

QUESTION PAPER
Technical Assistant (Para Medical) - Radiographer [SHIFT - 1]

Exam Date : 06/09/2023

Time : 09:30 AM - 12:30 PM

SECTION 1

Question 1

S. I. unit for Radioactivity is ____.

Answer :

- (A) Air Kerma
- (B) Gray
- (C) Sievert
- (D) Becquerel

Right Answer :
Becquerel

Question Id : 1

Option Id

- ☐ 1001
- ☐ 1002
- ☐ 1003
- ☐ 1004

Right Option Id : 1004

Question 2

ISOBARS are:

Answer :

- (A) same atomic numbers & atomic weight
- (B) same atomic number but different number of K-shell electrons
- (C) same atomic weight but different number of L-shell electrons
- (D) same atomic mass but different atomic numbers

Right Answer :
same atomic mass but different atomic numbers

Question Id : 24

Option Id

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

Right Option Id : 24004

Question 3

Which of the following is paramagnetic substance?

Answer :

- (A) Glass
- (B) Gadolinium
- (C) Nickel
- (D) Water

Right Answer :
Gadolinium

Question Id : 25

Option Id

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

Right Option Id : 25002

Question 4

Transformer with turns ratio < 1 is called?

Answer :

- (A) step-up transformer
- (B) step-down transformer
- (C) step-equal transformer
- (D) step-step transformer

Question Id : 26

Option Id

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

Right Answer :
step-down transformer

Right Option Id : 26002

Question 5

Radiation quality refers to which of the following?

Answer :

- (A) intensity of X-ray beam
- (B) penetrability of X-ray beam
- (C) cost of X-ray beam
- (D) colour of X-ray beam

Right Answer :
penetrability of X-ray beam

Question Id : 27

Option Id

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

Right Option Id : 27002

Question 6

Which of the following is used as target material in X-ray tube?

Answer :

- (A) Sodium
- (B) Aluminium
- (C) Copper
- (D) Tungsten

Right Answer :
Tungsten

Question Id : 28

Option Id

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

Right Option Id : 28004

Question 7

The characteristic curve of a radiographic screen-film image receptor is ____.

Answer :

- (A) the graphic relationship between optical density (OD) and radiation exposure
- (B) the graphic relationship between optical density (OD) and film density
- (C) the graphic relationship between optical density (OD) and film magnification
- (D) the graphic relationship between optical density (OD) and radiation storage

Right Answer :
the graphic relationship between optical density (OD) and radiation exposure

Question Id : 32

Option Id

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

Right Option Id : 32001

Question 8

Which is a beam restrictor?

Answer :

- (A) Aperture diaphragm
- (B) Brick
- (C) Film
- (D) Screen

Right Answer :
Aperture diaphragm

Question Id : 30

Option Id

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

Right Option Id : 30001

Question 9

Scatter radiation is reduced by using which of the following?

Answer :

- (A) Transformer
- (B) Generator
- (C) Photo timers
- (D) Grids

Right Answer :
Grids

Question Id : 31

Option Id

- ☐ 31001
- ☐ 31002
- ☐ 31003
- ☐ 31004

Right Option Id : 31004

Question 10

Base of radiographic film is made of which among the following substances?

Answer :

- (A) Polyester
- (B) Gelatin
- (C) Silver bromide
- (D) Tungsten

Right Answer :
Polyester

Question Id : 23

Option Id

- ☐ 23001
- ☐ 23002
- ☐ 23003
- ☐ 23004

Right Option Id : 23001

Question 11

Production of visible image from latent image is called ____.

Answer :

- (A) Wetting
- (B) Developing
- (C) Fixing
- (D) Drying

Right Answer :
Developing

Question Id : 33

Option Id

- ☐ 33001
- ☐ 33002
- ☐ 33003
- ☐ 33004

Right Option Id : 33002

Question 12

Radiolucent pathology is used for which of the following?

Answer :

- (A) Emphysema
- (B) Ascites
- (C) Pleural effusion
- (D) Pneumonia

Right Answer :
Emphysema

Question Id : 35

Option Id

- ☐ 35001
- ☐ 35002
- ☐ 35003
- ☐ 35004

Right Option Id : 35001

Question 13

Transfer of images and patient's reports to remote sites is known by which among the following names?

Answer :

- (A) Telecommunication

Question Id : 40

Option Id

- ☐ 40001

(B) Telecom

☐ 40002

(C) Teletherapy

☐ 40003

(D) Teleradiology

☐ 40004

Right Answer :

Teleradiology

Right Option Id : 40004

Question 14

Name of Auditory ossicles are:

Answer :

(A) Malleus, incus, shaves

(B) Molar, inert, shaves

(C) Molar, inert

(D) Malleus, incus, stapes

Question Id : 39

Option Id

☐ 39001

☐ 39002

☐ 39003

☐ 39004

Right Answer :

Malleus, incus, stapes

Right Option Id : 39004

Question 15

Which of the following are Components of Quality control program?

Answer :

(A) Purchasing, Selling

(B) Acceptance testing, Routine performance and monitoring, Maintenance

(C) Patient's advice, Attendant's advice

(D) Research, Review and development

Question Id : 38

Option Id

☐ 38001

☐ 38002

☐ 38003

☐ 38004

Right Answer :

Acceptance testing, Routine performance and monitoring, Maintenance

Right Option Id : 38002

Question 16

Total number of carpal bones in human body are __.

Answer :

(A) 8

(B) 14

(C) 16

(D) 12

Question Id : 34

Option Id

☐ 34001

☐ 34002

☐ 34003

☐ 34004

Right Answer :

16

Right Option Id : 34003

Question 17

CT number of zero indicates :

Answer :

(A) Air

(B) Water

(C) Blood

(D) Bone

Question Id : 36

Option Id

☐ 36001

☐ 36002

☐ 36003

Right Answer :

Water

Right Option Id : 36002

Question 18

DICOM stands for which of the following?

Answer :

- (A) Delicate imaging and comprehension
- (B) Dual imaging and comprehension
- (C) Digital imaging and communication
- (D) Direct imaging and communication

Question Id : 37

Option Id

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

Right Answer :

Digital imaging and communication

Right Option Id : 37003

Question 19

Radiation induced cataract occurs in which part of a human eye?

Answer :

- (A) Anterior pole of lens
- (B) Posterior pole of lens
- (C) Superior pole of lens
- (D) Inferior pole of lens

Question Id : 29

Option Id

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

Right Answer :

Posterior pole of lens

Right Option Id : 29002

Question 20

Skyline view in radiology is used for which of the following?

Answer :

- (A) Clavicle
- (B) Mandible
- (C) Patella
- (D) Calcaneus

Question Id : 22

Option Id

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

Right Answer :

Patella

Right Option Id : 22003

Question 21

The Swimmers view in X-ray is done for which of the following?

Answer :

- (A) Cervical spine
- (B) Dorsal spine
- (C) Lumbar spine
- (D) Sacral spine

Question Id : 2

Option Id

- ☐ 2001
- ☐ 2002
- ☐ 2003
- ☐ 2004

Right Answer :

Cervical spine

Right Option Id : 2001

Question 22

Which of the following is largely used as radiation detector in optically stimulated luminescence dosimetry?

Answer :

- (A) LiF
- (B) NaCl
- (C) Al_2O_3
- (D) KI

Right Answer :

Al_2O_3

Question Id : 20

Option Id

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

Right Option Id : 20003

Question 23

Most radiosensitive period during pregnancy is ____.

Answer :

- (A) 1st trimester
- (B) 2nd trimester
- (C) 3rd trimester
- (D) 4th trimester

Right Answer :

1st trimester

Question Id : 3

Option Id

- ☐ 3001
- ☐ 3002
- ☐ 3003
- ☐ 3004

Right Option Id : 3001

Question 24

Identify the main stays of cerebral imaging.

Answer :

- (A) Magnetic Resonance Imaging (MRI) and Cerebral Angiogram
- (B) Computed Tomography (CT) and X Ray
- (C) Magnetic Resonance Imaging (MRI) and X Ray
- (D) Computed Tomography (CT) and Magnetic Resonance Imaging (MRI)

Right Answer :

Computed Tomography (CT) and Magnetic Resonance Imaging (MRI)

Question Id : 21

Option Id

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

Right Option Id : 21004

Question 25

Select the most important requirement for interpretation of skull radiograph.

Answer :

- (A) colour
- (B) size
- (C) fracture
- (D) weight

Right Answer :

fracture

Question Id : 4

Option Id

- ☐ 4001
- ☐ 4002
- ☐ 4003
- ☐ 4004

Right Option Id : 4003

Question 26

Identify the following plane divides the body into an anterior part and a posterior part.

Answer :

Question Id : 5

Option Id

(A) Median sagittal plane

☐ 5001

(B) Transverse

☐ 5002

(C) Axial plane

☐ 5003

(D) Coronal plane

☐ 5004

Right Answer :

Coronal plane

Right Option Id : 5004

Question 27

Radiographic film density is defined as the amount of ___ on the processed radiograph.

Answer :

(A) whiteness

Option Id

☐ 6001

(B) blackness

☐ 6002

(C) colourless

☐ 6003

(D) redness

☐ 6004

Right Answer :

blackness

Right Option Id : 6002

Question 28

Name the filter that provides improved visualization of soft tissues on the superior aspect of the shoulder and upper thoracic spine.

Answer :

(A) Wedge

Option Id

☐ 7001

(B) Trough

☐ 7002

(C) Boomerang

☐ 7003

(D) others

☐ 7004

Right Answer :

Boomerang

Right Option Id : 7003

Question 29

What is the optimal size of a grid generally used for radiography of any body part?

Answer :

(A) thicker than 40 cm

Option Id

☐ 8001

(B) thicker than 30 cm

☐ 8002

(C) thicker than 20 cm

☐ 8003

(D) thicker than 10 cm

☐ 8004

Right Answer :

thicker than 10 cm

Right Option Id : 8004

Question 30

Beneficence in radiation technology means:

Answer :

(A) the active doing of good

Option Id

☐ 9001

(B) truth-telling

☐ 9002

(C) independent learning

(D) Justice

☐ 9003

☐ 9004

Right Answer :

the active doing of good

Right Option Id : 9001

Question 31

Who discovered X-rays and when?

Answer :

(A) Wilhelm Roentgen in 1897

(B) Wilhelm Roentgen in 1895

(C) William Crookes in 1897

(D) William Crookes in 1895

Question Id : 10

Option Id

☐ 10001

☐ 10002

☐ 10003

☐ 10004

Right Answer :

Wilhelm Roentgen in 1895

Right Option Id : 10002

Question 32

The percentage of voltage ripple produced by 3 phase 12 pulse power is :

Answer :

(A) 100

(B) 14

(C) 4

(D) 1

Question Id : 11

Option Id

☐ 11001

☐ 11002

☐ 11003

☐ 11004

Right Answer :

4

Right Option Id : 11003

Question 33

What is developmental anatomy?

Answer :

(A) study of the prenatal developmental changes in an individual

(B) study of structures with the aid of a microscope.

(C) the study of deeper parts of the body in relation to the skin surface

(D) study of the bones and deeper organs by plain and contrast radiography by ultrasound and computerised tomographic (CT) scans

Question Id : 12

Option Id

☐ 12001

☐ 12002

☐ 12003

☐ 12004

Right Answer :

study of the prenatal developmental changes in an individual

Right Option Id : 12001

Question 34

The intracellular component of body water account for about how much percentage of body weight?

Answer :

(A) 40

(B) 20

(C) 60

(D) 80

Question Id : 13

Option Id

☐ 13001

☐ 13002

☐ 13003

☐ 13004

Right Answer :

40

Right Option Id : 13001

Question 35

Most commonly used material in TLD batch is :

Answer :

- (A) NaCl
- (B) PbS
- (C) KI
- (D) LiF

Question Id : 14

Option Id

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

Right Answer :

LiF

Right Option Id : 14004

Question 36

Which of the following is pathological gas shadow seen in erect abdominal X-ray?

Answer :

- (A) Gas shadow in the fundus of stomach
- (B) Gas shadow in the ascending colon
- (C) Gas shadow in the rectum
- (D) Gas shadow under the left dome of diaphragm

Question Id : 15

Option Id

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

Right Answer :

Gas shadow under the left dome of diaphragm

Right Option Id : 15004

Question 37

One of the phase contrast imaging methods, which is very good for synchrotron use and high-resolution studies, it is known by which name?

Answer :

- (A) Analyzer based imaging
- (B) Grating based imaging
- (C) Crystal interferometer
- (D) Propagation based imaging

Question Id : 16

Option Id

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

Right Answer :

Crystal interferometer

Right Option Id : 16003

Question 38

Which of the following is Duane-Hunt formula to obtain the X-ray with minimum wavelength?

Answer :

- (A) $\lambda_{min} = \frac{hc}{Ve}$
- (B) $\lambda_{min} = \frac{hc}{e}$
- (C) $\lambda_{min} = \frac{hc}{V}$
- (D) $\lambda_{min} = \frac{Ve}{hc}$

Question Id : 17

Option Id

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

Right Answer :

Right Option Id : 17001

$$\lambda_{min} = \frac{hc}{E}$$

Question 39

Question Id : 18

SID is the one of primary controlling factors of distortion, it stands for which of the following?

Answer :

Option Id

- (A) Small Image Receptor Distance
- (B) Soft Image Receptor Distance
- (C) Strong Image Receptor Distance
- (D) Source Image Receptor Distance

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

Right Answer :

Right Option Id : 18004

Source Image Receptor Distance

Question 40

Question Id : 19

Transformation of heat during the phase change from solid to liquid or from liquid to solid is called?

Answer :

Option Id

- (A) heat of Vaporisation
- (B) heat of fusion
- (C) latent heat
- (D) specific heat

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

Right Answer :

Right Option Id : 19003

latent heat

SECTION 2

Question 41

Question Id : 42

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 :

Option Id

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

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

Right Answer :

Right Option Id : 42004

170 cm

Question 42

Question Id : 43

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

Answer :

Option Id

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

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

Right Answer :

Right Option Id : 43004

548

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
- (B) 40
- (C) 35
- (D) 30

Right Answer :
35

Question Id : 44

Option Id

- ☐ 44001
- ☐ 44002
- ☐ 44003
- ☐ 44004

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

Right Answer :
Rs. 1000

Question Id : 45

Option Id

- ☐ 45001
- ☐ 45002
- ☐ 45003
- ☐ 45004

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

Right Answer :
10 km/hr

Question Id : 46

Option Id

- ☐ 46001
- ☐ 46002
- ☐ 46003
- ☐ 46004

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

Right Answer :
2.25 km

Question Id : 47

Option Id

- ☐ 47001
- ☐ 47002
- ☐ 47003
- ☐ 47004

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?

Question Id : 48

Answer :

(A) 8%

(B) 6%

(C) 4%

(D) 7%

Option Id

☐ 48001

☐ 48002

☐ 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 :

Question Id : 60

Option Id

(A) $1\frac{1}{5}$ mins/ मिनट.

☐ 60001

(B) $2\frac{1}{5}$ mins/ मिनट.

☐ 60002

(C) $1\frac{2}{5}$ mins/ मिनट.

☐ 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

(C) Rs. 90

(D) Rs. 75

☐ 55002

☐ 55003

☐ 55004

Right Answer :

Rs. 75

Right Option Id : 55004

Question 56

Question Id : 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 :

Option Id

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

☐ 56001

(B) 2 m/sec

☐ 56002

(C) 3 m/sec

☐ 56003

(D) 5 m/sec

☐ 56004

Right Answer :

5 m/sec

Right Option Id : 56004

Question 57

Question Id : 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 :

Option Id

(A) 92

☐ 57001

(B) 106

☐ 57002

(C) 77

☐ 57003

(D) 66

☐ 57004

Right Answer :

77

Right Option Id : 57003

Question 58

Question Id : 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

(C) 13 : 4

(D) 4 : 13

Option Id

☐ 58001

☐ 58002

☐ 58003

☐ 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 :

(A) 231.21%

(B) 238.54%

(C) 234.29%

(D) 228.67%

Option Id

☐ 59001

☐ 59002

☐ 59003

☐ 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 :

(A) 208 : 115

(B) 43 : 188

(C) 27 : 187

(D) None of these

Option Id

☐ 51001

☐ 51002

☐ 51003

☐ 51004

Right Answer :

208 : 115

Right Option Id : 51001

SECTION 3

Question 61

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

Right Answer :

Amarkantak

Question Id : 77

Option Id

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

Right Option Id : 77003

Question 62

_____ is an Indian classical dance form developed in Kerala.

Answer :

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

Right Answer :

Mohiniyattam

Question Id : 74

Option Id

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

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

Right Answer :

Hydrogen

Question Id : 75

Option Id

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

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

Right Answer :

Kuiper Belt

Question Id : 76

Option Id

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

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)
- (C) World Bank
- (D) United Nations Conference on Trade and Development

Right Answer :

International Monetary Fund (IMF)

Question Id : 73

Option Id

- ☐ 73001
- ☐ 73002
- ☐ 73003
- ☐ 73004

Right Option Id : 73002

Question 66

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

Answer :

- (A) Italy
- (B) France
- (C) U.S.A.
- (D) Canada

Right Answer :

U.S.A.

Question Id : 78

Option Id

- ☐ 78001
- ☐ 78002
- ☐ 78003
- ☐ 78004

Right Option Id : 78003

Question 67

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

Answer :

- (A) Tea
- (B) Cotton
- (C) Jute
- (D) Sugarcane

Right Answer :

Jute

Question Id : 79

Option Id

- ☐ 79001
- ☐ 79002
- ☐ 79003
- ☐ 79004

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
- (B) Wheat
- (C) Maize
- (D) Non-Basmati White Rice

Right Answer :

Non-Basmati White Rice

Question Id : 80

Option Id

- ☐ 80001
- ☐ 80002
- ☐ 80003
- ☐ 80004

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

Question Id : 71

Option Id

(B) Papua New Guinea

☐ 71001

(C) Indonesia

☐ 71002

(D) Egypt

☐ 71003

☐ 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) MALAYALAM

(4) MAGAYAGAM

Answer :

Option Id

(A) 1

☐ 70001

(B) 2

☐ 70002

(C) 3

☐ 70003

(D) 4

☐ 70004

Right Answer :

2

Right Option Id : 70002

Question 73

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

Answer :

(A) $36 \div 4 \times 5 \times 8 \times 7 \times 4 = 10$

(B) $16 \times 12 \times 49 \times 5 \times 7 \times 9 = 200$

(C) $32 \times 8 \times 9 = 160 \times 12 \times 12$

(D) $8 \times 8 \times 8 \times 8 \times 8 = 57$

Right Answer :

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

Question Id : 62

Option Id

☐ 62001

☐ 62002

☐ 62003

☐ 62004

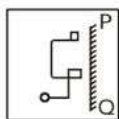
Right Option Id : 62004

Question 74

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

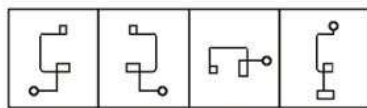
Question figure :

प्रश्न आकृति:



Answer figures :

उत्तर आकृति:



(1)

(2)

(3)

(4)

Answer :

(A) 1

(B) 2

(C) 3

(D) 4

Option Id

☐ 63001

☐ 63002

☐ 63003

☐ 63004

Right Answer :

2

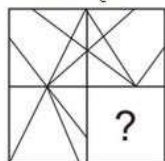
Right Option Id : 63002

Question 75

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

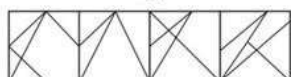
Question Figure

प्रश्न आकृति:



Answer Figure

उत्तर आकृति:



(a)

(b)

(c)

(d)

Answer :

(A) (a)

(B) (b)

(C) (c)

(D) (d)

Option Id

☐ 65001

☐ 65002

☐ 65003

☐ 65004

Question Id : 65

Right Answer :

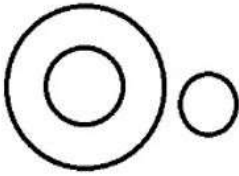
(b)

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

Question Id : 61

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

Option Id

☐ 61001

☐ 61002

☐ 61003

☐ 61004

Right Answer :

94

Right Option Id : 61003

Question 78

Question Id : 66

Identify the figure that completes the pattern.



Answer :

(A) 1

(B) 2

(C) 3

(D) 4

Option Id

☐ 66001

☐ 66002

☐ 66003

☐ 66004

Right Answer :

4

Right Option Id : 66004

Question 79

Question Id : 67

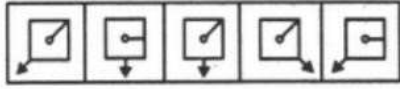
Select a figure from the Answer figures which will continue the same series as established by the five Problem Figures.

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

☐ 67001

☐ 67002

☐ 67003

☐ 67004

Right Answer :

3

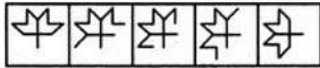
Right Option Id : 67003

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

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.

Question Id : 98

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**Question Id : 94**

Choose the meaning of underlined idiom used in the given sentence.:

Radhika said to Madhav, you have the floor.

Answer :

Option Id

(A) You have practically won.

☐ 94001

(B) You have full right to disagree.

☐ 94002

(C) You have tendency rights to property's floor.

☐ 94003

(D) You have full permission to speak your mind now.

☐ 94004

Right Answer :

Right Option Id : 94004

You have full permission to speak your mind now.

Question 87**Question Id : 93**

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

Answer :

Option Id

(A) Baron

☐ 93001

(B) Pauper

☐ 93002

(C) Righteous

☐ 93003

(D) Aristocrat

☐ 93004

Right Answer :

Right Option Id : 93002

Pauper

Question 88**Question Id : 92**

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 :

Option Id

(A) Mountain

☐ 92001

(B) Snow

☐ 92002

(C) Mountain peak

☐ 92003

(D) Mountain range

☐ 92004

Right Answer :

Right Option Id : 92002

Snow

Question 89**Question Id : 91**

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 :

- (A) 1,500 miles
- (B) 1,000 miles
- (C) 2,400 miles
- (D) 3,000 miles

Option Id

- ☐ 91001
- ☐ 91002
- ☐ 91003
- ☐ 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 :

- (A) 30
- (B) 2
- (C) 9
- (D) 15

Option Id

- ☐ 81001
- ☐ 81002
- ☐ 81003
- ☐ 81004

Right Answer :

9

Right Option Id : 81003

Question 91

Question Id : 89

Which statement is incorrect about a compound?

Answer :

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

Option Id

- ☐ 89001
- ☐ 89002
- ☐ 89003
- ☐ 89004

Right Answer :

The constituents retain their identity in a compound.

Right Option Id : 89004

Question 92

Question Id : 88

The structure of water (H₂O) molecule resembles with which of the following?

Answer :

- (A) Structure of CH₄ molecule
- (B) Structure of CO₂ molecule
- (C) Structure of SO₂ molecule
- (D) Structure of BeH₂ molecule

Option Id

- ☐ 88001
- ☐ 88002
- ☐ 88003

Right Answer :Structure of SO₂ 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

Question Id : 87

Option Id

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

Right Answer :

dispersion and total internal reflection

Right Option Id : 87004**Question 94**

Which among the following is an isoelectronic pair?

Answer :

- (A) NH₃ and CH₃⁺
- (B) NH₃ and CH₃⁻
- (C) CO and CH₄
- (D) NH₄⁺ and CH₄

Question Id : 86

Option Id

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

Marks Given to All Candidates

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

Question Id : 85

Option Id

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

Right Answer :

low melting point and high resistivity

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

Question Id : 84

Option Id

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

Right Answer :

Total internal reflection

Right Option Id : 84002

Question 97

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

Answer :

- (A) wavelength
- (B) frequency
- (C) velocity
- (D) amplitude

Right Answer :

amplitude

Question Id : 83

Option Id

- ☐ 83001
- ☐ 83002
- ☐ 83003
- ☐ 83004

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

Right Answer :

hypo secretion of growth hormone

Question Id : 82

Option Id

- ☐ 82001
- ☐ 82002
- ☐ 82003
- ☐ 82004

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

Right Answer :

amount of water in cells

Question Id : 90

Option Id

- ☐ 90001
- ☐ 90002
- ☐ 90003
- ☐ 90004

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

Right Answer :

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 Option Id : 100004