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NOTICE ICMR-JRF-2021

Dated 16.09.2021

REGARDING ANSWER KEYS FOR ICMR-JRF EXAM HELD ON 12.09.2021

This is for the information of all the candidates who appeared in ICMR-JRF-2021 computer based examination conducted by the ICMR, New Delhi and PGIMER, Chandigarh on 12.09.2021 at various centers across the country. Question Paper and Answer Keys are uploaded on the website for the information of the applicants. If a candidate finds any objections/doubts regarding the answer key of the question paper, he/she may communicate the same to Sr. Administrative Officer, Academic Section, PGIMER, Chandigarh *via* Email to anand.rajneesh@pgimer.edu.in in following format:-

Roll No.	Name, address, Email, Mobile No. of the candidate.	Question Number section	&	Question issue & description	Fee detail (attach Screen shot / transaction ID of the transfer of amount)

Please note that for raising objections/doubts a fee of Rs.500/- per question is payable, if the objection/doubt is found valid/justified then the fee (@Rs.500/- per valid objection/question) will be refunded. For objection/doubt found invalid the fee will be forfeited.

The objections/doubts can be sent/submitted till <u>September, 18, 2021 up to 11:59</u> P.M. <u>No objection/doubt raised beyond this time limit will be entertained</u>.

Fee may be paid through online/RTGS in the account details as under:-Account Name:Account Number:1041-3583830IFSC code:Bank Name:State Bank of India, Medical Institute (MI) Branch
Sector-12, Chandigarh.

A proof of payment of fee *i.e.* screenshot of successful transaction/RTGS number must be enclosed with the objection, failing objection will not be considered. Objections/doubts received within above prescribed period will be placed before the committee of the experts for their consideration. If these objections/doubts found valid then the decision/remedial action will be uploaded on the official websites of both the Institutes *i.e.* pgimer.edu.in & icmr.nic.in for the information to all concerned. No separate communication will be issued to any individual. Decision of the Committee of Experts will be final in this regard.

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 Science B 12th September 2021 Shift 3	
Subject Name :	Life Science B	
Creation Date :	2021-09-12 21:46:59	
Duration :	120	
Total Marks :	125	
Display Marks:	Yes	
Share Answer Key With Delivery Engine :	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? (SA type of questions will be always auto saved) :	No	

Life sciences

Group Number :	1
Group Id :	986068545
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

	Aptitude		
Section Id :	986068895		
Section Number :	1		
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 Clear Response :	Yes		
Sub-Section Number :	1		
Sub-Section Id :	986068987		
Question Shuffling Allowed :	Yes		

Question Number : 1 Is Question Mandatory : No Option Orientation : Vertical

Car B is ahead of Car A by 100m. Car A is moving with constant speed of 10 m/s and car B starts from rest accelerating with an acceleration of 2 m/s². Find the minimum distance between both the cars.

Options :

- 1. 🕷 100 m
- 2. ***** 50 m
- 3. ✔ 75 m
- 4. 🕷 0 m

Question Number : 2 Is Question Mandatory : No Option Orientation : Vertical

Going 40m to South of her house, Mehar turns left and goes another 20 m. Then, turning to the North, she goes 20m, and then starts walking to her house. In which direction, is she walking now?

Options :

1. Vorth-West

2. 🏁 North

3. 🏶 South-East

4. 🏁 East

Question Number : 3 Is Question Mandatory : No Option Orientation : Vertical

Which two months in a year have the same calendar?

Options :

- 1. ✓ September- December
- 2. * April- November
- 3. 🏶 May- August
- 4. 🏶 June- September

Question Number : 4 Is Question Mandatory : No Option Orientation : Vertical

At a railway station a 24-hour watch loses 3 minutes in 4 hours. If it is set correctly on Sunday noon, when will the watch show the correct time? **Options :**

- 1. ** 6 pm after 40 days
- 2. 🍀 12 noon after 75 days
- 3. ** 12 pm after 100 days
- 4. ✓ 12 noon after 80 days

Question Number : 5 Is Question Mandatory : No Option Orientation : Vertical

How many primary or deciduous teeth does a normal human have?

Options :

- 1. 🗱 32
- 2. 🖋 20
- 3. 🗱 16
- 4. ** 22

Question Number : 6 Is Question Mandatory : No Option Orientation : Vertical

Find the day of the week on 16th January, 1969?

- 1. 🏶 Monday
- 2. ✔ Thursday
- 3. 🏶 Wednesday
- 4. 🏶 Tuesday

Question Number : 7 Is Question Mandatory : No Option Orientation : Vertical

The theme of World Immunization Week 2021 is:

Options :

- 1. Vaccines bring us closer
- 2. 🏶 Vaccinate daughter, screen mothers
- 3. * Vaccines work for all
- 4. ** Protect your world- get vaccinated

Question Number : 8 Is Question Mandatory : No Option Orientation : Vertical

One yard is equal to how many inches?

Options :

1. ✓ 36 2. ¥ 3 3. ¥ 91.44

4. ᄣ 12

Question Number : 9 Is Question Mandatory : No Option Orientation : Vertical

Which of the following variant is known as the Delta variant of SARS-CoV-2?

Options :

- 1. ✓ Lineage B.1.617.2
- 2. * Lineage B.1.1.7
- 3. 🕷 Lineage B.1.351
- 4. 🗮 Lineage P.1

Question Number : 10 Is Question Mandatory : No Option Orientation : Vertical

COVID-19 mRNA vaccines give instructions to body's cells to make the "spike protein." Which of the following is an m-RNA vaccine for COVID-19? **Options :**

- 1. V Pfizer-BioNTech vaccine
- 2. * Oxford-Astra Zeneca vaccine
- 3. 🏶 Bharat Biotech vaccine
- 4. 🏶 Russia's Sputnik vaccine



Harvey J Alter

Charles M Rice

Michael Houghton

Options :

- 1. Videntification of Hepatitis C virus
- 2. ** work on black holes
- 3. ** developing the CRISPR–Cas9 gene-editing tools
- 4. ** for discoveries about how cells sense and adapt to oxygen availability

Question Number : 12 Is Question Mandatory : No Option Orientation : Vertical The instrument that records the intensity of earthquakes is:

- 1. ***** Barometer
- 2. ✓ Seismograph
- 3. ***** Dosimeter
- 4. **S** Gyroscope

Question Number : 13 Is Question Mandatory : No Option Orientation : Vertical

Which city is known as 'Gold capital of the world'?

Options :

- 1. ✓ Johannesburg
- 2. 🍀 Paris
- 3. 🏶 Dubai
- 4. 🍀 London

Question Number : 14 Is Question Mandatory : No Option Orientation : Vertical

The difference in the duration of day and night increases as one moves from:

Options :

- 1. \checkmark Equator to poles
- 2. 🏶 West to East
- 3. 🏶 East and west of the prime meridian
- 4. Poles to equator

Question Number : 15 Is Question Mandatory : No Option Orientation : Vertical

The World Health Organization (WHO) has certified which country as Malaria free in 2021?

Options :

- 1. 🏶 Pakistan
- 2. 🖋 China
- 3. 🏶 Brazil
- 4. 🍀 Canada

Question Number : 16 Is Question Mandatory : No Option Orientation : Vertical

Which of the following is not an anti- virus software?

Options :

1. 🕷 Avira

2. 🍀 Bitdefender

- 3. 🗸 Oracle
- 4. 🍀 Panda

Question Number : 17 Is Question Mandatory : No Option Orientation : Vertical

Gases usually used for filling an electric bulb are:

Options :

- 1. ✓ Argon and nitrogen
- 2. 🏶 Argon and carbon dioxide
- 3. 🏶 Nitrogen and carbon dioxide
- 4. 🏁 Nitrogen and oxygen

Question Number : 18 Is Question Mandatory : No Option Orientation : Vertical

A pea when soaked in water, gains about 40% by weight and 20% by volume. By what factor does the density increase? **Options :**

1. **≭** 2.15 2. **✓** 1.16

3. * 1.25

4. 🗱 1.1

Question Number : 19 Is Question Mandatory : No Option Orientation : Vertical

GPS is an abbreviation for?

Options :

- 1. 🏶 Global Poles System
- 2. 🏶 Global Positioning Store
- 3. 🖋 Global Positioning System
- 4. 🏶 Global Positioning Satellite

Question Number : 20 Is Question Mandatory : No Option Orientation : Vertical

One light year is equal to:

Options :

1. ****** 9.5×10^6 km

2. \checkmark 9.5×10¹² km

3. [★] 9.5×10⁹ km 4. [★] 9.5×10¹⁸ km

Question Number : 21 Is Question Mandatory : No Option Orientation : Vertical

The scientific study of dreams is called:

Options :

- 1. ***** Arachnology
- 2. 🏶 Pomology
- 3. * Speleology
- 4. 🗸 Oneirology

Question Number : 22 Is Question Mandatory : No Option Orientation : Vertical

Nosophobia is:

Options :

- 1. * Fear of not having a working mobile phone
- 2. ✓ Fear of developing a disease
- 3. ***** Fear of nausea or vomiting
- 4. 🍀 Fear of smells

Question Number : 23 Is Question Mandatory : No Option Orientation : Vertical

The colour of the onion is pink due to the presence of:

Options :

- 1. 🍀 Carotene
- 2. 🗸 Anthocyanin
- 3. 🏶 Xanthophyll
- 4. 🗱 Lycopene

Question Number : 24 Is Question Mandatory : No Option Orientation : Vertical

The gas used for artificial ripening of fruits is:

- 1. ✓ Ethylene
- 2. 🍀 Ethane
- 3. 🏶 Carbon dioxide

4. 🏶 Acetylene

Question Number : 25 Is Question Mandatory : No Option Orientation : Vertical The pH of human blood is about:

Options :

1. ✓ 7.4 2. ¥ 6.5 3. ¥ 3.7 4. ¥ 9.2

Question Number : 26 Is Question Mandatory : No Option Orientation : Vertical

The flower shown in the image is the source of which of the following anticancer drugs?



Options :

- 1. Vincristine
- 2. ***** Cyclosporine
- 3. 🏶 Oxaliplatin
- 4. 🍀 5-Flourouracil

Question Number : 27 Is Question Mandatory : No Option Orientation : Vertical

Which of the following is the best conductor of electricity?

Options :

- 1. 🖋 Sea water
- 2. 🏁 Rain water
- 3. ****** Boiled water
- 4. 🏶 Distilled water

Question Number : 28 Is Question Mandatory : No Option Orientation : Vertical

Anosmia and ageusia is loss of _____ and ____, respectively.

Options :

- 1. ✓ Smell, Taste
- 2. 🍀 Taste, Smell
- 3. ** Smell, Sight
- 4. 🏁 Sight, Taste

Question Number : 29 Is Question Mandatory : No Option Orientation : Vertical

According to Indian law, what is the minimum age of a person for employment in a factory? **Options :**

- 1. ***** 12 years
- 2. 💙 14 years
- 3. 🍀 18 years
- 4. 🏁 21 years

Question Number : 30 Is Question Mandatory : No Option Orientation : Vertical

A trader mixes 26 kg of rice priced at Rs. 20 per kg with 30 kg of rice of other variety priced at Rs. 36 per kg and sells the mixture at Rs. 30 per kg. His profit percent is:

Options :

- 1. 🏁 No profit, no loss
- 2. 🖋 5%
- 3. 🗱 10%
- 4. 🗱 8%

Question Number : 31 Is Question Mandatory : No Option Orientation : Vertical

What is chemical symbol for Tungsten?

Options :

- 1. 🖋 W
- 2. 🍀 T
- 3. 🕷 G
- 4. 🏁 Tn

Question Number : 32 Is Question Mandatory : No Option Orientation : Vertical

What type of study is best suited for the initial evaluation of rare diseases?

Options :

- 1. * Intervention studies
- 2. \checkmark Case control studies
- 3. ** Randomized controlled studies
- 4. 🍀 Cohort studies

Question Number : 33 Is Question Mandatory : No Option Orientation : Vertical

Which of the following phases of clinical trial evaluates safety and tolerability of a drug in healthy volunteers? **Options :**

- 1. ✔ Phase I
- 2. 🏁 Phase IIA
- 3. 🏶 Phase III
- 4. 🏶 Phase IIB

Question Number : 34 Is Question Mandatory : No Option Orientation : Vertical

If a diagnostic test is 90% sensitive, what will be the percentage of false negative results? **Options :**

- 1. * Cannot be estimated from the information provided
- 2. 🍀 9%
- 3. 🕷 19%
- 4. 🖋 10%

Question Number : 35 Is Question Mandatory : No Option Orientation : Vertical

Fertilisation of an ovum by a sperm commonly occurs in which part of the female reproductive system?

Options :

- 1. **X** Uterine body
- 2. 🏶 Ovary
- 3. 🏁 Vagina
- 4. 🗸 Fallopian tube

Question Number : 36 Is Question Mandatory : No Option Orientation : Vertical

Which one of the following is the basis of the modern periodic table?

Options :

- 1. ***** Atomic volume
- 2. * Atomic size
- 3. V Atomic number
- 4. 🏁 Atomic mass

Question Number : 37 Is Question Mandatory : No Option Orientation : Vertical

Carbon, diamond and graphite are together called:

Options :

- 1. ***** Isomers
- 2. 🍀 Isotopes
- 3. ***** Isomorphs
- 4. 🖋 Allotrope

Question Number : 38 Is Question Mandatory : No Option Orientation : Vertical

Ethyl mercaptan added to the otherwise odourless LPG cooking gas for imparting a detectable smell to the gas is a compound of:

Options :

1. ***** Bromine

- 2. ***** Oxygen
- 3. ✓ Sulphur
- 4. 🏁 Nitrogen

Question Number : 39 Is Question Mandatory : No Option Orientation : Vertical

"Operation Flood" is a movement related with the product:

Options :

- 1. 🖋 Milk
- 2. 🍀 Fresh Water
- 3. ***** Rice
- 4. 🏁 Rain

Question Number : 40 Is Question Mandatory : No Option Orientation : Vertical

Indian Standard Time (IST) refers to the local time of which city? **Options :**

- 1. 🍀 Banaras
- 2. 🏶 Gurugram near Delhi
- 3. 🗸 Mirzapur near Allahabad
- 4. 🏶 Kolkata

Question Number : 41 Is Question Mandatory : No Option Orientation : Vertical

A bag contains 7 green and 8 white balls. If two balls are drawn simultaneously, the probability that both are of the same colour is:

Options :

- 1. 🕷 8/15
- 2. 🗱 2/15
- 3. 🗱 3/15
- 4. 🖋 7/15

Question Number : 42 Is Question Mandatory : No Option Orientation : Vertical

Mode can be determined by applying the formula:

Options :

1. * Mode = 2 Median - 3 Mean

2. \checkmark Mode = 3 Median - 2 Mean

3. ₩ Mode = 3 Mean - 2 median 4. ₩ Mode = 2 Mean - 3 Median

Question Number : 43 Is Question Mandatory : No Option Orientation : Vertical

When an investigator uses the data, which has already been collected by others, such data is called:

Options :

- 1. 🏁 Primary data
- 2. * Processed data
- 3. ***** Collected data
- 4. ✓ Secondary data

Question Number : 44 Is Question Mandatory : No Option Orientation : Vertical

Sum of the deviation of the variable values 3, 4, 6, 8, 14 from their mean is:

Options :

- 1. 🖋 0
- 2. 🕷 1
- 3. 🗱 5
- 4. 🛎 7

Question Number : 45 Is Question Mandatory : No Option Orientation : Vertical

The mean of 5 observations is 4.4 and their variance is 8.24. If three of the observations are 1, 2 and 6. The other two observations are: **Options :**

- 1. 🗯 5 and 6
- 2. ✓ 4 and 9
- 3. ***** 7 and 8
- 4. ****** 5 and 8

Question Number : 46 Is Question Mandatory : No Option Orientation : Vertical

Marital status of a group of people represents which variable:

- 1. * Discrete
- 2. * Continuous
- 3. 🗸 Nominal

4. 🍀 Ordinal

Question Number : 47 Is Question Mandatory : No Option Orientation : Vertical

If a test statistic rejects the null hypothesis when it is true, then which type of error is made: **Options :**

- 1. ✓ Type-I error
- 2. ***** Type-II error
- 3. ** Both Type-I and Type-II errors
- 4. Sone of Type-I and Type-II errors

Question Number : 48 Is Question Mandatory : No Option Orientation : Vertical

Which one of the following is NOT a non-parametric test?

Options :

- 1. ✓ One-way ANOVA
- 2. 🏶 Mann-Whitney test
- 3. 🏶 Friedman test
- 4. 🏁 Kruskal-Wallis test

Question Number : 49 Is Question Mandatory : No Option Orientation : Vertical

If a constant 20 is subtracted from each of the value of X and Y, the regression coefficient of Y on X is:

- **Options :**
- 1. * $1/20^{\text{th}}$ of the original regression coefficient
- 2. ***** reduces by 20
- 3. **v** not changed
- 4. ** increases by 20

Question Number : 50 Is Question Mandatory : No Option Orientation : Vertical

In a regression model, a situation in which the error term is same or constant across all values of the independent variables is known as: **Options :**

- 1. ***** Multicollinearity
- 2. V Homoscedasticity
- 3. ***** Autocorrelation
- 4. ***** Skewed Distribution

Life sciences

Section Id :	986068896
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 :	Yes
Sub-Section Number :	1
Sub-Section Id :	986068988
Question Shuffling Allowed :	Yes

Question Number : 51 Is Question Mandatory : No Option Orientation : Vertical

The culture media shown in the image is:



- 1. ✔ Lowenstein-Jensen medium
- 2. 🏶 MacConkey (lactose) Agar medium
- 3. 🏶 Dubos Medium
- 4. 🏶 Mueller Hinton Agar media

Question Number : 52 Is Question Mandatory : No Option Orientation : Vertical

Staphylococcal food poisoning manifests within how much time after ingestion of contaminated food:

Options :

- 1. 🗸 2-6 hours
- 2. ***** 10-12 hours
- 3. ****** 12-24 hours
- 4. 🗱 24-48 hours

Question Number : 53 Is Question Mandatory : No Option Orientation : Vertical

A patient diagnosed to be having malaria was successfully treated with an anti-malarial drug extracted from a plant 'sweet wormwood'. The compound had been discovered by Nobel Laureate Tu Youyou in 1972. Which compound are we talking about here?

Options :

- 1. * Chloroquine
- 2. ** Hydroxychloroquine
- 3. **Artemisinin**
- 4. 🍀 Quinine

Question Number : 54 Is Question Mandatory : No Option Orientation : Vertical

An organism isolated from a female patient having urinary tract infection producing mucoid colonies, oxidase negative, Voges Proskauer test positive, urease positive could be?

Options :

- 1. 🗮 Escherichia coli
- 2. ** Proteus mirabilis
- 3. ✓ Klebsiella pneumoniae
- 4. 🏁 Salmonella paratyphi A

Question Number : 55 Is Question Mandatory : No Option Orientation : Vertical

During an outbreak of a viral infection, all health care workers are advised to wear personal protective equipment. For the purpose, N95 respirators were also provided. What does N95 stands for?

- 1. Von-oil proof, blocks 95% of very small (0.3 micron) test particles
- 2. * Non-oil proof, blocks 98% of very small (0.03 micron) test particles
- 3. ** Non-oil proof, blocks 95% of very small (0.003 micron) test particles
- 4. ** Non-oil proof, blocks 98% of very small (0.3 micron) test particles

Question Number : 56 Is Question Mandatory : No Option Orientation : Vertical

Which of the following is a Selective Estrogen Receptor Modulator used in the treatment of estrogen-dependent breast cancer? **Options :**

- 1. ***** Anastrozole
- 2. 🍀 Exemestane
- 3. * Letrozole
- 4. < Tamoxifen

Question Number : 57 Is Question Mandatory : No Option Orientation : Vertical

Aldosterone causes:

Options :

- 1. * Increase in urinary sodium excretion
- 2. * Decrease in urinary chloride excretion
- 3. 🏶 Decrease in body weight
- 4. ✓ Increase in potassium excretion

Question Number : 58 Is Question Mandatory : No Option Orientation : Vertical

Oxytocin is useful for:

Options :

- 1. ✓ Induction of labour
- 2. 🏁 Menorrhagia
- 3. * Hyperprolactinemia
- 4. 🏁 Infertility

Question Number : 59 Is Question Mandatory : No Option Orientation : Vertical

The Langendorff apparatus shown below is characterized by which of the following statements?



Options :

- 1. ✓ It is an isolated heart perfusion technique
- 2. * This is used for studying the effects of drugs on trachea
- 3. * Perfusion of small intestine done in this apparatus helps to study physiology of the gut
- 4. * It is very useful to study multiple organs in large animals

Question Number : 60 Is Question Mandatory : No Option Orientation : Vertical

Which of the following antidote – poison combination is incorrect?

Options :

- 1. 🏶 Glucagon Beta blockers
- 2. * Hydroxocobalamin Cyanide
- 3. V Glucose Ethylene glycol
- 4. 🏶 Calcium chloride Fluoride

Question Number : 61 Is Question Mandatory : No Option Orientation : Vertical

Which of the following is CORRECT regarding surfactants of the lungs?

- 1. V Produced by the type II pneumocytes
- 2. Surfactant deficiency protects against neonatal respiratory distress syndrome
- 3. Surfactant deficiency at childhood protects from repeated episodes of pneumonia

4. ** Nearly 90% of the surfactant is composed of proteins

Question Number : 62 Is Question Mandatory : No Option Orientation : Vertical

Which of the following is a muscle involved in normal inspiration?

Options :

- 1. ✓ External intercostal muscle
- 2. * Internal intercostal muscle
- 3. 🏶 Scalene
- 4. * Sternocleidomastoid

Question Number : 63 Is Question Mandatory : No Option Orientation : Vertical

Which of the following region of eye has the greatest concentration of cones?

Options :

- 1. * Optic disc
- 2. 🖋 Fovea
- 3. * Parafoveal region
- 4. 🎽 Peripheral region

Question Number : 64 Is Question Mandatory : No Option Orientation : Vertical

Which of the following diseases is not caused by fungi?

Options :

- 1. ***** Histoplasmosis
- 2. 🏶 Pneumocystis pneumonia
- 3. 🏶 Rhinosporidiosis
- 4. 🖋 Melioidosis

Question Number : 65 Is Question Mandatory : No Option Orientation : Vertical

A high school athlete with a past medical history of structural heart problems presents to the cardiology clinic for a periodical check-up. On examination, his heart rate was 96 beats/ min and BP was 140/86 mm Hg. What would be the mean arterial pressure (MAP) in this patient?

- 1. 🏁 98 mm Hg
- 2. ** 100 mm Hg
- 3. 🗱 102 mm Hg

4. 🖋 104 mm Hg

Question Number : 66 Is Question Mandatory : No Option Orientation : Vertical

Histones pack the DNA into a repeating array of DNA-protein particles called:

Options :

- 1. ✓ Nucleosomes
- 2. * Centromere
- 3. * Telomere
- 4. 🏁 Chromatin

Question Number : 67 Is Question Mandatory : No Option Orientation : Vertical

Which one of the following is used to study the structural details of biological tissues using freeze-fracture technique? **Options :**

- 1. ****** Scanning electron microscopy
- 2. V Transmission electron microscopy
- 3. 🏶 Atomic force microscopy
- 4. ** Phase contrast microscopy

Question Number : 68 Is Question Mandatory : No Option Orientation : Vertical

Pericentric inversion is a type of chromosome mutation in which:

Options :

- 1. * Inversion of a chromosome segment that does not includes centromere
- 2. \checkmark Inversion of a chromosome segment that includes centromere
- 3. * Inversion of a chromosome segment that includes telomere but not centromere
- 4. * Inversion of a chromosome segment that neither includes telomere nor centromere

Question Number : 69 Is Question Mandatory : No Option Orientation : Vertical

Fluorescence recovery after photobleaching (FRAP) is a technique to study:

- 1. **W** Membrane proteins
- 2. ***** Transporting ions
- 3. ** Cholesterol patches
- 4. ** Nuclear proteins

Question Number : 70 Is Question Mandatory : No Option Orientation : Vertical

To study the living cells without staining, which of the following microscopes can be used? **Options :**

- 1. Scanning Electron microscope
- 2. ***** Transmission electron microscope
- 3. V Phase contrast microscope
- 4. ***** Fluorescent microscope

Question Number : 71 Is Question Mandatory : No Option Orientation : Vertical

The material used as a bioplastic is:

Options :

- 1. ****** Polystyrene
- 2. ****** Polypropylene
- 3. V Polyhydroxybutyrate
- 4. 🏶 Dextran

Question Number : 72 Is Question Mandatory : No Option Orientation : Vertical

What is PHRED score in a Next generation sequencing data?

Options :

- 1. * Indicator of mutation load
- 2. V Read quality score
- 3. ** Average depth/coverage calculation score
- 4. 🏶 Alignment score

Question Number : 73 Is Question Mandatory : No Option Orientation : Vertical

What does SNP stand for?

- 1. 🏶 Single number polymorphism
- 2. 🏶 Same nucleotide polymorphism
- 3. ***** Sequence nucleotide polymorphism
- 4. 🖋 Single nucleotide polymorphism

Question Number : 74 Is Question Mandatory : No Option Orientation : Vertical

"Compensation" refers to which of the following processes in relation to flow cytometry? **Options :**

- 1. * Conversion of analog signals to digital signals
- 2. V Elimination of overlapping fluorescent signals from different fluorochromes
- 3. Stimation of the level of cellular autofluorescence
- 4. * Categorizes different leucocyte populations

Question Number : 75 Is Question Mandatory : No Option Orientation : Vertical

Which one of the following crosses will produce two phenotypes in the next generation?

Options :

- 1. * Outcross
- 2. * Selfing of pure lines
- 3. V Test cross
- 4. 🏁 Incomplete dominance

Question Number : 76 Is Question Mandatory : No Option Orientation : Vertical

The type of inheritance in which many traits of a character are spread across a gradient and the effect of each allele is additive, is: **Options :**

- 1. ***** Codominance
- 2. 🏶 Monohybrid out cross
- 3. V Polygenic inheritance
- 4. 🏶 Dihybrid test cross

Question Number : 77 Is Question Mandatory : No Option Orientation : Vertical

Both the alleles express themselves equally in F_1 generation, EXCEPT:

Options :

- 1. **V** Antirrhinum majus
- 2. 🏶 Sickle cell anaemia
- 3. 🏶 AB blood group
- 4. 🏁 Roan cattle

Question Number : 78 Is Question Mandatory : No Option Orientation : Vertical

In the cross AaBBcc x aaBbCc, what is the probability of an offspring that is aaBbcc? **Options :**

- 1. ***** 1/2
- 1. 1/2 2. [≈] 1/4
- 2. ≈ 1/4 3. **≈** 1/16
- 3. •• 1/1
- 4. ✔ 1/8

Question Number : 79 Is Question Mandatory : No Option Orientation : Vertical

Gene for starch synthesis in pea plant is functionally connected with:

Options :

- 1. ***** Chlorophyll synthesis
- 2. ✓ Shape of seed
- 3. **Shape of pod**
- 4. ***** Flower colour

Question Number : 80 Is Question Mandatory : No Option Orientation : Vertical

When a diploid female plant is crossed with a tetraploid male, the ploidy of endosperm cells in the resulting seed is:

Options :

- 1. ** Pentaploidy
- 2. 🏶 Diploidy
- 3. 🏶 Triploidy
- 4. 🗸 Tetraploidy

Question Number : 81 Is Question Mandatory : No Option Orientation : Vertical

Out of the seven contrasting pairs of characters studied by Mendel in pea plant, how many had colour-based contrasting traits?

Options :

- 1. 🏁 One
- 2. 🕷 Two
- 3. V Three
- 4. 🍀 Four

Question Number : 82 Is Question Mandatory : No Option Orientation : Vertical

Which one of the following is called Sewall Wright Effect?

Options :

- 1. 🍀 Gene Pool
- 2. 🏁 Gene Flow
- 3. V Genetic Drift
- 4. 🍀 Isolation

Question Number : 83 Is Question Mandatory : No Option Orientation : Vertical

Bone is connected to muscles with the help of:

Options :

- 1. 🏁 Ligament
- 2. * Cartilage
- 3. 🗹 Tendon
- 4. 🏶 Haversian canals

Question Number : 84 Is Question Mandatory : No Option Orientation : Vertical

A 5-year-old female patient was brought to the OPD by her mother with the chief complaints of speech impairment, a small head size and problems in movement and balance (ataxia). She also finds baby's behaviour as unique in the form of frequent laughter, hyperactivity and short attention span. On genetic analysis, deletion in the maternal chromosome 15 was found. Which of the following can present with these symptoms?

Options :

- 1. ** Prader-Willi syndrome
- 2. 🗸 Angelman syndrome
- 3. * Hurler syndrome
- 4. ***** Weaver syndrome

Question Number : 85 Is Question Mandatory : No Option Orientation : Vertical

Burkitt's lymphoma occurs due to translocation of:

Options :

- 1. * Chromosome 13
- 2. V Chromosome 8
- 3. ** Chromosome 12
- 4. 🍀 Chromosome 11

Question Number : 86 Is Question Mandatory : No Option Orientation : Vertical

Which of the following is NOT a vestigial organ in man?

Options :

- 1. * Nictitating membrane
- 2. 🍀 Tail vertebrae
- 3. ** Vermiform appendix
- 4. 🖋 Nails

Question Number : 87 Is Question Mandatory : No Option Orientation : Vertical

A toxic substance responsible for the chills and high fever recurring every three to four days in malarial fever is:

Options :

- 1. 🕷 interferon
- 2. 🗸 haemozoin
- 3. 🏶 hirudin
- 4. 🏁 colostrum

Question Number : 88 Is Question Mandatory : No Option Orientation : Vertical

Multiload 375 is:

Options :

- 1. V Cu releasing IUD
- 2. ***** Hormone releasing IUD
- 3. 🏶 Non medicated IUD
- 4. 🏶 Oral pill containing steroids

Question Number : 89 Is Question Mandatory : No Option Orientation : Vertical

Which group's members have same chromosomal set and protoplasm?

Options :

- 1. Secondary Oocyte and polar body
- 2. * Primary Oocyte and secondary oocyte
- 3. 🏶 Ovum and second polar body
- 4. ✓ Secondary Oocyte and ovum

Question Number : 90 Is Question Mandatory : No Option Orientation : Vertical

ZIFT refers to the transfer of embryo in fallopian tube up to: **Options :**

- 1. ✓ Eight blastomeres stage
- 2. 🏁 16 blastomeres stage
- 3. 🏶 More than 8 blastomeres stage
- 4. 🏶 16-24 blastomeres stage

Question Number : 91 Is Question Mandatory : No Option Orientation : Vertical

All the following are components of a flow cytometer, EXCEPT:

Options :

- 1. 🏶 Photomultiplier tube
- 2. V Scintillation counter
- 3. * Lasers
- 4. ***** Flow chamber

Question Number : 92 Is Question Mandatory : No Option Orientation : Vertical

Which of the following forms left-handed helix?

Options :

- 1. 🏁 RNA
- 2. 🏶 B-DNA
- 3. 🖋 Z-DNA
- 4. 🏁 A-DNA

Question Number : 93 Is Question Mandatory : No Option Orientation : Vertical

Restriction endonucleases are very important enzymes used in Genetic engineering. They are used for:

Options :

- 1. ***** Cutting RNA
- 2. ** Cutting single stranded DNA
- 3. ✓ Cutting double stranded DNA
- 4. 🏶 Joining double stranded DNA

Question Number : 94 Is Question Mandatory : No Option Orientation : Vertical

If a hemophilic man marries a carrier woman, then which of the following holds true for his progenies?

Options :

1. \checkmark 50% daughters are carrier and 50% are hemophilic

- 2. 🏶 All the daughters are hemophilic
- 3. * All sons are haemophilic and all daughters are normal
- 4. * All sons are normal and all daughters are carriers

Question Number : 95 Is Question Mandatory : No Option Orientation : Vertical

The expected phenotypic ratio of a dihybrid cross is:

Options :

- 1. 🏼 12:3:1
- 2. 🖋 9:3:3:1
- 3. 🗱 15:1
- 4. 🍀 9:7

Question Number : 96 Is Question Mandatory : No Option Orientation : Vertical

ABO blood grouping in human beings cites the example of: **Options :**

- 1. * Incomplete dominance
- 2. ***** Co-dominance
- 3. 🏶 Mutiple allelism
- 4. ✓ Both co-dominance and multiple allelism

Question Number : 97 Is Question Mandatory : No Option Orientation : Vertical

Bt Cotton is a:

Options :

- 1. ^{SC} Cloned plant
- 2. 🗸 Transgenic plant
- 3. 🏶 Hybrid plant
- 4. 🍀 Mutated plant

Question Number : 98 Is Question Mandatory : No Option Orientation : Vertical

In an area where DDT had been used extensively, the population of birds declined significantly because: **Options :**

- 1. * Cobras were feeding exclusively on birds
- 2. V Many of the birds' eggs laid, did not hatch

3. ***** Birds stopped laying eggs

4. ** Earthworms in the area got eradicated

Question Number : 99 Is Question Mandatory : No Option Orientation : Vertical

If a mutation converts a triplet codon "UGC" to "UGA", it is called

Options :

- 1. ***** Missense mutation
- 2. ***** Deletion mutation
- 3. ***** Frameshift mutation
- 4. Von-sense mutation

Question Number : 100 Is Question Mandatory : No Option Orientation : Vertical

False about TATA box is that it:

Options :

- 1. * Has TATAAA sequence
- 2. V Lies 10 bp upstream to the start point
- 3. ** Aligns RNA polymerase at proper site
- 4. 🏁 Has mostly 7-8 base pair sequences

Question Number : 101 Is Question Mandatory : No Option Orientation : Vertical

During complete metabolism of glucose, the number of ATP formed is:

Options :

- 1. 🕷 Two
- 2. ***** Twelve
- 3. **V** Thirty-six
- 4. ***** Forty-four

Question Number : 102 Is Question Mandatory : No Option Orientation : Vertical

Vitamin B12 deficiency can be diagnosed by urinary excretion of:

- 1. ***** Pyruvate
- 2. V Methylmalonate
- 3. 🕷 Malate

4. 🏁 Lactate

Question Number : 103 Is Question Mandatory : No Option Orientation : Vertical

Which of the following enzyme participates in both the citric acid cycle and the electron transport chain? **Options :**

- 1. ***** NADH dehydrogenase
- 2. 🏁 Malate dehydrogenase
- 3. ✓ Succinate dehydrogenase
- 4. 🏁 Isocitrate dehydrogenase

Question Number : 104 Is Question Mandatory : No Option Orientation : Vertical

Bilirubin in serum can be measured by:

Options :

- 1. ✓ Van den Bergh reaction
- 2. * Ehrlich's reaction
- 3. 🏶 Hay sulphase test
- 4. ***** Fouchet's reaction

Question Number : 105 Is Question Mandatory : No Option Orientation : Vertical

A positive Benedict's test is not given by:

Options :

- 1. ✓ Sucrose
- 2. 🍀 Lactose
- 3. ***** Glucose
- 4. 🏶 Maltose

Question Number : 106 Is Question Mandatory : No Option Orientation : Vertical

Bordeaux mixture is:

- 1. * Organochlorine
- 2. 🏶 Antibiotic
- 3. 🏶 Organophosphate
- 4. 🗸 Inorganic fungicide

Question Number : 107 Is Question Mandatory : No Option Orientation : Vertical

Two-dimensional gels are used to:

Options :

- 1. Separate DNA from RNA
- 2. * Separate DNA fragments
- 3. ** Separate RNA fragments
- 4. ✓ Separate different proteins

Question Number : 108 Is Question Mandatory : No Option Orientation : Vertical

Health adjusted life expectancy (HALE) refers to:

Options :

- 1. V The equivalent number of years in full health that a new-born can expect to live based on current rates of ill-health and mortality
- 2. 🏶 The equivalent number of years of healthy life lost due to all causes whether from premature mortality or chronic disability
- 3. * Expectation of life years which could be free of disability
- 4. ** Loss of healthy life years resulting from chronic disability and total number of healthy years

Question Number : 109 Is Question Mandatory : No Option Orientation : Vertical

The weight of the baby becomes 5 times the birth weight by the age of:

Options :

- 1. 🍀 Two years
- 2. V Three years
- 3. ***** Four years
- 4. * Five years

Question Number : 110 Is Question Mandatory : No Option Orientation : Vertical

Which of the following laboratory values should a nurse expect to be elevated in a child who has pancreatitis?

- 1. ✓ Serum Amylase
- 2. ** Glycosylated haemoglobin
- 3. 🏶 Blood urea nitrogen (BUN)
- 4. 🏶 Red blood cell count

Question Number : 111 Is Question Mandatory : No Option Orientation : Vertical

An infant is to receive 28 mg of Phenobarbital (Luminal) orally per day divided into two equal doses for seizure control. The medication is dispensed as 20 mg per 5 ml. How many millilitres should the nurse administer for each dose?

Options :

- 1. 🕷 2.5
- 2. 🖋 3.5
- 3. * 5.5
- 4. 🗱 2

Question Number : 112 Is Question Mandatory : No Option Orientation : Vertical

Exclusive breastfeeding is recommended for about:

Options :

- 1. 🏁 8 months
- 2. ***** 4 months
- $3. \checkmark 6$ months
- 4. 🏁 10 months

Question Number : 113 Is Question Mandatory : No Option Orientation : Vertical

RNA interference (RNAi) or Post-Transcriptional Gene Silencing (PTGS) is a conserved biological response to:

Options :

- 1. ✓ double-stranded RNA
- 2. 🏶 DNA- RNA hybrid
- 3. 🏶 Methylated double stranded DNA
- 4. 🏶 Single stranded DNA

Question Number : 114 Is Question Mandatory : No Option Orientation : Vertical

Databases such as CATH and SCOP are used to identify:

- 1. \checkmark the structural family to which a protein belongs
- 2. * the genetic family to which a protein belongs
- 3. ** homologous proteins
- 4. 🏶 analogous proteins

Question Number : 115 Is Question Mandatory : No Option Orientation : Vertical

Two sequences are said to be homologous if:

Options :

- 1. \checkmark they have diverged from a common ancestor
- 2. ** their alignments share 30% identity or more
- 3. \approx they belong to the same fold family
- 4. ** they have converged to share similar functional properties

Question Number : 116 Is Question Mandatory : No Option Orientation : Vertical

What is the function of Chaperonins?

Options :

- 1. ***** Conformation prediction
- 2. V Protein folding
- 3. ***** Complex & slow conformation stability
- 4. 🏶 Stability analysis

Question Number : 117 Is Question Mandatory : No Option Orientation : Vertical

The colour of earthworm body is brown due to:

Options :

- 1. 🏶 Haemoglobin
- 2. 🏶 Haemocyanin
- 3. 🕷 RBC
- 4. V Porphyrin

Question Number : 118 Is Question Mandatory : No Option Orientation : Vertical

Which of the following amino acids does not have an aromatic ring?

Options :

- 1. * Tryptophan
- 2. 🏶 Histidine
- 3. 🖋 Proline
- 4. 🏶 Tyrosine

Question Number : 119 Is Question Mandatory : No Option Orientation : Vertical

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

Options :

- 1. ✓ Adenosine deaminase deficiency
- 2. ***** Adenosine deficiency
- 3. ****** Growth deficiency
- 4. 🏶 Adenine deficiency

Question Number : 120 Is Question Mandatory : No Option Orientation : Vertical

The computational methodology that tries to find the best matching between two molecules, a receptor and ligand is called:

Options :

- 1. ***** Molecular matching
- 2. ✓ Molecular docking
- 3. 🏶 Molecular fitting
- 4. 🏶 Molecule affinity checking

Question Number : 121 Is Question Mandatory : No Option Orientation : Vertical

The dual resistance vector is:

Options :

- 1. [₩] M₁₃
- 2. ***** pUC18
- 3. ***** pUC19
- 4. ✔ pBR 322

Question Number : 122 Is Question Mandatory : No Option Orientation : Vertical

Radioactive decay of the nucleus emits which of the following electromagnetic radiations?

Options :

- 1. * Ultraviolet rays
- 2. 🏶 X-Rays
- 3. 🏁 Infra-red
- 4. 🗸 Gamma rays

Question Number : 123 Is Question Mandatory : No Option Orientation : Vertical

Which of the following produce antibodies?

Options :

- 1. ***** Monocytes
- 2. ✓ B-lymphocytes
- 3. ***** Granulocytes
- 4. ***** T-lymphocytes

Question Number : 124 Is Question Mandatory : No Option Orientation : Vertical

Perforin lined pores in target cell are developed by:

Options :

- 1. Vatural killer cells
- 2. ** Neutrophil
- 3. ***** Macrophage
- 4. 🏶 Mast cell

Question Number : 125 Is Question Mandatory : No Option Orientation : Vertical

Which type of immunity is developed after exposure to pathogens?

Options :

- 1. Vatural active acquired immunity
- 2. * Artificial active acquired immunity
- 3. 🏶 Natural passive acquired immunity
- 4. ** Artificial passive acquired immunity

Question Number : 126 Is Question Mandatory : No Option Orientation : Vertical

The infectious stage of Plasmodium that enters the human body is:

Options :

- 1. ***** Trophozoites
- 2. 🖋 Sporozoites
- 3. ***** Female gametocytes
- 4. * Male gametocytes

Question Number : 127 Is Question Mandatory : No Option Orientation : Vertical

The vaccine against polio viruses is an example of: **Options :**

- 1. * Autoimmunization
- 2. ** Passive immunization
- 3. **Active immunization**
- 4. **Simple immunization**

Question Number : 128 Is Question Mandatory : No Option Orientation : Vertical

The chemical test that is used for diagnosis of typhoid is:

Options :

- 1. 🏶 Casoni test
- 2. 🏶 Mantoux test
- 3. 🏶 Galactomannan test
- 4. 🖋 Widal test

Question Number : 129 Is Question Mandatory : No Option Orientation : Vertical

Cell mediated immunity involves all, EXCEPT:

Options :

- 1. * Class I MHC molecules
- 2. ***** T helper cells
- 3. * Processed antigen
- 4. ✓ Secreted antibody

Question Number : 130 Is Question Mandatory : No Option Orientation : Vertical

T lymphocytes in a lymph node are concentrated in which of the following anatomical locations? **Options :**

- 1. 🏁 Medulla
- 2. V Paracortex adjacent to lymphoid follicle
- 3. ***** Germinal centre of lymphoid follicle
- 4. 🏶 Mantle zone of lymphoid follicle

Question Number : 131 Is Question Mandatory : No Option Orientation : Vertical

Which of the following groups is formed only of the hermaphrodite organisms?

Options :

1. 🏶 Earthworm, Tapeworm, Housefly, Frog

- 2. 🏶 Earthworm, Tapeworm, Sea horse, Housefly
- 3. 🏶 Earthworm, Leech, Sponge, Roundworm
- 4. 🗸 Earthworm, Tapeworm, Leech, Sponge

Question Number : 132 Is Question Mandatory : No Option Orientation : Vertical

Which of the following products of apiculture is used in cosmetics and polishes?

Options :

- 1. 🏁 Honey
- 2. 🍀 Oil
- 3. 🖋 Wax
- 4. 🏁 Royal jelly

Question Number : 133 Is Question Mandatory : No Option Orientation : Vertical

Holstein-Friesian, Brown Swiss and Jersey are all well-known: **Options :**

- 1. V Exotic breeds of cattle
- 2. * Exotic breeds of goat
- 3. 🏶 Exotic breed of poultry
- 4. * Exotic breed of birds

Question Number : 134 Is Question Mandatory : No Option Orientation : Vertical

Sabin-Feldman dye test is used in the diagnosis of:

Options :

- 1. V Toxoplasmosis
- 2. 🏶 Amoebiasis
- 3. * Cryptosporidiosis
- 4. 🏶 Trypanosomiasis

Question Number : 135 Is Question Mandatory : No Option Orientation : Vertical

Aquatic larva of mosquito is known as:

- 1. 🏁 Caterpillar
- 2. 🍀 Tadpole

3. [★] Maggot 4. ✓ Wriggler

Question Number : 136 Is Question Mandatory : No Option Orientation : Vertical

While calculating Air Quality Index, the data for which of the following pollutant(s) is essential?

Options :

- $1. \checkmark PM_{2.5} \text{ or } PM_{10}$
- 2. 🏶 Carbon dioxide and Carbon monoxide
- 3. \approx O₃ and NH₃
- 4. SO₂ and NO₂

Question Number : 137 Is Question Mandatory : No Option Orientation : Vertical

Which among the following is a cold desert?

Options :

- 1. 🏁 Kalahari
- 2. 🕷 Sonoran
- 3. 🕷 Thar
- 4. 💜 Patagonian

Question Number : 138 Is Question Mandatory : No Option Orientation : Vertical

Which of the following is most commonly applied in automobile exhaust system?

Options :

- 1. * Wet scrubber
- 2. ** Dry scrubber
- 3. ***** Electrostatic precipitator
- 4. V Catalytic converter

Question Number : 139 Is Question Mandatory : No Option Orientation : Vertical

Which of the following is a secondary air pollutant?

- 1. **Sulphur dioxide**
- 2. 🗸 Ozone
- 3. 🏁 Carbon monoxide

4. 🏁 Nitrogen Dioxide

Question Number : 140 Is Question Mandatory : No Option Orientation : Vertical

Itai-Itai disease is associated with which metal poisoning?

Options :

1. ✓ Cd
 2. ✗ Ag
 3. ✗ Hg
 4. ✗ Pd

Question Number : 141 Is Question Mandatory : No Option Orientation : Vertical

The scientific name of the flower shown in the image is:



Options : 1. *V Hibiscus rosa-sinensis*

- 2. 🍀 Tagetes erecta
- 3. 🏶 Bougainvillea glabra
- 4. ** Dicentra spectabilis

Question Number : 142 Is Question Mandatory : No Option Orientation : Vertical

A host plant produces a toxin that is lethal to aphids feeding on its leaves. Over time, some of the aphids become immune to the toxin. In response, the host plant begins to produce a different toxin that is lethal to aphids. This is an example of:

Options :

- 1. ** parasitism
- 2. \checkmark coevolution
- 3. 🏁 mutualism
- 4. 🏁 commensalism

Question Number : 143 Is Question Mandatory : No Option Orientation : Vertical

Which of the following best describes a pattern of idealized population growth that is restricted by limiting factors?

Options :

- 1. ✓ Logistic growth model
- 2. * Carrying capacity model
- 3. 🏶 Exponential growth model
- 4. 🏁 Habitat cap model

Question Number : 144 Is Question Mandatory : No Option Orientation : Vertical

Induction of cell division activity and delay in senescence is caused by:

Options :

- 1. * Gibberellin
- 2. 🏁 Auxin
- 3. 🗸 Cytokinin
- 4. 🍀 Ethylene

Question Number : 145 Is Question Mandatory : No Option Orientation : Vertical

Which plant part is modified into pitcher in pitcher plant?

Options :

1. 🍀 Root

- 2. [★] Stem
 3. ✓ Leaf
- 4. 🍀 Flower

Question Number : 146 Is Question Mandatory : No Option Orientation : Vertical

Natural insecticide obtained from Neem tree is:

Options :

- 1. 🗸 Azadirachtin
- 2. * Nicotine
- 3. * Ecdysone
- 4. 🏁 Malathion

Question Number : 147 Is Question Mandatory : No Option Orientation : Vertical

Which of the following insect can be used for production of formic acid?

Options :

- 1. ***** Bed bugs
- 2. * Crickets
- 3. * Locusts
- 4. < Red ants

Question Number : 148 Is Question Mandatory : No Option Orientation : Vertical

The practice of painless killing of laboratory animal to relieve pain after experimentation is called:

Options :

- 1. 🖋 Euthanasia
- 2. * Dissection
- 3. 🏁 Post Mortem
- 4. 🏶 Autopsy

Question Number : 149 Is Question Mandatory : No Option Orientation : Vertical

Which of the animals are referred to as solipeds?

Options :

1. 🏁 Dog

2. 🍀 Cattle

3. ✓ Horse4. [¥] Poultry

Question Number : 150 Is Question Mandatory : No Option Orientation : Vertical

Which one of the following is a mammal?

Options :

- 1. 🍀 Shark
- 2. 🏁 Trout
- 3. 🖋 Whale

4. 🗱 Salmon

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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 :	Social Science C 12th September 2021 Shift 3	
Subject Name :	Social Science C	
Creation Date :	2021-09-12 21:47:00	
Duration :	120	
Total Marks :	125	
Display Marks:	Yes	
Share Answer Key With Delivery Engine :	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? (SA type of questions will be always auto saved) :	No	

Social Science

Group Number :	1
Group Id :	986068546
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

	Aptitude	
Section Id :	986068897	
Section Number :	1	
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 Clear Response :	Yes	
Sub-Section Number :	1	
Sub-Section Id :	986068989	
Question Shuffling Allowed :	Yes	

Question Number : 1 Is Question Mandatory : No Option Orientation : Vertical

Car B is ahead of Car A by 100m. Car A is moving with constant speed of 10 m/s and car B starts from rest accelerating with an acceleration of 2 m/s². Find the minimum distance between both the cars.

Options :

- 1. 🕷 100 m
- 2. **×** 50 m
- 3. ✔ 75 m
- 4. 🕷 0 m

Question Number : 2 Is Question Mandatory : No Option Orientation : Vertical

Going 40m to South of her house, Mehar turns left and goes another 20 m. Then, turning to the North, she goes 20m, and then starts walking to her house. In which direction, is she walking now?

Options :

1. Vorth-West

2. 🏁 North

3. 🏶 South-East

4. 🏁 East

Question Number : 3 Is Question Mandatory : No Option Orientation : Vertical

Which two months in a year have the same calendar?

Options :

- 1. ✓ September- December
- 2. * April- November
- 3. 🏶 May-August
- 4. ****** June-September

Question Number : 4 Is Question Mandatory : No Option Orientation : Vertical

At a railway station a 24-hour watch loses 3 minutes in 4 hours. If it is set correctly on Sunday noon, when will the watch show the correct time? **Options :**

- 1. ** 6 pm after 40 days
- 2. 🍀 12 noon after 75 days
- 3. ** 12 pm after 100 days
- 4. ✓ 12 noon after 80 days

Question Number : 5 Is Question Mandatory : No Option Orientation : Vertical

How many primary or deciduous teeth does a normal human have?

Options :

- 1. 🗱 32
- 2. 🖋 20
- 3. 🗱 16
- 4. ** 22

Question Number : 6 Is Question Mandatory : No Option Orientation : Vertical

Find the day of the week on 16th January, 1969?

- 1. 🏶 Monday
- 2. ✔ Thursday
- 3. 🏶 Wednesday
- 4. 🍀 Tuesday

Question Number : 7 Is Question Mandatory : No Option Orientation : Vertical

The theme of World Immunization Week 2021 is:

Options :

- 1. Vaccines bring us closer
- 2. 🏶 Vaccinate daughter, screen mothers
- 3. * Vaccines work for all
- 4. ** Protect your world- get vaccinated

Question Number : 8 Is Question Mandatory : No Option Orientation : Vertical

One yard is equal to how many inches?

Options :

1. ✓ 36 2. ¥ 3 3. ¥ 91.44

4. ᄣ 12

Question Number : 9 Is Question Mandatory : No Option Orientation : Vertical

Which of the following variant is known as the Delta variant of SARS-CoV-2?

Options :

- 1. ✓ Lineage B.1.617.2
- 2. * Lineage B.1.1.7
- 3. 🕷 Lineage B.1.351
- 4. 🏁 Lineage P.1

Question Number : 10 Is Question Mandatory : No Option Orientation : Vertical

COVID-19 mRNA vaccines give instructions to body's cells to make the "spike protein." Which of the following is an m-RNA vaccine for COVID-19? **Options :**

- 1. V Pfizer-BioNTech vaccine
- 2. * Oxford-Astra Zeneca vaccine
- 3. 🏶 Bharat Biotech vaccine
- 4. 🏶 Russia's Sputnik vaccine



Harvey J Alter

Charles M Rice

Michael Houghton

Options :

- 1. Videntification of Hepatitis C virus
- 2. ** work on black holes
- 3. ** developing the CRISPR–Cas9 gene-editing tools
- 4. ** for discoveries about how cells sense and adapt to oxygen availability

Question Number : 12 Is Question Mandatory : No Option Orientation : Vertical The instrument that records the intensity of earthquakes is:

- 1. ***** Barometer
- 2. ✓ Seismograph
- 3. ***** Dosimeter
- 4. **S** Gyroscope

Question Number : 13 Is Question Mandatory : No Option Orientation : Vertical

Which city is known as 'Gold capital of the world'?

Options :

- 1. ✓ Johannesburg
- 2. 🍀 Paris
- 3. 🏶 Dubai
- 4. 🏁 London

Question Number : 14 Is Question Mandatory : No Option Orientation : Vertical

The difference in the duration of day and night increases as one moves from:

Options :

- 1. \checkmark Equator to poles
- 2. 🏶 West to East
- 3. 🏶 East and west of the prime meridian
- 4. Poles to equator

Question Number : 15 Is Question Mandatory : No Option Orientation : Vertical

The World Health Organization (WHO) has certified which country as Malaria free in 2021?

Options :

- 1. 🏶 Pakistan
- 2. 🖋 China
- 3. 🏶 Brazil
- 4. 🍀 Canada

Question Number : 16 Is Question Mandatory : No Option Orientation : Vertical

Which of the following is not an anti- virus software?

Options :

1. 🕷 Avira

2. 🏶 Bitdefender

- 3. 🗸 Oracle
- 4. 🍀 Panda

Question Number : 17 Is Question Mandatory : No Option Orientation : Vertical

Gases usually used for filling an electric bulb are:

Options :

- 1. ✓ Argon and nitrogen
- 2. 🏶 Argon and carbon dioxide
- 3. 🏶 Nitrogen and carbon dioxide
- 4. 🏁 Nitrogen and oxygen

Question Number : 18 Is Question Mandatory : No Option Orientation : Vertical

A pea when soaked in water, gains about 40% by weight and 20% by volume. By what factor does the density increase? **Options :**

1. **≭** 2.15 2. **✓** 1.16

3. * 1.25

4. 🗱 1.1

Question Number : 19 Is Question Mandatory : No Option Orientation : Vertical

GPS is an abbreviation for?

Options :

- 1. 🏶 Global Poles System
- 2. 🏶 Global Positioning Store
- 3. 🖋 Global Positioning System
- 4. 🏶 Global Positioning Satellite

Question Number : 20 Is Question Mandatory : No Option Orientation : Vertical

One light year is equal to:

Options :

1. ****** 9.5×10^6 km

2. \checkmark 9.5×10¹² km

3. [★] 9.5×10⁹ km 4. [★] 9.5×10¹⁸ km

Question Number : 21 Is Question Mandatory : No Option Orientation : Vertical

The scientific study of dreams is called:

Options :

- 1. ***** Arachnology
- 2. 🏶 Pomology
- 3. * Speleology
- 4. 🗸 Oneirology

Question Number : 22 Is Question Mandatory : No Option Orientation : Vertical

Nosophobia is:

Options :

- 1. * Fear of not having a working mobile phone
- 2. ✓ Fear of developing a disease
- 3. ***** Fear of nausea or vomiting
- 4. 🍀 Fear of smells

Question Number : 23 Is Question Mandatory : No Option Orientation : Vertical

The colour of the onion is pink due to the presence of:

Options :

- 1. 🍀 Carotene
- 2. 🗸 Anthocyanin
- 3. 🏶 Xanthophyll
- 4. 🗱 Lycopene

Question Number : 24 Is Question Mandatory : No Option Orientation : Vertical

The gas used for artificial ripening of fruits is:

- 1. ✓ Ethylene
- 2. 🍀 Ethane
- 3. 🏶 Carbon dioxide

4. 🏶 Acetylene

Question Number : 25 Is Question Mandatory : No Option Orientation : Vertical The pH of human blood is about:

Options :

1. ✓ 7.4 2. ¥ 6.5 3. ¥ 3.7 4. ¥ 9.2

Question Number : 26 Is Question Mandatory : No Option Orientation : Vertical

The flower shown in the image is the source of which of the following anticancer drugs?



Options :

- 1. Vincristine
- 2. ***** Cyclosporine
- 3. 🏶 Oxaliplatin
- 4. 🍀 5-Flourouracil

Question Number : 27 Is Question Mandatory : No Option Orientation : Vertical

Which of the following is the best conductor of electricity?

Options :

- 1. 🖋 Sea water
- 2. 🏁 Rain water
- 3. ****** Boiled water
- 4. 🏶 Distilled water

Question Number : 28 Is Question Mandatory : No Option Orientation : Vertical

Anosmia and ageusia is loss of _____ and ____, respectively.

Options :

- 1. ✓ Smell, Taste
- 2. 🍀 Taste, Smell
- 3. ** Smell, Sight
- 4. 🏁 Sight, Taste

Question Number : 29 Is Question Mandatory : No Option Orientation : Vertical

According to Indian law, what is the minimum age of a person for employment in a factory? **Options :**

- 1. ***** 12 years
- 2. 💙 14 years
- 3. 🏁 18 years
- 4. 🏁 21 years

Question Number : 30 Is Question Mandatory : No Option Orientation : Vertical

A trader mixes 26 kg of rice priced at Rs. 20 per kg with 30 kg of rice of other variety priced at Rs. 36 per kg and sells the mixture at Rs. 30 per kg. His profit percent is:

Options :

- 1. 🏁 No profit, no loss
- 2. 🖋 5%
- 3. 🗱 10%
- 4. 🗱 8%

Question Number : 31 Is Question Mandatory : No Option Orientation : Vertical

What is chemical symbol for Tungsten?

Options :

- 1. 🖋 W
- 2. 🍀 T
- 3. ***** G
- 4. 🏁 Tn

Question Number : 32 Is Question Mandatory : No Option Orientation : Vertical

What type of study is best suited for the initial evaluation of rare diseases?

Options :

- 1. * Intervention studies
- 2. \checkmark Case control studies
- 3. ** Randomized controlled studies
- 4. 🍀 Cohort studies

Question Number : 33 Is Question Mandatory : No Option Orientation : Vertical

Which of the following phases of clinical trial evaluates safety and tolerability of a drug in healthy volunteers? **Options :**

- 1. ✔ Phase I
- 2. 🏁 Phase IIA
- 3. 🏶 Phase III
- 4. 🏶 Phase IIB

Question Number : 34 Is Question Mandatory : No Option Orientation : Vertical

If a diagnostic test is 90% sensitive, what will be the percentage of false negative results? **Options :**

- 1. * Cannot be estimated from the information provided
- 2. 🍀 9%
- 3. 🕷 19%
- 4. 🖋 10%

Question Number : 35 Is Question Mandatory : No Option Orientation : Vertical

Fertilisation of an ovum by a sperm commonly occurs in which part of the female reproductive system?

Options :

- 1. **X** Uterine body
- 2. 🏶 Ovary
- 3. 🏁 Vagina
- 4. 🗸 Fallopian tube

Question Number : 36 Is Question Mandatory : No Option Orientation : Vertical

Which one of the following is the basis of the modern periodic table?

Options :

- 1. ***** Atomic volume
- 2. * Atomic size
- 3. V Atomic number
- 4. 🏁 Atomic mass

Question Number : 37 Is Question Mandatory : No Option Orientation : Vertical

Carbon, diamond and graphite are together called:

Options :

- 1. * Isomers
- 2. 🏁 Isotopes
- 3. ***** Isomorphs
- 4. 🖋 Allotrope

Question Number : 38 Is Question Mandatory : No Option Orientation : Vertical

Ethyl mercaptan added to the otherwise odourless LPG cooking gas for imparting a detectable smell to the gas is a compound of:

Options :

1. ***** Bromine

- 2. ***** Oxygen
- 3. ✓ Sulphur
- 4. 🏁 Nitrogen

Question Number : 39 Is Question Mandatory : No Option Orientation : Vertical

"Operation Flood" is a movement related with the product:

Options :

- 1. 🖋 Milk
- 2. 🍀 Fresh Water
- 3. ***** Rice
- 4. 🏁 Rain

Question Number : 40 Is Question Mandatory : No Option Orientation : Vertical

Indian Standard Time (IST) refers to the local time of which city? **Options :**

- 1. 🍀 Banaras
- 2. 🏶 Gurugram near Delhi
- 3. 🗸 Mirzapur near Allahabad
- 4. 🍀 Kolkata

Question Number : 41 Is Question Mandatory : No Option Orientation : Vertical

A bag contains 7 green and 8 white balls. If two balls are drawn simultaneously, the probability that both are of the same colour is:

Options :

- 1. 🕷 8/15
- 2. 🗱 2/15
- 3. 🗱 3/15
- 4. 🖋 7/15

Question Number : 42 Is Question Mandatory : No Option Orientation : Vertical

Mode can be determined by applying the formula:

Options :

1. * Mode = 2 Median - 3 Mean

2. \checkmark Mode = 3 Median - 2 Mean

3. ₩ Mode = 3 Mean - 2 median 4. ₩ Mode = 2 Mean - 3 Median

Question Number : 43 Is Question Mandatory : No Option Orientation : Vertical

When an investigator uses the data, which has already been collected by others, such data is called:

Options :

- 1. 🏁 Primary data
- 2. * Processed data
- 3. ***** Collected data
- 4. ✓ Secondary data

Question Number : 44 Is Question Mandatory : No Option Orientation : Vertical

Sum of the deviation of the variable values 3, 4, 6, 8, 14 from their mean is:

Options :

- 1. 🖋 0
- 2. 🕷 1
- 3. 🗱 5
- 4. 🛎 7

Question Number : 45 Is Question Mandatory : No Option Orientation : Vertical

The mean of 5 observations is 4.4 and their variance is 8.24. If three of the observations are 1, 2 and 6. The other two observations are: **Options :**

- 1. 🗯 5 and 6
- 2. ✓ 4 and 9
- 3. ***** 7 and 8
- 4. ****** 5 and 8

Question Number : 46 Is Question Mandatory : No Option Orientation : Vertical

Marital status of a group of people represents which variable:

- 1. * Discrete
- 2. * Continuous
- 3. 🗸 Nominal

4. 🏁 Ordinal

Question Number : 47 Is Question Mandatory : No Option Orientation : Vertical

If a test statistic rejects the null hypothesis when it is true, then which type of error is made: **Options :**

- 1. ✓ Type-I error
- 2. ***** Type-II error
- 3. ** Both Type-I and Type-II errors
- 4. 🏶 None of Type-I and Type-II errors

Question Number : 48 Is Question Mandatory : No Option Orientation : Vertical

Which one of the following is NOT a non-parametric test?

Options :

- 1. 🗸 One-way ANOVA
- 2. 🏶 Mann-Whitney test
- 3. 🏶 Friedman test
- 4. 🏁 Kruskal-Wallis test

Question Number : 49 Is Question Mandatory : No Option Orientation : Vertical

If a constant 20 is subtracted from each of the value of X and Y, the regression coefficient of Y on X is:

Options :

- 1. * 1/20th of the original regression coefficient
- 2. ***** reduces by 20
- 3. \checkmark not changed
- 4. ***** increases by 20

Question Number : 50 Is Question Mandatory : No Option Orientation : Vertical

In a regression model, a situation in which the error term is same or constant across all values of the independent variables is known as: **Options :**

- 1. ***** Multicollinearity
- 2. V Homoscedasticity
- 3. * Autocorrelation
- 4. 🏶 Skewed Distribution

Social Science

Section Id :	986068898
Section Number :	2
Section type :	Online
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Enable Mark as Answered Mark for Review and Clear Response :	Yes
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Question Shuffling Allowed :	Yes

Question Number : 51 Is Question Mandatory : No Option Orientation : Vertical

Which of the following is not one of the domains of 5 factor model of personality?

Options :

- 1. ✓ Introversion
- 2. * Neuroticism
- 3. ***** Agreeableness
- 4. * Conscientiousness

Question Number : 52 Is Question Mandatory : No Option Orientation : Vertical

The female equivalent of oedipus complex is known as:

Options :

- 1. ***** Father complex
- 2. * Redeemer Complex
- 3. ✓ Electra complex
- 4. 🏶 Messianic Complex

Question Number : 53 Is Question Mandatory : No Option Orientation : Vertical

Concrete operational stage of Piaget's theory of cognitive development is associated with the age of:

Options :

1. ** 0-2 years

2. [★] 3-6 years
 3. [★] 5-7 years
 4. ✓ 7-11 years

Question Number : 54 Is Question Mandatory : No Option Orientation : Vertical

What is the correct order of the stages of grief in Kubler-Ross Grief Cycle?

Options :

- 1. ** Anger, Denial, Bargaining, Depression, Acceptance
- 2. V Denial, Anger, Bargaining, Depression, Acceptance
- 3. * Anger, Bargaining, Depression, Denial, Acceptance
- 4. 🏶 Denial, Depression, Anger, Bargaining, Acceptance

Question Number : 55 Is Question Mandatory : No Option Orientation : Vertical

The degree to which a sociological measure accurately reflects the topic is known as: **Options :**

- 1. ***** Reliability
- 2. 🍀 Utility
- 3. Validity
- 4. ** Neutrality

Question Number : 56 Is Question Mandatory : No Option Orientation : Vertical

Which one of the following is at the lowest hierarchical level, according to the Maslow's Theory?

Options :

- 1. V Physiological needs
- 2. ***** Belonging and love
- 3. ** Self-Actualization
- 4. 🏶 Self-esteem

Question Number : 57 Is Question Mandatory : No Option Orientation : Vertical

It is a fixed set of greatly simplified beliefs or idea which are held generally by the members of a group or by people: **Options :**

- 1. ✓ Stereotypy
- 2. 🏁 Neologism

3. ^{SE} Delusion4. ^{SE} Prejudice

Question Number : 58 Is Question Mandatory : No Option Orientation : Vertical

When a person justifies his maladaptive behaviour by false logic or ascribes it to noble motives which do not inspire it, it is called:

Options :

- 1. * Projection
- 2. 🗸 Rationalization
- 3. ***** Regression
- 4. ***** Repression

Question Number : 59 Is Question Mandatory : No Option Orientation : Vertical

The process through which a learned response stops occurring due to the non-availability of reinforcement is called:

Options :

- 1. ***** Generalization
- 2. ** Punishment
- 3. Spontaneous Recovery
- 4. < Extinction

Question Number : 60 Is Question Mandatory : No Option Orientation : Vertical

The perception of movement in a stationary spot is called:

Options :

- 1. * Geometrical illusion
- 2. * Delusion
- 3. V Phi phenomenon
- 4. 🏶 Auto kinetic phenomenon

Question Number : 61 Is Question Mandatory : No Option Orientation : Vertical

Tendency of people to put less effort when in a group is called as

- 1. ✓ Social Loafing
- 2. 🏶 Social Conformity
- 3. ***** Compliance

4. 🏁 Social Affiliation

Question Number : 62 Is Question Mandatory : No Option Orientation : Vertical

"Alice in Wonderland" syndrome is associated with which of the following infections? **Options :**

- 1. 🍀 CMV
- 2. * Herpes simplex
- 3. V Epstein-Barr Virus
- 4. 🍀 HIV

Question Number : 63 Is Question Mandatory : No Option Orientation : Vertical

Which one of the following is not a model of Social Group work?

Options :

- 1. ** Social goal model
- 2. 🏶 Remedial model
- 3. V Functional model
- 4. 🏁 Reciprocal model

Question Number : 64 Is Question Mandatory : No Option Orientation : Vertical

Which of the following is true about Couvade syndrome?

Options :

- 1. * It is also called erotomania
- 2. 🍀 It is also called delusion of doubles
- 3. \checkmark It is seen in husbands of pregnant women
- 4. It is usually associated with brain disease

Question Number : 65 Is Question Mandatory : No Option Orientation : Vertical

Which of the following is not a Schneider first-rank symptom?

- 1. ***** Thought withdrawal
- 2. ***** Somatic passivity
- 3. 🏶 Third-person auditory hallucinations
- 4. V Thought block

Question Number : 66 Is Question Mandatory : No Option Orientation : Vertical

Which of the following is not seen in Anorexia Nervous?

Options :

- 1. ✓ Binge eating
- 2. 🍀 Amenorrhoea
- 3. ** Self-perception of being "fat"
- 4. 🏶 Underweight

Question Number : 67 Is Question Mandatory : No Option Orientation : Vertical Full form of CAPART is:

Options :

- 1. V Council for the advancement of people's action and rural technology
- 2. * Council for the advancement for people's association and rural techniques
- 3. * Council of the advancement of people's association and rural transformation
- 4. * Council for the additional people's association and rural technology

Question Number : 68 Is Question Mandatory : No Option Orientation : Vertical

Features of alcohol withdrawal are all except:

Options :

- 1. ✓ Hypersomnolence
- 2. ***** Epileptic seizure
- 3. ***** Restlessness
- 4. 🏁 Hallucination

Question Number : 69 Is Question Mandatory : No Option Orientation : Vertical

The three-tier system of Panchayati Raj was recommended by:

- 1. 🏁 Kaka Kalekar Committee
- 2. 🏶 Simon Commission
- 3. 🖋 Balwant Rai Mehta Committee
- 4. 🎽 Jai Prakash Narain Committee

Question Number : 70 Is Question Mandatory : No Option Orientation : Vertical

Tactile hallucinations are seen in:

Options :

- 1. * Alcoholic polyneuropathy
- 2. V Cocaine Abuse
- 3. 🏶 Obsessive Compulsive Disorder
- 4. 🏶 Panic Disorder

Question Number : 71 Is Question Mandatory : No Option Orientation : Vertical

Dieting can be used for weight control in obesity. As an approximate guide to dieting, 1 pound of fat is equivalent to:

Options :

- 1. 🏁 1000 Kcal
- 2. 🍀 2000 Kcal
- 3. 🗱 3000 Kcal
- 4. 🖋 3500 Kcal

Question Number : 72 Is Question Mandatory : No Option Orientation : Vertical

Which of the following is derived from Hemp plant?

Options :

- 1. ***** Cocaine
- 2. ** Amphetamine
- 3. 🗸 Cannabis
- 4. 🗱 LSD

Question Number : 73 Is Question Mandatory : No Option Orientation : Vertical

When sociologists study the structure of layers in society and people's movement between them, they call this:

Options :

- 1. ** social solidarity
- 2. ** social conflict
- 3. 🏶 social control
- 4. ✓ social stratification

Question Number : 74 Is Question Mandatory : No Option Orientation : Vertical

Structural-Functionalists describe society as:

Options :

- 1. * a source of conflict, inequality and isolation
- 2. ** a complex network of interaction at a micro-level
- 3. \checkmark a normative framework of roles and institutions
- 4. \approx an unstable structure of social relationships

Question Number : 75 Is Question Mandatory : No Option Orientation : Vertical

Who propounded the theory of Sociological Imagination?

Options :

- 1. ✔ Mills
- 2. Schutz
- 3. 🏶 Garfinkel
- 4. 🏶 Domer

Question Number : 76 Is Question Mandatory : No Option Orientation : Vertical

Who said that the social stratification in India is based on 'purity and pollution'?

Options :

- 1. 🏁 Ranbir Bhatti
- 2. 🗱 KM Kapadia
- 3. * Yogendra Yadav
- 4. 🗸 Louis Dumont

Question Number : 77 Is Question Mandatory : No Option Orientation : Vertical

When two people interact with each other, they form a:

Options :

- 1. 🏁 Society
- 2. V Dyadic group
- 3. ***** Association
- 4. 🏁 Institution

Question Number : 78 Is Question Mandatory : No Option Orientation : Vertical Queer Theory makes the claim that:

Options :

- 1. ✓ all sexualities are pluralistic, fragmented and frequently reconstructed
- 2. ** deviant forms of masculinity are seen as more threatening to the gender order than deviant forms of femininity
- 3. \approx heterosexuality is the normal and most desirable way to be
- 4. ** the sexual categories and discourses we use are based upon true, underlying biological differences

Question Number : 79 Is Question Mandatory : No Option Orientation : Vertical

The purging of emotions is called as:

Options :

- 1. 🏁 Mutual aid
- 2. 🗸 Catharsis
- 3. ***** Group cohesion
- 4. 🏶 Mastery

Question Number : 80 Is Question Mandatory : No Option Orientation : Vertical

Arrange the following popular social movements in the sequence of their genesis year:

- (a) Nirbhaya movement
- (b) Chipko movement
- (c) Narmada Bachao Andolan
- (d) Jan Lokpal

Options :

- 1. ****** (a), (b), (c) and (d)
- 2. V (b), (c), (d) and (a)
- 3. ***** (c), (b), (a) and (d)
- 4. ***** (d), (b), (c) and (a)

Question Number : 81 Is Question Mandatory : No Option Orientation : Vertical

Which of the following option correctly defines the full form of AMRIT scheme launched in India to provide affordable drugs for cancer & heart diseases? **Options :**

- 1. ✓ Affordable Medicines and Reliable Implants for Treatment
- 2. * Affordable Medicines for Rejuvenation and Integrated Transformation
- 3. 🏶 Affordable Medicines for Reliable and Integrated Health Treatment
- 4. * Atal Mission for Rejuvenation and Integrated Transformation

Question Number : 82 Is Question Mandatory : No Option Orientation : Vertical

Two HPV types (16 and 18) cause _____% of cervical cancers and pre-cancerous cervical lesions.

Options :

- 1. 🕷 50%
- 2. 🖋 70%
- 3. ***** 91%
- 4. 🗱 99%

Question Number : 83 Is Question Mandatory : No Option Orientation : Vertical

Which of the following is not a type of non-probability sampling?

Options :

- 1. ***** Snowball sampling
- 2. ***** Convenience Sampling
- 3. ***** Judgement sampling
- 4. 🖋 Simple Random Sampling

Question Number : 84 Is Question Mandatory : No Option Orientation : Vertical

Which of the following is not a method for controlling the effects of confounding in epidemiological studies?

Options :

- 1. ***** Randomization
- 2. 🏶 Stratification
- 3. ***** Matching
- 4. 🖋 Blinding

Question Number : 85 Is Question Mandatory : No Option Orientation : Vertical

Which of the following report released by the office of Registrar General and Census Commissioner provides annual estimates of birth rate, death rate, fertility and mortality indicators?

- 1. * Demographic and Social Statistics Report
- 2. ✓ Sample Registration System Statistical Report
- 3. 🏶 Health Statistics Report
- 4. 🏶 Demographic and Health Information Report

Question Number : 86 Is Question Mandatory : No Option Orientation : Vertical

It is the attempt to arrive at an exact definition as far as possible of the social situation and personality of a given client:

Options :

- 1. ✓ Social Diagnosis
- 2. ** Social Cohesion
- 3. ****** Social Support
- 4. ** Social Assessment

Question Number : 87 Is Question Mandatory : No Option Orientation : Vertical

The role of the group worker can be understood best through this term:

Options :

- 1. 🏶 Advocate
- 2. 🛩 Enabler
- 3. * Teacher
- 4. 🍀 Trainer

Question Number : 88 Is Question Mandatory : No Option Orientation : Vertical

Which of the following is not a principle of social action given by Britto (1980)?

Options :

- 1. ** Principle of credibility building
- 2. * Principle of legitimization
- 3. * Principle of dramatization
- 4. V Principle of individualization

Question Number : 89 Is Question Mandatory : No Option Orientation : Vertical

'The Central Government Health Scheme" (CGHS) Started in the year:

Options :

- 1. 🗱 1957
- 2. 🕷 1952
- 3. 🕷 1967
- 4. 💙 1954

Question Number : 90 Is Question Mandatory : No Option Orientation : Vertical

The principle of specific objective is a principle of: **Options :**

- 1. ***** Social case work
- 2. V Social group work
- 3. ***** Community organisation
- 4. 🏶 Social Welfare Administration

Question Number : 91 Is Question Mandatory : No Option Orientation : Vertical

Which among the following is not a Model of Urban Structure?

Options :

- 1. 🏁 Sector model
- 2. 🏶 Concentric Zone Model
- 3. ✓ Social inclusive exclusive model
- 4. 🏶 Multiple nuclei model

Question Number : 92 Is Question Mandatory : No Option Orientation : Vertical

'Sansad Adarsh Gram Yojana' (SAGY) was launched in commemoration of the birth anniversary of:

Options :

- 1. 🖋 Shri Jayaprakash Narayan
- 2. 🏶 Shri Deendhayal Upadhyaya
- 3. 🏶 Shri Atal Bihari Vajpayee
- 4. 🏁 Mahatma Gandhi

Question Number : 93 Is Question Mandatory : No Option Orientation : Vertical

What does acculturation signify?

Options :

- 1. * Growing up and internalizing the values and norms of one's society
- 2. Spread of a cultural element from the centre of origin to other societies
- 3. * Interchange of elements of culture between society
- 4. ✓ Incorporation of an element of culture from another culture, while retaining its identity

Question Number : 94 Is Question Mandatory : No Option Orientation : Vertical

The split-half method is used as a test of:

Options :

- 1. ***** Stability
- 2. * External validity
- 3. ✓ Internal reliability
- 4. * Inter-observer consistency

Question Number : 95 Is Question Mandatory : No Option Orientation : Vertical

Which was the year marked as The International Year of Micro-credit?

Options :

- 1. 🖋 2005
- 2. 🗱 2007
- 3. 🗱 2009
- 4. 🗱 2001

Question Number : 96 Is Question Mandatory : No Option Orientation : Vertical

The Rational Emotive Behavioural therapy (REBT) is best associated with:

Options :

- 1. 🖋 Albert Ellis
- 2. 🍀 Eric Berne
- 3. 🏶 Gordon Hamilton
- 4. 🏶 William Glasser

Question Number : 97 Is Question Mandatory : No Option Orientation : Vertical

f-test was designed by:

Options :

- 1. ***** Karl popper
- 2. * Pearson
- 3. 🏶 Stewart Golton
- 4. < Ronald A. Fisher

Question Number : 98 Is Question Mandatory : No Option Orientation : Vertical

The special grant for tribal welfare is provided under Article: **Options :**

1. ✓ 275 2. ¥ 276 3. ¥ 345 4. ¥ 346

Question Number : 99 Is Question Mandatory : No Option Orientation : Vertical

Which of these is NOT a mortality indicator?

Options :

- 1. 🏶 Crude death rate
- 2. ***** Life expectancy
- 3. V Prevalence
- 4. * Proportional mortality rate

Question Number : 100 Is Question Mandatory : No Option Orientation : Vertical

Which of the following is Not a model for Public Private Partnership in public health management?

Options :

- 1. **Acquisition**
- 2. 🍀 Lease
- 3. 🏶 Build, operate, lease and transfer (BOLT)
- 4. * Design, Build and operate (DBO)

Question Number : 101 Is Question Mandatory : No Option Orientation : Vertical

Kempner's rice fruit diet is prescribed for:

Options :

- 1. ✓ Hypertension
- 2. * Diabetes
- 3. ***** Constipation
- 4. 🏁 Peptic ulcer

Question Number : 102 Is Question Mandatory : No Option Orientation : Vertical

WASH (or Watsan, WaSH) is an acronym that stands for:

Options :

1. ***** Waste, sanitation and hygiene

- 2. Vater, sanitation and hygiene
- 3. ***** Water, soil and health
- 4. 🏁 Waste, sand and health

Question Number : 103 Is Question Mandatory : No Option Orientation : Vertical

Which of the following is the 'Flight or Fright' hormone?

Options :

- 1. ** Progesterone
- 2. 🗸 Adrenaline
- 3. 🏶 Glucagon
- 4. 🏶 Aldosterone

Question Number : 104 Is Question Mandatory : No Option Orientation : Vertical

Iodine number of a lipid is a measure of:

Options :

- 1. \checkmark degree of unsaturation of a fat
- 2. * presence of acetyl groups
- 3. \approx presence of hydroxyl groups
- 4. 🏶 molecular weight of fatty acids

Question Number : 105 Is Question Mandatory : No Option Orientation : Vertical

The 3 D's of pellagra are:

Options :

- 1. * Deaf mutism, Diarrhoea and Diabetes
- 2. 🏶 Diabetes, Diarrhoea and Dementia
- 3. 🏶 Dystonia, Dermatitis and Diarrhoea
- 4. V Dermatitis, Diarrhoea and Dementia

Question Number : 106 Is Question Mandatory : No Option Orientation : Vertical

PDCAAS represents:

- 1. ✓ Protein digestibility corrected amino acid score
- 2. * Protein digestibility calculated ascorbic acid score

- 3. * Protein dispersibility corrected amino acid score
- 4. * Pulse's digestibility corrected amino acid score

Question Number : 107 Is Question Mandatory : No Option Orientation : Vertical

The function of bile salts in the intestine is:

Options :

- 1. ***** absorption of lipids
- 2. ✓ emulsification of lipids
- 3. ***** solubilisation of proteins and fats
- 4. * emulsification and absorption of peptides

Question Number : 108 Is Question Mandatory : No Option Orientation : Vertical

The Body Mass Index (BMI) is calculated by:

Options :

- 1. \checkmark Weight (kg)/ height (m)²
- 2. 🏶 Height (m)/ weight (kg)
- 3. ***** Height (m) / weight (pound)²
- 4. Weight (kg)/ height (cm)²

Question Number : 109 Is Question Mandatory : No Option Orientation : Vertical

During the first few days after birth, mother's breasts produce a high protein milk which is rich in protective antibodies. This milk is called: **Options :**

- 1. 🏁 Anoxia
- 2. * Fontanel
- 3. 🏶 Hyaline
- 4. < Colostrum

Question Number : 110 Is Question Mandatory : No Option Orientation : Vertical

Growth hormone is secreted by:

- 1. 🏶 Pancreas
- 2. ** Adrenal gland
- 3. * Pineal gland

4. 💜 Pituitary gland

Question Number : 111 Is Question Mandatory : No Option Orientation : Vertical

Alcoholic diabetic patient is on an increased risk of hypoglycemia because:

Options :

- 1. 🎽 Alcohol has no calories
- 2. Alcohol inhibits gluconeogenesis in the liver
- 3. * Alcohol requires insulin to be metabolised
- 4. * Alcohol is metabolised similarly to carbohydrates

Question Number : 112 Is Question Mandatory : No Option Orientation : Vertical

In a child suffering from marasmus which of the following clinical manifestation is NOT observed? **Options :**

- 1. ** Watery diarrhoea with stools
- 2. 🏶 Subnormal temperature
- 3. * Visible peristalsis from thin abdominal wall
- 4. ✓ Generalized oedema

Question Number : 113 Is Question Mandatory : No Option Orientation : Vertical

Which of the following has the highest Specific dynamic action (SDA)?

Options :

- 1. **✓** Egg
- 2. 🏶 Potato
- 3. 🕷 Mango
- 4. 🏶 Corn oil

Question Number : 114 Is Question Mandatory : No Option Orientation : Vertical

Which one of the following is a fat-soluble vitamin and its related deficiency disease?

- 1. * Ascorbic acid- Scurvy
- 2. 🗸 Retinol- Xerophthalmia
- 3. 🏶 Cobalamin- Beri Beri
- 4. 🏶 Calciferol- Pellagra

Question Number : 115 Is Question Mandatory : No Option Orientation : Vertical

A 26-year-old man presented with complaints of headache, dizziness, vomiting, stupor and blurred vision. He had consumed 800 g of grilled ocean shark liver the day before. What is the most likely cause of his symptoms?

Options :

- 1. * Vitamin A deficiency
- 2. Vitamin A toxicity
- 3. 🏶 Iron deficiency
- 4. 🏶 Vitamin C toxicity

Question Number : 116 Is Question Mandatory : No Option Orientation : Vertical

Which hormone is produced by the alpha cells of islets of Langerhans in the pancreas? **Options :**

- 1. 🏁 Insulin
- 2. 🏁 Somatostatin
- 3. V Glucagon
- 4. 🍀 Cholecystokinin

Question Number : 117 Is Question Mandatory : No Option Orientation : Vertical

Major carotenoid phytochemical found in tomatoes is:

Options :

- 1. 🍀 lutein
- 2. 🍀 beta-carotene
- 3. V lycopene
- 4. 🏼 zeaxanthin

Question Number : 118 Is Question Mandatory : No Option Orientation : Vertical

Table salt is:

- 1. 🏁 100% sodium
- 2. 🗸 About 40% sodium
- 3. * Contains only negligible amounts of sodium
- 4. * Must be restricted in fat-restricted diets

Question Number : 119 Is Question Mandatory : No Option Orientation : Vertical

Which of the following is a disease of inherited metabolic disorder of three branched chain amino acids – Leucine, Isoleucine and Valine? **Options :**

- 1. * Phenylketonuria
- 2. ✓ Maple Syrup Urine Disease
- 3. ***** Homocystinuria
- 4. 🏶 Tyrosinemia

Question Number : 120 Is Question Mandatory : No Option Orientation : Vertical

Which of the following is NOT a Theory of Clothing?

Options :

- 1. * Modesty theory
- 2. \checkmark Individuality theory
- 3. ** Protection theory
- 4. 🎽 Adornment theory

Question Number : 121 Is Question Mandatory : No Option Orientation : Vertical

The average of a non-zero number and its square is 5 times the number. The number is: **Options :**

1. 🖋 9

- 2. 🗱 17
- 3. 🗱 29
- 4. ** 295

Question Number : 122 Is Question Mandatory : No Option Orientation : Vertical

Mean deviation, Variance and Standard Deviation of the values 4,4,4,4,4,4 is:

- 1. 🏼 4
- 2. 🗱 8
- 3. 🗱 2
- 4. 🖋 0

Question Number : 123 Is Question Mandatory : No Option Orientation : Vertical

The mean of 10 numbers is 9, then sum of these numbers will be:

Options :

- 1. 🍀 9
- 2. 🗱 19
- 3. 🖋 90
- 4. 🗱 70

Question Number : 124 Is Question Mandatory : No Option Orientation : Vertical

Respondent driven sampling is a:

Options :

- 1. ✓ Snowball sampling method
- 2. * Probability sampling method
- 3. * Kish grid sampling method
- 4. Sequential sampling method

Question Number : 125 Is Question Mandatory : No Option Orientation : Vertical

What is the output or measure of effect derived from logistic regression?

Options :

- 1. 🏁 Risk Ratio
- 2. 🏶 Hazard ratio
- 3. 🏶 Rate ratio
- 4. 🖋 Odds Ratio

Question Number : 126 Is Question Mandatory : No Option Orientation : Vertical

The survival method used to adjust for multiple predictors on time to event is:

Options :

- 1. ** Life table survival method
- 2. 🏁 Kaplan-Meier Survival method
- 3. V Cox survival method
- 4. 🏁 Tobit regression method

Question Number : 127 Is Question Mandatory : No Option Orientation : Vertical

ROC curve is obtained by plotting: **Options :**

- 1. ** sensitivity versus specificity
- 2. * (1-sensitivity) versus specificity
- 3. V sensitivity versus (1-specificity)
- 4. 🏶 (1-sensitivity) versus (1-specificity)

Question Number : 128 Is Question Mandatory : No Option Orientation : Vertical

CPM is a network analysis and project management technique which stands for?

Options :

- 1. * Critical Property model
- 2. 🏶 Common paperwork management
- 3. 🏶 Cost per Manager
- 4. 🗸 Critical Path Method

Question Number : 129 Is Question Mandatory : No Option Orientation : Vertical

National Mental Health Policy was adopted in the year:

Options :

- 1. 🗱 2005
- 2. * 2010
- 3. 🖋 2014
- 4. 🕷 2017

Question Number : 130 Is Question Mandatory : No Option Orientation : Vertical

What is Bankers Discount?

Options :

- 1. * Money deducted by the banker & it is the discount on the face value of the bill
- 2. * Bill of exchange & the interest on the face value of the bill
- 3. \checkmark Money deducted by the banker & it is the simple interest on the face value of the bill
- 4. * Bills of exchange & it is the discount on the face value of the bill

Question Number : 131 Is Question Mandatory : No Option Orientation : Vertical

The normal distribution is also known by which of the following names?

Options :

- 1. ***** Leptokurtic curve
- 2. ***** Platykurtic curve
- 3. V Mesokurtic curve
- 4. 🏶 Lorenz curve

Question Number : 132 Is Question Mandatory : No Option Orientation : Vertical

Slack Variables are always:

Options :

- 1. * Negative
- 2. 🕷 Zero
- 3. Von-Negative
- 4. 🏶 Non-Positive

Question Number : 133 Is Question Mandatory : No Option Orientation : Vertical

Parabolic Trend equation is represented as:

Options :

- 1. X = $a+bY+cY^2$
- 2. **≭** X=a+bY²+cY
- 3. ***** $Y=a+bX^2+cX$
- 4. \checkmark Y=a+bX+cX²

Question Number : 134 Is Question Mandatory : No Option Orientation : Vertical

The median of a frequency distribution is found graphically with the help of:

Options :

- 1. 🏁 Histogram
- 2. ***** Frequency Curve
- 3. ***** Frequency Polygon
- 4. 🗸 Ogive

Question Number : 135 Is Question Mandatory : No Option Orientation : Vertical For a normal curve/distribution, kurtosis of the distribution is:

1. [★] 2 2. [★] 2.5 3. ✓ 3.0 4. [★] 3.5

Question Number : 136 Is Question Mandatory : No Option Orientation : Vertical

Who is the author of book "Patterns of Culture"?

Options :

- 1. ***** Henry Maine
- 2. V Ruth Benedict
- 3. ****** Robert Redfield
- 4. 🏶 G.M. Foster

Question Number : 137 Is Question Mandatory : No Option Orientation : Vertical

Which of the following sites represents North Indian Neolithic zone?

Options :

- 1. ****** Brahmagiri
- 2. 🏶 Sanganakallu
- 3. 🏁 T. Narsipur
- 4. 🖋 Burzahom

Question Number : 138 Is Question Mandatory : No Option Orientation : Vertical

The phenotype of an individual, under the influence of nongenetic agents has become like the one normally caused by a specific genotype in the absence of the nongenetic agents is called:

Options :

- 1. ✓ Phenocopy
- 2. 🍀 Linkage
- 3. ***** Penetrance
- 4. ***** Expressivity

Question Number : 139 Is Question Mandatory : No Option Orientation : Vertical

A female statuette known as "Venus of Willendorf" was yielded from which place? **Options :**

1. [★] Germany
 2. [★] France
 3. ✓ Austria
 4. [★] Italy

Question Number : 140 Is Question Mandatory : No Option Orientation : Vertical

Colloquially referred to as 'Skeleton Lake', from where several hundred ancient human skeletal remains were retrieved and have been identified from their ancient DNA and stable isotope analysis, is located in:

Options :

- 1. 🏁 Rakhigarhi (Haryana)
- 2. V Chamoli (Uttarakhand)
- 3. ***** Dalhousie (Himachal Pradesh)
- 4. ** Nubra Valley (Leh and Ladakh)

Question Number : 141 Is Question Mandatory : No Option Orientation : Vertical

Medial Malleolus is present in:

Options :

- 1. ✔ Tibia
- 2. 🍀 Femur
- 3. 🍀 Fibula
- 4. 🍀 Calcaneus

Question Number : 142 Is Question Mandatory : No Option Orientation : Vertical

Which of the following statement/s are TRUE about the fingerprint science?

Options :

- 1. * They are useful in twin pregnancies
- 2. * They are polygenic traits
- 3. ✓ Monozygotic twins have different fingerprints
- 4. 🏶 They are embryogenic in origin

Question Number : 143 Is Question Mandatory : No Option Orientation : Vertical

Which one of the following is not an autosomal recessive disorder? **Options :**

- 1. ***** Bartter syndrome
- 2. V Achondroplasia
- 3. * Ellis-van Creveld syndrome
- 4. 🍀 Cystic Fibrosis

Question Number : 144 Is Question Mandatory : No Option Orientation : Vertical

Match the following:	
Marriage Type	Description
(i) Sororate	(a)Woman to marry husband's brother
(ii) Levirate	(b) Marriage of woman with several men
(iii) Polyandry	(c) Marriage between children of siblings of same sex
(iv) Parallel Cousin Marriage	(d) the marriage of one man to two or more sisters usually successively
Options :	
1. 🗸 (i)-(d), (ii)-(a), (iii)-(b), (iv)-(c)	
2. 🏶 (i)-(d), (ii)-(c), (iii)-(b), (iv)-(a)	
3. 🏶 (i)-(c), (ii)-(d), (iii)-(a), (iv)-(b)	
4. 🏶 (i)-(a), (ii)-(b), (iii)-(c), (iv)-(d)	
1. ✓ (i)-(d), (ii)-(a), (iii)-(b), (iv)-(c) 2. 業 (i)-(d), (ii)-(c), (iii)-(b), (iv)-(a) 3. 業 (i)-(c), (ii)-(d), (iii)-(a), (iv)-(b)	

Question Number : 145 Is Question Mandatory : No Option Orientation : Vertical

What was the name of the scientist who invented the "Ten Point" system of finger print classification?

Options :

- 1. ✓ Sir Edward Richard Henry
- 2. 🏁 Sir James Rodger
- 3. 🏶 Sir Thomas Geoffrey
- 4. 🏶 Sir William Rogers

Question Number : 146 Is Question Mandatory : No Option Orientation : Vertical

The correct formula of Furuhata index is:

- 1. ***** Loops/Whorls ×100
- 2. ** Arches x 100/Whorls
- 3. ****** 2 Whorls + Loops/n
- 4. Vhorls x 100/loops

Question Number : 147 Is Question Mandatory : No Option Orientation : Vertical

World Human Rights Day is celebrated on:

Options :

- 1. * 1st December
- 2. * 1st November
- 3. ***** 10^{th} November
- 4. $\checkmark 10^{\text{th}}$ December

Question Number : 148 Is Question Mandatory : No Option Orientation : Vertical

Multicollinearity occurs when independent variables in a regression model are:

Options :

- 1. * Negative
- 2. 🍀 Equal
- 3. 🏶 Unrelated
- 4. V Correlated

Question Number : 149 Is Question Mandatory : No Option Orientation : Vertical

The youngest daughter of the family usually inherits all ancestral property in which of the following tribe?

Options :

- 1. 🖋 Khasi
- 2. 🍀 Birhor
- 3. 🏶 Santhal
- 4. 🍀 Toda

Question Number : 150 Is Question Mandatory : No Option Orientation : Vertical

According to Zeltman and Duncun, which among the following is not a strategy of social action?

- **Options :**
- 1. 🏶 Educational strategy
- 2. ** Persuasive strategy
- 3. * Facilitative strategy
- 4. ✓ Bargaining strategy