

**QUESTION PAPER**  
**Technical Assistant (Para Medical) - Lab Technician [SHIFT - 1]**

Exam Date : 06/09/2023

Time : 09:30 AM - 12:30 PM

**SECTION 1**

**Question 1**

For which of the following substances the safety sign of toxic should be put?

Answer :

- (A) Alkali
- (B) Potassium Cyanide
- (C) Chloroform
- (D) Ether

**Right Answer :**  
Potassium Cyanide

**Question Id : 1**

Option Id

- ☐ 1001
- ☐ 1002
- ☐ 1003
- ☐ 1004

**Right Option Id : 1002**

**Question 2**

Which one is low complexity tests among the following test?

Answer :

- (A) antibiotic sensitivity test
- (B) determination of erythrocyte sedimentation rate
- (C) determination of level of drugs
- (D) ELISA test for HIV

**Right Answer :**  
determination of erythrocyte sedimentation rate

**Question Id : 24**

Option Id

- ☐ 24001
- ☐ 24002
- ☐ 24003
- ☐ 24004

**Right Option Id : 24002**

**Question 3**

You are working in the pathology laboratory, from following which important step you will follow to minimize the infections?

Answer :

- (A) leave the infected material anywhere
- (B) frequently touch mouth, nose and eyes by hands
- (C) only use push button pipettes and dispensers
- (D) use mouth pipettes

**Right Answer :**  
only use push button pipettes and dispensers

**Question Id : 25**

Option Id

- ☐ 25001
- ☐ 25002
- ☐ 25003
- ☐ 25004

**Right Option Id : 25003**

**Question 4**

What is the conventional unit used for the level of glucose in blood?

Answer :

- (A) mg/dl
- (B) gm/l
- (C) mEq/L
- (D) g/dl

**Question Id : 26**

Option Id

- ☐ 26001
- ☐ 26002
- ☐ 26003
- ☐ 26004

**Right Answer :**  
mg/dl

**Right Option Id : 26001**

**Question 5**

The biomedical waste of collected tissues for biopsy should be discarded in \_\_\_\_.

**Answer :**

- (A) Black bag
- (B) White bag
- (C) Red bag
- (D) Yellow bag

**Right Answer :**  
Yellow bag

**Question Id : 27**

**Option Id**

- ☐ 27001
- ☐ 27002
- ☐ 27003
- ☐ 27004

**Right Option Id : 27004**

**Question 6**

From following, which component of cell plays important role in the intracellular digestion of foreign matter within the cell?

**Answer :**

- (A) Golgi apparatus
- (B) DNA
- (C) RNA
- (D) lysosome

**Right Answer :**  
lysosome

**Question Id : 28**

**Option Id**

- ☐ 28001
- ☐ 28002
- ☐ 28003
- ☐ 28004

**Right Option Id : 28004**

**Question 7**

Which reagent reacts with fructose to form red colored compound?

**Answer :**

- (A) Seliwanoff's reagent
- (B) Benedict's reagent
- (C) Sodium carbonate reagent
- (D) Cupric sulfate reagent

**Right Answer :**  
Seliwanoff's reagent

**Question Id : 32**

**Option Id**

- ☐ 32001
- ☐ 32002
- ☐ 32003
- ☐ 32004

**Right Option Id : 32001**

**Question 8**

Which of the following mechanisms does the liver develop that plays an important role in a human body?

**Answer :**

- (A) conversion of glucose to pyruvate
- (B) metabolism of glucose
- (C) conversion of glucose to glycogen
- (D) release of glycogen from glucose

**Right Answer :**  
conversion of glucose to glycogen

**Question Id : 30**

**Option Id**

- ☐ 30001
- ☐ 30002
- ☐ 30003
- ☐ 30004

**Right Option Id : 30003**

**Question 9**

**Question Id : 31**

Which urine sample you will collect for test of proteinuria of the patient?

Answer :

(A) random urine collection

(B) early morning urine collection

(C) 12 hours urine collection

(D) 24 hours urine collection

Option Id

☐ 31001

☐ 31002

☐ 31003

☐ 31004

**Right Answer :**

24 hours urine collection

**Right Option Id : 31004**

**Question 10**

What is the normal plasma urea level?

Answer :

(A) 5-10 mg/dl

(B) 10-20 mg/dl

(C) 15- 45 mg/dl

(D) 50-65 mg/dl

**Question Id : 23**

Option Id

☐ 23001

☐ 23002

☐ 23003

☐ 23004

**Right Answer :**

15- 45 mg/dl

**Right Option Id : 23003**

**Question 11**

What will you keep in mind while concentrated acids are diluted in the glass ware cylinder?

Answer :

(A) always add acids to water with constant stirring

(B) directly pour the acid to water

(C) mix sulfuric acid and water in glass cylinder

(D) use heat when pour the alkalis poured to the water

**Question Id : 33**

Option Id

☐ 33001

☐ 33002

☐ 33003

☐ 33004

**Right Answer :**

always add acids to water with constant stirring

**Right Option Id : 33001**

**Question 12**

At which temperature the buffer solutions should be stored?

Answer :

(A) 1-2 °C

(B) 2-8 ° C

(C) 9-18 ° C

(D) 18-36 ° C

**Question Id : 35**

Option Id

☐ 35001

☐ 35002

☐ 35003

☐ 35004

**Right Answer :**

2-8 ° C

**Right Option Id : 35002**

**Question 13**

For the separation of fractions of serum proteins, which type of centrifuge can be used?

Answer :

(A) High Speed Centrifuge

(B) High Speed Cooling Centrifuge

**Question Id : 40**

Option Id

☐ 40001

(C) Ultra Centrifuge

☐ 40002

(D) Low Centrifuge

☐ 40003

☐ 40004

**Right Answer :**

Ultra Centrifuge

**Right Option Id : 40003**

#### Question 14

For which blood test the lavender tube which contains EDTA, is used?

Answer :

(A) Serum

Option Id

☐ 39001

(B) Whole Blood for CBC

☐ 39002

(C) Whole Blood for ESR

☐ 39003

(D) Plasma for Blood Glucose

☐ 39004

**Right Answer :**

Whole Blood for CBC

**Right Option Id : 39002**

#### Question 15

What will you apply to the arm for making the veins more prominent and easier to enter the needle?

Answer :

(A) Needle

Option Id

☐ 38001

(B) IV cannula

☐ 38002

(C) Gloves

☐ 38003

(D) Tourniquet

☐ 38004

**Right Answer :**

Tourniquet

**Right Option Id : 38004**

#### Question 16

How will you recognize whether the blood specimen is hemolyzed?

Answer :

(A) thick plasma or serum

Option Id

☐ 34001

(B) white plasma or serum

☐ 34002

(C) bluish plasma or serum

☐ 34003

(D) pink plasma or serum

☐ 34004

**Right Answer :**

pink plasma or serum

**Right Option Id : 34004**

#### Question 17

The bacteria which retain the stain crystal violet by gram's technique are called as?

Answer :

(A) gram positive

Option Id

☐ 36001

(B) gram negative

☐ 36002

(C) gram neutral

☐ 36003

(D) gram equal

☐ 36004

**Right Answer :**  
gram positive

**Right Option Id : 36001**

**Question 18**

How much time E. Coli takes for the growth and division of a bacterium into two cells?

Answer :

- (A) 10-19 minutes
- (B) 20-23 minutes
- (C) 2 hours
- (D) 24 hours

**Question Id : 37**

Option Id

- ☐ 37001
- ☐ 37002
- ☐ 37003
- ☐ 37004

**Right Answer :**  
20-23 minutes

**Right Option Id : 37002**

**Question 19**

Which organism is responsible for Syphilis?

Answer :

- (A) Rickettsia species
- (B) Treponema Pallidum
- (C) Vibrio cholerae
- (D) Shigella

**Question Id : 29**

Option Id

- ☐ 29001
- ☐ 29002
- ☐ 29003
- ☐ 29004

**Right Answer :**  
Treponema Pallidum

**Right Option Id : 29002**

**Question 20**

For culture method of laboratory diagnosis of fungal disease, which media is used?

Answer :

- (A) Giemsa
- (B) PAS (Periodic Acid-Schiff) Stain
- (C) Indian ink
- (D) SDA (Sabouraud Dextrose Agar)

**Question Id : 22**

Option Id

- ☐ 22001
- ☐ 22002
- ☐ 22003
- ☐ 22004

**Right Answer :**  
SDA (Sabouraud Dextrose Agar)

**Right Option Id : 22004**

**Question 21**

What is the full form of HIV?

Answer :

- (A) Human Immune Virus
- (B) Human Immunodeficiency Virus
- (C) Human Hepatitis Virus
- (D) Human Hysteric Virus

**Question Id : 2**

Option Id

- ☐ 2001
- ☐ 2002
- ☐ 2003
- ☐ 2004

**Right Answer :**  
Human Immunodeficiency Virus

**Right Option Id : 2002**

**Question 22**

From following which does not contain DNA?

Answer :

- (A) Red blood cells
- (B) White blood cells
- (C) Mitochondria
- (D) Golgi apparatus

**Right Answer :**

Red blood cells

**Question Id : 20**

Option Id

- ☐ 20001
- ☐ 20002
- ☐ 20003
- ☐ 20004

**Right Option Id : 20001**

**Question 23**

What is the life span of platelets in humans?

Answer :

- (A) 8-11 days
- (B) 120 days
- (C) 15-25 days
- (D) 240 days

**Right Answer :**

8-11 days

**Question Id : 3**

Option Id

- ☐ 3001
- ☐ 3002
- ☐ 3003
- ☐ 3004

**Right Option Id : 3001**

**Question 24**

Which major veins empty the blood in the right atrium?

Answer :

- (A) Carotid Vein
- (B) Cephalic Vein
- (C) Pulmonary Vein
- (D) Superior and Inferior Vena Cava

**Right Answer :**

Superior and Inferior Vena Cava

**Question Id : 21**

Option Id

- ☐ 21001
- ☐ 21002
- ☐ 21003
- ☐ 21004

**Right Option Id : 21004**

**Question 25**

Which is the largest part of the brain?

Answer :

- (A) neuroglia
- (B) mid brain
- (C) cerebrum
- (D) cerebellum

**Right Answer :**

cerebrum

**Question Id : 4**

Option Id

- ☐ 4001
- ☐ 4002
- ☐ 4003
- ☐ 4004

**Right Option Id : 4003**

**Question 26**

Which gland synthesizes the growth hormone?

Answer :

**Question Id : 5**

Option Id

- (A) Thyroid ☐ 5001
- (B) Pancreas ☐ 5002
- (C) Hypothalamus ☐ 5003
- (D) Anterior Pituitary ☐ 5004

**Right Answer :**

Anterior Pituitary

**Right Option Id : 5004**

**Question 27**

Which activity of respiration requires energy?

**Answer :**

- (A) Expiration
- (B) Inspiration
- (C) Pause
- (D) Inspection

**Question Id : 6**

**Option Id**

- ☐ 6001
- ☐ 6002
- ☐ 6003
- ☐ 6004

**Right Answer :**

Inspiration

**Right Option Id : 6002**

**Question 28**

Which chemical digestion takes place in the small intestine?

**Answer :**

- (A) formation of chyme
- (B) proteins are broken down to amino acids
- (C) formation of stool
- (D) conversion of glucose to glycogen

**Question Id : 7**

**Option Id**

- ☐ 7001
- ☐ 7002
- ☐ 7003
- ☐ 7004

**Right Answer :**

proteins are broken down to amino acids

**Right Option Id : 7002**

**Question 29**

Which processes are involved in the formation of urine in the kidney?

**Answer :**

- (A) simple filtration, selective reabsorption, secretion
- (B) digestion, absorption, secretion
- (C) filtration, regulation, excretion
- (D) digestion, expiration

**Question Id : 8**

**Option Id**

- ☐ 8001
- ☐ 8002
- ☐ 8003
- ☐ 8004

**Right Answer :**

simple filtration, selective reabsorption, secretion

**Right Option Id : 8001**

**Question 30**

Which is the most superficial layer of the skin?

**Answer :**

- (A) dermis
- (B) germinative layer
- (C) epidermis

**Question Id : 9**

**Option Id**

- ☐ 9001
- ☐ 9002
- ☐ 9003

(D) subcutaneous tissue

☐ 9004

**Right Answer :**

epidermis

**Right Option Id : 9003**

**Question 31**

The immunity provided by T-cells are called as \_\_\_\_.

Answer :

(A) innate immunity

(B) phagocytosis

(C) humoral immunity

(D) cell mediated immunity

**Question Id : 10**

Option Id

☐ 10001

☐ 10002

☐ 10003

☐ 10004

**Right Answer :**

cell mediated immunity

**Right Option Id : 10004**

**Question 32**

Where is the spermatozoa produced?

Answer :

(A) ovaries

(B) testes

(C) urethra

(D) prostate gland

**Question Id : 11**

Option Id

☐ 11001

☐ 11002

☐ 11003

☐ 11004

**Right Answer :**

testes

**Right Option Id : 11002**

**Question 33**

What is the death of cell in a living tissue following harmful injury called as?

Answer :

(A) morphology

(B) infection

(C) inflammation

(D) necrosis

**Question Id : 12**

Option Id

☐ 12001

☐ 12002

☐ 12003

☐ 12004

**Right Answer :**

necrosis

**Right Option Id : 12004**

**Question 34**

From following which are the cytokines?

Answer :

(A) Interleukin-1

(B) Neutrophils

(C) Eosinophils

(D) Platelets

**Question Id : 13**

Option Id

☐ 13001

☐ 13002

☐ 13003

☐ 13004

**Right Answer :**

Interleukin-1

**Right Option Id : 13001**



**Question 35**

Who will mostly collect the histopathological specimens from patient's body?

Answer :

- (A) Nurse
- (B) Anesthetist
- (C) Surgeon
- (D) MLT students

**Right Answer :**  
Surgeon

**Question Id : 14**

Option Id

- ☐ 14001
- ☐ 14002
- ☐ 14003
- ☐ 14004

**Right Option Id : 14003****Question 36**

What is the criteria of rejection of receiving any specimen of histopathology in laboratory?

Answer :

- (A) details of specimen site are not documented
- (B) not taken by laboratory technician
- (C) not given hand to hand
- (D) not taken in lab

**Right Answer :**  
details of specimen site are not documented

**Question Id : 15**

Option Id

- ☐ 15001
- ☐ 15002
- ☐ 15003
- ☐ 15004

**Right Option Id : 15001****Question 37**

What is the gross examination of tissues in histopathology?

Answer :

- (A) inspected with the microscope
- (B) acid neutralization
- (C) washing
- (D) inspected with the bare eyes

**Right Answer :**  
inspected with the bare eyes

**Question Id : 16**

Option Id

- ☐ 16001
- ☐ 16002
- ☐ 16003
- ☐ 16004

**Right Option Id : 16004****Question 38**

Which branch of medicine that deals with the study of red blood cells?

Answer :

- (A) pathology
- (B) cytology
- (C) hematology
- (D) histopathology

**Right Answer :**  
hematology

**Question Id : 17**

Option Id

- ☐ 17001
- ☐ 17002
- ☐ 17003
- ☐ 17004

**Right Option Id : 17003****Question 39****Question Id : 18**

Which component gives red color to red blood cells?

Answer :

- (A) Platelets
- (B) Hemoglobin
- (C) Leukocytes
- (D) Eosinophils

Option Id

- ☐ 18001
- ☐ 18002
- ☐ 18003
- ☐ 18004

**Right Answer :**

Hemoglobin

**Right Option Id : 18002**

**Question 40**

What does the MCV stand for?

Answer :

- (A) Mean Corpuscular Volume
- (B) Mean Corpuscular Hemoglobin Concentration
- (C) Mean Cystic Volume
- (D) Mean Cell Volume

**Question Id : 19**

Option Id

- ☐ 19001
- ☐ 19002
- ☐ 19003
- ☐ 19004

**Right Answer :**

Mean Corpuscular Volume

**Right Option Id : 19001**

**SECTION 2**

**Question 41**

Average height of 25 children is 140 cm. If 5 new children joined the class then average height becomes 145 cm. What is the average height of 5 new children?

Answer :

- (A) 155 cm
- (B) 160 cm
- (C) 165 cm
- (D) 170 cm

**Question Id : 42**

Option Id

- ☐ 42001
- ☐ 42002
- ☐ 42003
- ☐ 42004

**Right Answer :**

170 cm

**Right Option Id : 42004**

**Question 42**

The least number, which when divided by 12, 15, 20 and 54 leaves in each case a remainder of 8 is:

Answer :

- (A) 504
- (B) 536
- (C) 544
- (D) 548

**Question Id : 43**

Option Id

- ☐ 43001
- ☐ 43002
- ☐ 43003
- ☐ 43004

**Right Answer :**

548

**Right Option Id : 43004**

**Question 43**

Ten years ago, P was half of Q's age. If the ratio of their present ages is 3:4, what will be the total of their present ages?

Answer :

- (A) 45

**Question Id : 44**

Option Id

(B) 40

(C) 35

(D) 30

☐ 44001

☐ 44002

☐ 44003

☐ 44004

**Right Answer :**

35

**Right Option Id : 44003**

**Question 44**

If a seller reduce the selling price of an item from Rs. 400 to Rs. 380, his loss increases by 2%. What is the cost price of the item?

**Answer :**

(A) Rs. 1000

(B) Rs. 800

(C) Rs. 1200

(D) Rs. 1100

**Question Id : 45**

**Option Id**

☐ 45001

☐ 45002

☐ 45003

☐ 45004

**Right Answer :**

Rs. 1000

**Right Option Id : 45001**

**Question 45**

A man's speed with the current is 15km/hr and the speed of the current is 2.5 km/hr. The man's speed against the current is:

**Answer :**

(A) 8.5 km/hr

(B) 10 km/hr

(C) 12.5 km/hr

(D) 9 km/hr

**Question Id : 46**

**Option Id**

☐ 46001

☐ 46002

☐ 46003

☐ 46004

**Right Answer :**

10 km/hr

**Right Option Id : 46002**

**Question 46**

A man can row 4 km/hr in still water. If the river is running at 2 km/hr it takes 90 min to row to a place and back. How far is the place?

**Answer :**

(A) 2 km

(B) 4 km

(C) 5 km

(D) 2.25 km

**Question Id : 47**

**Option Id**

☐ 47001

☐ 47002

☐ 47003

☐ 47004

**Right Answer :**

2.25 km

**Right Option Id : 47004**

**Question 47**

Akhil took a loan of Rs. 1400 with simple interest for as many years as the rate of interest. If paid Rs.686 as interest at the end of the loan period, what is the rate of interest?

**Answer :**

(A) 8%

(B) 6%

(C) 4%

**Question Id : 48**

**Option Id**

☐ 48001

☐ 48002

(D) 7%

☐ 48003

☐ 48004

**Right Answer :**

7%

**Right Option Id : 48004**

**Question 48**

Evaluate:

$$\frac{(3.38)^2 - (1.62)^2}{3.38 - 1.62} = ?$$

Answer :

(A) 5

(B) 4

(C) 6

(D) 8

**Question Id : 49**

Option Id

☐ 49001

☐ 49002

☐ 49003

☐ 49004

**Right Answer :**

5

**Right Option Id : 49001**

**Question 49**

Simplify:

$$\left[ \frac{1}{2} + \frac{1}{3} \right] \div \left[ \frac{2}{5} \left( \frac{3}{6} - \frac{3}{7} \right) \right] = ?$$

Answer :

(A) 175/6

(B) 174/6

(C) 174/3

(D) 174/4

**Question Id : 41**

Option Id

☐ 41001

☐ 41002

☐ 41003

☐ 41004

**Right Answer :**

175/6

**Right Option Id : 41001**

**Question 50**

If three number in the ratio 3:2:5 are such that the sum of their squares is 1862, the middle number will be:

Answer :

(A) 7

(B) 14

(C) 21

(D) 35

**Question Id : 50**

Option Id

☐ 50001

☐ 50002

☐ 50003

☐ 50004

**Right Answer :**

14

**Right Option Id : 50002**

**Question 51**

The time taken, in minutes, by Arun to cover a distance of 400 m, if he runs at a speed of 20 km/h is:

Answer :

(A)  $1\frac{1}{5}$  mins/ मिनट.

(B)  $2\frac{1}{5}$  mins/ मिनट.

(C)  $1\frac{2}{5}$  mins/ मिनट.

**Question Id : 60**

Option Id

☐ 60001

☐ 60002

☐ 60003

(D) None of these

☐ 60004

**Right Answer :**

**Right Option Id : 60001**

1  $\frac{1}{5}$  mins/ मिनट.

**Question 52**

**Question Id : 52**

If the side of a square is increased by 8cm, its area increases by 120 sq.cm., then the side of the square is:

**Answer :**

Option Id

(A) 5 cm

☐ 52001

(B) 4.5 cm

☐ 52002

(C) 3.5 cm

☐ 52003

(D) 3 cm

☐ 52004

**Right Answer :**

**Right Option Id : 52003**

3.5 cm

**Question 53**

**Question Id : 53**

If  $(64)^2 - (36)^2 = 20 \times X$ , then the value of X is:

**Answer :**

Option Id

(A) 70

☐ 53001

(B) 120

☐ 53002

(C) 180

☐ 53003

(D) 140

☐ 53004

**Right Answer :**

**Right Option Id : 53004**

140

**Question 54**

**Question Id : 54**

The H.C.F. of two numbers is 8. Which one of the following can never be their L.C.M.?

**Answer :**

Option Id

(A) 24

☐ 54001

(B) 48

☐ 54002

(C) 56

☐ 54003

(D) 60

☐ 54004

**Right Answer :**

**Right Option Id : 54004**

60

**Question 55**

**Question Id : 55**

A and B undertake to do a piece of work for Rs. 600. A alone can do it in 6 days while B alone can do it in 8 days. With the help of C, they finish it in 3 days. The share of C is:

**Answer :**

Option Id

(A) Rs.125

☐ 55001

(B) Rs. 110

☐ 55002

(C) Rs. 90

☐ 55003

(D) Rs. 75

☐ 55004

Right Answer :

Rs. 75

Right Option Id : 55004

Question 56

A is travelling at 72 km per hour on a highway while B is travelling at a speed of 25 metres per second. The difference between their speeds in metres per second is:

Answer :

(A)  $1\frac{1}{2}$  m/sec

(B) 2 m/sec

(C) 3 m/sec

(D) 5 m/sec

Question Id : 56

Option Id

☐ 56001

☐ 56002

☐ 56003

☐ 56004

Right Answer :

5 m/sec

Right Option Id : 56004

Question 57

There are five companies and we have been given the number of employees working in different companies. In the table we have also been given the percentage of male and female employees in account and research department.

Company	Employees	Account		Research	
		Male	Female	Male	Female
A	450	12	14	9	7
B	700	19	10	11	13
C	550	28	14	4	7
D	600	31	9	6	4
E	350	12	18	3	7

If 60% of the employees of company E in Account department have MBA degree and 40% of the employees of the same company in the research department have MBA degree, then how many employees have MBA degree in company E?

Answer :

(A) 92

(B) 106

(C) 77

(D) 66

Option Id

☐ 57001

☐ 57002

☐ 57003

☐ 57004

Right Answer :

77

Right Option Id : 57003

Question 58

There are five companies and we have been given the number of employees working in different companies. In the table we have also been given the percentage of male and female employees in account and research department.

Company	Employees	Account		Research	
		Male	Female	Male	Female
A	450	12	14	9	7
B	700	19	10	11	13
C	550	28	14	4	7
D	600	31	9	6	4
E	350	12	18	3	7

What is the ratio of the number of female employees of company B in account department to the number of male employees of company C in research department?

Answer :

(A) 5 : 2

(B) 35 : 11

Option Id

☐ 58001

☐ 58002

Question Id : 58

(C) 13 : 4

☐ 58003

(D) 4 : 13

☐ 58004

**Right Answer :**

35 : 11

**Right Option Id : 58002**

**Question 59**

**Question Id : 59**

There are five companies and we have been given the number of employees working in different companies. In the table we have also been given the percentage of male and female employees in account and research department.

Company	Employees	Account		Research	
		Male	Female	Male	Female
A	450	12	14	9	7
B	700	19	10	11	13
C	550	28	14	4	7
D	600	31	9	6	4
E	350	12	18	3	7

The total number of account employees of company A is approximately what percent more than the total number of research employees of company E?

**Answer :**

**Option Id**

(A) 231.21%

☐ 59001

(B) 238.54%

☐ 59002

(C) 234.29%

☐ 59003

(D) 228.67%

☐ 59004

**Right Answer :**

234.29%

**Right Option Id : 59003**

**Question 60**

**Question Id : 51**

There are five companies and we have been given the number of employees working in different companies. In the table we have also been given the percentage of male and female employees in account and research department.

Company	Employees	Account		Research	
		Male	Female	Male	Female
A	450	12	14	9	7
B	700	19	10	11	13
C	550	28	14	4	7
D	600	31	9	6	4
E	350	12	18	3	7

What is the ratio of the male employees in account department of company A and C together to the female employees of research department in company B and D together?

**Answer :**

**Option Id**

(A) 208 : 115

☐ 51001

(B) 43 : 188

☐ 51002

(C) 27 : 187

☐ 51003

(D) None of these

☐ 51004

**Right Answer :**

208 : 115

**Right Option Id : 51001**

**SECTION 3**

**Question 61**

**Question Id : 77**

The river Narmada has its source at which among the following places?

Answer :

- (A) Satpura
- (B) Brahmagiri
- (C) Amarkantak
- (D) Slopes of the Western Ghats

Option Id

- ☐ 77001
- ☐ 77002
- ☐ 77003
- ☐ 77004

**Right Answer :**

Amarkantak

**Right Option Id : 77003**

**Question 62**

\_\_\_\_\_ is an Indian classical dance form developed in Kerala.

Answer :

- (A) Rouf
- (B) Kuchipudi
- (C) Mohiniyattam
- (D) Bhavai

**Question Id : 74**

Option Id

- ☐ 74001
- ☐ 74002
- ☐ 74003
- ☐ 74004

**Right Answer :**

Mohiniyattam

**Right Option Id : 74003**

**Question 63**

Name the gas used for making vegetable ghee from vegetable oil.

Answer :

- (A) Oxygen
- (B) Hydrogen
- (C) Nitrogen
- (D) Ozone

**Question Id : 75**

Option Id

- ☐ 75001
- ☐ 75002
- ☐ 75003
- ☐ 75004

**Right Answer :**

Hydrogen

**Right Option Id : 75002**

**Question 64**

A donut shaped region of icy bodies situated beyond the orbit of Neptune planet is known as \_\_\_\_.

Answer :

- (A) Vesta
- (B) Oort Cloud
- (C) Kuiper Belt
- (D) Haumea

**Question Id : 76**

Option Id

- ☐ 76001
- ☐ 76002
- ☐ 76003
- ☐ 76004

**Right Answer :**

Kuiper Belt

**Right Option Id : 76003**

**Question 65**

Gita Gopinath was the first woman and second Indian to be featured on the "Wall of former Chief Economist" of the \_\_\_\_.

Answer :

- (A) World Trade Organisation (WTO)
- (B) International Monetary Fund (IMF)

**Question Id : 73**

Option Id

- ☐ 73001
- ☐ 73002



(C) World Bank

☐ 73003

(D) United Nations Conference on Trade and Development

☐ 73004

**Right Answer :**

International Monetary Fund (IMF)

**Right Option Id : 73002**

**Question 66**

The method of Impeachment of the President of India was adopted from which foreign country?

**Answer :**

(A) Italy

Option Id

☐ 78001

(B) France

☐ 78002

(C) U.S.A.

☐ 78003

(D) Canada

☐ 78004

**Right Answer :**

U.S.A.

**Right Option Id : 78003**

**Question 67**

Fibers from which among the following are known as "Golden Fiber"?

**Answer :**

(A) Tea

Option Id

☐ 79001

(B) Cotton

☐ 79002

(C) Jute

☐ 79003

(D) Sugarcane

☐ 79004

**Right Answer :**

Jute

**Right Option Id : 79003**

**Question 68**

Recently, India prohibited export of which among the following grain to ensure adequate availability in the Indian market?

**Answer :**

(A) Basmati Rice

Option Id

☐ 80001

(B) Wheat

☐ 80002

(C) Maize

☐ 80003

(D) Non-Basmati White Rice

☐ 80004

**Right Answer :**

Non-Basmati White Rice

**Right Option Id : 80004**

**Question 69**

Recently, India gifted INS Kirpan-a warship from the Khukri Class commissioned in 1991 to the Navy of which among the following foreign friend countries to bolster their naval capabilities?

**Answer :**

(A) Vietnam

Option Id

☐ 71001

(B) Papua New Guinea

☐ 71002

(C) Indonesia

☐ 71003

(D) Egypt

☐ 71004

**Right Answer :**  
Vietnam

**Right Option Id : 71001**

**Question 70**

**Question Id : 72**

The President of India, Smt Droupadi Murmu inaugurated 'Unmesha' – International Literature Festival and 'Utkarsh' – Festival of Folk and Tribal Performing Arts at which among the following states of India?

Answer :

Option Id

(A) Punjab

☐ 72001

(B) Maharashtra

☐ 72002

(C) Madhya Pradesh

☐ 72003

(D) Gujarat

☐ 72004

**Right Answer :**  
Madhya Pradesh

**Right Option Id : 72003**

**Question 71**

**Question Id : 69**

Mrs. Dixa took a taxi to meet her three friends for lunch. They were waiting for her outside the restaurant when she pulled up in the car. She was so excited to see her friends that she left her bag in the taxi. As the taxi pulled away, she and her friends took notice of the license plate number so they would be able to identify the car when they called the taxi company.

1: The four women seem to agree that the plate starts out with the letter J.

2: Three of them agree that the plate ends with 12L.

3: Three of them think that the second letter is X, and a different three think that the third letter is K.

The four license plate numbers below represent what each of the four women thinks she saw.

Which one is most likely the license plate number of the taxi?

Answer :

Option Id

(A) JXK 12I

☐ 69001

(B) JYK 12L

☐ 69002

(C) JXK 12L

☐ 69003

(D) JXX 12L

☐ 69004

**Right Answer :**  
JXK 12L

**Right Option Id : 69003**

**Question 72**

**Question Id : 70**

Choose the alternative which closely resembles the right side mirror image of the given word.

MALAYALAM

(1) MALAYALAM

(2) MAJAYAJAM

(3) MΛΛAYΛΛAM

(4) MΛΛAYΛΛAM

Answer :

Option Id

(A) 1

☐ 70001

(B) 2

☐ 70002

(C) 3

☐ 70003

(D) 4

☐ 70004

**Right Answer :**  
2

**Right Option Id : 70002**

**Question 73**

**Question Id : 62**

If P denotes '+', Q denotes '-', R denotes 'x' and S denotes '÷', which of the following statements is correct?

Answer :

Option Id

- (A)  $36\ 4\ 5\ 8\ 7\ 4 = 10$
- (B)  $16\ 12\ 49\ 5\ 7\ 9 = 200$
- (C)  $32\ 8\ 9 = 160\ 12\ 12$
- (D)  $8\ 8\ 8\ 8\ 8\ 8 = 57$

- ☐ 62001
- ☐ 62002
- ☐ 62003
- ☐ 62004

**Right Answer :**

$8\ 8\ 8\ 8\ 8\ 8 = 57$

**Right Option Id : 62004**

#### Question 74

**Question Id : 63**

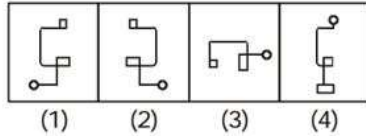
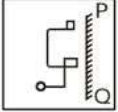
Which of the answer figures is exactly the mirror image of the question figure, when the mirror is held on the line PQ?

**Question figure :**

**Answer figures :**

प्रश्न आकृति:

उत्तर आकृति:



**Answer :**

- (A) 1
- (B) 2
- (C) 3
- (D) 4

**Option Id**

- ☐ 63001
- ☐ 63002
- ☐ 63003
- ☐ 63004

**Right Answer :**

2

**Right Option Id : 63002**

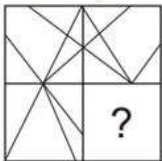
#### Question 75

**Question Id : 65**

Following Question has four alternatives, which among them completes the figure?

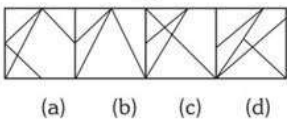
**Question Figure**

प्रश्न आकृति:



**Answer Figure**

उत्तर आकृति:



**Answer :**

- (A) (a)
- (B) (b)
- (C) (c)
- (D) (d)

**Option Id**

- ☐ 65001
- ☐ 65002
- ☐ 65003
- ☐ 65004

**Right Answer :**

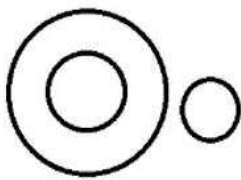
(b)

**Right Option Id : 65002**

#### Question 76

**Question Id : 64**

Which of the following diagram represents relationship among the given elements in a much logical way?



Answer :

- (A) Cup, glass, dish
- (B) Man, woman, child
- (C) Electronics, LED TV, House
- (D) Vegetable, fruit, green

Option Id

- ☐ 64001
- ☐ 64002
- ☐ 64003
- ☐ 64004

**Right Answer :**

Electronics, LED TV, House

**Right Option Id : 64003**

#### Question 77

If 'when' means 'x', 'you' means ' $\div$ ', 'come' means '-' and 'will' means '+', then what will be the value of "8 when 12 will 16 you 2 come 10"?

Answer :

- (A) 70
- (B) 80
- (C) 94
- (D) 97

Question Id : 61

Option Id

- ☐ 61001
- ☐ 61002
- ☐ 61003
- ☐ 61004

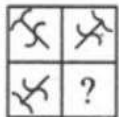
**Right Answer :**

94

**Right Option Id : 61003**

#### Question 78

Identify the figure that completes the pattern.



(X)



(1)



(2)



(3)



(4)

Answer :

- (A) 1
- (B) 2
- (C) 3
- (D) 4

Option Id

- ☐ 66001
- ☐ 66002
- ☐ 66003
- ☐ 66004

**Right Answer :**

4

**Right Option Id : 66004**

#### Question 79

Select a figure from the Answer figures which will continue the same series as established by the five Problem Figures.

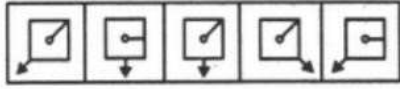
Question Id : 67

Problem Figures/समस्या आकृतियाँ



(A) (B) (C) (D) (E)

Answer Figures/उत्तर आकृतियाँ



(1) (2) (3) (4) (5)

Answer :

(A) 1

(B) 2

Option Id

☐ 67001

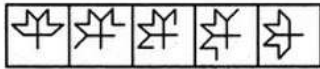
☐ 67002

Question 80

Select a figure from the Answer figures which will continue the same series as established by the five Problem Figures.

Question Id : 68

Problem Figures/समस्या आकृतियाँ



(A) (B) (C) (D) (E)

Answer Figures/उत्तर आकृतियाँ



(1) (2) (3) (4) (5)

Answer :

(A) 1

(B) 2

(C) 3

(D) 4

Option Id

☐ 68001

☐ 68002

☐ 68003

☐ 68004

Right Answer :

1

Right Option Id : 68001

SECTION 4

Question 81

Identify the antonym for the word: Modest

Answer :

(A) Unhappy

(B) Sullen

(C) Conceited

(D) Glum

Question Id : 99

Option Id

☐ 99001

☐ 99002

☐ 99003

☐ 99004

Right Answer :

Conceited

Right Option Id : 99003

Question 82

Question Id : 98

Change the following sentence into passive voice:  
They created such a fuss over a trivial matter.

Answer :

- (A) Such a fuss was being created by them over a trivial matter.
- (B) Such a fuss has been created over a trivial matter.
- (C) Such a fuss was created by them over a trivial matter.
- (D) By them such a fuss has been created over a trivial matter.

Option Id

- ☐ 98001
- ☐ 98002
- ☐ 98003
- ☐ 98004

**Right Answer :**

Such a fuss was created by them over a trivial matter.

**Right Option Id : 98003**

**Question 83**

From the options that follow, choose the correct indirect speech of the given sentence.:  
She said, "Oil floats on water."

Answer :

- (A) She says that oil has floated on water.
- (B) She said that oil floats on water.
- (C) She said that oil floated on water.
- (D) She said that oil has floated on water.

**Question Id : 97**

Option Id

- ☐ 97001
- ☐ 97002
- ☐ 97003
- ☐ 97004

**Right Answer :**

She said that oil floats on water.

**Right Option Id : 97002**

**Question 84**

Which part of the sentence is incorrect?:  
"Gandhinagar is a capital of Gujarat."

Answer :

- (A) Gandhinagar is
- (B) a capital
- (C) of Gujarat
- (D) No error

**Question Id : 96**

Option Id

- ☐ 96001
- ☐ 96002
- ☐ 96003
- ☐ 96004

**Right Answer :**

a capital

**Right Option Id : 96002**

**Question 85**

The correctly spelt word is:

Answer :

- (A) attention
- (B) atention
- (C) attension
- (D) attainton

**Question Id : 95**

Option Id

- ☐ 95001
- ☐ 95002
- ☐ 95003
- ☐ 95004

**Right Answer :**

attention

**Right Option Id : 95001**

**Question 86**

Choose the meaning of underlined idiom used in the given sentence.:  
Radhika said to Madhav, you have the floor.

**Question Id : 94**

Answer :

- (A) You have practically won.
- (B) You have full right to disagree.
- (C) You have tendency rights to property's floor.
- (D) You have full permission to speak your mind now.

Option Id

- ☐ 94001
- ☐ 94002
- ☐ 94003
- ☐ 94004

**Right Answer :**

You have full permission to speak your mind now.

**Right Option Id : 94004**

**Question 87**

Give one word substitute of: 'one who has no money'.

Answer :

- (A) Baron
- (B) Pauper
- (C) Righteous
- (D) Aristocrat

**Question Id : 93**

Option Id

- ☐ 93001
- ☐ 93002
- ☐ 93003
- ☐ 93004

**Right Answer :**

Pauper

**Right Option Id : 93002**

**Question 88**

Read the following comprehension passage and answer the following questions.

Himalayas, Nepali Himalaya, great mountain system of Asia forming a barrier between the Plateau of Tibet to the north and the alluvial plains of the Indian subcontinent to the south. The Himalayas are some of the greatest natural wonders of the world. This gigantic mountain range is about 1,500 miles long, stretching across Southeast Asia. Comprised of 30 mountains and nine of the highest peaks in the world, including Mount Everest and K2, this mountain range is full of interesting world records, culture and geographical marvels. For thousands of years the Himalayas have held a profound significance for the people of South Asia, as their literature, mythologies, and religions reflect. Since ancient times the vast glaciated heights have attracted the attention of the pilgrim mountaineers of India, who coined the Sanskrit name Himalaya—from hima ("snow") and alaya ("abode")—for that great mountain system. In contemporary times the Himalayas have offered the greatest attraction and the greatest challenge to mountaineers throughout the world. The ranges, which form the northern border of the Indian subcontinent and an almost impassable barrier between it and the lands to the north, are part of a vast mountain belt that stretches halfway around the world from North Africa to the Pacific Ocean coast of Southeast Asia.

The Sanskrit word Himalaya means adobe of what?

Answer :

- (A) Mountain
- (B) Snow
- (C) Mountain peak
- (D) Mountain range

Option Id

- ☐ 92001
- ☐ 92002
- ☐ 92003
- ☐ 92004

**Right Answer :**

Snow

**Right Option Id : 92002**

**Question 89**

Read the following comprehension passage and answer the following questions.

Himalayas, Nepali Himalaya, great mountain system of Asia forming a barrier between the Plateau of Tibet to the north and the alluvial plains of the Indian subcontinent to the south. The Himalayas are some of the greatest natural wonders of the world. This gigantic mountain range is about 1,500 miles long, stretching across Southeast Asia. Comprised of 30 mountains and nine of the highest peaks in the world, including Mount Everest and K2, this mountain range is full of interesting world records, culture and geographical marvels. For thousands of years the Himalayas have held a profound significance for the people of South Asia, as their literature, mythologies, and religions reflect. Since ancient times the vast glaciated heights have attracted the attention of the pilgrim mountaineers of India, who coined the Sanskrit name Himalaya—from hima ("snow") and alaya ("abode")—for that great mountain system. In contemporary times the Himalayas have offered the greatest attraction and the greatest challenge to mountaineers throughout the world. The ranges, which form the northern border of the Indian subcontinent and an almost impassable barrier between it and the lands to the north, are part of a vast mountain belt that stretches halfway around the world from North Africa to the Pacific Ocean coast of Southeast Asia.

About how many miles long is the gigantic mountain range of Himalaya?

Answer :

Option Id

- (A) 1,500 miles ☐ 91001
- (B) 1,000 miles ☐ 91002
- (C) 2,400 miles ☐ 91003
- (D) 3,000 miles ☐ 91004

**Right Answer :**

1,500 miles

**Right Option Id : 91001**

**Question 90**

**Question Id : 81**

Read the following comprehension passage and answer the following questions.

Himalayas, Nepali Himalaya, great mountain system of Asia forming a barrier between the Plateau of Tibet to the north and the alluvial plains of the Indian subcontinent to the south. The Himalayas are some of the greatest natural wonders of the world. This gigantic mountain range is about 1,500 miles long, stretching across Southeast Asia. Comprised of 30 mountains and nine of the highest peaks in the world, including Mount Everest and K2, this mountain range is full of interesting world records, culture and geographical marvels. For thousands of years the Himalayas have held a profound significance for the people of South Asia, as their literature, mythologies, and religions reflect. Since ancient times the vast glaciated heights have attracted the attention of the pilgrim mountaineers of India, who coined the Sanskrit name Himalaya—from hima ("snow") and alaya ("abode")—for that great mountain system. In contemporary times the Himalayas have offered the greatest attraction and the greatest challenge to mountaineers throughout the world. The ranges, which form the northern border of the Indian subcontinent and an almost impassable barrier between it and the lands to the north, are part of a vast mountain belt that stretches halfway around the world from North Africa to the Pacific Ocean coast of Southeast Asia.

The Himalaya range consists how many highest peaks from all around the world?

**Answer :**

**Option Id**

- (A) 30 ☐ 81001
- (B) 2 ☐ 81002
- (C) 9 ☐ 81003
- (D) 15 ☐ 81004

**Right Answer :**

9

**Right Option Id : 81003**

**Question 91**

**Question Id : 89**

Which statement is incorrect about a compound?

**Answer :**

**Option Id**

- (A) The constituents of a compound cannot be separated by a physical method. ☐ 89001
- (B) Elements in a compound always present in a definite proportion by mass. ☐ 89002
- (C) Compound is homogenous in nature. ☐ 89003
- (D) The constituents retain their identity in a compound. ☐ 89004

**Right Answer :**

The constituents retain their identity in a compound.

**Right Option Id : 89004**

**Question 92**

**Question Id : 88**

The structure of water (H<sub>2</sub>O) molecule resembles with which of the following?

**Answer :**

**Option Id**

- (A) Structure of CH<sub>4</sub> molecule ☐ 88001
- (B) Structure of CO<sub>2</sub> molecule ☐ 88002
- (C) Structure of SO<sub>2</sub> molecule ☐ 88003
- (D) Structure of BeH<sub>2</sub> molecule ☐ 88004

**Right Answer :**

Structure of SO<sub>2</sub> molecule

**Right Option Id : 88003**



**Question 93**

Rainbow is formed due to a combination of

Answer :

- (A) refraction and absorption
- (B) dispersion and diffraction
- (C) refraction and scattering
- (D) dispersion and total internal reflection

**Right Answer :**

dispersion and total internal reflection

**Question Id : 87**

Option Id

- ☐ 87001
- ☐ 87002
- ☐ 87003
- ☐ 87004

**Right Option Id : 87004**

**Question 94**

Which among the following is an isoelectronic pair?

Answer :

- (A)  $\text{NH}_3$  and  $\text{CH}_3^+$
- (B)  $\text{NH}_3$  and  $\text{CH}_3^-$
- (C) CO and  $\text{CH}_4$
- (D)  $\text{NH}_4^+$  and  $\text{CH}_4$

**Right Answer :**

$\text{NH}_3$  and  $\text{CH}_3^-$

**Question Id : 86**

Option Id

- ☐ 86001
- ☐ 86002
- ☐ 86003
- ☐ 86004

**Right Option Id : 86002**

**Question 95**

The electric fuse wire has:

Answer :

- (A) high melting point and high resistivity
- (B) low melting point and high resistivity
- (C) high melting point and low resistivity
- (D) low melting point and low resistivity

**Right Answer :**

low melting point and high resistivity

**Question Id : 85**

Option Id

- ☐ 85001
- ☐ 85002
- ☐ 85003
- ☐ 85004

**Right Option Id : 85002**

**Question 96**

Transmission of light signal through optical fibres is possible due to?

Answer :

- (A) Interference
- (B) Total internal reflection
- (C) Dispersion
- (D) Scattering

**Right Answer :**

Total internal reflection

**Question Id : 84**

Option Id

- ☐ 84001
- ☐ 84002
- ☐ 84003
- ☐ 84004

**Right Option Id : 84002**

**Question 97**

When we change loud sound to feeble sound, we decrease its -

Answer :

**Question Id : 83**

Option Id

(A) wavelength

☐ 83001

(B) frequency

☐ 83002

(C) velocity

☐ 83003

(D) amplitude

☐ 83004

**Right Answer :**

amplitude

**Right Option Id : 83004**

**Question 98**

Dwarfism is caused due to-

**Answer :**

(A) hyper secretion of thyroxin

(B) hypo secretion of growth hormone

(C) hypo secretion of adrenaline

(D) hyper secretion of growth hormone

**Question Id : 82**

Option Id

☐ 82001

☐ 82002

☐ 82003

☐ 82004

**Right Answer :**

hypo secretion of growth hormone

**Right Option Id : 82002**

**Question 99**

The stomata open or close due to change in the \_\_\_\_.

**Answer :**

(A) protein composition of cells

(B) amount of water in cells

(C) position of nucleus in the cells

(D) temperature of cells

**Question Id : 90**

Option Id

☐ 90001

☐ 90002

☐ 90003

☐ 90004

**Right Answer :**

amount of water in cells

**Right Option Id : 90002**

**Question 100**

Choose the correct statement:-

**Answer :**

(A) Dance, swimming, drawing are acquired trait and can pass from one generation to another generation

(B) Colour of iris of eye is an inherited trait and cannot pass from one generation to another generation

(C) Dance, swimming and drawing are inherited traits and can pass from one generation to another generation

(D) Dance, swimming and drawing are acquired trait and cannot pass from one generation to another generation

**Question Id : 100**

Option Id

☐ 100001

☐ 100002

☐ 100003

☐ 100004

**Right Answer :**

Dance, swimming and drawing are acquired trait and cannot pass from one generation to another generation

**Right Option Id : 100004**