophorum* [Option ID = 14949]
2. *Mycobacterium avium* subsp. *paratuberculosis* [Option ID = 14950]
3. *Brucella abortus* [Option ID = 14951]
4. *Campylobacter fetus* [Option ID = 14952]

39) Tuberculin test is a type of:

[Question ID = 3739][Question Description = 139_119_BVA_SEP22_Q39]

1. Precipitation test [Option ID = 14953]
2. Agglutination test [Option ID = 14954]
3. Hypersensitivity reaction test [Option ID = 14955]
4. Desensitization test [Option ID = 14956]

40) Organ first affected by rigor mortis is:[Question ID = 3740][Question Description = 140_119_BVA_SEP22_Q40]

1. Heart [Option ID = 14957]
2. Lung [Option ID = 14958]
3. Skeletal muscle [Option ID = 14959]
4. Diaphragm [Option ID = 14960]

41) The equipment used to determine the wind direction is:

[Question ID = 3741][Question Description = 141_119_BVA_SEP22_Q41]

1. Wind vane [Option ID = 14961]
2. Stevenson screen [Option ID = 14962]
3. Sling psychrometer [Option ID = 14963]
4. Barometer [Option ID = 14964]

42) Farmer's lung condition is caused by:

[Question ID = 3742][Question Description = 142_119_BVA_SEP22_Q42]

1. Silica
[Option ID = 14965]
2. Asbestos
[Option ID = 14966]
3. Hay or grain dust
[Option ID = 14967]
4. Asbestos
[Option ID = 14968]

43) Casoni's test is conducted for the diagnosis of:

[Question ID = 3743][Question Description = 143_119_BVA_SEP22_Q43]

1. Anthrax [Option ID = 14969]
2. Toxoplasmosis [Option ID = 14970]
3. Hydatidosis [Option ID = 14971]
4. Cysticercosis [Option ID = 14972]

44) World Rabies is celebrated on:

[Question ID = 3744][Question Description = 144_119_BVA_SEP22_Q44]

1. 17th July [Option ID = 14973]
2. 24th March [Option ID = 14974]
3. 9th November [Option ID = 14975]
4. 28th September [Option ID = 14976]

45) Operation Flood was launched in India in the year:

[Question ID = 3745][Question Description = 145_119_BVA_SEP22_Q45]

1. 1980 [Option ID = 14977]
2. 1960 [Option ID = 14978]
3. 1970 [Option ID = 14979]
4. 1995 [Option ID = 14980]

46) The study of outbreak of disease in a bird population is known as:

[Question ID = 3746][Question Description = 146_119_BVA_SEP22_Q46]

1. Ecchymology [Option ID = 14981]
2. Epornitic [Option ID = 14982]
3. Epizootology [Option ID = 14983]
4. Ecology [Option ID = 14984]

47) The ecosystem created by man:

[Question ID = 3747][Question Description = 147_119_BVA_SEP22_Q47]

1. Autochthonous [Option ID = 14985]
2. Synanthropic [Option ID = 14986]
3. Anthropogenic [Option ID = 14987]
4. Domicile [Option ID = 14988]

48) Watery pork is associated with:

[Question ID = 3748][Question Description = 148_119_BVA_SEP22_Q48]

1. Pale soft exudative meat [Option ID = 14989]
2. Dark, firm and dry meat [Option ID = 14990]
3. Cysticercosis [Option ID = 14991]
4. Emaciation [Option ID = 14992]

49) One of the best methods for cleaning and sanitizing milk processing facilities is:

[Question ID = 3749][Question Description = 149_119_BVA_SEP22_Q49]

1. Central cleaning system [Option ID = 14993]
2. Cleaning in place [Option ID = 14994]
3. Clean-out-of-place [Option ID = 14995]
4. Foam tanks [Option ID = 14996]

50) Match List I with List II

List I	List II
(Name of the disease)	(Alternative name of the disease)
A. Abattoir fever	I. Leptospirosis
B. Hydrophobia	II. Q fever
C. Seven day fever	III. Listeriosis
D. Bang's disease	IV. Rabies
	V. Brucellosis

Choose the correct answer from the options given below:

[Question ID = 3750][Question Description = 150_119_BVA_SEP22_Q50]

1. A - III, B - IV, C - II, D - V [Option ID = 14997]
2. A - V, B - IV, C - I, D - II [Option ID = 14998]
3. A - II, B - IV, C - V, D - III [Option ID = 14999]
4. A - II, B - IV, C - I, D - V [Option ID = 15000]

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1) Given below are two statements

Statement I: In noncompetitive inhibition, increasing the substrate concentration does not increase the reaction rate of the enzyme.

Statement II: Lead, mercury and other heavy metals are noncompetitive inhibitors and permanently change the shape of the enzyme, thus inactivating it.

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 3851][Question Description = 101_121_VEM_SEP22_Q01]

1. Both Statement I and Statement II are true [Option ID = 15401]
2. Both Statement I and Statement II are false [Option ID = 15402]
3. Statement I is true but Statement II is false [Option ID = 15403]
4. Statement I is false but Statement II is true [Option ID = 15404]

2) Given below are two statements

Statement I: Active transport mechanism of ions is specific to Gram-positive bacteria.

Statement II: Phosphotransferase system (PTS) consisting of permeases is present in all bacteria.

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 3852][Question Description = 102_121_VEM_SEP22_Q02]

1. Both Statement I and Statement II are true [Option ID = 15405]
2. Both Statement I and Statement II are false [Option ID = 15406]
3. Statement I is true but Statement II is false [Option ID = 15407]
4. Statement I is false but Statement II is true [Option ID = 15408]

3) Given below are two statements

Statement I: Aerotolerant anaerobes can survive in the presence of oxygen but do not use it in their metabolism.

Statement II: *Bacillus* always captures energy by fermentation regardless of whether the environment contains oxygen.

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 3853][Question Description = 103_121_VEM_SEP22_Q03]

1. Both Statement I and Statement II are true [Option ID = 15409]
2. Both Statement I and Statement II are false [Option ID = 15410]
3. Statement I is true but Statement II is false [Option ID = 15411]
4. Statement I is false but Statement II is true [Option ID = 15412]

4) Phospholipase D is not produced by:[Question ID = 3854][Question Description = 104_121_VEM_SEP22_Q04]

1. *Staphylococcus aureus* [Option ID = 15413]
2. *Yersinia pestis* [Option ID = 15414]

3. *Pseudomonas aeruginosa* [Option ID = 15415]
4. *Corynebacterium ovis* [Option ID = 15416]

5) Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A : Spores have shorter life span in calcium deficient or acidic soils.

Reason R : In acidic soils, calcium may be leached from the spore coat, thus shortening their survival times because high calcium content in spore coat bound with dipicolinic acid is responsible for extended survival time.

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 3855][Question Description = 105_121_VEM_SEP22_Q05]

1. Both A and R are true and R is the correct explanation of A [Option ID = 15417]
2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 15418]
3. A is true but R is false [Option ID = 15419]
4. A is false but R is true [Option ID = 15420]

6) Match List I with List II

List I	List II
(Bacterial disease)	(Causative bacteria)
A. Tick-borne fever	I. <i>Ehrlichia ewingii</i>
B. Canine granulocytic ehrlichiosis	II. <i>Ehrlichia platys</i>
C. Canine monocytic ehrlichiosis	III. <i>Ehrlichia phagocytophila</i>
D. Canine cyclic thrombocytopenia	IV. <i>Ehrlichia ondiri</i>
	V. <i>Ehrlichia canis</i>

Choose the correct answer from the options given below:

[Question ID = 3856][Question Description = 106_121_VEM_SEP22_Q06]

1. A - IV, B - III, C - V, D - II [Option ID = 15421]
2. A - III, B - I, C - V, D - II [Option ID = 15422]
3. A - II, B - IV, C - V, D - III [Option ID = 15423]
4. A - III, B - IV, C - I, D - II [Option ID = 15424]

7) Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A : The sensitivity of the isolation of chlamydiae is increased by addition of cytotoxic chemicals such as cycloheximide, 5-iodo-2-deoxyuridine, cytochalasin B and emetine to the cell culture medium.

Reason R : The cells of the various cell lines used will become more replicating cells, thus giving more yield of bacteria.

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 3857][Question Description = 107_121_VEM_SEP22_Q07]

1. Both A and R are true and R is the correct explanation of A [Option ID = 15425]
2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 15426]
3. A is true but R is false [Option ID = 15427]
4. A is false but R is true [Option ID = 15428]

8) Which among the followings are not belonging to genus *Chlamydomonas*?

- A. *C. trachomatis*
- B. *C. psittaci*
- C. *C. muridarum*
- D. *C. pecorum*
- E. *C. pneumoniae*

Choose the *correct* answer from the options given below:

[Question ID = 3858][Question Description = 108_121_VEM_SEP22_Q08]

1. A and B only [Option ID = 15429]
2. A and C only [Option ID = 15430]
3. C and D only [Option ID = 15431]
4. B and E only [Option ID = 15432]

9) Which of the following is not true about *Ureaplasma* culturing?

[Question ID = 3859][Question Description = 109_121_VEM_SEP22_Q09]

1. Thallium acetate in the medium helps to check contaminants. [Option ID = 15433]
2. Colony size is from 0.02-0.06 mm. [Option ID = 15434]
3. Require cholesterol for growth. [Option ID = 15435]
4. Require pH 6.0. [Option ID = 15436]

10) Among different types of *Clostridium botulinum*, which one is not neurotoxic?[Question ID = 3860][Question Description = 110_121_VEM_SEP22_Q10]

1. Type A [Option ID = 15437]
2. Type B [Option ID = 15438]
3. Type C1 [Option ID = 15439]
4. Type C2 [Option ID = 15440]

11) Which among the followings are not true about *Listeria ivanovii*?

- A. Causes sporadic abortions in sheep and cattle.
- B. Causes CNS infection in ruminants.
- C. Less haemolytic than *L. monocytogenes*.
- D. CAMP Test negative with *Staphylococcus aureus*.
- E. Causes influenza like symptoms in humans.

Choose the *correct* answer from the options given below:

[Question ID = 3861][Question Description = 111_121_VEM_SEP22_Q11]

1. A, B and C only [Option ID = 15441]
2. B, C and E only [Option ID = 15442]
3. B, C and D only [Option ID = 15443]
4. A, B, C and D only [Option ID = 15444]

12) Which among the following *Clostridium* species produce botulinum toxin?

- A. *Clostridium sporogenes*
- B. *Clostridium baratii*
- C. *Clostridium butyricum*
- D. *Clostridium sordellii*
- E. *Clostridium argentinense*

Choose the *correct* answer from the options given below:

[Question ID = 3862][Question Description = 112_121_VEM_SEP22_Q12]

1. B, C and E only [Option ID = 15445]
2. B, C and D only [Option ID = 15446]
3. A, B and C only [Option ID = 15447]
4. A, B, C and E only [Option ID = 15448]

13) Which among the following can differentiate between *Listeria* and *Erysipelothrix*?

- A. Catalase test
- B. Oxidase test
- C. Coagulase test
- D. CAMP test
- E. Ability to grow on MLA

Choose the *correct* answer from the options given below:

[Question ID = 3863][Question Description = 113_121_VEM_SEP22_Q13]

1. A, B and C only [Option ID = 15449]
2. B, C and D only [Option ID = 15450]
3. A, C and D only [Option ID = 15451]
4. A, B, C and D only [Option ID = 15452]

14) Which among the following virulence factors are not produced by *Bordetella avium*?

- A. Osteotoxin
- B. Adenylate cyclase toxin
- C. Filamentous hemagglutinin
- D. Dermonecrotic toxin
- E. Pertactin

Choose the *correct* answer from the options given below:

[Question ID = 3864][Question Description = 114_121_VEM_SEP22_Q14]

1. A and C only [Option ID = 15453]
2. B and C only [Option ID = 15454]
3. C and D only [Option ID = 15455]
4. C, D and E only [Option ID = 15456]

15) Which among the following bacteria are causing enzootic abortions in ewes?

- A. *Campylobacter fetus* subsp. *fetus*
- B. *Campylobacter fetus* subsp. *venerealis*
- C. *Chlamydomphila abortus*
- D. *Brucella ovis*
- E. *Listeria monocytogenes*

Choose the *correct* answer from the options given below:

[Question ID = 3865][Question Description = 115_121_VEM_SEP22_Q15]

1. A and C only [Option ID = 15457]
2. B, C and E only [Option ID = 15458]
3. A, D and E only [Option ID = 15459]
4. A, C, D and E only [Option ID = 15460]

16) Match List I with List II

List I	List II
(Virus)	(Arthropod vector spreading the virus)
A. Rift Valley fever virus	I. <i>Stomoxys calcitrans</i>
B. Nairobi sheep disease virus	II. <i>Culicoides</i> biting midges
C. Schmallenberg virus	III. No vector
D. Hantaan virus	IV. Ticks
	V. Mosquitoes

Choose the correct answer from the options given below:

[Question ID = 3866][Question Description = 116_121_VEM_SEP22_Q16]

1. A - II, B - IV, C - V, D - III [Option ID = 15461]
2. A - III, B - IV, C - II, D - V [Option ID = 15462]
3. A - V, B - III, C - II, D - I [Option ID = 15463]
4. A - V, B - IV, C - II, D - III [Option ID = 15464]

17) Match List I with List II

List I	List II
(Coronavirus)	(Classified under Genus)
A. Transmissible gastroenteritis (TGE) virus of swine	I. Group C Betacoronavirus
B. Bovine coronavirus	II. Group B Betacoronavirus
C. Severe acute respiratory syndrome (SARS) coronavirus	III. Group A Betacoronavirus
D. Avian infectious bronchitis virus	IV. Alphacoronavirus
	V. Gammacoronavirus

Choose the correct answer from the options given below:

[Question ID = 3867][Question Description = 117_121_VEM_SEP22_Q17]

1. A - II, B - III, C - V, D - I [Option ID = 15465]
2. A - IV, B - V, C - II, D - I [Option ID = 15466]
3. A - IV, B - III, C - II, D - V [Option ID = 15467]

4. A - III, B - I, C - II, D - V [Option ID = 15468]

18) Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R
Assertion A : For the assay of neutralizing antibody of virus, two general procedures are available: the constant-serum-variable-virus method and the constant-virus-variable-serum method. Constant serum-variable-virus method is more sensitive but rarely used.

Reason R : It utilizes relatively large amount of serum, which may not be readily available.

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 3868][Question Description = 118_121_VEM_SEP22_Q18]

1. Both A and R are true and R is the correct explanation of A [Option ID = 15469]
2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 15470]
3. A is true but R is false [Option ID = 15471]
4. A is false but R is true [Option ID = 15472]

19) Which pairs among the following are matching regarding feline leukemia virus (FeLV) subgroups?

FeLV subgroup Characteristic feature

- A. FeLV-A - Predominant subgroup and is isolated from all FeLV-infected cats.
- B. FeLV-B - Associated with lymphoid depletion and immunosuppression.
- C. FeLV-C - Associated with erythroid hypoplasia and progressive anemia.
- D. FeLV-D - Not a valid subtype.
- E. FeLV-T - Associated with neoplasia.

Choose the *correct* answer from the options given below:

[Question ID = 3869][Question Description = 119_121_VEM_SEP22_Q19]

1. A and C only [Option ID = 15473]
2. A, C and D only [Option ID = 15474]
3. A, B and E only [Option ID = 15475]
4. A, B, D and E only [Option ID = 15476]

20) For routine enteric cases (diarrhea), feces would be the primary sample in calves but whole-blood can be useful only in which of the following enteric disease?

[Question ID = 3870][Question Description = 120_121_VEM_SEP22_Q20]

1. Rotavirus infections [Option ID = 15477]
2. Coronavirus infections [Option ID = 15478]
3. Torovirus infections [Option ID = 15479]
4. Bovine viral diarrhea (BVD) [Option ID = 15480]

21) Given below are two statements

Statement I: Surface appearance of calicivirus virions is unique and they derive their name from latin word *calix*.

Statement II: They have 32 cup-shaped projections.

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 3871][Question Description = 121_121_VEM_SEP22_Q21]

1. Both Statement I and Statement II are true [Option ID = 15481]
2. Both Statement I and Statement II are false [Option ID = 15482]
3. Statement I is true but Statement II is false [Option ID = 15483]
4. Statement I is false but Statement II is true [Option ID = 15484]

22) Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R
Assertion A : Acyclovir (inhibitor of DNA polymerase) is nontoxic for uninfected cells, but very effective in herpesvirus infected cells.

Reason R : It requires herpesvirus-coded enzyme, thymidine kinase, to phosphorylate it to its active form and this viral enzyme occurs only in infected cells.

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 3872][Question Description = 122_121_VEM_SEP22_Q22]

1. Both A and R are true and R is the correct explanation of A [Option ID = 15485]

2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 15486]
3. A is true but R is false [Option ID = 15487]
4. A is false but R is true [Option ID = 15488]

23) Based on phylogenetic reconstructions, a new virus order, *Megavirales*, has been recently proposed that would include:

- A. *Poxviridae* viruses
- B. *Asfarviridae* viruses
- C. *Iridoviridae* viruses
- D. *Mimiviruses*
- E. *Pandoraviruses*

Choose the *correct* answer from the options given below:

[Question ID = 3873][Question Description = 123_121_VEM_SEP22_Q23]

1. A and D only [Option ID = 15489]
2. A and E only [Option ID = 15490]
3. A, D and E only [Option ID = 15491]
4. A, B, C, D and E [Option ID = 15492]

24) All viruses within the order *Picornavirales* share the following features except:

[Question ID = 3874][Question Description = 124_121_VEM_SEP22_Q24]

1. Conserved RNA-dependent RNA polymerase. [Option ID = 15493]
2. A genome that has a protein (VPg) attached to the 3 prime end. [Option ID = 15494]
3. Absence of overlapping open reading frames within the genome. [Option ID = 15495]
4. Viral RNA translated into a polyprotein before processing. [Option ID = 15496]

25) Given below are two statements

Statement I: There is wide geographic distribution of serotype O of FMD in South America and across Africa to Southeast Asia.

Statement II: There are at least twenty two topotypes of this O serotype.

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 3875][Question Description = 125_121_VEM_SEP22_Q25]

1. Both Statement I and Statement II are true [Option ID = 15497]
2. Both Statement I and Statement II are false [Option ID = 15498]
3. Statement I is true but Statement II is false [Option ID = 15499]
4. Statement I is false but Statement II is true [Option ID = 15500]

26) Infectious bronchitis virus can be propagated in:

- A. Primary chick kidney cells
- B. BHK cell line
- C. Vero cell line
- D. Embryonated chicken eggs via the allantoic sac route
- E. Embryonated chicken eggs via the CAM route

Choose the *correct* answer from the options given below:

[Question ID = 3876][Question Description = 126_121_VEM_SEP22_Q26]

1. A and D only [Option ID = 15501]
2. B and E only [Option ID = 15502]
3. C and D only [Option ID = 15503]
4. A and E only [Option ID = 15504]

27) Based on sequence analysis of H gene, at least how many distinct lineages of canine distemper virus strains are recognized worldwide?[Question ID = 3877][Question Description = 127_121_VEM_SEP22_Q27]

1. Four [Option ID = 15505]
2. Five [Option ID = 15506]
3. Six [Option ID = 15507]
4. Seven [Option ID = 15508]

28) Histopathological studies on canine distemper virus infected astrocytes, as well as in epithelial cells in different organs will reveal:[Question ID = 3878][Question Description = 128_121_VEM_SEP22_Q28]

1. Acidophilic inclusions in the nuclei only. [Option ID = 15509]
2. Acidophilic inclusions in the nuclei and cytoplasm both. [Option ID = 15510]
3. Basophilic inclusions in the nuclei and cytoplasm both. [Option ID = 15511]
4. Basophilic inclusions in the cytoplasm only. [Option ID = 15512]

29) DIVA strategy has been used to vaccinate cattle against IBR by marker vaccine in which following glycoprotein has been deleted:[Question ID = 3879][Question Description = 129_121_VEM_SEP22_Q29]

1. Glycoprotein B [Option ID = 15513]
2. Glycoprotein C [Option ID = 15514]
3. Glycoprotein D [Option ID = 15515]
4. Glycoprotein E [Option ID = 15516]

30) Which of the following are true about *Peste des petits ruminants* (PPR)?

- A. There is only one serotype.
- B. It is grouped into four (4) distinct lineages based on the sequence of the F protein.
- C. There is no correlation between virulence and lineage.
- D. Under natural infection, sheep being more severely affected than goats.
- E. A live-attenuated vaccine (Nigeria 75/1) is now most commonly used.

Choose the *correct* answer from the options given below:

[Question ID = 3880][Question Description = 130_121_VEM_SEP22_Q30]

1. A, B and D only [Option ID = 15517]
2. B, C and E only [Option ID = 15518]
3. A, B and E only [Option ID = 15519]
4. A, B, D and E only [Option ID = 15520]

31) Which among the following dermatophytes have intercalary chlamydospores?

- A. *Trichophyton tonsurans*
- B. *Trichophyton mentagrophytes*
- C. *Trichophyton verrucosum*
- D. *Trichophyton rubrum*
- E. *Trichophyton violaceum*

Choose the *correct* answer from the options given below:

[Question ID = 3881][Question Description = 131_121_VEM_SEP22_Q31]

1. A, C and D only [Option ID = 15521]
2. B, C and D only [Option ID = 15522]
3. A, B and C only [Option ID = 15523]
4. A, C and E only [Option ID = 15524]

32) Which of the following dermatophytes is more common in pig?

[Question ID = 3882][Question Description = 132_121_VEM_SEP22_Q32]

1. *Microsporum gallinae* [Option ID = 15525]
2. *Microsporum cookei* [Option ID = 15526]
3. *Microsporum nanum* [Option ID = 15527]
4. *Microsporum gypsum complex* [Option ID = 15528]

33) Which of the following is not included in the family *Dematiaceae*?

[Question ID = 3883][Question Description = 133_121_VEM_SEP22_Q33]

1. *Fusarium* [Option ID = 15529]
2. *Hormodendrum* [Option ID = 15530]
3. *Cladosporium* [Option ID = 15531]
4. *Alternaria* [Option ID = 15532]

34) Dermatophytes are included in the family:[Question ID = 3884][Question Description = 134_121_VEM_SEP22_Q34]

1. *Cryptococcaceae* [Option ID = 15533]

2. *Moniliaceae* [Option ID = 15534]
3. *Dematiaceae* [Option ID = 15535]
4. *Tuberculariaceae* [Option ID = 15536]

35) Food Safety and Standards Authority of India (FSSAI) and Bureau of Indian Standards (BIS) in India has set a maximum permissible level for Aflatoxin M1 in liquid milk at:

[Question ID = 3885][Question Description = 135_121_VEM_SEP22_Q35]

1. 0.5 parts per million (ppm) [Option ID = 15537]
2. 5.0 parts per million (ppm) [Option ID = 15538]
3. 0.5 parts per billion (ppb) [Option ID = 15539]
4. 5.0 parts per billion (ppb) [Option ID = 15540]

36) Which of the followings is not a secondary binding assay?

[Question ID = 3886][Question Description = 136_121_VEM_SEP22_Q36]

1. Immunoperoxidase [Option ID = 15541]
2. Immunodiffusion [Option ID = 15542]
3. Counter-immunoelectrophoresis (CIEE) [Option ID = 15543]
4. Agglutination [Option ID = 15544]

37) One characteristic that distinguishes the construction of immunoglobulin heavy chains from that of light chains is:

[Question ID = 3887][Question Description = 137_121_VEM_SEP22_Q37]

1. The use of V gene segments [Option ID = 15545]
2. The use of a D gene segments [Option ID = 15546]
3. The use of a J gene segments [Option ID = 15547]
4. Somatic mutation [Option ID = 15548]

38) In which area of the lymph node, are T cells mainly found?

[Question ID = 3888][Question Description = 138_121_VEM_SEP22_Q38]

1. Germinal center [Option ID = 15549]
2. Sinusoids [Option ID = 15550]
3. Paracortex [Option ID = 15551]
4. Primary follicles [Option ID = 15552]

39) Which among the following TLRs are intracellular in location in cattle?

- A. TLR 4
- B. TLR 5
- C. TLR 6
- D. TLR 7
- E. TLR 8

Choose the *correct* answer from the options given below:

[Question ID = 3889][Question Description = 139_121_VEM_SEP22_Q39]

1. A and C only [Option ID = 15553]
2. B and D only [Option ID = 15554]
3. C and D only [Option ID = 15555]
4. D and E only [Option ID = 15556]

40) Match List I with List II

List I	List II
(Type of adjuvant)	(Mode of action)
A. Freund's incomplete adjuvant (FIA)	I. Activates Damage-Associated Molecular Patterns (DAMPs)
B. Lipopolysaccharide (LPS)	II. Depot plus immune stimulant
C. ISCOM	III. Macrophage stimulator
D. Freund's incomplete adjuvant (FIA)	IV. Stimulates antigen processing
	V. Slow antigen release depot

Choose the correct answer from the options given below:

[Question ID = 3890][Question Description = 140_121_VEM_SEP22_Q40]

1. A - V, B - III, C - IV, D - II [Option ID = 15557]
2. A - IV, B - III, C - V, D - I [Option ID = 15558]

3. A - V, B - III, C - II, D - I [Option ID = 15559]
4. A - IV, B - III, C - I, D - II [Option ID = 15560]

41) Which among the followings are not true about live vaccines in comparison to killed ones?

- A. More chances of hypersensitivity
B. Fewer doses are required
C. Stimulates CMI only
D. Adjuvant is needed
E. No risk of reversion

Choose the *correct* answer from the options given below:

[Question ID = 3891][Question Description = 141_121_VEM_SEP22_Q41]

1. A, C and E only [Option ID = 15561]
2. C, D and E only [Option ID = 15562]
3. B, C, D and E only [Option ID = 15563]
4. A, C, D and E only [Option ID = 15564]

42) Proteasomes play a key role in processing of:[Question ID = 3892][Question Description = 142_121_VEM_SEP22_Q42]

1. Bacterial antigens [Option ID = 15565]
2. Exogenous antigens [Option ID = 15566]
3. Endogenous antigens [Option ID = 15567]
4. MHC Class II peptides [Option ID = 15568]

43) As per USDA classification of Genetically Engineered Veterinary Biologicals, vaccines containing live organisms that contain gene deletions or heterologous marker genes are categorized in:[Question ID = 3893][Question Description = 143_121_VEM_SEP22_Q43]

1. Category I [Option ID = 15569]
2. Category II [Option ID = 15570]
3. Category III [Option ID = 15571]
4. Category IV [Option ID = 15572]

44) Alpha chain of MHC Class Ia chain consists of following domains:[Question ID = 3894][Question Description = 144_121_VEM_SEP22_Q44]

1. Three (3) [Option ID = 15573]
2. Four (4) [Option ID = 15574]
3. Five (5) [Option ID = 15575]
4. Six (6) [Option ID = 15576]

45) Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A : The vaccine strain of anthrax was rendered avirulent by growth in 50% serum agar under an atmosphere of rich in carbon dioxide.

Reason R : The organism lost its ability to form spore and thus safe for vaccination.

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 3895][Question Description = 145_121_VEM_SEP22_Q45]

1. Both A and R are true and R is the correct explanation of A [Option ID = 15577]
2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 15578]
3. A is true but R is false [Option ID = 15579]
4. A is false but R is true [Option ID = 15580]

46) Which of the following is used in veterinary vaccines and cross-links proteins and nucleic acids?

[Question ID = 3896][Question Description = 146_121_VEM_SEP22_Q46]

1. Formaldehyde [Option ID = 15581]
2. Ethylene oxide [Option ID = 15582]
3. Ethyleneimine [Option ID = 15583]
4. Beta-propiolactone [Option ID = 15584]

47) Which among the following data bases are not sourced from NCBI, USA?

- A. DDBJ

- B. EMBL
- C. TrEMBL
- D. KEGG
- E. PIRs

Choose the *correct* answer from the options given below:

[Question ID = 3897][Question Description = 147_121_VEM_SEP22_Q47]

1. A, B and C only [Option ID = 15585]
2. A, B and D only [Option ID = 15586]
3. B, C and E only [Option ID = 15587]
4. A, C and D only [Option ID = 15588]

48) The first recombinant DNA molecule was synthesized in the year:

[Question ID = 3898][Question Description = 148_121_VEM_SEP22_Q48]

1. 1942 [Option ID = 15589]
2. 1952 [Option ID = 15590]
3. 1962 [Option ID = 15591]
4. 1972 [Option ID = 15592]

49) Which among the following is not true about pBR322 vector?

- A. Its size is 10kb.
- B. It carries antibiotic resistance genes for ampicillin and streptomycin.
- C. It has reasonably high copy number.
- D. The ampicillin resistance site has sites for BamH1, Sal1 and HindIII R.E.s
- E. It was developed by Bolivar and Rodriguez.

Choose the *correct* answer from the options given below:

[Question ID = 3899][Question Description = 149_121_VEM_SEP22_Q49]

1. A, B and C only [Option ID = 15593]
2. A, C and D only [Option ID = 15594]
3. A, B, C and D only [Option ID = 15595]
4. A, C, D and E only [Option ID = 15596]

50) Asymmetric PCR is the one in which:

- A. Single strand copies of one strand of template DNA are generated.
- B. Primers are used in unequal concentrations.
- C. Only one primer is used in combination with dideoxynucleotides.
- D. Primer is either radio- or fluorescence-labelled.
- E. Primer used in low concentration is used as the primer during the sequencing step.

Choose the *correct* answer from the options given below:

[Question ID = 3900][Question Description = 150_121_VEM_SEP22_Q50]

1. A, B and E only [Option ID = 15597]
2. A, B and D only [Option ID = 15598]
3. C, D and E only [Option ID = 15599]
4. A, C, D and E only
[Option ID = 15600]