National Testing Agency

Question Paper Name :	Fish Genetics and Breeding 17th September Shift 2
Subject Name :	Fish Genetics and Breeding
Creation Date :	2021-09-17 18:54:50
Duration :	120
Total Marks :	480
Display Marks:	Yes

Fish Genetics and Breeding

Group Number :	1
Group Id :	190889131
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 :	190889317
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory

Number of Questions :	20
Number of Questions to be attempted :	20
Section Marks :	80
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	190889357
Question Shuffling Allowed :	Yes

Question Number : 1 Question Id : 19088915022 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 :

19088959981. 1

19088959982. 2

19088959983. 3

19088959984. 4

Question Number : 2 Question Id : 19088915023 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 :

19088959985. 1

19088959986. 2

19088959987. 3

19088959988. 4

Question Number : 3 Question Id : 19088915024 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 :

19088959989. 1

19088959990. 2

19088959991. 3

19088959992. 4

Question Number : 4 Question Id : 19088915025 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 :

19088959993. 1

19088959994. 2

19088959995. 3

19088959996. 4

Question Number : 5 Question Id : 19088915026 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_2?

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

Options :

19088959997. 1

19088959998. 2

19088959999. 3

19088960000. 4

Question Number : 6 Question Id : 19088915027 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 :

19088960001. 1

19088960002. 2

19088960003. 3

19088960004. 4

Question Number : 7 Question Id : 19088915028 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

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 :

19088960005. 1

19088960006. 2

19088960007. 3

19088960008. 4

Question Number : 8 Question Id : 19088915029 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 :

19088960009. 1

19088960010. 2

19088960011. 3

19088960012. 4

Question Number : 9 Question Id : 19088915030 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 :

19088960013. 1

19088960014. 2

19088960015. 3

19088960016. 4

Question Number : 10 Question Id : 19088915031 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 :

19088960017. 1

19088960018. 2

19088960019. 3

19088960020. 4

Question Number : 11 Question Id : 19088915032 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 :

19088960021. 1

19088960022. 2

19088960023. 3

19088960024. 4

Question Number : 12 Question Id : 19088915033 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?

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

Options :

19088960025. 1

19088960026. 2

19088960027. 3

19088960028. 4

Question Number : 13 Question Id : 19088915034 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?

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

Options :

19088960029. 1

19088960030. 2

19088960031. 3

19088960032. 4

Question Number : 14 Question Id : 19088915035 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 :

19088960033. 1

19088960034. 2

19088960035. 3

19088960036. 4

Question Number : 15 Question Id : 19088915036 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 :

19088960037. 1

19088960038. 2

19088960039. 3

19088960040. 4

Question Number : 16 Question Id : 19088915037 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 :

19088960041. 1

19088960042. 2

19088960043. 3

19088960044. 4

Question Number : 17 Question Id : 19088915038 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 :

19088960045. 1

19088960046. 2

19088960047. 3

19088960048. 4

Question Number : 18 Question Id : 19088915039 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 :

19088960049. 1

19088960050. 2

19088960051. 3

19088960052. 4

Question Number : 19 Question Id : 19088915040 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 :

19088960053. 1

19088960054. 2

19088960055. 3

19088960056. 4

Question Number : 20 Question Id : 19088915041 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 :

19088960057. 1

19088960058. 2

19088960059. 3

19088960060. 4

Part B Core : Fishery Science-III

Section Id :	190889318
Section Number :	2
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 :	190889358
Question Shuffling Allowed :	Yes

Question Number : 21 Question Id : 19088915042 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The current rapid depletion of biological diversity of planet earth is termed as

1. End of the world
2. Doomsday
3. Fifth extinction
4. Sixth extinction

Options :

19088960061. 1

19088960062. 2

19088960063. 3

19088960064. 4

Question Number : 22 Question Id : 19088915043 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which statement is true for criteria "Endangered"?

1. 80% reduction in population size in last 10 years
2. $< 100\ km^2$ area extent of occurrence
3. < 2500 mature individuals
4. 20% reduction in population size over 3 generations

Options :

19088960065. 1

19088960066. 2

19088960067. 3

19088960068. 4

Question Number : 23 Question Id : 19088915044 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Genetic Diversity is NOT described using

1. Polymorphism
2. Average heterozygosity
3. F indices
4. Selection differential

Options :

19088960069. 1

19088960070. 2

19088960071. 3

19088960072. 4

Question Number : 24 Question Id : 19088915045 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

If a population is in Hardy Weinberg Equilibrium, the expected heterozygote frequency of locus with allele p and q is:

1. p^2
2. q^2
3. pq
4. 2pq

Options :

19088960073. 1

19088960074. 2

19088960075. 3

19088960076. 4

Question Number : 25 Question Id : 19088915046 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The size of mitochondrial DNA in eukaryotes is

1. 12 KB
2. 16.6 KB
3. 26 KB
4. 40.5 KB

Options :

19088960077. 1

19088960078. 2

19088960079. 3

19088960080. 4

Question Number : 26 Question Id : 19088915047 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

DNA barcode represents sequence of

1. 16 S
2. Co1
3. D loop
4. Atpase 6

Options :

19088960081. 1

19088960082. 2

19088960083. 3

19088960084. 4

Question Number : 27 Question Id : 19088915048 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

An individual produces 10 viable offspring in its life. The fitness is

1. 0.1
2. 1
3. 10
4. 0.01

Options :

19088960085. 1

19088960086. 2

19088960087. 3

19088960088. 4

Question Number : 28 Question Id : 19088915049 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The probability that two alleles at a locus are identical by descent is

1. Genetic load
2. Inbreeding coefficient
3. Heritability
4. Breeding value

Options :

19088960089. 1

19088960090. 2

19088960091. 3

19088960092. 4

Question Number : 29 Question Id : 19088915050 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which of the following statements is NOT true for idealised population?

1. There is no migration
2. All individuals are hermaphrodites
3. Mutation is ignored
4. Has overlapping generation

Options :

19088960093. 1

19088960094. 2

19088960095. 3

19088960096. 4

Question Number : 30 Question Id : 19088915051 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

For no differentiation between fragments, the F_{ST}=

1. 0
2. 1
3. 0.5
4. <1

Options :

19088960097. 1

19088960098. 2

19088960099. 3

19088960100. 4

Question Number : 31 Question Id : 19088915052 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Selection favouring heterozygotes and rare alleles is called

1. Positive selection
2. Directional selection
3. Disruptive selection
4. Balancing selection

Options :

19088960101. 1

19088960102. 2

19088960103. 3

19088960104. 4

Question Number : 32 Question Id : 19088915053 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The genotypic value "G" is

1. A+D+E
2. A+D+Eg
3. A+D+I
4. P+A+D+I

Options :

19088960105. 1

19088960106. 2

19088960107. 3

19088960108. 4

Question Number : 33 Question Id : 19088915054 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The ratio that tells us about the degree of genetic determination is

1. H^2
2. h^2
3. r
4. r^2

Options :

19088960109. 1

19088960110. 2

19088960111. 3

19088960112. 4

Question Number : 34 Question Id : 19088915055 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The total number of gametes in a population is called

1. Genotypic value
2. Effective population size
3. Base population
4. Gene pool

Options :

19088960113. 1

19088960114. 2

19088960115. 3

19088960116. 4

Question Number : 35 Question Id : 19088915056 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Inter allelic interaction causes

1. Dominance deviation
2. Interaction deviation
3. Breeding value
4. Environmental variance

Options :

19088960117. 1

19088960118. 2

19088960119. 3

19088960120. 4

Question Number : 36 Question Id : 19088915057 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The number of tetrads found in meiotic prophase in an organism with diploid number of 12 is

1. 6
2. 12
3. 18
4. 24

Options :

19088960121. 1

19088960122. 2

19088960123. 3

19088960124. 4

Question Number : 37 Question Id : 19088915058 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The homologous chromosomes are NOT necessarily identical in their

1. Overall size
2. Centromere placement
3. Arm ratio
4. Alleles

Options :

19088960125. 1

19088960126. 2

19088960127. 3

19088960128. 4

Question Number : 38 Question Id : 19088915059 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The mutation at a different location in the genome which compensates for the effect of first mutation is called

1. Forward mutation
2. Back mutation
3. Supressor mutation
4. Reverse mutation

Options :

19088960129. 1

19088960130. 2

19088960131. 3

19088960132. 4

Question Number : 39 Question Id : 19088915060 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The most common autosomal aneuploid is

1. trisomy 13
2. trisomy 15
3. trisomy 18
4. trisomy 21

Options :

19088960133. 1

19088960134. 2

19088960135. 3

19088960136. 4

Question Number : 40 Question Id : 19088915061 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

A group of individuals born at the same time is called

1. Survivors
2. Biotic potential
3. Population
4. Cohort

Options :

19088960137. 1

19088960138. 2

19088960139. 3

19088960140. 4

Question Number : 41 Question Id : 19088915062 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The genome size of *E coli* is about

1. 3.4 mbp
2. 3.8 mbp
3. 4.9 mbp
4. 4.6 mbp

Options :

19088960141. 1

19088960142. 2

19088960143. 3

19088960144. 4

Question Number : 42 Question Id : 19088915063 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The plasmids capable of freely replicating and able to intergrate into bacterial chromosomes are called

1. Repliosomes
2. Episomes
3. F factor
4. Hfr cell

Options :

19088960145. 1

19088960146. 2

19088960147. 3

19088960148. 4

Question Number : 43 Question Id : 19088915064 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

A DNA molecule 300 bp long has 20 complete rotations. This DNA molecule is

1. Positively supercoiled
2. Negatively supercoiled
3. Relaxed
4. Cannot predict the type of supercoiling

Options :

19088960149. 1

19088960150. 2

19088960151. 3

19088960152. 4

Question Number : 44 Question Id : 19088915065 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which of the following components provides rigidity to cell membrane?

1. Glycerol
2. Sterol
3. Phospholipid
4. Ribose

Options :

19088960153. 1

19088960154. 2

19088960155. 3

19088960156. 4

Question Number : 45 Question Id : 19088915066 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The zygotene phase of cell cycle is characterised by

1. Chiasmata formation
2. Crossing over
3. Pairing of homologous chromosomes
4. Tetrad formation

Options :

19088960157. 1

19088960158. 2

19088960159. 3

19088960160. 4

Question Number : 46 Question Id : 19088915067 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The Lock and Key model for the interaction between enzyme and substrate was proposed by

1. Parlor
2. Emil Fischer
3. Kosland
4. Arora

Options :

19088960161. 1

19088960162. 2

19088960163. 3

19088960164. 4

Question Number : 47 Question Id : 19088915068 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The human gene with no intron is

1. Histone H1 gene
2. Histone H4 gene
3. Histone H2 gene
4. Histone H3 gene

Options :

19088960165. 1

19088960166. 2

19088960167. 3

19088960168. 4

Question Number : 48 Question Id : 19088915069 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The length of DNA present in nucleosome core particle is

1. 146 bp
2. 165 bp
3. 200 bp
4. 146 Kbp

Options :

19088960169. 1

19088960170. 2

19088960171. 3

19088960172. 4

Question Number : 49 Question Id : 19088915070 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The sequence of anti sense RNA is same as

1. Template strand
2. Non template strand
3. Positive strand
4. Coding strand

Options :

19088960173. 1

19088960174. 2

19088960175. 3

19088960176. 4

Question Number : 50 Question Id : 19088915071 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Ochre refers to the codon

1. UAG
2. UGA
3. UGG
4. UAA

Options :

19088960177. 1

19088960178. 2

19088960179. 3

19088960180. 4

Question Number : 51 Question Id : 19088915072 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The term nucleic acid was first coined by

1. Watson and Crick
2. Avery, Mac Loed and McCarty
3. Dressler
4. Richard Altmann

Options :

19088960181. 1

19088960182. 2

19088960183. 3

19088960184. 4

Question Number : 52 Question Id : 19088915073 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Inosine ***cannot*** pair with

1. Adenine
2. Uracil
3. Cytosine
4. Thymine

Options :

19088960185. 1

19088960186. 2

19088960187. 3

19088960188. 4

Question Number : 53 Question Id : 19088915074 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Pyrosequencing is a method of DNA sequencing based on the principle of

1. Synthesis by sequencing
2. Sequencing by ligation
3. Sequencing by synthesis
4. Ligation by synthesis

Options :

19088960189. 1

19088960190. 2

19088960191. 3

19088960192. 4

Question Number : 54 Question Id : 19088915075 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

How many bands of DNA would be expected in Messelson and Stahl's experiment after two rounds of conservative replication?

1. 1
2. 4
3. 2
4. 3

Options :

19088960193. 1

19088960194. 2

19088960195. 3

19088960196. 4

Question Number : 55 Question Id : 19088915076 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

How many base pairs are required in the minimal sequence required for oriC to function?

1. 200 bp
2. 245 bp
3. 300 bp
4. 150 bp

Options :

19088960197. 1

19088960198. 2

19088960199. 3

19088960200. 4

Question Number : 56 Question Id : 19088915077 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which organelle contains the catalase enzyme?

1. Golgi
2. Lysosome
3. Endoplasmic reticulum
4. Peroxisome

Options :

19088960201. 1

19088960202. 2

19088960203. 3

19088960204. 4

Question Number : 57 Question Id : 19088915078 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: Teleost haemoglobin bind to 2 oxygen molecules

Statement II: Teleost haemoglobin exists as a tetramer

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 :

19088960205. 1

19088960206. 2

19088960207. 3

19088960208. 4

Question Number : 58 Question Id : 19088915079 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which of the following amino acids tastes bitter?

1. Glycine
2. Alanine
3. Leucine
4. Aspartate

Options :

19088960209. 1

19088960210. 2

19088960211. 3

19088960212. 4

Question Number : 59 Question Id : 19088915080 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: More than 50% of the nitrogenous waste is excreted as ammonia in teleosts

Statement II: The majority of ammonia is excreted across the branchial epithelium as NH_4^+

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 :

19088960213. 1

19088960214. 2

19088960215. 3

19088960216. 4

Question Number : 60 Question Id : 19088915081 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which of the following hormones are amino acid derivatives

A.Thyroid hormones

B.Catecholamins

C.Prostaglandins

D.Serotonin and melatonin

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

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

Options :

19088960217. 1

19088960218. 2

19088960219. 3

19088960220. 4

Question Number : 61 Question Id : 19088915082 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: In crustaceans, Methyl farnesoate (MF) is known as a juvenile hormone, which plays a role in reproduction

Statement II: Methyl farnesoate (MF) is produced in the mandibular organ (MO) of crustaceans

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 :

19088960221. 1

19088960222. 2

19088960223. 3

19088960224. 4

Question Number : 62 Question Id : 19088915083 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which of the following hormones have extracellular receptors?

A.Prolactin

B.Epinephrine

C.Thyroxine

D.Serotonin

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

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

Options :

19088960225. 1

19088960226. 2

19088960227. 3

19088960228. 4

Question Number : 63 Question Id : 19088915084 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which of the following amino acids is a precursor of nitric oxide?

1. Tyrosine
2. Tryptophan
3. Arginine
4. Alanine

Options :

19088960229. 1

19088960230. 2

19088960231. 3

19088960232. 4

Question Number : 64 Question Id : 19088915085 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which sugar molecule contains nine carbons?

1. Neuraminic acid
2. Verbacose
3. Glucosamine
4. NANA

Options :

19088960233. 1

19088960234. 2

19088960235. 3

19088960236. 4

Question Number : 65 Question Id : 19088915086 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which of the following tests can be used to differentiate glucose and fructose?

1. Tollen's test
2. Seliwanoff's test
3. Fehling's test
4. Schiff's test

Options :

19088960237. 1

19088960238. 2

19088960239. 3

19088960240. 4

Question Number : 66 Question Id : 19088915087 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: Trehalose is a monosaccharide present in crustacean extracellular fluid

Statement II: Trehalose is a reducing sugar

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 :

19088960241. 1

19088960242. 2

19088960243. 3

19088960244. 4

Question Number : 67 Question Id : 19088915088 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Chitin is which form of sugar?

1. Homopolysaccharide
2. Heteroplysaccharide
3. Disaccharide
4. Monosaccharide

Options :

19088960245. 1

19088960246. 2

19088960247. 3

19088960248. 4

Question Number : 68 Question Id : 19088915089 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which of the following enzymes are NOT components of the TCA cycle?

A. Isocitrate dehydrogenase

B. Lactate dehydrogenase

C. Malate dehydrogenase

D. Pyruvate dehydrogenase

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

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

Options :

19088960249. 1

19088960250. 2

19088960251. 3

19088960252. 4

Question Number : 69 Question Id : 19088915090 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The allergic protein present in shrimp muscle is

1. Troponin
2. Lectin
3. Tropomyosin
4. Actin

Options :

19088960253. 1

19088960254. 2

19088960255. 3

19088960256. 4

Question Number : 70 Question Id : 19088915091 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which of the following is an osmoregulatory strategy of a freshwater teleost?

1. Iso-osmotic regulation
2. Osmoconforming
3. Hypo-osmotic regulation
4. Hyper-osmotic regulation

Options :

19088960257. 1

19088960258. 2

19088960259. 3

19088960260. 4

Part C : Fish Genetics and Breeding

Section Id :	190889319
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 :	190889359
Question Shuffling Allowed :	Yes

Question Number : 71 Question Id : 19088915092 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

An individual with same allele at a locus is called

1. Homozygous
2. Heteromologous
3. Homologous
4. Heterozygous

Options :

19088960261. 1

19088960262. 2

19088960263. 3

19088960264. 4

Question Number : 72 Question Id : 19088915093 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. Orthologs	I. Gene regulation
B. Paralogs	II. Acetylation
C. Post translational modification	III. Homologous genes present in same organism
D. Lac operon	IV. Homologous genes present in different organisms

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

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

Options :

19088960265. 1

19088960266. 2

19088960267. 3

19088960268. 4

Question Number : 73 Question Id : 19088915094 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The recombination percentage in a diploid cell ***cannot*** exceed

1. 100
2. 50
3. 25
4. 75

Options :

19088960269. 1

19088960270. 2

19088960271. 3

19088960272. 4

Question Number : 74 Question Id : 19088915095 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

If father is colour blind man and mother is homozygous for normal colour vision, then the probability of son being colour blind is

1. 0
2. 1
3. 0.5
4. 0.75

Options :

19088960273. 1

19088960274. 2

19088960275. 3

19088960276. 4

Question Number : 75 Question Id : 19088915096 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which of the following is not an assumption for Hardy Weinberg Law?

1. Mating within the population occurs at random for a respective locus
2. The populations are sufficiently very large and could random effects are negligible
3. Not more than one factor among mutation, migration or random drift may be acting at a given time under consideration
4. There is no selective advantage for any genotypes and all genotypes are equally viable and fertile.

Options :

19088960277. 1

19088960278. 2

19088960279. 3

19088960280. 4

Question Number : 76 Question Id : 19088915097 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which evolutionary process does NOT have a significant effect on allele frequencies?

1. Migration
2. Natural selection
3. Genetic drift
4. Inbreeding

Options :

19088960281. 1

19088960282. 2

19088960283. 3

19088960284. 4

Question Number : 77 Question Id : 19088915098 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

If an autosomal recessive disorder which shows Hardy Weinberg equilibrium has an incidence of 1 in 6400 then the frequency of carriers is approximately-

1. 1/40
2. 1/80
3. 1/160
4. 1/20

Options :

19088960285. 1

19088960286. 2

19088960287. 3

19088960288. 4

Question Number : 78 Question Id : 19088915099 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Who is known as father of modern /scientific animal breeding?

1. Robert Bakewell
2. J. L. Lush
3. Sewall Wright
4. Ronald Fisher

Options :

19088960289. 1

19088960290. 2

19088960291. 3

19088960292. 4

Question Number : 79 Question Id : 19088915100 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The inbreeding coefficient of the progeny produced by mating half sibs is

1. 0
2. 0.062
3. 0.125
4. 0.250

Options :

19088960293. 1

19088960294. 2

19088960295. 3

19088960296. 4

Question Number : 80 Question Id : 19088915101 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

In a sampled population the percentage of homozygous recessive genotype (aa) is 36 percent, the frequency of the "a" allele is

1. 60 percent
2. 36 percent
3. 72 percent
4. 30 percent

Options :

19088960297. 1

19088960298. 2

19088960299. 3

19088960300. 4

Question Number : 81 Question Id : 19088915102 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The degree of dominance is expressed as

1. d
2. d/a
3. a/d
4. d+a

Options :

19088960301. 1

19088960302. 2

19088960303. 3

19088960304. 4

Question Number : 82 Question Id : 19088915103 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The effect of a particular allele expressed as the mean deviation from the population mean of individuals having received that gene from one parent, the gene received from the other parent coming at random from the population is called as

1. Breeding value
2. Average effect of gene substitution
3. Dominance deviation
4. Average effect

Options :

19088960305. 1

19088960306. 2

19088960307. 3

19088960308. 4

Question Number : 83 Question Id : 19088915104 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The value of an individual judged by mean value of its progeny is called as

1. Genotypic value
2. Phenotypic value
3. Breeding value
4. Fitness

Options :

19088960309. 1

19088960310. 2

19088960311. 3

19088960312. 4

Question Number : 84 Question Id : 19088915105 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: Repeatability is useful to indicate gain in accuracy expected from multiple measurements.

Statement II: If repeatability is high, more will be gained, if it is low, less will be gained by increasing number of repeated records.

In 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 :

19088960313. 1

19088960314. 2

19088960315. 3

19088960316. 4

Question Number : 85 Question Id : 19088915106 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The covariance of offspring and mid parent value is expressed as

1. V_A
2. $2V_A$
3. $1/2V_A$
4. $1/4V_A$

Options :

19088960317. 1

19088960318. 2

19088960319. 3

19088960320. 4

Question Number : 86 Question Id : 19088915107 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The regression of offspring on single parent is

1. Heritability
2. Twice the heritability
3. Half heritabilty
4. One fourth heritability

Options :

19088960321. 1

19088960322. 2

19088960323. 3

19088960324. 4

Question Number : 87 Question Id : 19088915108 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The correlation between breeding value and phenotyic value is expressed as

1. h^2
2. h
3. H
4. H^2

Options :

19088960325. 1

19088960326. 2

19088960327. 3

19088960328. 4

Question Number : 88 Question Id : 19088915109 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: In estimation of heritability two points to be considered are precision and bias. The more closer the relationship the more precise is the estimate.

Statement II: The characters with lowest heritabilities are those associated with reproductive fitness.

In 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 :

19088960329. 1

19088960330. 2

19088960331. 3

19088960332. 4

Question Number : 89 Question Id : 19088915110 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The difference of mean phenotypic value of offspring of selected parents and whole of parental generation before selection is called

1. Selection differential
2. Response to selection
3. Selection intensity
4. Selection limit

Options :

19088960333. 1

19088960334. 2

19088960335. 3

19088960336. 4

Question Number : 90 Question Id : 19088915111 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which factor does NOT limit the intensity of selection?

1. Lower reproductive rate of organism
2. Small population size
3. Inbreeding
4. Higher heritability

Options :

19088960337. 1

19088960338. 2

19088960339. 3

19088960340. 4

Question Number : 91 Question Id : 19088915112 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which is NOT an aid to selection?

1. Index selection
2. Individual selection
3. Between family selection
4. Within family selection

Options :

19088960341. 1

19088960342. 2

19088960343. 3

19088960344. 4

Question Number : 92 Question Id : 19088915113 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 : Selection causes Bulmer effect.

Reason R : Selection reduces variance and heritability in progeny of first selection. There is further but progressively smaller reduction in subsequent generation.

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 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 :

19088960345. 1

19088960346. 2

19088960347. 3

19088960348. 4

Question Number : 93 Question Id : 19088915114 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: The reduction in additive genetic variance doesnot go on indefinetly. A balance is soon reached where the increase of disequilibrium due to selection is balanced by loss due to recombination.

Statement II: In absence of linkage, three or four generations are sufficient to bring population very near to this balance. With linked genes it takes longer.

In 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 :

19088960349. 1

19088960350. 2

19088960351. 3

19088960352. 4

Question Number : 94 Question Id : 19088915115 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The change of mean resulting from inbreeding is

1. -dpqF
2. dpqF
3. -2dpqF
4. 2dpqF

Options :

19088960353. 1

19088960354. 2

19088960355. 3

19088960356. 4

Question Number : 95 Question Id : 19088915116 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which is true for heterosis?

1. If a population crossed do not differ in gene frequency there will be heterosis
2. Heterosis will be greatest when one allele is fixed in one population and the other is not fixed.
3. Heterosis will be greater when both allele in both population are fixed
4. Heterosis will be greatest when the degree of dominance at a locus is zero

Options :

19088960357. 1

19088960358. 2

19088960359. 3

19088960360. 4

Question Number : 96 Question Id : 19088915117 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: The amount of heterosis is something that is not specific to each particular cross.

Statement II: If lines crossed are highly inbred, the difference of gene frequency can be only 0 or 1. The heterosis is then sum of deviations of those loci that have different alleles in two lines.

In 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 :

19088960361. 1

19088960362. 2

19088960363. 3

19088960364. 4

Question Number : 97 Question Id : 19088915118 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The between line genetic variance is how many times the genetic variance in base population?

1. 1/2 F
2. 1/4F
3. 2F
4. 4F

Options :

19088960365. 1

19088960366. 2

19088960367. 3

19088960368. 4

Question Number : 98 Question Id : 19088915119 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The deviation of a cross from its expected value is called

1. SCA
2. GCA
3. Maternal effect
4. Heterosis

Options :

19088960369. 1

19088960370. 2

19088960371. 3

19088960372. 4

Question Number : 99 Question Id : 19088915120 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Inbreeding and crossing are likely to be a better means of improvement than selection without inbreeding when much of the genetic variance of character is

1. Additive
2. Non additive
3. Maternal
4. Environmental

Options :

19088960373. 1

19088960374. 2

19088960375. 3

19088960376. 4

Question Number : 100 Question Id : 19088915121 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

(AxB) x P refers to

1. Top cross
2. Three way cross
3. Two way cross
4. Four way cross

Options :

19088960377. 1

19088960378. 2

19088960379. 3

19088960380. 4

Question Number : 101 Question Id : 19088915122 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which of the following fish is a maternal mouth brooder?

1. *Oreochromis mossambicus*
2. *Saratherodon melanotheran*
3. *Pterophyllum scalare*
4. *Cyprinus carpio*

Options :

19088960381. 1

19088960382. 2

19088960383. 3

19088960384. 4

Question Number : 102 Question Id : 19088915123 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which gland is known as conductor of endocrine orchestra?

1. Hypopthalamus
2. Pituitary
3. Adrenal
4. Pancreas

Options :

19088960385. 1

19088960386. 2

19088960387. 3

19088960388. 4

Question Number : 103 Question Id : 19088915124 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The sex determination system exhibited by dollar hatchet fish is

1. XY
2. XO
3. WZ
4. ZO

Options :

19088960389. 1

19088960390. 2

19088960391. 3

19088960392. 4

Question Number : 104 Question Id : 19088915125 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Gonad Inhibiting hormone is a neuropeptide belonging to CHH family and is produced from

1. Medulla terminalis X organ
2. Thoracic ganglion
3. Y organ
4. Testes

Options :

19088960393. 1

19088960394. 2

19088960395. 3

19088960396. 4

Question Number : 105 Question Id : 19088915126 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The only genetic approach that offers the opportunity of continued genetic gain, is

1. Hybridisation
2. Transgenesis
3. Selective Breeding
4. Cross Breeding

Options :

19088960397. 1

19088960398. 2

19088960399. 3

19088960400. 4

Question Number : 106 Question Id : 19088915127 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

In GIFT project the number of stocks collected for formation of base population were

1. 40
2. 8
3. 4
4. 12

Options :

19088960401. 1

19088960402. 2

19088960403. 3

19088960404. 4

Question Number : 107 Question Id : 19088915128 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which of the following is normally a diploid?

1. Primary polar body
2. Secondary polar body
3. Primary spermatocyte
4. Spermatid

Options :

19088960405. 1

19088960406. 2

19088960407. 3

19088960408. 4

Question Number : 108 Question Id : 19088915129 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The possible number of genotypes produced by AABBCc individual is

1. 8
2. 4
3. 16
4. 2

Options :

19088960409. 1

19088960410. 2

19088960411. 3

19088960412. 4

Question Number : 109 Question Id : 19088915130 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The Convention on Biological Diversity was adopted in

1. 1998
2. 1992
3. 1994
4. 2000

Options :

19088960413. 1

19088960414. 2

19088960415. 3

19088960416. 4

Question Number : 110 Question Id : 19088915131 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The DNA regions rich in cytosine- guanine base pairs are identified by

1. Q banding
2. C banding
3. NOR banding
4. R banding

Options :

19088960417. 1

19088960418. 2

19088960419. 3

19088960420. 4

Question Number : 111 Question Id : 19088915132 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: $H= v_1A_1 + v_2A_2 + ...$ where v_1 and v_2 are economic values of trait 1 and 2, A1 and A2 are breeding values of trait 1 and 2 and H is the the breeding goal.

Statement II: H is also called as aggregate genotype.

In 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 :

19088960421. 1

19088960422. 2

19088960423. 3

19088960424. 4

Question Number : 112 Question Id : 19088915133 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The average rohu in a population weighs 2.0kg. A rohu of 2.3 kg is selected as a parent and the heritability for this trait in this population is 0.2. What is the estimated breeding value of the selected fish?

1. 0.4
2. 0.06
3. 4.6
4. 4

Options :

19088960425. 1

19088960426. 2

19088960427. 3

19088960428. 4

Question Number : 113 Question Id : 19088915134 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Given below are two statements

Statement I: Genomic selection is based on estimation of detailed associations between a very dense set of genetic markers (SNP) and phenotypes on a select group of animals.

Statement II: With genomic selection the DNA of the animal provides information for estimating the breeding value, without having to collect phenotypes on the animal itself or on its close relatives.

In 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 :

19088960429. 1

19088960430. 2

19088960431. 3

19088960432. 4

Question Number : 114 Question Id : 19088915135 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The genetic correlation exists between two traits because of the following, ***except***

1. Linkage disequilibrium
2. Pleotropic effect
3. Conflicting resource allocation
4. Common enviroment

Options :

19088960433. 1

19088960434. 2

19088960435. 3

19088960436. 4

Question Number : 115 Question Id : 19088915136 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

If the levels in the study represent all possible levels of the factor, or at least the levels of interest in the study, the effect estimated is called as

1. Random effect
2. Wahlund effect
3. Fixed effect
4. Bulmer effect

Options :

19088960437. 1

19088960438. 2

19088960439. 3

19088960440. 4

Question Number : 116 Question Id : 19088915137 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which one of the following is NOT a Type II marker?

1. RAPD
2. Allozyme
3. Microsatellite
4. AFLP

Options :

19088960441. 1

19088960442. 2

19088960443. 3

19088960444. 4

Question Number : 117 Question Id : 19088915138 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which one of the following markers has a codominant mode of inheritance?

1. AFLP
2. RAPD
3. Microsatellite
4. Mitochondrial DNA

Options :

19088960445. 1

19088960446. 2

19088960447. 3

19088960448. 4

Question Number : 118 Question Id : 19088915139 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The tool used for homology search is

1. SwissProt
2. BLAST
3. GeneRunner
4. RasMol

Options :

19088960449. 1

19088960450. 2

19088960451. 3

19088960452. 4

Question Number : 119 Question Id : 19088915140 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which of the following does NOT describe BLOSUM matrices?

1. It stands for BLOcks SUbstitution Matrix
2. It was developed by Henikoff
3. They are used to score alignments between evolutionarily divergent protein sequences
4. These matrices are logarithmic identity values

Options :

19088960453. 1

19088960454. 2

19088960455. 3

19088960456. 4

Question Number : 120 Question Id : 19088915141 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. IPR	I. Quarantine
B. Cryopreservation	II. Glycerol
C. Western ghats	III. Patent
D. Exotic germplasm	IV. Biodiversity hotspot

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

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

Options :

19088960457. 1

19088960458. 2

19088960459. 3

19088960460. 4