

National Testing Agency

Question Paper Name :	Veterinary Biochemistry 23rd Sep 2020 Shift 2 Set 2
Subject Name :	Veterinary Biochemistry
Creation Date :	2020-09-23 19:33:39
Duration :	120
Total Marks :	480
Display Marks:	Yes
Share Answer Key With Delivery Engine :	Yes
Actual Answer Key :	Yes

Veterinary Biochemistry

Group Number :	1
Group Id :	71087034
Group Maximum Duration :	0
Group Minimum Duration :	120
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	480
Is this Group for Examiner? :	No

Part A General Knowledge

Section Id :	710870100
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	20

Number of Questions to be attempted :	20
Section Marks :	80
Display Number Panel :	Yes
Group All Questions :	Yes
Mark As Answered Required? :	Yes
Sub-Section Number :	1
Sub-Section Id :	710870100
Question Shuffling Allowed :	Yes

Question Number : 1 Question Id : 7108704021 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which one of the following crops is a commercial crop in Punjab and Haryana but is a subsistence crop in Orissa?

1. Tea
2. Cotton
3. Rubber
4. Rice

Options :

- 71087016081. 1
- 71087016082. 2
- 71087016083. 3
- 71087016084. 4

Question Number : 2 Question Id : 7108704022 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which of the following are the two most important wheat-growing zones of the country?

- A. Ganga-Satluj plains in the north-west
- B. Deltaic regions
- C. Black soil region of the Deccan
- D. Plains of north-east

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

- 1. Only A and B
- 2. Only B and C
- 3. Only C and D
- 4. Only A and C

Options :

- 71087016085. 1
- 71087016086. 2
- 71087016087. 3
- 71087016088. 4

Question Number : 3 Question Id : 7108704023 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Indian agriculture is typically characterized as

- 1. Land surplus, labour scarce economy
- 2. Land surplus, labour surplus economy
- 3. Land scarce, labour surplus economy
- 4. Land scarce, labour scarce economy

Options :

- 71087016089. 1

71087016090. 2

71087016091. 3

71087016092. 4

Question Number : 4 Question Id : 7108704024 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which one of the following countries is the main rival of India in tea export?

1. China
2. Japan
3. Germany
4. Sri Lanka

Options :

71087016093. 1

71087016094. 2

71087016095. 3

71087016096. 4

Question Number : 5 Question Id : 7108704025 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement A: MSP is declared by the government every year to provide incentives to the farmers for raising the production of crops.

Statement B: Buffer stock is created to distribute food grains in the deficit areas and among the poorer strata of the society at the lower price than the market price.

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

1. Both Statement A and Statement B are correct
2. Both Statement A and Statement B are incorrect
3. Statement A is correct but Statement B is incorrect
4. Statement A is incorrect but Statement B is correct

Options :

- 71087016097. 1
- 71087016098. 2
- 71087016099. 3
- 71087016100. 4

Question Number : 6 Question Id : 7108704026 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which one of the following is a global association of nations of the world to help cooperation in international law, security, economic development and social equity?

1. United Nations Organization
2. International Monetary Fund
3. World Bank
4. World Health Organization

Options :

- 71087016101. 1
- 71087016102. 2
- 71087016103. 3
- 71087016104. 4

Question Number : 7 Question Id : 7108704027 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Under the Ganga Action Plan Phase II, pollution abatement works are being taken up in how many towns?

- 1. 57
- 2. 65
- 3. 52
- 4. 69

Options :

- 71087016105. 1
- 71087016106. 2
- 71087016107. 3
- 71087016108. 4

Question Number : 8 Question Id : 7108704028 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which one of the following statements is **incorrect**?

- 1. The highest number of pigs in the world are found in India
- 2. Utter Pradesh provides largest amount of pork
- 3. Assam has the largest number of pork producing pigs
- 4. Pork constitutes about 7.6% of the total meat produced in India

Options :

71087016109. 1

71087016110. 2

71087016111. 3

71087016112. 4

Question Number : 9 Question Id : 7108704029 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which type of N-fertilizer is suitable for water-logged soils?

1. Zinc Phosphate
2. Ammonium Sulphate
3. Calcium
4. Potassium Nitrate

Options :

71087016113. 1

71087016114. 2

71087016115. 3

71087016116. 4

Question Number : 10 Question Id : 7108704030 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The famous Bailadila range of hills in the Bastar district of Chhattisgarh is famous for its

1. Bauxite deposits
2. Manganese deposits
3. Copper deposits
4. High-grade haematite deposits

Options :

71087016117. 1

71087016118. 2

71087016119. 3

71087016120. 4

Question Number : 11 Question Id : 7108704031 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

A farmer wishes to start a 100 sq. m rectangular vegetable garden. Since he has only 30m barbed wire, he fences three sides of the garden letting his house compound wall act as the fourth side fencing. What is the dimension of the garden?

1. 15 m x 6.67m
2. 20 m x 5 m
3. 30 m x 3.33 m
4. 40 m x 2.5 m

Options :

71087016121. 1

71087016122. 2

71087016123. 3

71087016124. 4

Question Number : 12 Question Id : 7108704032 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

In which one of the following industries, the consumption of natural rubber is the largest?

1. Auto tyres and tubes
2. Footwear
3. Dipped goods
4. Latex foam

Options :

71087016125. 1
71087016126. 2
71087016127. 3
71087016128. 4

Question Number : 13 Question Id : 7108704033 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which one of the following countries was the partner country of 34th Surajkund International Crafts Fair held in Haryana?

1. China
2. Nepal
3. Bhutan
4. Uzbekistan

Options :

71087016129. 1
71087016130. 2
71087016131. 3
71087016132. 4

Question Number : 14 Question Id : 7108704034 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Nobel laureate Abhijit Vinayak Banerjee was conferred the honorary Doctor of Letters (D. Litt.) by which University?

1. University of Delhi
2. University of Kolkata
3. University of Mumbai
4. University of Hyderabad

Options :

- 71087016133. 1
- 71087016134. 2
- 71087016135. 3
- 71087016136. 4

Question Number : 15 Question Id : 7108704035 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Where is the headquarters of European Union?

- 1. Geneva, Switzerland
- 2. Washington D.C., USA
- 3. New York, US
- 4. Brussels, Belgium

Options :

- 71087016137. 1
- 71087016138. 2
- 71087016139. 3
- 71087016140. 4

Question Number : 16 Question Id : 7108704036 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which of the following would be deficient if one finds high somatic cell count in the cow's milk?

- 1. Butterfat
- 2. Whey protein
- 3. Casein
- 4. Trace minerals

Options :

- 71087016141. 1
- 71087016142. 2
- 71087016143. 3
- 71087016144. 4

Question Number : 17 Question Id : 7108704037 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Who was the first administrator-statesman to attempt planning as a means for economic development?

- 1. C. Rajagopalachari
- 2. V. T. Krishnamachari
- 3. M. Viswesvarayya
- 4. Sir C. P. Ramaswami Aiyar

Options :

- 71087016145. 1
- 71087016146. 2
- 71087016147. 3
- 71087016148. 4

Question Number : 18 Question Id : 7108704038 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Amazon rainforest span over nine countries. In August 2019, in which country did a deadly fire broke out in the Amazon forest?

- 1. Brazil
- 2. Venezuela
- 3. Colombia
- 4. Argentina

Options :

- 71087016149. 1
- 71087016150. 2
- 71087016151. 3
- 71087016152. 4

Question Number : 19 Question Id : 7108704039 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Economic liberalization in India started with

- 1. Sustainable changes in industrial licensing policy
- 2. The convertibility of the Indian Rupee
- 3. Significant reduction of tax rates
- 4. Changes in procedural formalities for FDI

Options :

- 71087016153. 1
- 71087016154. 2
- 71087016155. 3
- 71087016156. 4

Question Number : 20 Question Id : 7108704040 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The term 'Delimitation' which was in news recently is associated with which process?

- 1. Fixing the limit of Income tax
- 2. Fixing limits of Affordable housing
- 3. Fixing limits of Territorial constituencies
- 4. Fixing limits of Chairpersons salary

Options :

- 71087016157. 1

71087016158. 2

71087016159. 3

71087016160. 4

Part B Core Veterinary and Animal Sciences IV

Section Id :	710870101
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	50
Number of Questions to be attempted :	50
Section Marks :	200
Display Number Panel :	Yes
Group All Questions :	Yes
Mark As Answered Required? :	Yes
Sub-Section Number :	1
Sub-Section Id :	710870101
Question Shuffling Allowed :	Yes

Question Number : 21 Question Id : 7108704041 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Renin, secreted from kidney physiologically acts as

1. An enzyme
2. A hormone
3. A neurotransmitter
4. A cytokine

Options :

71087016161. 1

71087016162. 2

71087016163. 3

71087016164. 4

Question Number : 22 Question Id : 7108704042 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Most powerful phagocytic cell of blood is

1. Neutrophil
2. Eosinophil
3. Basophil
4. Macrophage

Options :

71087016165. 1

71087016166. 2

71087016167. 3

71087016168. 4

Question Number : 23 Question Id : 7108704043 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The primary energy substrate for mammary metabolism in ruminants is

1. Propionate
2. Butyrate
3. Acetate
4. Glucose

Options :

71087016169. 1

71087016170. 2

71087016171. 3

71087016172. 4

Question Number : 24 Question Id : 7108704044 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which one of the following is **NOT** a part of the growth process?

1. Cell multiplication
2. Cell enlargement
3. Incorporation of protoplasm
4. Cancerous growth

Options :

- 71087016173. 1
- 71087016174. 2
- 71087016175. 3
- 71087016176. 4

Question Number : 25 Question Id : 7108704045 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The stimulus for gastric phase of secretion is the presence of food, in the

1. Mouth
2. Oesophagus
3. Stomach
4. Duodenum

Options :

- 71087016177. 1
- 71087016178. 2
- 71087016179. 3
- 71087016180. 4

Question Number : 26 Question Id : 7108704046 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Zone of comfort in majority of homeotherms is

1. 21-26°C
2. 15-20°C
3. 30-40°C
4. 15-25°C

Options :

71087016181. 1
71087016182. 2
71087016183. 3
71087016184. 4

Question Number : 27 Question Id : 7108704047 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The amount of air that can be inspired maximally after normal expiration is

1. Vital capacity
2. Tidal volume
3. Inspiratory capacity
4. Expiratory capacity

Options :

71087016185. 1
71087016186. 2
71087016187. 3
71087016188. 4

Question Number : 28 Question Id : 7108704048 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Sensory and motor neurons synapsing in the grey column of spinal cord would essentially constitute

1. Monosynaptic reflex arc
2. Sympathetic motor outflow
3. Parasympathetic motor outflow
4. Sensory perception pathway

Options :

- 71087016189. 1
- 71087016190. 2
- 71087016191. 3
- 71087016192. 4

Question Number : 29 Question Id : 7108704049 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Lactating animals have longer period of anoestrus due to

1. High LH and FSH
2. Low LH and FSH
3. High PRL
4. Low PRL

Options :

- 71087016193. 1
- 71087016194. 2
- 71087016195. 3
- 71087016196. 4

Question Number : 30 Question Id : 7108704050 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Zone of Adrenal associated with aldosterone secretion is

1. Zona fasciculata
2. Zona reticularis
3. Zona glomerulosa
4. Medulla

Options :

71087016197. 1
71087016198. 2
71087016199. 3
71087016200. 4

Question Number : 31 Question Id : 7108704051 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Primary source of allantoic fluid is

1. Maternal circulation
2. Fetal respiratory tract
3. Fetal urine
4. Secretions of allantoic membrane

Options :

71087016201. 1
71087016202. 2
71087016203. 3
71087016204. 4

Question Number : 32 Question Id : 7108704052 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Bundle of His is also called

1. SA bundle
2. AV bundle
3. Atrial bundle
4. Inter nodal bundle

Options :

- 71087016205. 1
- 71087016206. 2
- 71087016207. 3
- 71087016208. 4

Question Number : 33 Question Id : 7108704053 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Activity induced muscle injury is due to

1. Muscle fatigue
2. Myoglobin release
3. Increase creatine kinase and lysosomal enzymes
4. Increase lactate and Hydrogen ion cone

Options :

- 71087016209. 1
- 71087016210. 2
- 71087016211. 3
- 71087016212. 4

Question Number : 34 Question Id : 7108704054 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Saltatory conduction is seen in

1. Schwann cells
2. Glial cells
3. Non-myelinated nerve fiber
4. Myelinated nerve fiber

Options :

- 71087016213. 1
- 71087016214. 2
- 71087016215. 3
- 71087016216. 4

Question Number : 35 Question Id : 7108704055 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Ventricular depolarization in normal ECG is depicted as

- A. QRS complex
- B. T wave
- C. P Wave

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

1. C, A, B
2. A, B, C
3. B, A, C
4. C, B, A

Options :

- 71087016217. 1
- 71087016218. 2
- 71087016219. 3

71087016220. 4

Question Number : 36 Question Id : 7108704056 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The smooth endoplasmic reticulum is the site of synthesis of

1. Ribosomes
2. Proteins
3. Lipids
4. Glycoproteins

Options :

71087016221. 1
71087016222. 2
71087016223. 3
71087016224. 4

Question Number : 37 Question Id : 7108704057 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Lysosomes are a bundle of

1. Hydrolases
2. Oxidases
3. Catalases
4. Protease

Options :

71087016225. 1
71087016226. 2
71087016227. 3
71087016228. 4

Question Number : 38 Question Id : 7108704058 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The "energy currency" of the cell is

1. Pyruvic acid
2. Acetyl CoA
3. NADP
4. ATP

Options :

71087016229. 1
71087016230. 2
71087016231. 3
71087016232. 4

Question Number : 39 Question Id : 7108704059 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Diffusion of water through skin and loss through evaporation is termed as

1. Sweating
2. Sensible water loss
3. Insensible water loss
4. Panting

Options :

71087016233. 1
71087016234. 2
71087016235. 3
71087016236. 4

Question Number : 40 Question Id : 7108704060 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Isometric contraction of muscle denotes

1. Muscle extension
2. Muscle flexion
3. No change in length of sarcomere
4. No change in tension on myofilaments

Options :

- 71087016237. 1
- 71087016238. 2
- 71087016239. 3
- 71087016240. 4

Question Number : 41 Question Id : 7108704061 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

An enzyme speeds up the reaction by

1. Changing ΔG for the reaction
2. Converting endergonic reaction into exergonic one
3. Reducing its E_A
4. Increasing its activation energy

Options :

- 71087016241. 1
- 71087016242. 2
- 71087016243. 3
- 71087016244. 4

Question Number : 42 Question Id : 7108704062 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Halting of metabolic pathway by the inhibitory binding of its end product to an enzyme is called

1. Enzyme activation
2. Allosteric activation
3. Co-operativity
4. Feedback inhibition

Options :

- 71087016245. 1
- 71087016246. 2
- 71087016247. 3
- 71087016248. 4

Question Number : 43 Question Id : 7108704063 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Longest duration phase of the 'interphase' in cell cycle is

1. S-phase
2. G₁-phase
3. G₂-phase
4. M-phase

Options :

- 71087016249. 1
- 71087016250. 2
- 71087016251. 3
- 71087016252. 4

Question Number : 44 Question Id : 7108704064 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Prokaryotic cells generally, undergo doubling in approximately

1. 10 minutes
2. 24 hours
3. 20 minutes to 1 hour
4. 5 to 6 hours

Options :

- 71087016253. 1
- 71087016254. 2
- 71087016255. 3
- 71087016256. 4

Question Number : 45 Question Id : 7108704065 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Plants surviving in cooler regions are expected to have more of which one of the following types of fatty acids in their membranes?

1. Phospholipids
2. Cholesterol
3. Saturated fatty acids
4. Unsaturated fatty acids

Options :

- 71087016257. 1
- 71087016258. 2
- 71087016259. 3
- 71087016260. 4

Question Number : 46 Question Id : 7108704066 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

2-oxy-4-aminopyrimidine is commonly called

1. Thymine
2. Uridine
3. Cytosine
4. Thymidine

Options :

- 71087016261. 1
- 71087016262. 2
- 71087016263. 3
- 71087016264. 4

Question Number : 47 Question Id : 7108704067 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

During translation, a stretch of short six ribonucleotide sequence preceding the initial AUG start codon of mRNA is comprised of

1. ACCAGG
2. Purine bases only
3. Pyrimidine bases only
4. TATA box

Options :

- 71087016265. 1
- 71087016266. 2
- 71087016267. 3
- 71087016268. 4

Question Number : 48 Question Id : 7108704068 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Semiconservative mode of replication was proposed by which of the following scientists?

1. Maxam and Gilbert
2. Messelson and Stahl
3. Kohler and Milstein
4. Beadle and Tatum

Options :

- 71087016269. 1
- 71087016270. 2
- 71087016271. 3
- 71087016272. 4

Question Number : 49 Question Id : 7108704069 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Eukaryotic DNA polymerase 'alpha' differs from 'delta' and 'epsilon' forms by having

1. High processivity
2. Low processivity
3. 3' to 5' exonuclease activity
4. Proof-reading activity

Options :

- 71087016273. 1
- 71087016274. 2
- 71087016275. 3
- 71087016276. 4

Question Number : 50 Question Id : 7108704070 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Epinephrine upon binding to a G protein-coupled receptor outside the cell, activates the plasma membrane embedded enzyme called

1. Cyclic AMP
2. Protein kinase A
3. Adenylate cyclase
4. Inositol triphosphate

Options :

- 71087016277. 1
- 71087016278. 2
- 71087016279. 3
- 71087016280. 4

Question Number : 51 Question Id : 7108704071 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

A disorder in which an immune system response to antigen is absent or defective is specifically called as

1. Autoimmune disorder
2. Immunodeficiency
3. Anaphylaxis
4. Immunocompromised

Options :

- 71087016281. 1
- 71087016282. 2
- 71087016283. 3
- 71087016284. 4

Question Number : 52 Question Id : 7108704072 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Epinephrine secreted by the adrenal glands is basically a

1. Corticosteroid
2. Second messenger
3. Paracrine hormone
4. Water soluble hormone

Options :

71087016285. 1
71087016286. 2
71087016287. 3
71087016288. 4

Question Number : 53 Question Id : 7108704073 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Southern blots carried out with DNA from different animal species is commonly called

1. Dot blot
2. Phytoblot
3. Zooblot
4. Diversity blot

Options :

71087016289. 1
71087016290. 2
71087016291. 3
71087016292. 4

Question Number : 54 Question Id : 7108704074 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

'FISH' is a nucleic acid analyzing technique which generally involves

1. Southern blot and hybridization
2. RNA hybridization only
3. Fluorescent primer based amplification
4. Hybridizing probe directly to chromosomes

Options :

- 71087016293. 1
- 71087016294. 2
- 71087016295. 3
- 71087016296. 4

Question Number : 55 Question Id : 7108704075 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Scaling-up of suspension cultures primarily involves increase in one of the following

1. Volume of culture medium
2. Density of medium
3. Volume of the culture vessel
4. Aeration of the culture

Options :

- 71087016297. 1
- 71087016298. 2
- 71087016299. 3
- 71087016300. 4

Question Number : 56 Question Id : 7108704076 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Cells that stain with trypan blue dye are

1. Viable cells
2. Dead cells
3. Both viable and dead cells
4. Dividing phase cells

Options :

- 71087016301. 1
- 71087016302. 2
- 71087016303. 3
- 71087016304. 4

Question Number : 57 Question Id : 7108704077 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Antigen primed partner cells for hybridoma production are generally derived from which one of the following tissues of mice?

1. Lymphoid organs
2. Spleen
3. Peripheral blood
4. Liver

Options :

- 71087016305. 1
- 71087016306. 2
- 71087016307. 3
- 71087016308. 4

Question Number : 58 Question Id : 7108704078 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

L-glutamine is an important constituent of cell culture medium as

1. It acts as an amine donor
2. It maintains pH
3. It gives energy to the cells
4. It acts as amino acid supplement

Options :

- 71087016309. 1
- 71087016310. 2
- 71087016311. 3
- 71087016312. 4

Question Number : 59 Question Id : 7108704079 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

First buffalo calf produced using *in vitro* fertilization technology in India was named as

1. Garima
2. Holi
3. Swarna
4. Pratham

Options :

- 71087016313. 1
- 71087016314. 2
- 71087016315. 3
- 71087016316. 4

Question Number : 60 Question Id : 7108704080 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which of the following agents is used *in vitro* for activation of parthenogenetic embryos, in order to induce cleavage?

1. Hyaluronidase
2. Sodium pyruvate
3. Calcimycin
4. LIF

Options :

71087016317. 1
71087016318. 2
71087016319. 3
71087016320. 4

Question Number : 61 Question Id : 7108704081 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: Most important non-volatile acid within body is Sulphuric acid

Statement II: Sulphuric acid is formed from Sulphur containing amino acids

In 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 :

71087016321. 1
71087016322. 2

71087016323. 3

71087016324. 4

Question Number : 62 Question Id : 7108704082 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: Prostaglandin $F_{2\alpha}$ and Prostaglandin E_2 are derived from Arachidonic acid

Statement II: $PGF_{2\alpha}$ has a ketone group while PGE_2 has hydroxyl group on Carbon-9 position

In 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 :

71087016325. 1

71087016326. 2

71087016327. 3

71087016328. 4

Question Number : 63 Question Id : 7108704083 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Replacement of amino acid valine by glutamic acid in both keta chains of hemoglobin results in

1. Formation of myoglobin
2. Sickle cell anemia
3. Break-up of heam molecule
4. Break-up of globin chain

Options :

- 71087016329. 1
- 71087016330. 2
- 71087016331. 3
- 71087016332. 4

Question Number : 64 Question Id : 7108704084 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The ratio of phosphate used in ATP Synthesis per one half mole of O_2 used during oxidation of glucose to $6 CO_2$ and $6 H_2O$ is

1. 2:1
2. 3:1
3. 4:1
4. 6:1

Options :

- 71087016333. 1
- 71087016334. 2
- 71087016335. 3
- 71087016336. 4

Question Number : 65 Question Id : 7108704085 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

RNA Polymerase must have which of the following properties?

- A. Recognize promoter sequence
- B. Cause unwinding of two turns of DNA helix
- C. Break phosphate radicals from RNA nucleotides
- D. Interact with chain terminating sequence

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

- 1. A, B and C only
- 2. B, C and D only
- 3. A, C and D only
- 4. A, B, C and D

Options :

- 71087016337. 1
- 71087016338. 2
- 71087016339. 3
- 71087016340. 4

Question Number : 66 Question Id : 7108704086 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The functional group Vitamin A can be

- A. Retinol
- B. Retinal
- C. Retinoic acid
- D. Retinyl ester

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

- 1. A and B only
- 2. B and C only
- 3. C and D only
- 4. A, B and C only

Options :

- 71087016341. 1
- 71087016342. 2
- 71087016343. 3
- 71087016344. 4

Question Number : 67 Question Id : 7108704087 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: Iron on absorption from small intestine combines with apo transferrin in blood

Statement II: Iron is transported as transferrin in blood

In 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 :

71087016345. 1

71087016346. 2

71087016347. 3

71087016348. 4

Question Number : 68 Question Id : 7108704088 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is

Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: Main benefit of ELISA over RIA is that it is cost-effective, does not use radio-isotopes and can be automated

Statement II: ELISA is more accurate than RIA

In 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 :

71087016349. 1

71087016350. 2

71087016351. 3

71087016352. 4

Question Number : 69 Question Id : 7108704089 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Match **List I** with **List II**

List I	List II
A. C_{3b}	I. Activates most cells and basophils
B. C_{5a}	II. Lysis of cells
C. C_{3a}	III. Chantosis of WBC's
D. C_{5b6789}	IV. Opsonization

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

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

Options :

71087016353. 1
71087016354. 2
71087016355. 3
71087016356. 4

Question Number : 70 Question Id : 7108704090 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which among the following is both glucogenic and ketogenic

1. Leucine
2. Iso leucine
3. Lysine
4. Histidine

Options :

71087016357. 1

71087016358. 2

71087016359. 3

71087016360. 4

Part C Veterinary Biochemistry

Section Id :	710870102
Section Number :	3
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	50
Number of Questions to be attempted :	50
Section Marks :	200
Display Number Panel :	Yes
Group All Questions :	Yes
Mark As Answered Required? :	Yes
Sub-Section Number :	1
Sub-Section Id :	710870102
Question Shuffling Allowed :	Yes

Question Number : 71 Question Id : 7108704091 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is

Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following is an antioxidant at low partial oxygen pressure

1. Ascorbic acid
2. Beta (β) carotene
3. Urate
4. Butylated hydroxytoluene

Options :

71087016361. 1

71087016362. 2

71087016363. 3

71087016364. 4

Question Number : 72 Question Id : 7108704092 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

How much different polypeptide chains could be encoded by an mRNA carrying triplet codon for 20 amino acids?

1. 20^{18}
2. 20^{19}
3. 20^{20}
4. 20^{21}

Options :

71087016365. 1

71087016366. 2

71087016367. 3

71087016368. 4

Question Number : 73 Question Id : 7108704093 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Chemotherapeutic agent(s) that target bacterial topoisomerase-II is/are

- A. Novobiocin
- B. Nalidixic acid
- C. Camptothecin
- D. Ciprofloxacin

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

1. A, only
2. A and B only
3. A, B and C only
4. A, B, and D only

Options :

- 71087016369. 1
- 71087016370. 2
- 71087016371. 3
- 71087016372. 4

Question Number : 74 Question Id : 7108704094 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which of the following is/are true for riboswitch?

- A. Part of mRNA forms a special secondary structure
- B. An mRNA containing a riboswitch can regulate its own expression
- C. The riboswitch displays the ability to regulate its own expression
- D. It is exclusively a eukaryotic process

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

- 1. A only
- 2. A and B only
- 3. A, B, and C only
- 4. A, B, and D only

Options :

- 71087016373. 1
- 71087016374. 2
- 71087016375. 3
- 71087016376. 4

Question Number : 75 Question Id : 7108704095 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which of the following is a ligand for TLR9 receptor?

- 1. Double stranded RNA
- 2. Lipopolysaccharide
- 3. CpG unmethylated dinucleotides
- 4. Single stranded RNA

Options :

71087016377. 1

71087016378. 2

71087016379. 3

71087016380. 4

Question Number : 76 Question Id : 7108704096 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following protects polyunsaturated membrane lipids from the attack of free radicals?

1. Vitamin K
2. Vitamin E
3. Vitamin D
4. Retinoic acid

Options :

71087016381. 1

71087016382. 2

71087016383. 3

71087016384. 4

Question Number : 77 Question Id : 7108704097 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Hypoxia enhances tumor growth by activating a transcription growth factor (HIF-1) which increases the expression of

- A. Glycolytic cycle enzymes
- B. GLUT (Glucose transporter) -1
- C. GLUT (Glucose transportet) -2
- D. GLUT (Glucose transporter) -3

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

- 1. A, B and D only
- 2. A and B only
- 3. B and C only
- 4. A, B and C only

Options :

- 71087016385. 1
- 71087016386. 2
- 71087016387. 3
- 71087016388. 4

Question Number : 78 Question Id : 7108704098 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Different parameters of four proteins dissolved in a buffer solution of pH 7.4 are

Protein	M. Wt. (k.Da)	pI	Diameter (nm)	Sedimentation coefficient (S)
P1	60	8.9	1.3	10
P2	90	5.2	1.6	15
P3	95	6.2	0.4	50
P4	100	8.5	2.0	40

Match the protein that will be separated first in List II against the method mentioned in List I

List I	List II
Methods	Protein
A. Ion exchange chromatography using CM cellulose	I. P1
B. Ion exchange chromatography using DEAE cellulose	II. P2
C. Gel filtration chromatography	III. P3
D. Ultracentrifugation	IV. P4

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

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

Options :

71087016389. 1
 71087016390. 2
 71087016391. 3
 71087016392. 4

Question Number : 79 Question Id : 7108704099 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which of the following statements NOT correct for phospholipids in mammals?

1. Phosphatidyl ethanolamine, the major lipid of the inner leaflet of the cell membrane is synthesized from the alcohol ethanolamine
2. When dietary choline is insufficient then phosphatidyl ethanolamine is converted to phosphatidyl choline.
3. Movement of phosphatidyl serine on outer leaflet of the plasma membrane signals for apoptosis
4. Flipflop movement of phospholipids on a plasma membrane is spontaneous mechanism

Options :

71087016393. 1

71087016394. 2

71087016395. 3

71087016396. 4

Question Number : 80 Question Id : 7108704100 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical 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: Premature infants may suffer from respiratory distress syndrome

Reason R: Immature lung does not synthesize enough di-lauryl phosphotidyl choline

In 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 :

71087016397. 1

71087016398. 2

71087016399. 3

71087016400. 4

Question Number : 81 Question Id : 7108704101 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical 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: Regular exercise increases beta (β) oxidation in mammals

Reason R: Fatty acids activate the transcription of enzymes for fatty acid synthesis and calcium signal cascade increases mitochondrial biogenesis through metabolic reprogramming

In 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 :

71087016401. 1

71087016402. 2

71087016403. 3

71087016404. 4

Question Number : 82 Question Id : 7108704102 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

pK of three amino acids are :

Amino acid	pK ₁ (α-COOH)	pK ₂ (α-amino group)	pK ₃ (R-group)
A1	2.20	9.21	10.46
A2	1.82	8.99	12.48
A3	1.92	10.70	8.37

If the amino acids are dissolved in a buffer solution of pH 10.735 then which of the following statements is true?

1. A1 will not move in the electrical field but A2 and A3 will migrate towards cathode
2. A2 will not move in an electrical field but A1 and A3 will migrate towards cathode
3. A3 will not move in an electrical field but A1 and A2 will migrate towards anode
4. A3 will not move in the electrical field but A1 and A2 will migrate towards cathode

Options :

- 71087016405. 1
- 71087016406. 2
- 71087016407. 3
- 71087016408. 4

Question Number : 83 Question Id : 7108704103 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which of the following protease inhibitor resembles the peptide substrate of the HIV protease?

1. Retrovir
2. Indinavir
3. Atazanavir
4. Darunavir

Options :

71087016409. 1
71087016410. 2
71087016411. 3
71087016412. 4

Question Number : 84 Question Id : 7108704104 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Match **List I** with **List II**

List I	List II
(Carbohydrate)	(Use, function etc)
A. 2-Deoxy glucose	I. Glycoprotein
B. L-Fucose	II. Glycolysis inhibitor
C. Xylulose -5 phosphate	III. Metabolic intermediate of the pentose phosphate pathway
D. 2,3-bisphosphoglycerate	IV. Oxygen retention time of haemoglobin

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

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

Options :

71087016413. 1
71087016414. 2
71087016415. 3
71087016416. 4

Question Number : 85 Question Id : 7108704105 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

What are the steps involved in the processing of endogenous antigen?

- A. Proteasomal degradation of antigen
- B. Assembly of peptide with class I MHC molecules by displacing CLIP
- C. Invariant chain guided transport of class II MHC molecules to endocytic vesicles
- D. Assembly of peptide with class II MHC molecules by calnexin, calreticulin and tapasin

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

- 1. A only
- 2. A and B only
- 3. A, C and D only
- 4. A, B and C only

Options :

- 71087016417. 1
- 71087016418. 2
- 71087016419. 3
- 71087016420. 4

Question Number : 86 Question Id : 7108704106 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Match **List I** with **List II**

List I	List II
(Serum protein)	(Change in concentration and disease/ condition)
A. Alpha (α) fetoprotein	I. Increase in iron deficiency
B. Alpha(α)1 protease inhibitor	II. Decrease in vascular haemolysis
C. Haptoglobin	III. Increase in haematoma
D. Transferrin	IV. Decrease in liver disease

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

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

Options :

- 71087016421. 1
- 71087016422. 2
- 71087016423. 3
- 71087016424. 4

Question Number : 87 Question Id : 7108704107 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Nucleic acid that may act as efficient template for transcription

- A. Double stranded DNA
- B. Single stranded DNA
- C. Double stranded RNA
- D. RNA-DNA hybrid

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

- 1. A only
- 2. A and B only
- 3. A, B and C only
- 4. A, B and D only

Options :

- 71087016425. 1
- 71087016426. 2
- 71087016427. 3
- 71087016428. 4

Question Number : 88 Question Id : 7108704108 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which of the following transamination reaction catalyzed by transaminases in the presence of all the required substance is NOT correct in humans and pigs?

1. Leucine + α -Ketoglutarate \rightleftharpoons α -Keto acid + Glutamate
2. Aspartate + α -Ketoglutarate \rightleftharpoons α -Keto acid + Glutamate
3. Alanine + α -Ketoglutarate \rightleftharpoons α -Keto acid + Glutamate
4. Cysteine + α -Ketoglutarate \rightleftharpoons α -Keto acid + Glutamate

Options :

71087016429. 1
71087016430. 2
71087016431. 3
71087016432. 4

Question Number : 89 Question Id : 7108704109 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical 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: Hydroxyl radical reacts with guanine to form 8-oxoguanine, it is mutagenic

Reason R: It often pairs with thiamine rather than cytosine during DNA replication

In 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 :

71087016433. 1

71087016434. 2

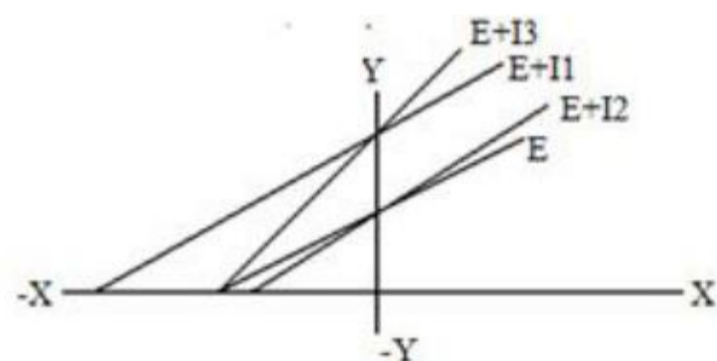
71087016435. 3

71087016436. 4

Question Number : 90 Question Id : 7108704110 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Following diagram is a result of Lineweaver-Burk plot of an enzyme along with different inhibitors. The reaction mixture contains the same molar concentration of inhibitors (I1, I2 and I3) and if the other conditions of the reactions are the same, then



1. I1 is competitive , I2 is uncompetitive and I3 is noncompetitive inhibitor.
2. I1 is uncompetitive, I2 is competitive and I3 is noncompetitive inhibitor
3. I1 is competitive, I2 is noncompetitive and I3 is uncompetitive
4. I1 is noncompetitive, I2 is uncompetitive and I3 is competitive inhibitor

Options :

71087016437. 1

71087016438. 2

71087016439. 3

71087016440. 4

Question Number : 91 Question Id : 7108704111 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following is involved in the production of the correct 3' ends of histone mRNA, which lacks a poly 'A' tail?

1. U₃ snRNA
2. U₅ snRNA
3. U₇ snRNA
4. 7SK RNA

Options :

- 71087016441. 1
- 71087016442. 2
- 71087016443. 3
- 71087016444. 4

Question Number : 92 Question Id : 7108704112 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which of the following methods requires conversion of the analyte to a gaseous, charged form?

1. Gas-Liquid Chromatography (GLC)
2. Mass Spectrometry (MS)
3. High performance Liquid Chromatography (HPLC)
4. High-performance Thin-layer Chromatography (HPTLC)

Options :

- 71087016445. 1
- 71087016446. 2
- 71087016447. 3
- 71087016448. 4

Question Number : 93 Question Id : 7108704113 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Glucagon like peptide-1 is secreted from

1. α (alpha) Cell of islets of langerhans
2. β (beta) Cell of islets of langerhans
3. L-Cell of intestine
4. Hypothalamus

Options :

71087016449. 1

71087016450. 2

71087016451. 3

71087016452. 4

Question Number : 94 Question Id : 7108704114 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

In which of the following animal/s alanine transaminase is NOT considered as liver specific enzyme?

- A. Dog
- B. Cat
- C. Cow
- D. Buffalo

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

1. A, B and D only
2. A only
3. A and C only
4. C and D only

Options :

- 71087016453. 1
- 71087016454. 2
- 71087016455. 3
- 71087016456. 4

Question Number : 95 Question Id : 7108704115 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical 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: Phosphorylation is a highly effective means of controlling the activity of proteins

Reason R: A phosphoryl group can form three or more highly directional hydrogen bonds which allow specific interaction with hydrogen bond donors

In 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 :

- 71087016457. 1
- 71087016458. 2
- 71087016459. 3
- 71087016460. 4

Question Number : 96 Question Id : 7108704116 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following statement is **NOT** correct in respect of Coenzymes?

1. Coenzymes are proteins
2. Coenzymes are low molecular weight substances
3. Coenzymes are dialyzable
4. Coenzymes are organic compounds

Options :

- 71087016461. 1
- 71087016462. 2
- 71087016463. 3
- 71087016464. 4

Question Number : 97 Question Id : 7108704117 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

In respect of competitive inhibition of enzymes, choose the correct statement

1. K_m value increased and V_{max} remained unchanged
2. V_{max} remained unchanged and K_m decreased
3. Both K_m and V_{max} remained unchanged
4. Both K_m and V_{max} decreased

Options :

- 71087016465. 1
- 71087016466. 2
- 71087016467. 3
- 71087016468. 4

Question Number : 98 Question Id : 7108704118 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following cell cytoskeleton helps to produce motion of the organelles or of the whole cell?

1. Actin filaments
2. Microtubules
3. Both Actin filaments and Microtubules
4. Intermediate filaments

Options :

- 71087016469. 1
- 71087016470. 2
- 71087016471. 3
- 71087016472. 4

Question Number : 99 Question Id : 7108704119 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which amongst the following intermediate in Cholesterol biosynthesis is converted into Ubiquinone or Coenzyme Q as a component of Electron Transport Chain?

1. Farnesyl pyrophosphate
2. Lanosterol
3. Mevalonate
4. Squalene

Options :

- 71087016473. 1
- 71087016474. 2
- 71087016475. 3
- 71087016476. 4

Question Number : 100 Question Id : 7108704120 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is

Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

How many molecules of ATP are produced when two molecules of pyruvate are completely oxidized in the Krebs cycle and Electron Transport Chain?

1. 10
2. 32
3. 25
4. 38

Options :

- 71087016477. 1
- 71087016478. 2
- 71087016479. 3
- 71087016480. 4

Question Number : 101 Question Id : 7108704121 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is
Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1

Which of the following causes platelet aggregation and vasoconstriction?

1. TxA_2
2. PGI_2
3. PGE_2
4. PGD_2

Options :

- 71087016481. 1
- 71087016482. 2
- 71087016483. 3
- 71087016484. 4

Question Number : 102 Question Id : 7108704122 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is

**Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1**

Anti-inflammatory activity of NSAID is by inhibition of which of the following enzyme?

1. PGH₂ Synthase
2. Phospholipase A₂
3. COX-2
4. Phosphohexose isomerase

Options :

- 71087016485. 1
- 71087016486. 2
- 71087016487. 3
- 71087016488. 4

**Question Number : 103 Question Id : 7108704123 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is
Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1**

Assertion (A): 'C' - Peptide estimation is used for an accurate determination of the level of insulin in the blood

Reason (R): 'C' – peptides connect A and B chain of insulin molecule

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 the not correct explanation of **A**
3. **A** is true but **R** is false
4. **A** is false but **R** is true

Options :

- 71087016489. 1
- 71087016490. 2
- 71087016491. 3
- 71087016492. 4

Question Number : 104 Question Id : 7108704124 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which amongst the following volatile fatty acids(VFAs) is glucogenic in ruminants?

1. Acetic acid
2. Propionic acid
3. Butyric acid
4. Valeric acid

Options :

- 71087016493. 1
- 71087016494. 2
- 71087016495. 3
- 71087016496. 4

Question Number : 105 Question Id : 7108704125 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which amongst the following is an irreversible reaction in the glycolytic pathway?

1. PEP to Pyruvate
2. GA3P to DHAP
3. GA3P to 1,3 BPG
4. 3,PG to 2, BPG

Options :

- 71087016497. 1
- 71087016498. 2
- 71087016499. 3
- 71087016500. 4

Question Number : 106 Question Id : 7108704126 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is

**Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1**

Deficiency of which enzyme causes hyperammonemia type-I disorder?

1. Carbamoyl phosphate synthase
2. Ornithine trans carboxylase
3. Arginosuccinate synthetase
4. Arginase

Options :

71087016501. 1
71087016502. 2
71087016503. 3
71087016504. 4

**Question Number : 107 Question Id : 7108704127 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is
Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1**

How many net ATPs are generated by the oxidation of one molecule of ketone body β -OH
Butyric Acid?

1. 22.5
2. 21.5
3. 20.5
4. 19.5

Options :

71087016505. 1
71087016506. 2
71087016507. 3
71087016508. 4

**Question Number : 108 Question Id : 7108704128 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is
Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 4 Wrong Marks : 1

Deficiency of which among the following may cause Ketosis in ruminants?

1. Acetyl CoA
2. α -Ketoglutarate
3. Oxaloacetate
4. Citrate

Options :

- 71087016509. 1
- 71087016510. 2
- 71087016511. 3
- 71087016512. 4

Question Number : 109 Question Id : 7108704129 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which amongst the following statements is NOT correct in respect of pKa?

1. pKa expresses the relative strength of weak acid or base
2. The stronger is the acid, lower its pKa
3. The stronger is the base, lower its pKa
4. The pKa is the pH at the midpoint of titration

Options :

- 71087016513. 1
- 71087016514. 2
- 71087016515. 3
- 71087016516. 4

Question Number : 110 Question Id : 7108704130 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which is the regulatory enzyme in cholesterol biosynthesis?

1. HMG CoA reductase
2. HMG CoA synthetase
3. HMG CoA oxidase
4. HMG CoA phosphatase

Options :

- 71087016517. 1
- 71087016518. 2
- 71087016519. 3
- 71087016520. 4

Question Number : 111 Question Id : 7108704131 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which amongst the following is the most sensitive biomarker for diagnosis of Kidney diseases in dogs?

1. BUN
2. Serum Creatinine
3. Urine Protein to Creatinine ratio
4. Urine Alkaline Phosphatase

Options :

- 71087016521. 1
- 71087016522. 2
- 71087016523. 3
- 71087016524. 4

Question Number : 112 Question Id : 7108704132 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

Which is the specific test for detection of ketone body acetoacetate in urine?

1. Rothera's test
2. Gerhardt's test
3. Modified Rothera's test
4. Benedict's Test

Options :

- 71087016525. 1
- 71087016526. 2
- 71087016527. 3
- 71087016528. 4

Question Number : 113 Question Id : 7108704133 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

During the synthesis of the purine nucleotide ring, carbon atom number 6 is given by which of the metabolite?

1. CO₂
2. Aspartate
3. Glycine
4. fTHF

Options :

- 71087016529. 1
- 71087016530. 2
- 71087016531. 3
- 71087016532. 4

Question Number : 114 Question Id : 7108704134 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Blocking of which channels leads to depolarization of β - Cell membrane results in the secretion of insulin?

1. ATP sensitive K^+ channels
2. ATP sensitive Cl^- channels
3. Voltage gated Ca^{++} channels
4. Na^+/K^+ Pump

Options :

- 71087016533. 1
- 71087016534. 2
- 71087016535. 3
- 71087016536. 4

Question Number : 115 Question Id : 7108704135 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

'Incretins' are group of peptides hormones from GIT that stimulate the release of which among the following hormone?

1. Insulin
2. Glucagon
3. Pancreatic Polypeptides
4. Somatostatin

Options :

- 71087016537. 1
- 71087016538. 2
- 71087016539. 3
- 71087016540. 4

Question Number : 116 Question Id : 7108704136 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which chemical agent is used for the visualization of DNA on agarose gel?

1. Ethidium bromide
2. Bromophenol blue
3. Phenol red
4. Sybr green

Options :

71087016541. 1

71087016542. 2

71087016543. 3

71087016544. 4

Question Number : 117 Question Id : 7108704137 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which of the following vitamin is a component of Coenzyme A?

1. Pantothenic acid
2. Niacin
3. Thiamine
4. Riboflavin

Options :

71087016545. 1

71087016546. 2

71087016547. 3

71087016548. 4

Question Number : 118 Question Id : 7108704138 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which among the following lipoprotein is responsible for the 'reverse journey' of cholesterol and not allowing its peripheral accumulation?

1. VLDL
2. LDL
3. IDL
4. HDL

Options :

71087016549. 1
71087016550. 2
71087016551. 3
71087016552. 4

Question Number : 119 Question Id : 7108704139 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Blood direct bilirubin level increases in which type of Jaundice?

1. Hepatic
2. Post-hepatic
3. Pre-hepatic
4. Haemolytic

Options :

71087016553. 1
71087016554. 2
71087016555. 3
71087016556. 4

Question Number : 120 Question Id : 7108704140 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

Which mucopolysaccharide is present in the vitreous humor and synovial fluid of joints?

1. Hyaluronic acid
2. Chondroitin sulphate
3. Keratin sulphate
4. Heparin

Options :

71087016557. 1

71087016558. 2

71087016559. 3

71087016560. 4