# Postgraduate Institute of Medical Education and Research PGIMER, Chandigarh

#### **Notations:**

1. Options shown in green color and with ✓ icon are correct.

2.Options shown in red color and with \* icon are incorrect.

**Question Paper Name:** Life Sciences B 23 Sept 2022 Shift 2

**Subject Name :** Life Sciences B

**Creation Date :** 2022-09-23 17:33:21

**Duration:** 120

Total Marks: 125

**Display Marks:** Yes

**Share Answer Key With Delivery Engine:** Yes

Actual Answer Key: Yes

Calculator: None

Magnifying Glass Required?: No

Ruler Required?: No

**Eraser Required?:** No

Scratch Pad Required?: No

Rough Sketch/Notepad Required?: No

**Protractor Required?:** No

**Show Watermark on Console?:** Yes

**Highlighter:** No

Auto Save on Console?

**Change Font Color:** No

**Change Background Color:** No

Change Theme :	No
Help Button :	No
Show Reports :	No
Show Progress Bar :	No
	Life Sciences B

**Group Number: Group Id:** 986068703 **Group Maximum Duration:** 0 **Group Minimum Duration:** 120 **Show Attended Group?:** No **Edit Attended Group?:** No Break time: 0 **Group Marks:** 125 Is this Group for Examiner?: No **Examiner permission: Cant View Show Progress Bar?:** No

# **Aptitude**

Section Id: 9860681092 **Section Number:** Section type: Online **Number of Questions:** 50 Number of Questions to be attempted : 50 **Section Marks:** 50

**Enable Mark as Answered Mark for Review and** 

Yes **Clear Response:** 

**Maximum Instruction Time:** 0 Sub-Section Number: 1

**Sub-Section Id:** 9860681216

**Question Shuffling Allowed :** Yes

Question Number: 1 Question Id: 98606851020 Question Type: MCQ Option Shuffling: Yes Is

Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum

**Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Coal, crude oil, and natural gas are all considered fossil fuels because they were formed from the fossilized, buried remains of plants and animals that lived millions of years ago. For more than a century, burning fossil fuels has generated most of the energy required to propel our cars, power our businesses, and keep the lights on in our homes. Even today, oil, coal, and gas provide for about 80 percent of our energy needs. However, they also have harmful effects, which include:

- A) Land degradation
- B) Water pollution
- C) Air pollution
- D) Overpopulation of animals
- E) Global warming
- F) Ocean acidification

#### **Options:**

- 1. **✓** A, B, C, E, F
- 2. \* A, B, C, D, E, F
- 3. \* A, B, C, D, E
- 4. \* A, B, C, E

Question Number: 2 Question Id: 98606851021 Question Type: MCQ Option Shuffling: Yes Is

Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum

**Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

The cultural tradition of using this substance seems to have developed through a convergent

evolution process, as traces of this habit have been separately in many of the early civilizations. This substance is a soft, cohesive substance designed to be chewed without being swallowed, and composed of chicle, sweeteners, softeners, flavors, colors, and a hard or powdered polyol coating. What is this?

# **Options:**

- 1. \* Opium
- 2. \* Cocoa powder
- 3. \* Tobacco
- 4. **✓** Chewing gum

Question Number: 3 Question Id: 98606851022 Question Type: MCQ Option Shuffling: Yes Is

Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum

**Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Which of the following substance produces brisk effervescence with baking soda solution?

# **Options:**

- 1. **V** Ethanoic acid
- 2. \* Table salt
- 3. **%** Ice
- 4. Sunflower oil

Question Number: 4 Question Id: 98606851023 Question Type: MCQ Option Shuffling: Yes Is

Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum

**Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Aspirin was derived from the acetylsalicylic acid found in:

- 1. \* Petri dish containing bacteria
- 2. Willow tree bark

- 3. \* Petri dish containing fungi
- 4. Mushrooms

Question Number: 5 Question Id: 98606851024 Question Type: MCQ Option Shuffling: Yes Is

Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum

**Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Particulates of ...... size pose greatest risk to human health.

#### **Options:**

1. ✓ Less than 2.5 micrometers in diameter

2. Less than 7.5 micrometers in diameter

3. Less than 4.5 micrometers in diameter

4. Less than 3.5 micrometers in diameter

Question Number: 6 Question Id: 98606851025 Question Type: MCQ Option Shuffling: Yes Is

Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum

**Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

An electric fan is switched on in a closed room. The air in the room is:

# **Options:**

- 1. V Heated
- 2. \* Cooled
- 3. Maintains its temperature
- 4. \* Heated or cooled depending on the atmospheric pressure

Question Number: 7 Question Id: 98606851026 Question Type: MCQ Option Shuffling: Yes Is

Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum

**Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Long distance short-wave radio broad-casting uses:

# **Options:**

- 1. \* Ground wave
- 2. ✓ Ionospheric wave
- 3. \* Direct wave
- 4. Space wave

Question Number: 8 Question Id: 98606851027 Question Type: MCQ Option Shuffling: Yes Is

Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum

**Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

A tall man of height 6 feet, wants to see his full image. Then required minimum length of the mirror will be:

# **Options:**

- 1. **\*** 12 feet
- 2. **⋖** 3 feet
- 3. **%** 6 feet
- 4. \* 9 feet

Question Number: 9 Question Id: 98606851028 Question Type: MCQ Option Shuffling: Yes Is

Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum

**Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

A plane glass slab is kept over various coloured letters; the letter which appears least raised is:

## **Options:**

1. S Blue

2. \* Violet

3. \* Yellow

4. **⋖** Red

Question Number: 10 Question Id: 98606851029 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Surfactants are compounds that lower the surface tension between two liquids, between a gas and a liquid, or between a liquid and a solid. An example of this is:

# **Options:**

- 1. **✓** Shampoo
- 2. \* Blood
- 3. \* Cooking oil
- 4. \* Table salt

Question Number: 11 Question Id: 98606851030 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

Correct Marks: 1 Wrong Marks: 0.25

Question Label: MCQ

Inulin occurs in the root of:

# **Options:**

- 1. V Dahlia
- 2. Mango
- 3. Wheat
- 4. Sugarcane

Question Number: 12 Question Id: 98606851031 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

Which one of the following alcoholic drinks is produced without distillation?

# **Options:**

- 1. **✓** wine
- 2. \* whisky
- 3. \* rum
- 4. \* brandy

Question Number: 13 Question Id: 98606851032 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

The vitamin whose content increases following the conversion of milk into curd by lactic acid bacteria is:

# **Options:**

- 1. \* Vitamin C
- 2. Vitamin B12
- 3. \* Vitamin E
- 4. \* Vitamin D

Question Number: 14 Question Id: 98606851033 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Which of the following fractions of petroleum has the lowest boiling point?

- 1. \* diesel
- 2. \* kerosene
- 3. **✓** gasoline
- 4. \* heavy oil

Question Number: 15 Question Id: 98606851034 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

A well stoppered thermos flask contains some ice cubes. This is an example of:

# **Options:**

- 1. \* Closed system
- 2. \* Open system
- 3. ✓ Isolated system
- 4. Non-thermodynamic system

Question Number: 16 Question Id: 98606851035 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

In the table below are shown temperature conversions from Celsius (C) to Fahrenheit (F). Which of the following are correctly matched?

S. No.	С	F
Α	0	32
В	-10	14
С	100	180
D	-40	-40

# Options:

1. \* A, B, C

2. \* B, C, D

3. **4** A, B, D

4. \* A, C, D

Question Number: 17 Question Id: 98606851036 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

Correct Marks: 1 Wrong Marks: 0.25

Question Label: MCQ

Two ice cubes are pressed over each other until they unite to form one block. The force mainly responsible for holding them together is:

- 1. Wan der Waals force
- 2. \* Dipole-dipole interaction
- 3. **✓** Hydrogen bonding
- 4. \* Covalent bonding

Question Number: 18 Question Id: 98606851037 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Hypo is used in photography because it is:

# **Options:**

- 1. \* A strong reducing agent
- 2. \* A strong oxidizing agent
- 3. ✓ A strong complexing agent
- 4. \* Photosensitive compound

Question Number: 19 Question Id: 98606851038 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

A piece of ice floats in a vessel with water above which a layer of a lighter oil is poured. How will the level of the interface change after the whole of ice melts? What will be the change in the total level of liquid in the vessel?

#### **Options:**

- 1. \* Interface falls, total level also falls
- 2. ✓ Interface rises, total level falls
- 3. \* Interface falls, total level rises
- 4. \* Interface rises, total level also rises

Question Number: 20 Question Id: 98606851039 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Legal limit of blood alcohol concentration as per traffic rules in India is:

# **Options:**

- 1. **✓** 30 mg in 100ml blood
- 2. \* 60 mg in 100 ml blood
- 3. \* 50 mg in 100 ml blood
- 4. \* 40 mg in 100 ml blood

Question Number: 21 Question Id: 98606851040 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Water at 24 degrees Celsius feels much colder than air at the same temperature and our body loses heat many times more quickly while in water than it would in air at the same temperature.

The reason(s) for this is/are:

- A) Water is the better conductor of the two
- B) Water is much easier to touch and feel than air
- C) Water is denser than air.

## **Options:**

- 1. \* A
- 2. 🗸 A, C
- 3. \* A, B
- 4. \* B, C

Question Number: 22 Question Id: 98606851041 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

If an iron ball and a wooden ball of same radii are released from a height 'h' in vacuum then time

taken by both of them to reach ground will be:

# **Options:**

- 1. \* Unequal
- 2. **✓** Exactly equal
- 3. \* Iron ball will take double the time as compared to wooden ball
- 4. Wooden ball will take double the time as compared to iron ball

Question Number: 23 Question Id: 98606851042 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

A bus is moving with a speed of 10 m/s on a straight road. A scooterist wishes to overtake the bus in 100 s. If the bus is at a distance of 1 km from the scooterist, with what speed should the scooterist chase the bus?

# **Options:**

- 1. \* 10 m/s
- 2. **1** 20 m/s
- 3. \* 40 m/s
- 4. \* 25 m/s

Question Number: 24 Question Id: 98606851043 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Wood pulp is used to make which of the following:

- A) Paper bags
- B) Calendars
- C) Cardboard boxes
- D) Tissue and toilet papers

- E) Blankets
- F) Building insulation
- G) Diapers and sanitary pads

# **Options:**

- 1. \* A, C, E, F, G
- 2. \* A, B, C, D, F, G
- 3. **A**, B, C, D, E, F, G
- 4. \* A, B, C, D, G

Question Number: 25 Question Id: 98606851044 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

A cut trunk shows 26 concentric rings of spring wood and autumn wood in alternate rows. The age of trunk would be:

# **Options:**

- 1. **✓** 13 years
- 2. **×** 26 years
- 3. **×** 52 years
- 4. \* 104 years

Question Number: 26 Question Id: 98606851045 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Statins used for lowering blood cholesterol level are extracted from:

- 1. \* algae
- 2. \* bacteria

- 3. \* viruses
- 4. **✓** yeast

Question Number: 27 Question Id: 98606851046 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

A pair of fair dice is thrown independently three times. The probability of getting a score of exactly 9 twice is:

#### **Options:**

- 1. \* 1/729
- 2. \* 8/9
- 3. \* 8/729
- 4. 🗸 8/243

Question Number: 28 Question Id: 98606851047 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Big holes in Swiss cheese are produced by:

#### **Options:**

- 1. \* A machine
- 2. \* A bacterium that produces large amount of methane gas
- 3. ✓ A bacterium producing a large amount of carbon dioxide
- 4. \* A fungus that releases a lot of gas during its metabolic activities

Question Number: 29 Question Id: 98606851048 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

With reference to the Indian climate, the Western Disturbances originate over:

# **Options:**

- 1. \* Arabian Sea
- 2. Mediterranean Sea
- 3. \* Baltic Sea
- 4. \* Bay of Bengal

Question Number: 30 Question Id: 98606851049 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

At an election, a voter may vote for any number of candidates, not greater than the number to be elected. There are 10 candidates and 4 are to be elected. If a voter votes for at least one candidate, then the number of ways in which he can vote is:

# **Options:**

- 1. 3 5040
- 2. \* 6210
- 3. 🗸 385
- 4. \* 1110

Question Number: 31 Question Id: 98606851050 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

10 men and 8 women together can complete a work in 5 days. Work done by one woman in a day is equal to half the work done by a man in one day. How many days will it take for 4 men and 6

women to complete that work?

# **Options:**

- 1. **\*** 12 days
- 2. **1**0 days
- 3. \* 8 days
- 4. \* 4 days

Question Number: 32 Question Id: 98606851051 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

When you use your finger to scroll information displayed on a touch screen, the device responds because your finger:

# **Options:**

- 1. \* Exerts pressure that activates pressure sensors
- 2. ✓ Disrupts an electrical current
- 3. \* Transfers body's static electricity to the device
- 4. \* Generates and completes a piezo-electric circuit

Question Number: 33 Question Id: 98606851052 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0.25

Question Label: MCQ

Milk kept at room temperature turns to curd due to:

- 1. \* Oxidation reaction
- 2. \* Reduction reaction
- 3. **Fermentation**

#### 4. Concentration

Question Number: 34 Question Id: 98606851053 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

Farsighted, or hypermetropic, eye can be corrected using a:

# **Options:**

- 1. ✓ Converging lens
- 2. \* Diverging lens
- 3. **Cylindrical lens**
- 4. \* Planar lens

Question Number: 35 Question Id: 98606851054 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

If the door of a working refrigerator is left open in a well-insulated room, the overall temperature of air in this room will:

#### **Options:**

- 1. \* Remain unchanged
- 2. \* Decrease
- 3. V Increase
- 4. \* Initially increase, then decrease

Question Number: 36 Question Id: 98606851055 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Televisions and computer monitor commonly have a LED screen. The abbreviation LED stands for:

# **Options:**

- 1. \* Linked Electromagnetic Displacement
- 2. \* Low Energy Display
- 3. Luminescent Electronic Detector
- 4. ✓ Light Emitting Diode

Question Number: 37 Question Id: 98606851056 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Vinegar is:

# **Options:**

- 1. ✓ Acetic acid
- 2. \* Oxalic acid
- 3. \* Citric acid
- 4. \* Tartaric acid

Question Number: 38 Question Id: 98606851057 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Raw vegetables get quickly cooked in a pressure cooker because:

- 1. \* Its alloy composition improves efficiency of heat transfer
- 2. ✓ Boiling point of water increases at higher pressures

- 3. More steam can be generated in a sealed utensil
- 4. High pressure enhances heat penetration into food material

Question Number: 39 Question Id: 98606851058 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

While evaluating an investigational new drug, a 'Phase I study' is conducted on:

# **Options:**

- 1. \* Laboratory animals
- 2. ✓ Few healthy volunteers
- 3. \* A single member from the research team
- 4. Small group of patients

Question Number: 40 Question Id: 98606851059 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

The Indian Council of Medical Research updated its national ethical guidelines for biomedical and health research involving human participants most recently in:

# **Options:**

1. 🗸 2017

2. \* 2018

3. \* 2019

4. \* 2020

Question Number: 41 Question Id: 98606851060 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Among the data collected for a clinical study in diabetic patients, which of the following is NOT a scalar variable?

# **Options:**

- 1. \* Blood glucose level at time of enrolment into research study
- 2. \* Daily units of insulin prescribed to the patient
- 3. \* Age of the patient at time of disease diagnosis
- 4. ✓ District where the patients currently live

Question Number: 42 Question Id: 98606851061 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

The value of variance for the number of COVID cases due to non-adherence to COVID appropriate behaviour is 64. Calculate the value of standard deviation.

# **Options:**

- 1. 🗸 8
- 2. \* 4
- 3. \* 16
- 4. \* 2

Question Number: 43 Question Id: 98606851062 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

ANOVA is a statistical technique, which is used to test which one of the following?

- 1. \* Equality of means
- 2. ✓ Equality of variances
- 3. **Equality of quartiles**
- 4. **Equality of medians**

Question Number: 44 Question Id: 98606851063 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

A researcher has access to data pertaining to the health expenditure of individuals. If each value of this data series is multiplied by 10, then what will be the effect on the median?

# **Options:**

- 1. Median will not be affected
- 2. \* One-tenth of the original median value
- 3. \* Twice the value of the original median value
- 4. ✓ 10 times of the original median value

Question Number: 45 Question Id: 98606851064 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

The weight of three persons who participated in a health study were 56, 50 and 47 Kilograms.

Calculate the arithmetic weight.

- 1. 🗸 51
- 2. \* 53
- 3. \* 56
- 4. \* 50

Question Number: 46 Question Id: 98606851065 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

Which of the following denotes "Five equal groups into which a population can be divided according to the distribution of values of a particular variable"?

# **Options:**

- 1. \* Percentile
- 2. \* Quartile
- 3. **✓** Quintile
- 4. \* Decile

Question Number: 47 Question Id: 98606851066 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

"The percent of total variation in the dependent variable that is explained by the set of independent variables in the study", is denoted by which one of the following?

## **Options:**

- 1. **Covariance**
- 2. \* Logistic regression
- 3. Multicollinearity
- 4. ✓ Coefficient of Determination

Question Number: 48 Question Id: 98606851067 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

The pre-test with the questionnaire before conducting a survey is denoted by which of the following term?

# **Options:**

- 1. Non-parametric analysis
- 2. ✓ Pilot survey
- 3. \* Follow up period
- 4. Systematic review

Question Number: 49 Question Id: 98606851068 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

A research laboratory examined their data of 100 patients proven to have tuberculosis based on results from sputum culture. Only 40 of them had a positive result on sputum microscopy, while 80 had a positive result from a novel diagnostic test under evaluation. Based on this information, as compared to sputum microscopy, the new test has better:

## **Options:**

- 1. **✓** Sensitivity
- 2. Specificity
- 3. \* Positive predictive value
- 4. \* Negative predictive value

Question Number: 50 Question Id: 98606851069 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

A researcher administers an achievement test to assess & indicate the possible effect of an independent variable in her study. The distribution of scores in this test is found to be negatively skewed. On this basis what can the researcher deduce regarding the difficulty level of the test?

# **Options:**

- 1. ✓ The test is very easy.
- 2. \* The test is very difficult.
- 3. \* The researcher cannot measure the difficulty level of the test by merely looking at the distribution of the scores.
- 4. \* The test is difficult and needs normalization.

# **Life Sciences**

**Section Id:** 9860681093

Section Number: 2

Section type: Online

Number of Questions: 100

Number of Questions to be attempted: 75

Section Marks: 75

**Enable Mark as Answered Mark for Review and** 

Clear Response :

Maximum Instruction Time:

Sub-Section Number: 1

**Sub-Section Id:** 9860681217

**Question Shuffling Allowed :** Yes

Question Number: 51 Question Id: 98606851070 Question Type: MCQ Option Shuffling: Yes

Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Which one of the following fungi is most likely to be found within reticulo-endothelial cells?

# **Options:**

1. ✓ Histoplasma capsulatum

- 2. \* Candida albicans
- 3. \* Mucormycosis
- 4. Sporothrix schenckii

Question Number: 52 Question Id: 98606851071 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

The X factor and/or the V factor is required by which genus of bacteria?

# **Options:**

- 1. \* Pasteurella
- 2. **✓** Haemophilus
- 3. \* Actinobacillus
- 4. **Zymomonas**

Question Number: 53 Question Id: 98606851072 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Autoinfection is seen in life cycle of which parasite?

## **Options:**

- 1. \* Schistosoma haematobium
- 2. **✓** Taenia solium
- 3. \* Nectar americanus
- 4. \* Plasmodium vivax

Question Number: 54 Question Id: 98606851073 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Sterilization on three successive days by steaming at 100°C for 30 minutes is known as:

# **Options:**

- 1. \* Pasteurization
- 2. **✓** Tyndallization
- 3. \* Inspissation
- 4. Fermentation

Question Number: 55 Question Id: 98606851074 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Mesophiles are group of bacteria that grow within the temperature range of:

# **Options:**

- 1. \* 0-20 degree Celsius
- 2. ✓ 20-45 degree Celsius
- 3. **4**5-60 degree Celsius
- 4. More than 60 degree Celsius

Question Number: 56 Question Id: 98606851075 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

The extent to which a person's behaviour, taking medication, following a diet, and/or executing lifestyle changes, corresponds with recommendations from a health care provider, is known as:

- 1. ✓ Adherence
- 2. \* Patient management
- 3. \* Concordance
- 4. \* Nursing care

Question Number: 57 Question Id: 98606851076 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

A tablet that has no active ingredient and does not have any pharmacological action, but is still used to improve patient's condition is known as:

# **Options:**

- 1. **✓** Placebo
- 2. \* Active tablet
- 3. \* Psychotherapy
- 4. \* Hypnotherapy

Question Number: 58 Question Id: 98606851077 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Your friends, who are otherwise healthy, are planning to travel to mountains, to heights above 8000ft above sea level. Which of the following medications would you recommend to carry with them?

- 1. \* Digoxin
- 2. ✓ Acetazolamide
- 3. \* Ipratropium inhaler
- 4. \* Theophylline

Question Number: 59 Question Id: 98606851078 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

A high octanol water partition coefficient is likely to make the drug:

# **Options:**

1. ✓ More permeable to blood brain barrier

- 2. \* Easier renal elimination
- 3. Small volume of distribution
- 4. \* High protein binding

Question Number: 60 Question Id: 98606851079 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Which of the following anti-diabetic drugs can cause vitamin B12 deficiency?

## **Options:**

- 1. \* Glipizide
- 2. \* Acarbose
- 3. ✓ Metformin
- 4. \* Pioglitazone

Question Number: 61 Question Id: 98606851080 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

The volume of air, inspired or expired during normal respiration, is called:

# **Options:**

- 1. ✓ Tidal volume
- 2. \* Inspiratory reserve volume
- 3. \* Expiratory reserve volume
- 4. \* Residual volume

Question Number: 62 Question Id: 98606851081 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Which of the following statement is false about red blood cells (RBCs)?

# **Options:**

- 1. \* Biconcave in shape
- 2. \* Non-nucleated
- 3. ✓ Have a life span of 60 days
- 4. Formed in red bone marrow

Question Number: 63 Question Id: 98606851082 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

A single molecule of haemoglobin can transport up to \_\_\_ molecules of oxygen.

- 1. \* One
- 2. \* Two
- 3. **✓** Four
- 4. \* Eight

Question Number: 64 Question Id: 98606851083 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

The hormone involved in rhythmic activities, such as day/night and seasonal changes is:

# **Options:**

- 1. \* Calcitonin
- 2. Melatonin
- 3. **Cyclin**
- 4. \* Estrogen

Question Number: 65 Question Id: 98606851084 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Kinetoplast is made up of copies of:

# **Options:**

- 1. \* RNA
- 2. \* Protein
- 3. **\*\*** Fat
- 4. Mitochondria DNA

Question Number: 66 Question Id: 98606851085 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Single step large mutation leading to speciation is also called:

- 1. Founder effect
- 2. **✓** Saltation
- 3. \* Branching descent
- 4. \* Natural selection

Question Number: 67 Question Id: 98606851086 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

If the total amount of adenine and thymine in a double-stranded DNA is 45%, the amount of guanine in this DNA will be:

# **Options:**

- 1. \* 22.5%
- 2. 🗸 27.5%
- 3. \* 45%
- 4. \* 55%

Question Number: 68 Question Id: 98606851087 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time : 0 Option Orientation : Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

How many DNA duplexes are obtained from one DNA duplex after 10 cycles of PCR?

- 1. \* 2000
- 2. \* 200
- 3. \* 1002
- 4. 🗸 1024

Question Number: 69 Question Id: 98606851088 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

A single nucleotide substitution (C has been replaced by A) has taken place in a gene, but the protein sequence is not altered. What is the type of such variant called as?

# **Options:**

- 1. Non-synonymous variant
- 2. ✓ Synonymous variant
- 3. Missense variant
- 4. Non-sense variant

Question Number: 70 Question Id: 98606851089 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Which of the following is wrongly paired?

#### **Options:**

- 1. ✓ Nucleic acid hydrogen bond
- 2. Polysaccharide glycosidic bond
- 3. \* Proteins peptide bond
- 4. Phospholipids –phosphate linkage

Question Number: 71 Question Id: 98606851090 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

What does HGVS stands for?

# **Options:**

- 1. ✓ Human Genome Variation Society
- 2. \* Human Gene and Variant Society
- 3. \* Human Genome Variant Society
- 4. \* Human Gene Variation Society

Question Number: 72 Question Id: 98606851091 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

What type of amplification takes place in sequencing by synthesis technique?

# **Options:**

- 1. \* Loop mediated isothermal amplification
- 2. ✓ Bridge amplification
- 3. \* Strand-displacement amplification

4. \* All of these

Question Number: 73 Question Id: 98606851092 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

The core of the spliceosome complex is formed by:

- 1. ✓ Small nuclear RNA
- 2. Small nucleolar RNA
- 3. \* Small interfering RNA
- 4. \* Long noncoding RNA

Question Number: 74 Question Id: 98606851093 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

DNA and RNA polymerase differ in ALL of the following, EXCEPT:

# **Options:**

1. \* Their error rate

2. ✓ The type of chemical reaction they catalyse

3. \* The nucleotide substrates they incorporate

4. \* Their processivity

Question Number: 75 Question Id: 98606851094 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

On a ribosome, the mRNA is read from.....and the polypeptide chain is synthesized from:

# **Options:**

- 1. **3** to 5; C to N terminus
- 2. **3** 'to 5'; N to C terminus
- 3. **✓** 5' to 3'; N to C terminus
- 4. **\*** 5' to 3'; C to N terminus

Question Number: 76 Question Id: 98606851095 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

What will be the probability of getting AABB genotype, if a plant with genotype AaBb is self-fertilized? (A and B are not linked).

# **Options:**

- 1. \* 1/2
- 2. \* 1/4
- 3. \* 1/8
- 4. 🗸 1/16

Question Number: 77 Question Id: 98606851096 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Which of the following do not encompass reverse genetics?

# **Options:**

- 1. \* Genome editing
- 2. \* Creating gene-knockout mice
- 3. \* Introducing mutations deterministically in a known gene
- 4. ✓ Novel gene discovery by genetic screens

Question Number: 78 Question Id: 98606851097 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

The smallest unit of genetic material which upon mutation produce a phenotypic effect is:

- 1. **\$** Gene
- 2. V Muton
- 3. \* Inducer
- 4. \* Regulator

Question Number: 79 Question Id: 98606851098 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Which of the following conditions is a peroxisomal disorder?

## **Options:**

- 1. \* Acute intermittent porphyria
- 2. Maple syrup urine disease
- 3. Medium chain acyl-CoA dehydrogenase deficiency
- 4. ✓ Zellweger syndrome

Question Number: 80 Question Id: 98606851099 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Which of the following repair pathways can faithfully repair a double-stand DNA break?

#### **Options:**

- 1. Non-homologous end joining
- 2. ✓ Homologous recombination
- 3. \* Base excision repair
- 4. \* Nucleotide excision repair

Question Number: 81 Question Id: 98606851100 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

If the father in a family has a disease while the mother is normal, the disease is only inherited by the daughters and not the sons. Name this type of disease?

- 1. \* Autosomal recessive
- 2. \* Autosomal dominant
- 3. Sex-linked recessive
- 4. ✓ Sex-linked dominant

Question Number: 82 Question Id: 98606851101 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

Mendel did not observe linkage due to:

## **Options:**

- 1. \* Crossing over
- 2. \* Synapses
- 3. \* Mutation
- 4. ✓ Independent assortment

Question Number: 83 Question Id: 98606851102 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

Alpha 1 anti-trypsin deficiency is an autosomal recessive genetic disorder. What are the chances that any of the offspring do not express the disease phenotype if both parents are genotype (Aa)?

- 1. \* 100%
- 2. 🗸 75%
- 3. \* 50%
- 4. \* 0%

Question Number: 84 Question Id: 98606851103 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Who coined the term 'linkage'?

## **Options:**

- 1. ✓ Morgan
- 2. Mendel
- 3. \* Darwin
- 4. \* De Vries

Question Number: 85 Question Id: 98606851104 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

A microbial biocontrol agent that can be used to control butterfly caterpillars is:

#### **Options:**

- 1. \* Trichoderma polysporum
- 2. W Bacillus thuringiensis
- 3. Streptococcus
- 4. Mycorrhiza

Question Number: 86 Question Id: 98606851105 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

A fall in glomerular filtration rate (GFR) activates:

- 1. \* Juxtaglomerular cell, macula densa and argentaffin cell
- 2. \* Juxtaglomerular cell, lacis cell and myoepithelial cell
- 3. \* Juxtaglomerular cell, Purkinje cell and chief cell
- 4. ✓ Juxtaglomerular cell, macula densa and lacis cell

Question Number: 87 Question Id: 98606851106 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

Which of the following vertebra is formed from four vertebrae?

#### **Options:**

- 1. \* Sacrum
- 2. ✓ Coccyx
- 3. \* Atlas
- 4. \* Axis

Question Number: 88 Question Id: 98606851107 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Sarcomere is:

- 1. \* Part between two H-lines
- 2. \* Part between two A-lines
- 3. \* Part between two I-bands
- 4. ✓ Part between two Z-lines

Question Number: 89 Question Id: 98606851108 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

Ends of long bones are covered with:

## **Options:**

- 1. \* Blood cells
- 2. \* muscles
- 3. **%** ligaments
- 4. **✓** cartilages

Question Number: 90 Question Id: 98606851109 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

The joints between the carpal bones are:

#### **Options:**

- 1. **✓** Gliding joints
- 2. \* Hinge joints
- 3. Saddle joints
- 4. \* Pivot joints

Question Number: 91 Question Id: 98606851110 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

How many fragments will be generated on the digestion of a closed circular DNA molecule with a restriction enzyme having six recognition sites on the DNA?

- 1. \* 5
- 2. \* 7
- 3. 🗸 6
- 4. \* 9

Question Number: 92 Question Id: 98606851111 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

The polymerization of the gel used in PAGE occurs between polyacrylamide and:

# **Options:**

- 1. \* N, N acrylamide
- 2. **Bis-acrylamide**
- 3. \* N methylene-acrylamide
- 4. ✓ N, N methylene-bis-acrylamide

Question Number: 93 Question Id: 98606851112 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

Suppose there is a deletion of 5 coding DNA nucleotides 234 to 238 position, which of the following is the correct way to depict it according to HGVS format?

- 1. **✓** c.234 238del
- 2. \* c.234-238del
- 3. \* c.234del5
- 4. All of these are correct

Question Number: 94 Question Id: 98606851113 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Biotechnologies consisting of the use of biological systems (bacteria) for the manufacture, transformation or degradation of molecules through enzymatic or fermentation processes for industrial purposes, are called:

## **Options:**

- 1. \* Yellow biotechnologies
- 2. \* Blue biotechnologies
- 3. \* Green biotechnologies
- 4. ✓ White biotechnologies

Question Number: 95 Question Id: 98606851114 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Which of the following is not a component of downstream processing?

#### **Options:**

- 1. Separation
- 2. \* Preservation
- 3. \* Purification
- 4. **✓** Expression

Question Number: 96 Question Id: 98606851115 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Plasmids are used as cloning vectors for which of the following reasons?

## **Options:**

- 1. \* Can be multiplied in culture
- 2. ✓ Self-replication in bacterial cells
- 3. \* Can be multiplied in laboratories with the help of enzymes
- 4. \* Replicate freely outside bacterial cells

Question Number: 97 Question Id: 98606851116 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

The first clinical application of gene therapy over a 4-year-old girl was for:

# **Options:**

- 1. ✓ Adenosine deaminase deficiency
- 2. \* Adenosine deficiency
- 3. **Second Second Secon**
- 4. \* Adenine deficiency

Question Number: 98 Question Id: 98606851117 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

The diagram which shows the arrangement of metaphasic chromosomes according to their position of centromere is called:

- 1. \* Histogram
- 2. \* Karyogram

- 3. \* Dendrogram
- 4. V Ideogram

Question Number: 99 Question Id: 98606851118 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

How many types of histone molecules are found in nature?

#### **Options:**

- 1. \* Three
- 2. \* Four
- 3. VFive
- 4. \* Six

Question Number: 100 Question Id: 98606851119 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

During DNA replication the synthesis of the leading strand of DNA results in fragments known as:

## **Options:**

- 1. Satellite segments
- 2. \* Kornberg segment
- 3. \* Double-helix segment
- 4. ✓ Okazaki fragments

Question Number: 101 Question Id: 98606851120 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

The role of Aminopterin in HAT media for monoclonal antibody production is:

## **Options:**

- 1. Salvage pathway blocker
- 2. ✓ De novo pathway blocker
- 3. \* Hybridoma cell stabilizer
- 4. \* Nucleotide analogue

Question Number: 102 Question Id: 98606851121 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Guanidinium group is present in:

# **Options:**

- 1. \* Histidine
- 2. \* Tryptophan
- 3. **✓** Arginine
- 4. \* Proline

Question Number: 103 Question Id: 98606851122 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Which component of proteins absorb UV light at 280 nm?

- 1. \* Peptide bonds
- 2. \* SH group of cysteine

- 3. \* Imidazole group of tryptophan
- 4. ✓ Indole group of tryptophan

Question Number: 104 Question Id: 98606851123 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Sodium fluoride used in sugar estimation inhibits:

## **Options:**

- 1. \* Aldolase
- 2. \* Hexokinase
- 3. **✓** Enolase
- 4. \* Phosphofructokinase

Question Number: 105 Question Id: 98606851124 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Which of the following is required for porphyrin synthesis?

#### Options:

- 1. Methionine
- 2. \* Ammonia
- 3. **⋖** Glycine
- 4. \* Alanine

Question Number: 106 Question Id: 98606851125 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

In tricarboxylic acid (TCA) cycle, fumarate is converted to malate by:

## **Options:**

- 1. Removal of H<sub>2</sub>O
- 2. \* Addition of O<sub>2</sub>
- 3. Removal of CO<sub>2</sub>
- 4. ✓ Addition of H<sub>2</sub>O

Question Number: 107 Question Id: 98606851126 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Pyridoxal phosphate is used as a coenzyme in various biological reactions. It transfers:

# **Options:**

- 1. ✓ Amino groups
- 2. \* Acyl groups
- 3. \* Hydride ion
- 4. \* Electrons

Question Number: 108 Question Id: 98606851127 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

The patient is to be administered with 250 ml of normal saline per hour using adult infusion set.

How much should be the drop rate? (1 ml = 20 drops)

#### **Options:**

1. 🗸 83

2. \* 70

3. \* 73

4. \* 75

Question Number: 109 Question Id: 98606851128 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

How much financial incentive is given in the sponsored scheme 'Nikshya Poshak Yojana' for nutritional support to each notified tuberculosis (TB) patient under National Health Mission (NHM) per month for duration the patient is on anti-TB treatment?

## **Options:**

1. \* Rs. 300/-

2. \* Rs. 400/-

3. **✓** Rs. 500/-

4. \* Rs. 700/-

Question Number: 110 Question Id: 98606851129 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Early ambulation in postoperative period prevents which complication?

- 1. **\*\*** Pain
- 2. ✓ Deep vein thrombosis
- 3. \* Vomiting
- 4. \* Infection

Question Number: 111 Question Id: 98606851130 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

One year old is suspected for bacterial meningitis, for which lumbar puncture is performed. Which of the following laboratory finding of spinal fluid would support the diagnosis?

# **Options:**

- 1. \* Decrease in cell count
- 2. ✓ Elevated protein level
- 3. \* Elevated glucose level
- 4. Low spinal fluid pressure

Question Number: 112 Question Id: 98606851131 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Growth chart or 'Road to Health' is a visible display of:

#### **Options:**

- 1. \* Height for age
- 2. Weight for height
- 3. \* Height for weight
- 4. **✓** Weight for age

Question Number: 113 Question Id: 98606851132 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Which of the following RNA constitutes 90 percent of the total cellular RNA?

- 1. ✓ rRNA
- 2. \* tRNA
- 3. \* mRNA
- 4. \* hnRNA

Question Number: 114 Question Id: 98606851133 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

In sequence alignment by BLAST, each word from query sequence is typically \_\_\_\_\_ residues for protein sequences and \_\_\_\_\_ residues for DNA sequences.

## **Options:**

- 1. \* ten, eleven
- 2. \* three, three
- 3. **✓** three, eleven
- 4. \* three, ten

Question Number: 115 Question Id: 98606851134 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

If the purpose is to calculate the probability of one event and a second event, the odds scores for the events are:

- 1. \* added
- 2. ✓ multiplied
- 3. \* subtracted
- 4. \* multiplied and added

Question Number: 116 Question Id: 98606851135 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Cryo-preservant used for cells consists of:

## **Options:**

1. ✓ 10% DMSO in Fetal Bovine Serum

2. \* 10% NO in Fetal Bovine Serum

3. \* 10% HCl in Fetal Bovine Serum

4. \* 5% HCl in Fetal Bovine Serum

Question Number: 117 Question Id: 98606851136 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

How many unusual bases are observed in a tRNA molecule?

#### **Options:**

- 1. \* 1
- 2. \* 3
- 3. 🗸 5
- 4. \* 0

Question Number: 118 Question Id: 98606851137 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

COVID-19 caused by:

- 1. \* DNA virus
- 2. \* Double stranded RNA virus
- 3. ✓ Positive sense single strand RNA virus
- 4. \* Negative sense single strand RNA virus

Question Number: 119 Question Id: 98606851138 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

What are the Yamanaka factors used for iPSCs reprogramming?

## **Options:**

- 1. \* Nanog, SOX4, Oct-3/4 and c-myc
- 2. ✓ SOX2, Klf4, Oct-3/4 and c-myc
- 3. **\$** p53, SOX4, Oct-3 and L-myc
- 4. \* lin28, SOX4, Oct-4 and L-myc

Question Number: 120 Question Id: 98606851139 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Hybridomas are immortalized for production of unlimited supply of monoclonal antibodies by which of the following:

- 1. ✓ Cell fusion
- 2. \* Ectopic expression of telomerase
- 3. \* Transformation by a retrovirus
- 4. \* Introduction of oncogenes

Question Number: 121 Question Id: 98606851140 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Niemann-Pick disease is a:

## **Options:**

1. ✓ Lipid storage disorder

2. \* Glycogen storage disorder

3. \* Amino acid metabolism disorder

4. Purine metabolism disorder

Question Number: 122 Question Id: 98606851141 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

The electrophoretic technique used to separate very large DNA segments is:

## **Options:**

- 1. \* Two-dimensional electrophoresis
- 2. ✓ Pulsed- field gel electrophoresis
- 3. High resolution electrophoresis
- 4. \* Polyacrylamide gel electrophoresis

Question Number: 123 Question Id: 98606851142 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

The process by which normal serum enhances phagocytosis is called:

- 1. \* Chemotaxis
- 2. **✓** Opsonization
- 3. \* Phosphorylation
- 4. \* Haematopoiesis

Question Number: 124 Question Id: 98606851143 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

Cluster of differentiation (CD) molecules are present on:

## **Options:**

- 1. ✓ Surface of cells
- 2. \* In the cytoplasm
- 3. \* In the nucleus
- 4. \* In the mitochondria

Question Number: 125 Question Id: 98606851144 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Ligand for TLR3 receptor is:

- 1. **✓** dsRNA
- 2. \* Lipopolysaccharide
- 3. \* Lipopeptides
- 4. \* Flagellin

Question Number: 126 Question Id: 98606851145 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

Which of the following mechanisms allows complete absorption of glucose from the intestinal lumen into cytosol of enterocyte?

### **Options:**

- 1. Simple diffusion through GLUT-5
- 2. Sodium channels in enterocyte membrane
- 3. ✓ Sodium- Glucose co transporter I (SGLT-1)
- 4. \* Paracellular uptake via gap junctions

Question Number: 127 Question Id: 98606851146 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

The molecular mass of IgG is 150 KDa and that of the antigen-antibody complex formed in the presence of antigen excess is 300 KDa. The molecular mass of antigen is:

#### **Options:**

- 1. **✓** 75 KDa
- 2. **3** 250 KDa
- 3. **\*** 125 KDa
- 4. \* 200 KDa

Question Number: 128 Question Id: 98606851147 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

All types of chemical forces are involved in antigen-antibody interaction, EXCEPT:

#### **Options:**

- 1. \* Van der Waal forces
- 2. \* Hydrogen bonds
- 3. \* Hydrophobic bonds
- 4. **Covalent bonds**

Question Number: 129 Question Id: 98606851148 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Predominant antibody in serum is:

## **Options:**

- 1. \* IgM
- 2. \* IgD
- 3. **%** IgE
- 4. **✓** IqG

Question Number: 130 Question Id: 98606851149 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Which of the following method cannot be used to determine the three-dimensional structure of a protein?

- 1. X-ray crystallography
- 2. \* Nuclear magnetic resonance
- 3. \* Cryo-electron Microscopy

#### 4. Ramachandran Plot

Question Number: 131 Question Id: 98606851150 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

During the peak summer and winter the frogs take shelter in deep burrows to protect them from extreme heat and cold. This is called as:

### **Options:**

1. ✓ Summer sleep (aestivation) and winter sleep (hibernation)

2. Summer sleep (hibernation) and winter sleep (aestivation)

3. Summer sleep (diapause) and winter sleep (suspend)

4. Summer sleep (dormancy) and winter sleep (diapause)

Question Number: 132 Question Id: 98606851151 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Which of the following pairs of organisms are uricotelic?

#### **Options:**

1. \* Cartilaginous fish and mammals

2. \* Reptiles and mammals

3. Birds and insects

4. \* Bony fish and lizards

Question Number: 133 Question Id: 98606851152 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

The factor that leads to the Founder's effect in a population is:

## **Options:**

1. Mutation

2. ✓ Genetic drift

3. \* Natural selection

4. \* Genetic recombination

Question Number: 134 Question Id: 98606851153 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Germinal centres of lymph node and spleen perform which of the following function?

# **Options:**

- 1. \* Support the development of immature B and T cells
- 2. Function in the removal of damaged erythrocytes from the circulation
- 3. \* Act as the major source of stem cells and thus help to maintain haematopoiesis
- 4. ✓ These are sites of antigenic stimulation of mature B cells

Question Number: 135 Question Id: 98606851154 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

The type of cleavage found in mammalian embryo is:

- 1. \* Planar cleavage
- 2. \* Unequal cleavage

- 3. **✓** Rotational cleavage
- 4. \* Radial cleavage

Question Number: 136 Question Id: 98606851155 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

Escherichia coli is used as an indicator organism to determine pollution of water with:

## **Options:**

1. \* Industrial effluents

2. \* Heavy metals

3. \* Pollen of aquatic plants

4. V Faecal matter

Question Number: 137 Question Id: 98606851156 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Certain bacteria living in the soil convert nitrates into nitrites and then to free nitrogen. Such bacteria are termed as:

### **Options:**

1. \* Nitrogen fixing bacteria

2. V Denitrifying bacteria

3. \* Ammonifying bacteria

4. \* Nitrifying bacteria

Question Number: 138 Question Id: 98606851157 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

The prebiotic atmosphere of the earth was of a reducing nature. It was transformed into an oxidizing atmosphere of present day due to emergence of:

## **Options:**

- 1. **V** Cyanobacteria
- 2. \* Angiosperms
- 3. \* Photosynthetic bacteria
- 4. **\*** Eukaryotic algae

Question Number: 139 Question Id: 98606851158 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Fossils are generally found in:

## **Options:**

- 1. ✓ Sedimentary rocks
- 2. **\*** Igneous rocks
- 3. Metamorphic rocks
- 4. \* Any type of rock

Question Number: 140 Question Id: 98606851159 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Which of the following is used as an atmospheric pollution indicator?

- 1. \* Lepidoptera
- 2. V Lichens
- 3. \* Lycopersicon
- 4. \* Lycopodium

Question Number: 141 Question Id: 98606851160 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Kranz anatomy occurs in:

# **Options:**

- 1. ✓ leaves
- 2. \* stem
- 3. \* flower
- 4. \* seed

Question Number: 142 Question Id: 98606851161 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Which one of the following is an example for homology?

#### **Options:**

- 1. \* Eye of octopus and mammals
- 2. Wings of butterfly and birds
- 3. Flippers of penguins and dolphins
- 4. ✓ Thorns of Bougainvillea and tendrils of Cucurbita

Question Number: 143 Question Id: 98606851162 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

Hormone responsible for growth of the root in micropropagation is:

# **Options:**

- 1. V auxin
- 2. \* gibberellin
- 3. \* cytokinin
- 4. \* abscisic acid

Question Number: 144 Question Id: 98606851163 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Long plants are able to stand erect due to presence of:

## **Options:**

- 1. **✓** Sclerenchyma
- 2. **Collenchyma**
- 3. \* Parenchyma
- 4. \* Prosenchyma

Question Number: 145 Question Id: 98606851164 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

Minimum Instruction Time: 0 Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Which of the following reproduces sexually only once in its life time?

- 1. \* Banana plant
- 2. \* Mango
- 3. V Tomato
- 4. **Eucalyptus**

Question Number: 146 Question Id: 98606851165 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Which one of the following is a breed of cattle?

# **Options:**

- 1. **✓** Ayrshire
- 2. \* Ghagus
- 3. \* Kadaknath
- 4. Scampi

Question Number: 147 Question Id: 98606851166 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Which one of the following is a marine fish?

### **Options:**

- 1. \* Rohu
- 2. V Hilsa
- 3. \* Catla
- 4. **Common carp**

Question Number: 148 Question Id: 98606851167 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks : 1 Wrong Marks : 0.25** 

Question Label: MCQ

The male reproductive tract develops from:

### **Options:**

1. Mullerian duct

2. **৺** Wolffian duct

3. \* Paramesonephric duct

4. Metanephric duct

Question Number: 149 Question Id: 98606851168 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Which of the following is the glycoprotein layer surrounding oocyte?

## **Options:**

- 1. \* Cumulus oophorus
- 2. \* Theca Externa
- 3. \* Theca Interna
- 4. V Zona Pellucida

Question Number: 150 Question Id: 98606851169 Question Type: MCQ Option Shuffling: Yes

Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A

**Minimum Instruction Time: 0 Option Orientation: Vertical** 

**Correct Marks: 1 Wrong Marks: 0.25** 

Question Label: MCQ

Sebaceous glands secrete through which mode of secretion?

- 1. \* Apocrine
- 2. \* Merocrine
- 3. **✓** Holocrine
- 4. **%** Cytocrine