

# National Testing Agency

|                              |                                                   |
|------------------------------|---------------------------------------------------|
| <b>Question Paper Name :</b> | Veterinary Microbiology 17th September<br>Shift 2 |
| <b>Subject Name :</b>        | Veterinary Microbiology                           |
| <b>Creation Date :</b>       | 2021-09-17 18:54:29                               |
| <b>Duration :</b>            | 120                                               |
| <b>Total Marks :</b>         | 480                                               |
| <b>Display Marks:</b>        | Yes                                               |

## Veterinary Microbiology

|                                      |          |
|--------------------------------------|----------|
| <b>Group Number :</b>                | 1        |
| <b>Group Id :</b>                    | 19088998 |
| <b>Group Maximum Duration :</b>      | 0        |
| <b>Group Minimum Duration :</b>      | 120      |
| <b>Show Attended Group? :</b>        | No       |
| <b>Edit Attended Group? :</b>        | No       |
| <b>Break time :</b>                  | 0        |
| <b>Group Marks :</b>                 | 480      |
| <b>Is this Group for Examiner? :</b> | No       |

## Part A: General Knowledge

|                         |           |
|-------------------------|-----------|
| <b>Section Id :</b>     | 190889218 |
| <b>Section Number :</b> | 1         |
| <b>Section type :</b>   | Online    |

|                                                                     |           |
|---------------------------------------------------------------------|-----------|
| <b>Number of Questions :</b>                                        | 20        |
| <b>Number of Questions to be attempted :</b>                        | 20        |
| <b>Section Marks :</b>                                              | 80        |
| <b>Enable Mark as Answered Mark for Review and Clear Response :</b> | Yes       |
| <b>Sub-Section Number :</b>                                         | 1         |
| <b>Sub-Section Id :</b>                                             | 190889258 |
| <b>Question Shuffling Allowed :</b>                                 | Yes       |

**Question Number : 1 Question Id : 19088911062 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 4 Wrong Marks : 1**

Which of the following is the device used to measure the power and speed of the wind?

1. Avometer
2. Anemometer
3. Airometer
4. Aviontimeter

**Options :**

19088944141. 1
19088944142. 2
19088944143. 3
19088944144. 4

**Question Number : 2 Question Id : 19088911063 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 4 Wrong Marks : 1**

Optical fibre used the concept of which of the following?

1. Reflection
2. Refraction
3. Total internal reflection
4. Total internal refraction

**Options :**

- 19088944145. 1
- 19088944146. 2
- 19088944147. 3
- 19088944148. 4

**Question Number : 3 Question Id : 19088911064 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Yellow vein mosaic is the viral disease of which of the following plants?

- 1. Ladyfinger
- 2. Papaya
- 3. Sugarcane
- 4. Banana

**Options :**

- 19088944149. 1
- 19088944150. 2
- 19088944151. 3
- 19088944152. 4

**Question Number : 4 Question Id : 19088911065 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following organ(s) is affected by Mumps disease?

- 1. Entire body
- 2. Skin
- 3. Eye
- 4. Parotid

**Options :**

- 19088944153. 1
- 19088944154. 2

19088944156. 4

**Question Number : 5 Question Id : 19088911066 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following is the chemical name of vitamin B<sub>2</sub>?

1. Riboflavin
2. Calciferol
3. Pyridoxin
4. Niacin

**Options :**

19088944157. 1

19088944158. 2

19088944159. 3

19088944160. 4

**Question Number : 6 Question Id : 19088911067 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following is not the input unit of the computer?

1. Mouse
2. Keyboard
3. Screen
4. Scanner

**Options :**

19088944161. 1

19088944162. 2

19088944163. 3

19088944164. 4

**Question Number : 7 Question Id : 19088911068 Question Type : MCQ Option Shuffling : No Is**

**Correct Marks : 4 Wrong Marks : 1**

The digital computer operates on which of the following principle?

1. Measurement
2. Calculation
3. Logical
4. Electrification

**Options :**

19088944165. 1

19088944166. 2

19088944167. 3

19088944168. 4

**Question Number : 8 Question Id : 19088911069 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The non-cooperation movement of Gandhiji was launched in which of the following year?

1. 1915
2. 1922
3. 1920
4. 1930

**Options :**

19088944169. 1

19088944170. 2

19088944171. 3

19088944172. 4

**Question Number : 9 Question Id : 19088911070 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

An Islamic revivalist movement named Wahabi movement was founded by which of the following person?

1. Sian Saheb
2. Syed Ahmed
3. Haji Shariat-Allah
4. DaduMian

**Options :**

19088944173. 1

19088944174. 2

19088944175. 3

19088944176. 4

**Question Number : 10 Question Id : 19088911071 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following is considered as the “Magna Carta of England Education in India”?

1. Hunter education commission
2. Lord Macaulay’s Minute
3. Wood’s Despatch
4. Thomas Babington Macaulay

**Options :**

19088944177. 1

19088944178. 2

19088944179. 3

19088944180. 4

**Question Number : 11 Question Id : 19088911072 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following nutrient does not come under the ambit of 'macro-nutrients in Soil Health Card?

1. Nitrogen
2. Zinc
3. Phosphorous
4. Potassium

**Options :**

19088944181. 1

19088944182. 2

19088944183. 3

19088944184. 4

**Question Number : 12 Question Id : 19088911073 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Cole crops, root crops and legumes come under the ambit of which of the following?

1. Olericulture
2. Pomology
3. Viticulture
4. Arboriculture

**Options :**

19088944185. 1

19088944186. 2

19088944187. 3

19088944188. 4

**Question Number : 13 Question Id : 19088911074 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The study of individual trees, shrubs, vines, and perennial woody plants is known as which of the following?

1. Turf management
2. Arboriculture
3. Pomology
4. Viticulture

**Options :**

19088944189. 1

19088944190. 2

19088944191. 3

19088944192. 4

**Question Number : 14 Question Id : 19088911075 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The ministry is implementing MIDH (Mission for Integrated Development of Horticulture) with effect from which of the following year?

1. 2012-13
2. 2019-20
3. 2015-16
4. 2014-15

**Options :**

19088944193. 1

19088944194. 2

19088944195. 3

19088944196. 4

**Question Number : 15 Question Id : 19088911076 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The interaction of soils with living things, particularly plants are well known as which of the following?

1. Edaphology
2. Pedology
3. Soil zoology
4. Pedogenesis

**Options :**

19088944197. 1

19088944198. 2

19088944199. 3

19088944200. 4

**Question Number : 16 Question Id : 19088911077 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following systems has also incorporated social aspects in itself?

1. Landscaping
2. Permaculture
3. Horticulture
4. Forest gardening

**Options :**

19088944201. 1

19088944202. 2

19088944203. 3

19088944204. 4

**Question Number : 17 Question Id : 19088911078 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

What do you term the phenomenon whereby the specific gene is added to the plant for producing a desirable phenotype?

1. Genetic manipulation
2. Genetic recombination
3. Genetic modification
4. Genetic hybridisation

**Options :**

19088944205. 1

19088944206. 2

19088944207. 3

19088944208. 4

**Question Number : 18 Question Id : 19088911079 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

What is the focus of the participatory plant breeding program?

1. Scientists
2. Plants
3. Environment
4. Farmers

**Options :**

19088944209. 1

19088944210. 2

19088944211. 3

19088944212. 4

**Question Number : 19 Question Id : 19088911080 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

How do you term the form of agriculture, in which, industrialized production of crops and animal products takes place?

1. Manufactured agriculture
2. Modern agriculture
3. Industrial agriculture
4. Mechanistic agriculture

**Options :**

19088944213. 1

19088944214. 2

19088944215. 3

19088944216. 4

**Question Number : 20 Question Id : 19088911081 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Micro-irrigation fund of Rs. 5,000 crore has been placed with which of the following organization?

1. NABARD
2. IDBI
3. SBI
4. RRBs

**Options :**

19088944217. 1

19088944218. 2

19088944219. 3

19088944220. 4

## **Part B Core : Veterinary and Animal Sciences-II**

**Section Id :** 190889219

**Section Number :** 2

**Section type :** Online

|                                                                     |           |
|---------------------------------------------------------------------|-----------|
| <b>Mandatory or Optional :</b>                                      | Mandatory |
| <b>Number of Questions :</b>                                        | 50        |
| <b>Number of Questions to be attempted :</b>                        | 50        |
| <b>Section Marks :</b>                                              | 200       |
| <b>Enable Mark as Answered Mark for Review and Clear Response :</b> | Yes       |
| <b>Sub-Section Number :</b>                                         | 1         |
| <b>Sub-Section Id :</b>                                             | 190889259 |
| <b>Question Shuffling Allowed :</b>                                 | Yes       |

**Question Number : 21 Question Id : 19088911082 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**  
**Correct Marks : 4 Wrong Marks : 1**

Drug of choice for treatment of fasciolosis in cattle is

- |                     |                  |
|---------------------|------------------|
| (1) Closantel       | (2) Rafoxanide   |
| (3) Triclabendazole | (4) Oxyclozanide |

**Options :**

- 19088944221. 1
- 19088944222. 2
- 19088944223. 3
- 19088944224. 4

**Question Number : 22 Question Id : 19088911083 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**  
**Correct Marks : 4 Wrong Marks : 1**

Metacestode stage found in invertebrate intermediate host is

- |                    |                  |
|--------------------|------------------|
| (1) Cysticercoid   | (2) Cysticercus  |
| (3) Strobilocercus | (4) Hydatid cyst |

**Options :**

19088944225. 1

19088944226. 2

19088944227. 3

19088944228. 4

**Question Number : 23 Question Id : 19088911084 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Tracheal route of migration is not seen in the following nematode species

- |                               |                               |
|-------------------------------|-------------------------------|
| (1) <i>Parascaris equorum</i> | (2) <i>Ascaris suum</i>       |
| (3) <i>Toxocara canis</i>     | (4) <i>Toxascaris leonina</i> |

**Options :**

19088944229. 1

19088944230. 2

19088944231. 3

19088944232. 4

**Question Number : 24 Question Id : 19088911085 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Butcher's Jelly condition is related to which of the following fly?

- |                       |                        |
|-----------------------|------------------------|
| (1) <i>Tabanus</i>    | (2) <i>Hypoderma</i>   |
| (3) <i>Sarcophaga</i> | (4) <i>Calliphoria</i> |

**Options :**

19088944233. 1

19088944234. 2

19088944235. 3

19088944236. 4

Question Number : 25 Question Id : 19088911086 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Prostriata tick is one of the following

- |                        |                          |
|------------------------|--------------------------|
| (1) <i>Ixodes</i>      | (2) <i>Amblyomma</i>     |
| (3) <i>Dermacentor</i> | (4) <i>Rhipicephalus</i> |

Options :

19088944237. 1

19088944238. 2

19088944239. 3

19088944240. 4

Question Number : 26 Question Id : 19088911087 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The test that differentiates *T. brucei* from *Trypanosoma brucei rhodesiense* is

- |                                       |                     |
|---------------------------------------|---------------------|
| (1) Blood incubation infectivity test | (2) Dye test        |
| (3) Formal Gel test                   | (4) Montenegro test |

Options :

19088944241. 1

19088944242. 2

19088944243. 3

19088944244. 4

Question Number : 27 Question Id : 19088911088 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Nematodes in the large intestine of horses having single spicule are

- |                                |                               |
|--------------------------------|-------------------------------|
| (1) <i>Strongylus vulgaris</i> | (2) <i>Parascaris equorum</i> |
| (3) <i>Draschia megastoma</i>  | (4) <i>Oxyuris equi</i>       |

**Options :**

19088944245. 1

19088944246. 2

19088944247. 3

19088944248. 4

**Question Number : 28 Question Id : 19088911089 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Followings are meat borne Zoonoses except

- |                                     |                                 |
|-------------------------------------|---------------------------------|
| (1) <i>Opisthorchis tenuicollis</i> | (2) <i>Trichinella spiralis</i> |
| (3) <i>Toxoplasma gondii</i>        | (4) <i>Taenia saginata</i>      |

**Options :**

19088944249. 1

19088944250. 2

19088944251. 3

19088944252. 4

**Question Number : 29 Question Id : 19088911090 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The ability of a parasite strain to resist the dose of two chemically unrelated drugs having different modes of action is termed as

- |                         |                     |
|-------------------------|---------------------|
| (1) Multiple resistance | (2) Side resistance |
| (3) Cross resistance    | (4) Reversion       |

**Options :**

19088944253. 1

19088944254. 2

19088944255. 3

19088944256. 4

**Question Number : 30 Question Id : 19088911091 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

One of the following vaccine contains exoantigen secreted by the parasite

- |                |             |
|----------------|-------------|
| (1) Pirodog    | (2) CoxAbic |
| (3) Leishmcene | (4) Toxovax |

**Options :**

19088944257. 1

19088944258. 2

19088944259. 3

19088944260. 4

**Question Number : 31 Question Id : 19088911092 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Asymmetrical dorsal lobe and barbed spicule present along with distinct vulval flap in female is a characteristic feature of the following nematode

- |                          |                       |
|--------------------------|-----------------------|
| (1) <i>Strongyloides</i> | (2) <i>Haemonchus</i> |
| (3) <i>Nematodirus</i>   | (4) <i>Cooperia</i>   |

**Options :**

- 19088944261. 1
- 19088944262. 2
- 19088944263. 3
- 19088944264. 4

**Question Number : 32 Question Id : 19088911093 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II

- | List I                                     | List II                           |
|--------------------------------------------|-----------------------------------|
| (A) Osteosarcoma in dog                    | (I) <i>Trypanosoma evansi</i>     |
| (B) Venacaval syndrome                     | (II) <i>Entamoeba histolytica</i> |
| (C) Urticarial plaques on horse body       | (III) <i>Dirofilaria immitis</i>  |
| (D) Flask shaped ulcer in intestine of man | (IV) <i>Spirocerca lupi</i>       |

Choose the correct answer from the options given below:

- (1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
- (2) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)
- (3) (A)-(IV), (B)-(III), (C)-(I), (D)-(II)
- (4) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

**Options :**

- 19088944265. 1
- 19088944266. 2
- 19088944267. 3
- 19088944268. 4

**Question Number : 33 Question Id : 19088911094 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**  
**Correct Marks : 4 Wrong Marks : 1**

Causative agent of Mal-de-Caderas is

- |                                |                                   |
|--------------------------------|-----------------------------------|
| (1) <i>Trypanosoma equinum</i> | (2) <i>Trypanosoma equiperdum</i> |
| (3) <i>Trypanosoma vivax</i>   | (4) <i>Trypanosoma evansi</i>     |

**Options :**

19088944269. 1
19088944270. 2
19088944271. 3
19088944272. 4

**Question Number : 34 Question Id : 19088911095 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**  
**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements:

- Statement I : One vertebrate and two invertebrate hosts are involved in metazoonosis type II
- Statement II : One invertebrate and two vertebrate hosts are involved in metazoonosis type III

In the light of the above statements, choose the most appropriate answer from the options given below :

- (1) Both Statement I and Statement II are correct
- (2) Both Statement I and Statement II are incorrect
- (3) Statement I is correct but Statement II is incorrect
- (4) Statement I is incorrect but Statement II is correct

**Options :**

19088944273. 1
19088944274. 2
19088944275. 3

19088944276. 4

**Question Number : 35 Question Id : 19088911096 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which type of adulterant of milk is detected by using Rosalic acid test?

- |                    |                                      |
|--------------------|--------------------------------------|
| (1) Neutralizers   | (2) Preservative                     |
| (3) Synthetic milk | (4) Specific gravity adjusting agent |

**Options :**

19088944277. 1

19088944278. 2

19088944279. 3

19088944280. 4

**Question Number : 36 Question Id : 19088911097 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

As per the FSSAI regulations, the standard plate count of pasteurized milk should not exceed

- |                 |                   |
|-----------------|-------------------|
| (1) 3000 CFU/mL | (2) 30,000 CFU/mL |
| (3) 10 CFU/mL   | (4) 50,000 CFU/mL |

**Options :**

19088944281. 1

19088944282. 2

19088944283. 3

19088944284. 4

**Question Number : 37 Question Id : 19088911098 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements:

- Statement I : Tetanus in food animal can be easily diagnosed during post mortem examination.
- Statement II : Rabies in food animal can be easily diagnosed during ante-mortem examination but not that easily after post mortem examination

In the light of the above statements, choose the most appropriate answer from the options given below :

- (1) Both Statement I and Statement II are correct
- (2) Both Statement I and Statement II are incorrect
- (3) Statement I is correct but Statement II is incorrect
- (4) Statement I is incorrect but Statement II is correct

**Options :**

- 19088944285. 1
- 19088944286. 2
- 19088944287. 3
- 19088944288. 4

**Question Number : 38 Question Id : 19088911099 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The B.O.D. strength of sewage effluent to be discharged into surface water should not be more than

- |              |                 |
|--------------|-----------------|
| (1) 25 mg/L  | (2) 25 gm/100 L |
| (3) 25 gm /L | (4) 25 µg/L     |

**Options :**

- 19088944289. 1
- 19088944290. 2
- 19088944291. 3
- 19088944292. 4

**Question Number : 39 Question Id : 19088911100 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Most of the fresh water on earth is available as

- |                           |                    |
|---------------------------|--------------------|
| (1) Glaciers and ice caps | (2) Ground water   |
| (3) Lakes and river       | (4) Reservoir dams |

**Options :**

19088944293. 1

19088944294. 2

19088944295. 3

19088944296. 4

**Question Number : 40 Question Id : 19088911101 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which is the most abundant component of fresh air?

- |                    |                 |
|--------------------|-----------------|
| (1) Nitrogen       | (2) Oxygen      |
| (3) Carbon dioxide | (4) Hydrosphere |

**Options :**

19088944297. 1

19088944298. 2

19088944299. 3

19088944300. 4

**Question Number : 41 Question Id : 19088911102 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

**Options :**

- 19088944301. 1
- 19088944302. 2
- 19088944303. 3
- 19088944304. 4

**Question Number : 42 Question Id : 19088911103 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which one of the bacterial pathogens mentioned below do not multiply freely in milk?

- |                                   |                             |
|-----------------------------------|-----------------------------|
| (1) <i>Staphylococcus aureus</i>  | (2) <i>Brucella abortus</i> |
| (3) <i>Listeria monocytogenes</i> | (4) <i>Escherichia coli</i> |

**Options :**

- 19088944305. 1
- 19088944306. 2
- 19088944307. 3
- 19088944308. 4

**Question Number : 43 Question Id : 19088911104 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Following are examples of viral zoonoses except:

- |                    |                       |
|--------------------|-----------------------|
| (1) Weil's disease | (2) Rift valley fever |
| (3) Louping ill    | (4) yellow fever      |

**Options :**

- 19088944309. 1
- 19088944310. 2
- 19088944311. 3
- 19088944312. 4

**Question Number : 44 Question Id : 19088911105 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

If the food processing equipment is dismantled for thorough cleaning, then this process is called as

- |                         |                                |
|-------------------------|--------------------------------|
| (1) Cleaning-in-place   | (2) Cleaning-out of-place      |
| (3) Routine maintenance | (4) Sterilization of equipment |

**Options :**

19088944313. 1

19088944314. 2

19088944315. 3

19088944316. 4

**Question Number : 45 Question Id : 19088911106 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The purpose of providing rest to any food animal in lairage for a minimum of 12 hour period after arrival from long distance is

- |                                           |                                         |
|-------------------------------------------|-----------------------------------------|
| (1) To reduce intestinal load of bacteria | (2) To reduce incidence of bruising     |
| (3) To collect maximum possible manure    | (4) To make it easy for animal handling |

**Options :**

19088944317. 1

19088944318. 2

19088944319. 3

19088944320. 4

**Question Number : 46 Question Id : 19088911107 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

"Redeye" in human is a constant and characteristic feature of

- |                 |                          |
|-----------------|--------------------------|
| (1) Farcy       | (2) Cat-scratch syndrome |
| (3) Malta fever | (4) Weil's syndrome      |

**Options :**

19088944321. 1

19088944322. 2

19088944323. 3

19088944324. 4

**Question Number : 47 Question Id : 19088911108 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Bacteria have ribosomal sub-units as follows

- |                 |                 |
|-----------------|-----------------|
| (1) 60s and 40s | (2) 50s and 30s |
| (3) 50s and 20s | (4) 60s and 30s |

**Options :**

19088944325. 1

19088944326. 2

19088944327. 3

19088944328. 4

**Question Number : 48 Question Id : 19088911109 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II

List I

List II

- |                         |                           |
|-------------------------|---------------------------|
| (A) LPS                 | (I) <i>Staphylococcus</i> |
| (B) Lipoteichoic acid   | (II) L-forms              |
| (C) Mycolic acids       | (III) <i>Brucella</i>     |
| (D) Cell wall deficient | (IV) <i>Mycobacterium</i> |

Choose the correct answer from the options given below:

- (1) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
- (2) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
- (3) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)
- (4) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)

**Options :**

19088944329. 1

19088944330. 2

19088944331. 3

19088944332. 4

**Question Number : 49 Question Id : 19088911110 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : Endotoxins are chemically made up of lipopolysaccharides and generally produced by Gram-negative bacteria

Statement II : Endotoxins are pyogenic.

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

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is correct but Statement II is false
- (4) Statement I is incorrect but Statement II is true

**Options :**

19088944333. 1

19088944334. 2

19088944335. 3

19088944336. 4

**Question Number : 50 Question Id : 19088911111 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements : One is labelled as Assertion A and the other is labelled as

Reason R

Assertion A : *Staphylococcus aureus* produces golden yellow pigmented colonies on mannitol salt agar

Reason R : Mannitol salt agar has high salt concentration of 7.5%

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

- (1) Both A and R are true and R is the correct explanation of A
- (2) Both A and R are true and R is NOT the correct explanation of A
- (3) A is true but R is false
- (4) A is false but R is true

**Options :**

19088944337. 1

19088944338. 2

19088944339. 3

19088944340. 4

**Question Number : 51 Question Id : 19088911112 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

“ Summer Mastitis” is caused by

- (A) *Staphylococcus aureus*
- (B) *Streptococcus agalactiae*
- (C) *Arcanobacterium pyogenes*
- (D) *Streptococcus dysgalactiae*
- (E) *Peptostreptococcus indolicus*

Choose the correct answer from the options given below :

- |                           |                              |
|---------------------------|------------------------------|
| (1) (A) and (B) only      | (2) (C) and (E) only         |
| (3) (A), (B) and (D) only | (4) (A),(C) (D) and (E) only |

**Options :**

19088944341. 1

19088944342. 2

19088944343. 3

19088944344. 4

**Question Number : 52 Question Id : 19088911113 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

“ Hot-cold lysis” is seen with bacteria

- |                                     |                                    |
|-------------------------------------|------------------------------------|
| (1) <i>Listeria monocytogenes</i>   | (2) <i>Staphylococcus aureus</i>   |
| (3) <i>Streptococcus agalactiae</i> | (4) <i>Clostridium perfringens</i> |

**Options :**

19088944345. 1

19088944346. 2

19088944347. 3

19088944348. 4

**Question Number : 53 Question Id : 19088911114 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements:

Statement I : Target haemolysis is produced due to narrow zone of partial haemolysis surrounded by broader zone of complete haemolysis on blood agar.

Statement II : Target haemolysis is produced by *Clostridium perfringens* and *Staphylococcus aureus*.

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

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is correct but Statement II is false
- (4) Statement I is incorrect but Statement II is true

**Options :**

19088944349. 1

19088944350. 2

19088944351. 3

19088944352. 4

**Question Number : 54 Question Id : 19088911115 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

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

Assertion A : Tetanus is dreadful neurotoxic disease of man and animals.

Reason R : Causative agent *Clostridium tetani* has high power of invasion and this organism can reach the brain.

In the light of the above statements, choose the most appropriate answer from the options given below :

- (1) Both A and R are correct and R is the correct explanation of A
- (2) Both A and R are correct but R is NOT the correct explanation of A
- (3) A is correct but R is not correct
- (4) A is not correct but R is correct

**Options :**

19088944353. 1

19088944354. 2

19088944355. 3

19088944356. 4

**Question Number : 55 Question Id : 19088911116 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II

| List I              | List II                               |
|---------------------|---------------------------------------|
| (A) Black death     | (I) <i>Yersinia enterocolitica</i>    |
| (B) Black disease   | (II) <i>Clostridium perfringens</i>   |
| (C) Nagler reaction | (III) <i>Clostridium novyi</i> Type B |
| (D) Cold enrichment | (IV) <i>Yersinia pestis</i>           |

Choose the correct answer from the options given below:

- (1) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
- (2) (A)-(IV), (B)-(I), (C)-(III), (D)-(II)
- (3) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
- (4) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)

**Options :**

19088944357. 1

19088944358. 2

19088944359. 3

19088944360. 4

**Question Number : 56 Question Id : 19088911117 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

*Streptococcus* species that are untypable by Lance field classification are

- (A) *Streptococcus uberis*
- (B) *Streptococcus equi*
- (C) *Streptococcus equisimilis*
- (D) *Streptococcus pneumoniae*
- (E) *Streptococcus parauberis*

Choose the correct answer from the options given below :

- |                      |                           |
|----------------------|---------------------------|
| (1) (A) and (E) only | (2) (A), (D) and (E) only |
| (3) (B) and (C) only | (4) (B), (C) and (D) only |

**Options :**

19088944361. 1

19088944362. 2

19088944363. 3

19088944364. 4

**Question Number : 57 Question Id : 19088911118 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Acid fast nature of *Mycobacterium* is due to presence of

- (A) Teichoic acids
- (B) Dipicolinic acids
- (C) Mycolic acids
- (D) N-Acetyl muramic acids
- (E) Glucuronic acids

Choose the correct answer from the options given below :

- (1) (A) and (C) only
- (2) (A), (C) and (D) only
- (3) (C) only
- (4) (D) only

**Options :**

19088944365. 1

19088944366. 2

19088944367. 3

19088944368. 4

**Question Number : 58 Question Id : 19088911119 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Statement I : Brilliant Green Agar (BGA) is a selective medium for *Salmonella*.

Statement II : BGA is made selective by incorporating high salt concentration of 6.5%

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

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

**Options :**

19088944369. 1

19088944370. 2

19088944371. 3

19088944372. 4

**Question Number : 59 Question Id : 19088911120 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The four cardinal signs of inflammation was given by

- |                    |                            |
|--------------------|----------------------------|
| (1) Galen          | (2) Aulus Cornelius Celsus |
| (3) E. Metchnikoff | (4) Hippocrates            |

**Options :**

19088944373. 1

19088944374. 2

19088944375. 3

19088944376. 4

**Question Number : 60 Question Id : 19088911121 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Cell swelling causes disruption of inter digitations between cells of

- |                        |                     |
|------------------------|---------------------|
| (1) Corneum layer      | (2) Lucidum layer   |
| (3) Germinativum layer | (4) Spinosium layer |

**Options :**

19088944377. 1

19088944378. 2

19088944379. 3

19088944380. 4

**Question Number : 61 Question Id : 19088911122 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Empyema is the suppurative inflammation of the

- |                  |                      |
|------------------|----------------------|
| (1) Lung alveoli | (2) Guttural pouches |
| (3) Middle ear   | (4) Ependyma         |

**Options :**

19088944381. 1

19088944382. 2

19088944383. 3

19088944384. 4

**Question Number : 62 Question Id : 19088911123 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Systemic lupus erythematosus is a

- (1) Bacterial disease caused by *Erysepelothrix* sp.
- (2) Herpes viral disease
- (3) Autoimmune disease
- (4) Immunodeficiency disease

**Options :**

19088944385. 1

19088944386. 2

19088944387. 3

19088944388. 4

**Question Number : 63 Question Id : 19088911124 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Disorderly and haphazard arrangement of tissue is termed as

- |               |                |
|---------------|----------------|
| (1) Dysplasia | (2) Metaplasia |
| (3) Dyscrasia | (4) Neoplasia  |

**Options :**

19088944389. 1

19088944390. 2

19088944391. 3

19088944392. 4

**Question Number : 64 Question Id : 19088911125 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Lipids and fats in tissues can be demonstrated by using

- |                                |                   |
|--------------------------------|-------------------|
| (1) Periodic acid Schiff stain | (2) Gimenez stain |
| (3) Romanosky stains           | (4) Oil Red       |

**Options :**

19088944393. 1

19088944394. 2

19088944395. 3

19088944396. 4

**Question Number : 65 Question Id : 19088911126 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Clotting time is increased in deficiency of

- |               |                |
|---------------|----------------|
| (1) Vitamin C | (2) Vitamin K  |
| (3) Vitamin E | (4) Riboflavin |

**Options :**

19088944397. 1

19088944398. 2

19088944399. 3

19088944400. 4

**Question Number : 66 Question Id : 19088911127 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Spongiform encephalopathies are not associated with the following feature

- |                       |                              |
|-----------------------|------------------------------|
| (1) Status spongiosus | (2) Perivascular cuffing     |
| (3) Neuronal loss     | (4) Amyloid plaque formation |

**Options :**

19088944401. 1

19088944402. 2

19088944403. 3

19088944404. 4

**Question Number : 67 Question Id : 19088911128 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The cutaneous form of which of the following disease is called as Farcy.

- |               |                      |
|---------------|----------------------|
| (1) Glanders  | (2) Equine Influenza |
| (3) Strangles | (4) Pseudoglanders   |

**Options :**

19088944405. 1

19088944406. 2

19088944407. 3

19088944408. 4

**Question Number : 68 Question Id : 19088911129 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Colibacillosis in poultry is not associated with the condition

- |                    |                     |
|--------------------|---------------------|
| (1) Air sacculitis | (2) Ventriculitis   |
| (3) Omphalitis     | (4) Panophthalmitis |

**Options :**

- 19088944409. 1
- 19088944410. 2
- 19088944411. 3
- 19088944412. 4

**Question Number : 69 Question Id : 19088911130 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Deficiency of Vitamin D is not associated with the condition

- |                      |                          |
|----------------------|--------------------------|
| (1) Chondrodystrophy | (2) Rachitic rosary ribs |
| (3) Bent sternum     | (4) Bowed legs           |

**Options :**

- 19088944413. 1
- 19088944414. 2
- 19088944415. 3
- 19088944416. 4

**Question Number : 70 Question Id : 19088911131 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The most potent toxin known to man

(1) Buchratoxin

(2) Ochratoxin

(3) Tetrodotoxin

(4) Botulinum toxin

**Options :**

19088944417. 1

19088944418. 2

19088944419. 3

19088944420. 4

## Part C : Veterinary Microbiology

**Section Id :** 190889220

**Section Number :** 3

**Section type :** Online

**Mandatory or Optional :** Mandatory

**Number of Questions :** 50

**Number of Questions to be attempted :** 50

**Section Marks :** 200

**Enable Mark as Answered Mark for Review and  
Clear Response :** Yes

**Sub-Section Number :** 1

**Sub-Section Id :** 190889260

**Question Shuffling Allowed :** Yes

**Question Number : 71 Question Id : 19088911132 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

| List I               | List II                                    |
|----------------------|--------------------------------------------|
| (A) Hesse            | (I) Sterilization for sporulating bacteria |
| (B) John Tyndall     | (II) Use of Agar for solid medium          |
| (C) Elie Metchnikoff | (III) Serum Antitoxin Activity Discovered  |
| (D) Emil Von Behring | (IV) Phagocytosis discovered               |

Choose the correct answer from the options given below :

- (1) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)
- (2) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
- (3) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)
- (4) (A)-(III), (B)-(I), (C)-(II), (D)-(IV)

**Options :**

19088944421. 1

19088944422. 2

19088944423. 3

19088944424. 4

**Question Number : 72 Question Id : 19088911133 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following organisms do not fulfill Koch's postulates?

- (A) Opportunistic organisms
- (B) Viruses
- (C) *Bacillus anthracis*
- (D) *Clostridium tetani*
- (E) *Chlamydia*

Choose the correct answer from the options given below :

- (1) (A), (B) and (E) only
- (2) (B) and (E) only
- (3) (A), (B) and (C) only
- (4) (C), (D) and (E) only

**Options :**

19088944425. 1

19088944426. 2

19088944427. 3

19088944428. 4

**Question Number : 73 Question Id : 19088911134 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Who is known as father of "modern microbiology"?

- |                           |                   |
|---------------------------|-------------------|
| (1) Antony Van Leewenhoek | (2) Louis Pasteur |
| (3) Robert Koch           | (4) Edward Jenner |

**Options :**

19088944429. 1

19088944430. 2

19088944431. 3

19088944432. 4

**Question Number : 74 Question Id : 19088911135 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : *Staphylococcus aureus* is a halophilic bacteria.

Statement II : Halophilic bacteria grow at high sugar concentration (upto 7.5%)

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

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

**Options :**

19088944433. 1

19088944434. 2

19088944435. 3

19088944436. 4

**Question Number : 75 Question Id : 19088911136 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following cannot grow on artificial medium?

- (A) *Mycobacterium leprae*
- (B) *Clostridium piliforme*
- (C) *Mycoplasma mycoides*
- (D) *Rickettsia*
- (E) *Chlamydia*

Choose the correct answer from the options given below :

- (1) (A), (C) and (E) only
- (2) (A), (D) and (E) only
- (3) (A) and (D) only
- (4) (A), (B), (D) and (E) only

**Options :**

- 19088944437. 1
- 19088944438. 2
- 19088944439. 3
- 19088944440. 4

**Question Number : 76 Question Id : 19088911137 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : Autoclave works under principle of moist-heat of sterilization.

Statement II : Autoclaving does not kill spores fully.

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

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

**Options :**

- 19088944441. 1
- 19088944442. 2
- 19088944443. 3
- 19088944444. 4

**Question Number : 77 Question Id : 19088911138 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

| List I                        | List II                      |
|-------------------------------|------------------------------|
| (A) Dichroic mirror           | (I) T.E.M.                   |
| (B) Primary electrons used    | (II) S.E.M.                  |
| (C) Secondary electrons used  | (III) Dark field microscopy  |
| (D) Live bacteria can be seen | (IV) Fluorescence microscopy |

Choose the correct answer from the options given below :

- (1) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
- (2) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)
- (3) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)
- (4) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)

**Options :**

19088944445. 1

19088944446. 2

19088944447. 3

19088944448. 4

**Question Number : 78 Question Id : 19088911139 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Flagellar antigen of bacteria is denoted by letter

- |       |       |
|-------|-------|
| (1) O | (2) K |
| (3) H | (4) F |

**Options :**

19088944449. 1

19088944450. 2

19088944451. 3

19088944452. 4

**Question Number : 79 Question Id : 19088911140 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

| List I                     | List II                                    |
|----------------------------|--------------------------------------------|
| (A) Braxy in sheep         | (I) <i>Clostridium perfringens</i> type D  |
| (B) Black disease in sheep | (II) <i>Clostridium perfringens</i> type B |
| (C) Lamb dysentery         | (III) <i>Clostridium novyi</i> type B      |
| (D) Pulpy kidney disease   | (IV) <i>Clostridium septicum</i>           |

Choose the correct answer from the options given below :

- (1) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
- (2) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)
- (3) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
- (4) (A)-(IV), (B)-(I), (C)-(III), (D)-(II)

**Options :**

19088944453. 1

19088944454. 2

19088944455. 3

19088944456. 4

**Question Number : 80 Question Id : 19088911141 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A) : *Clostridium perfringens* type B and C infections are mostly seen in new born animals.

Reason (R) : Toxins produced by type B and C (like alpha, beta) are denatured by trypsin but as they suckle their mothers so colostrum (having anti-trypsin activity) prevents their denaturation.

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

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
- (3) (A) is true but (R) is false
- (4) (A) is false but (R) is true

**Options :**

19088944457. 1

19088944458. 2

19088944459. 3

19088944460. 4

**Question Number : 81 Question Id : 19088911142 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : Indole test is good to differentiate between *E.coli* and *Salmonella*.

Statement II : M.R. and V.P. tests also help to differentiate between *E.coli* and *Salmonella*.

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

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is correct but Statement II is false
- (4) Statement I is incorrect but Statement II is true

**Options :**

19088944462. 2

19088944463. 3

19088944464. 4

**Question Number : 82 Question Id : 19088911143 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A) : *E.coli* on McConkey Lactose Agar (MLA) produces pink colored colonies.

Reason (R) : MLA has phenol red indicator which gives pink color due to acidic reaction.

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

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
- (3) (A) is true but (R) is false
- (4) (A) is false but (R) is true

**Options :**

19088944465. 1

19088944466. 2

19088944467. 3

19088944468. 4

**Question Number : 83 Question Id : 19088911144 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A) : Pus produced by *Streptococcus* is thinner than that of *Staphylococcus*.

Reason (R) : *Streptococcus* produces an enzyme streptodornase which degrade the pus constituents.

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

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
- (3) (A) is true but (R) is false
- (4) (A) is false but (R) is true

**Options :**

19088944469. 1

19088944470. 2

19088944471. 3

19088944472. 4

**Question Number : 84 Question Id : 19088911145 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

New name for etiological agent of infectious coryza in poultry is

- |                                        |                                       |
|----------------------------------------|---------------------------------------|
| (1) <i>Pasteurella gallinarum</i>      | (2) <i>Haemophilus paragallinarum</i> |
| (3) <i>Avibacterium paragallinarum</i> | (4) <i>Avibacter paragallinarum</i>   |

**Options :**

19088944473. 1

19088944474. 2

19088944475. 3

19088944476. 4

**Question Number : 85 Question Id : 19088911146 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : Haemorrhagic septicaemia in cattle is caused by *Pasteurella multocida*.

Statement II : *Pasteurella multocida* can not grow on McConkey Lactose Agar (MLA).

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

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is correct but Statement II is false
- (4) Statement I is incorrect but Statement II is true

**Options :**

19088944477. 1

19088944478. 2

19088944479. 3

19088944480. 4

**Question Number : 86 Question Id : 19088911147 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

*Listeria monocytogenes* is tested by

- |                 |                             |
|-----------------|-----------------------------|
| (1) Schick test | (2) Microagglutination test |
| (3) Sereny test | (4) Anton test              |

**Options :**

19088944481. 1

19088944482. 2

19088944483. 3

19088944484. 4

**Question Number : 87 Question Id : 19088911148 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A) : Coagulase-Negative Staphylococci (CNS) are poor inducers of tissue infections with abscess formation.

Reason (R) : CNS lack ability to produce Fatty Acid-Modifying Enzyme (FAME).

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

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
- (3) (A) is true but (R) is false
- (4) (A) is false but (R) is true

**Options :**

19088944485. 1

19088944486. 2

19088944487. 3

19088944488. 4

**Question Number : 88 Question Id : 19088911149 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Gamma cherry phage is specific for the bacteria

- |                                   |                                  |
|-----------------------------------|----------------------------------|
| (1) <i>Bacillus anthracis</i>     | (2) <i>Brucella abortus</i>      |
| (3) <i>Salmonella Typhimurium</i> | (4) <i>Staphylococcus aureus</i> |

**Options :**

19088944489. 1

19088944490. 2

19088944491. 3

19088944492. 4

**Question Number : 89 Question Id : 19088911150 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : *Clostridium piliforme* is the older name of bacteria causing Tyzzer's disease.

Statement II : *Clostridium piliforme* is Gram-negative organism.

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

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

**Options :**

19088944493. 1

19088944494. 2

19088944495. 3

19088944496. 4

**Question Number : 90 Question Id : 19088911151 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

| List I                  | List II                               |
|-------------------------|---------------------------------------|
| (A) Quellung reaction   | (I) <i>Mycobacterium tuberculosis</i> |
| (B) McFadyean reaction  | (II) <i>Streptococcus pneumoniae</i>  |
| (C) Weil-Felix reaction | (III) <i>Bacillus anthracis</i>       |
| (D) DTH reaction        | (IV) <i>Rickettsia prowazekii</i>     |

Choose the correct answer from the options given below :

- (1) (A)-(III), (B)-(II), (C)-(IV), (D)-(I)
- (2) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
- (3) (A)-(III), (B)-(I), (C)-(II), (D)-(IV)
- (4) (A)-(II), (B)-(III), (C)-(I), (D)-(IV)

**Options :**

19088944497. 1

19088944498. 2

19088944499. 3

19088944500. 4

**Question Number : 91 Question Id : 19088911152 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Based on latest classification, *Salmonella* has total number of following species

- (A) Two
- (B) Four
- (C) Six
- (D) Approx. one thousand
- (E) More than two thousand

Choose the correct answer from the options given below :

- (1) (A) only
- (2) (C) only
- (3) (D) only
- (4) (E) only

**Options :**

19088944501. 1

19088944502. 2

19088944503. 3

19088944504. 4

**Question Number : 92 Question Id : 19088911153 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

*Salmonella* serotypes belonging to group D of Kauffman and White Schema are

- (A) *Salmonella* Typhimurium
- (B) *Salmonella* Anatum
- (C) *Salmonella* Gallinarum
- (D) *Salmonella* Dublin
- (E) *Salmonella* Choleraesuis

Choose the correct answer from the options given below :

- (1) (A), (C) and (E) only
- (2) (A), (D) and (E) only
- (3) (C) and (D) only
- (4) (D) and (E) only

**Options :**

19088944505. 1

19088944506. 2

19088944507. 3

19088944508. 4

**Question Number : 93 Question Id : 19088911154 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

**Options :**

19088944509. 1

19088944510. 2

19088944511. 3

19088944512. 4

**Question Number : 94 Question Id : 19088911155 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Bluecomb disease is caused by

- (1) New Castle Disease Virus (NCDV)
- (2) Infectious Laryngotracheitis Virus (ILTV)
- (3) Infectious Bronchitis Virus (IBV)
- (4) Turkey Corona Virus

**Options :**

19088944513. 1

19088944514. 2

19088944515. 3

19088944516. 4

**Question Number : 95 Question Id : 19088911156 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II

| List I               | List II           |
|----------------------|-------------------|
| (A) Brick shaped     | (I) Coronavirus   |
| (B) Cartwheel shaped | (II) Poxvirus     |
| (C) Bullet shaped    | (III) Rotavirus   |
| (D) Crown shaped     | (IV) Rabies virus |

Choose the correct answer from the options given below :

- (1) (A)-(II), (B)-(IV), (C)-(I), (D)-(III)
- (2) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
- (3) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)
- (4) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)

**Options :**

19088944517. 1

19088944518. 2

19088944519. 3

19088944520. 4

**Question Number : 96 Question Id : 19088911157 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following is active against herpesvirus infections?

- (A) Idoxuridine
- (B) Amantadine
- (C) Acyclovir
- (D) Rimantadine
- (E) Vidarabine

Choose the correct answer from the options given below :

- (1) (A), (B) and (D) only
- (2) (A), (C) and (D) only
- (3) (A), (C) and (E) only
- (4) (B), (C) and (D) only

**Options :**

19088944521. 1

19088944522. 2

19088944523. 3

19088944524. 4

**Question Number : 97 Question Id : 19088911158 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

First antiviral drug approved for treatment of HIV infections

(1) Zidovudine

(2) Lamivudine

(3) Saquinavir

(4) Oseltamivir

**Options :**

19088944525. 1

19088944526. 2

19088944527. 3

19088944528. 4

**Question Number : 98 Question Id : 19088911159 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Japanese encephalitis is transmitted by the vector belonging to

(1) *Culex*

(2) *Anopheles*

(3) *Aedes*

(4) *Culicoides*

**Options :**

19088944529. 1

19088944530. 2

19088944531. 3

19088944532. 4

**Question Number : 99 Question Id : 19088911160 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Circoviruses are

- (A) Enveloped
- (B) Icosahedral in symmetry
- (C) Replicate in the cytoplasm
- (D) Stable in pH between 3 to 9
- (E) Having circular double stranded DNA

Choose the correct answer from the options given below :

- (1) (A), (B) and (E) only
- (2) (A), (C) and (E) only
- (3) (B) and (D) only
- (4) (B), (D) and (E) only

**Options :**

19088944533. 1

19088944534. 2

19088944535. 3

19088944536. 4

**Question Number : 100 Question Id : 19088911161 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : Birnaviruses have two segments of linear RNA.

Statement II : Both segments of Birnaviruses are single-stranded RNA.

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

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

**Options :**

19088944537. 1

19088944538. 2

19088944539. 3

19088944540. 4

**Question Number : 101 Question Id : 19088911162 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : FMD virus can affect cattle, sheep, goat, pigs and horses.

Statement II : There are only 4 serotypes of FMD virus prevalent in Asian Countries.

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

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is correct but Statement II is false
- (4) Statement I is incorrect but Statement II is true

**Options :**



19088944541. 1

19088944542. 2

19088944543. 3

19088944544. 4

**Question Number : 102 Question Id : 19088911163 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

“Fading Puppy Syndrome” is a disease caused by

- (1) Canine parvovirus
- (2) Canine herpesvirus
- (3) Canine adenovirus
- (4) Canine rotavirus

**Options :**

19088944545. 1

19088944546. 2

19088944547. 3

19088944548. 4

**Question Number : 103 Question Id : 19088911164 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Typical lesions called “sit-fasts” are seen in

- |                        |                               |
|------------------------|-------------------------------|
| (1) Lumpy skin disease | (2) Pseudo lumpy skin disease |
| (3) Pseudorabies       | (4) Rabies                    |

**Options :**

19088944549. 1

19088944550. 2

19088944551. 3

19088944552. 4

**Question Number : 104 Question Id : 19088911165 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : "Scrapie" is a disease of sheep caused by prions.

Statement II : Serology is not useful diagnostically for scrapie.

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

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is correct but Statement II is false
- (4) Statement I is incorrect but Statement II is true

**Options :**

19088944553. 1

19088944554. 2

19088944555. 3

19088944556. 4

**Question Number : 105 Question Id : 19088911166 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

FMD vaccine used in northern India nowadays lacks the serotype

- |       |            |
|-------|------------|
| (1) O | (2) A      |
| (3) C | (4) Asia-1 |

**Options :**

19088944557. 1

19088944558. 2

19088944559. 3

19088944560. 4

**Question Number : 106 Question Id : 19088911167 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A) : Fungi are heterotrophic in nature.

Reason (R) : Fungi lack chlorophyll.

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

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
- (3) (A) is true but (R) is false
- (4) (A) is false but (R) is true

**Options :**

19088944561. 1

19088944562. 2

19088944563. 3

19088944564. 4

**Question Number : 107 Question Id : 19088911168 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Fungi have typical cell wall characterized by presence of

- |               |                                  |
|---------------|----------------------------------|
| (1) Cellulose | (2) Hemicellulose                |
| (3) Chitin    | (4) N-Acetyl Muramic Acid (NAMA) |

**Options :**

19088944565. 1

19088944566. 2

19088944567. 3

19088944568. 4

**Question Number : 108 Question Id : 19088911169 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which among the following are sexual spores?

- |                   |                     |
|-------------------|---------------------|
| (1) Arthrospores  | (2) Basidiospores   |
| (3) Conidiospores | (4) Sporangiospores |

**Options :**

19088944569. 1

19088944570. 2

19088944571. 3

19088944572. 4

**Question Number : 109 Question Id : 19088911170 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

*Fungi imperfecti* lack sexual reproduction and belong to the class or group

- (1) Ascomycota
- (2) Basidiomycota
- (3) Deuteromycota
- (4) Zygomycota

**Options :**

19088944573. 1

19088944574. 2

19088944575. 3

19088944576. 4

**Question Number : 110 Question Id : 19088911171 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Darling's disease in dogs is caused by

- |                                    |                                     |
|------------------------------------|-------------------------------------|
| (1) <i>Histoplasma capsulatum</i>  | (2) <i>Blastomyces dermatitidis</i> |
| (3) <i>Cryptococcus neoformans</i> | (4) <i>Candida albicans</i>         |

**Options :**

19088944577. 1

19088944578. 2

19088944579. 3

19088944580. 4

**Question Number : 111 Question Id : 19088911172 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II :

| List I             | List II                         |
|--------------------|---------------------------------|
| (A) Zearalenone    | (I) Neurotoxicity               |
| (B) Aflatoxins     | (II) Degenerative renal changes |
| (C) Ochratoxins    | (III) Oestrogenic activity      |
| (D) Deoxynivalenol | (IV) Immunosuppression          |

Choose the correct answer from the options given below :

- (A)-(IV), (B)-(III), (C)-(I), (D)-(II)
- (A)-(II), (B)-(I), (C)-(IV), (D)-(III)
- (A)-(III), (B)-(I), (C)-(IV), (D)-(II)
- (A)-(III), (B)-(IV), (C)-(II), (D)-(I)

**Options :**

19088944581. 1

19088944582. 2

19088944583. 3

19088944584. 4

**Question Number : 112 Question Id : 19088911173 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

“Clonal Selection Theory” of antibody production was postulated by

- |                     |                      |
|---------------------|----------------------|
| (1) Niels Kaj Jerne | (2) McFarlane Burnet |
| (3) Paul Ehrlich    | (4) Medawar          |

**Options :**

19088944585. 1

19088944586. 2

19088944587. 3

19088944588. 4

**Question Number : 113 Question Id : 19088911174 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Constant domains in the heavy (H) chain of IgE molecule are

- |              |               |
|--------------|---------------|
| (1) Two (2)  | (2) Three (3) |
| (3) Four (4) | (4) Five (5)  |

**Options :**

19088944589. 1

19088944590. 2

19088944591. 3

19088944592. 4

**Question Number : 114 Question Id : 19088911175 Question Type : MCQ Option Shuffling : No**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Rheumatoid factor is antibody against

- |                                          |
|------------------------------------------|
| (1) Complement                           |
| (2) Synovial membrane                    |
| (3) Immunoglobulin F <sub>c</sub> region |
| (4) Nucleus of the host cell             |

**Options :**

19088944593. 1

19088944594. 2

19088944595. 3

19088944596. 4

**Question Number : 115 Question Id : 19088911176 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : Interleukin 1 is primarily produced from T-helper cells.

Statement II : Interleukin 1 has cytotoxic effect on tumor cells.

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

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is correct but Statement II is false
- (4) Statement I is incorrect but Statement II is true

**Options :**

19088944597. 1

19088944598. 2

19088944599. 3

19088944600. 4

**Question Number : 116 Question Id : 19088911177 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Interferon-gamma enhances the activity of

- (1) NK cells
- (2) Macrophages
- (3) Antibody Dependent Cell Cytotoxicity (ADCC)
- (4) Neutrophils

**Options :**

19088944601. 1

19088944602. 2

19088944603. 3

19088944604. 4

**Question Number : 117 Question Id : 19088911178 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Delayed Type Hypersensitivity (DTH) is the outcome of action of

- |         |                        |
|---------|------------------------|
| (1) IgE | (2) Sensitized T-cells |
| (3) IgG | (4) Complement         |

**Options :**

19088944605. 1

19088944606. 2

19088944607. 3

19088944608. 4

**Question Number : 118 Question Id : 19088911179 Question Type : MCQ Option Shuffling : No  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The number of constant region genes found in each T-Cell Receptor (TCR) gene family are

- |               |              |
|---------------|--------------|
| (1) Five (5)  | (2) Four (4) |
| (3) Three (3) | (4) Two (2)  |

**Options :**

19088944609. 1

19088944610. 2

19088944611. 3

19088944612. 4

**Question Number : 119 Question Id : 19088911180 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements :

Statement I : Short synthetic oligonucleotides of 15 to 30 bases are often employed in DNA probing because they are easy to obtain.

Statement II : Chances of random hybridization decrease dramatically as the probe becomes smaller.

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

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is correct but Statement II is false
- (4) Statement I is incorrect but Statement II is true

**Options :**

19088944613. 1

19088944614. 2

19088944615. 3

19088944616. 4

**Question Number : 120 Question Id : 19088911181 Question Type : MCQ Option Shuffling : No**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Match List I with List II

| List I                                              | List II                                 |
|-----------------------------------------------------|-----------------------------------------|
| (A) MoAb against TNF                                | (I) Treatment of cancer cells           |
| (B) MoAb against EGF receptors                      | (II) Treatment of Rheumatoid Arthritis  |
| (C) MoAb against CD20                               | (III) Treatment of macular degeneration |
| (D) MoAb against vascular endothelial growth factor | (IV) Treatment of B-cell tumors         |

Choose the correct answer from the options given below :

- (1) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)
- (2) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)
- (3) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
- (4) (A)-(II), (B)-(IV), (C)-(I), (D)-(III)

**Options :**

19088944617. 1

19088944618. 2

19088944619. 3

19088944620. 4