SSC CPO 13th Dec 2019 Shift-1
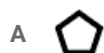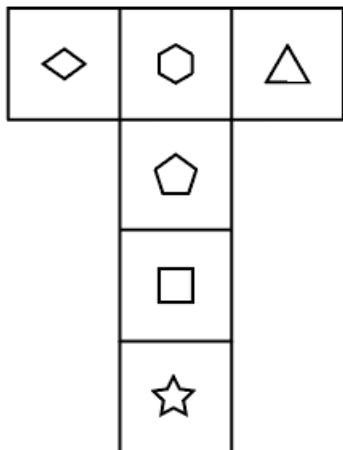
General Intelligence and Reasoning

Instructions

For the following questions answer them individually

Question 1

A cube is made by folding the given sheet. In the cube so formed, what would be the symbol on the opposite side of

A ⬠

B ⬡

C ◻

D ◇

Answer: A

Question 2

Select the number that can replace the question mark (?) in the following series.
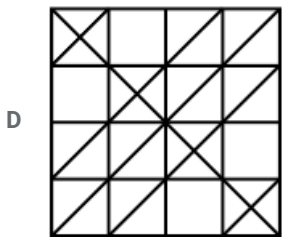**15, 18, 13, 20, 11, ?**

A 22

B 20

C 25

D 23

Answer: A

Question 3

Select the option in which the given figure is embedded (rotation is NOT allowed).

A

B

C

D
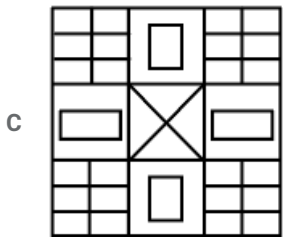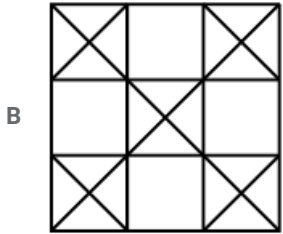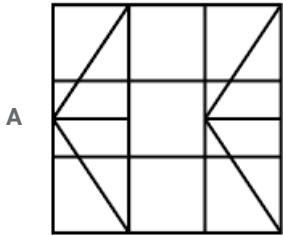
Answer: D

Question 4

Which two signs need to be interchanged to make the following equation correct?
$48 - 8 \div 4 + 5 \times 6 = 32$

A $\times$ and $+$

B $\div$ and $-$

C $\times$ and $\div$

D $\div$ and $+$

Answer: B

Question 5

Select the correct mirror image of the given combination when the mirror is held at the right side.

JKWM691F

A

B ꓘMⱮⱮ6ꓱIꟻ

C ꟻI6ⱮMWꓘ

D ᴸKWM69IꟻF

Answer: C

Question 6

Select the option that is embedded in the given figure (rotation is NOT allowed).

A

B

C

D

Answer: B

Question 7

Select the number that can replace the question mark (?) in the following series.
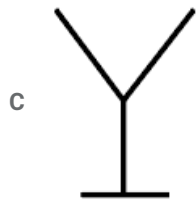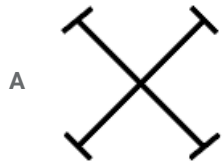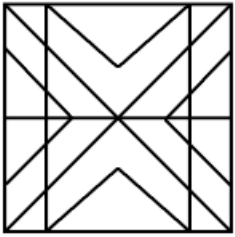3, 12, 36, 80, ?, 248

A   149

B   146

C   147

D   152

Answer: A

Question 8

If '+' means '−', '−' means '×', '×' means '÷' and '÷' means '+', then what will be the value of the following expression?

$25 - 2 + 32 \times 8 \div 4$

A 51

B 45

C 55

D 50

Answer: D

Question 9

The data of a company's employees is shown by the given Venn diagram. The circle represents 'engineers', the triangle represents computer experts', the rectangle represents 'MBAs' and the pentagon represents 'females'. The numbers given in the diagram represent the number of persons of that particular category.
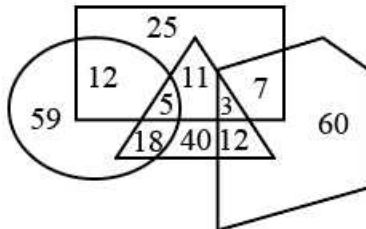
How many of the employees are MBAs, and how many male MBAs are computer experts but NOT engineers, respectively?

A 44.11

B 63,11

C 25,18

D 44,16

Answer: B

Question 10

Four number-pairs are given out of which three are alike in a certain way and one is different. Select the number-pair that is different from the rest.

A 18 : 306

B 23 : 552

C 13 : 182

D 25 : 650

Answer: A

Question 11

Select the option that is related to the third number in the same way as the second number is related to the first number.
184 : 207 :: 208 : ?

A 234

B 344

C 235

D 237

   Answer: A

Question 12

Select the letter-cluster that can replace the question mark (?) in the following series.
EFY, FID, GLI, HON, IRS, ?

A KUX

B KQY

C JUX

D JVY

   Answer: C

Question 13

Select the option that gives a meaningful sequence of the given words.
1. Billion
2. Trillion
3. Hundred
4. Million
5. Thousand

A 2, 1, 5, 3, 4

B 3, 1, 5, 2, 4

C 3, 1, 4, 5, 2

D 2, 1, 4, 5, 3

   Answer: D

Question 14

Three of the following four words are alike in a certain way and one is different. Select the odd word.

A Gladsome

B Morose

C Joyous

Question 15

'Quarrel' is related to 'War' in the same way as 'Error' is related to '_____

A Mend

B Defect

C Blunder

D Flaw

Answer: C

Question 16

Select the option that can replace the question mark (?) in the following series.

A

B

C

D
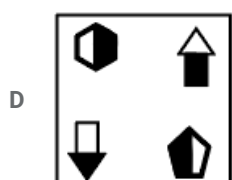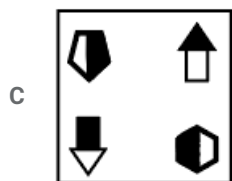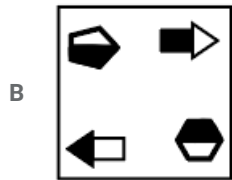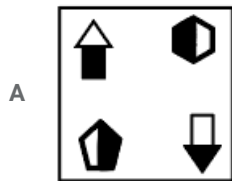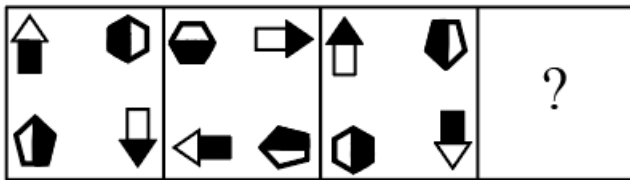
Answer: B

Question 17

Three of the following four letter-clusters are alike in a certain way and one is different.
Select the odd one.

A GKR

B QIZ

C HNU

D MKX

    Answer: C

Question 18

Three of the following four numbers are alike in a certain way and one is different. Select the number that is different from the rest.

A 90

B 165

C 195

D 170

    Answer: D

Question 19

Select the Answer Figure that is the correct mirror image of the given figure when the mirror is held at the right side.
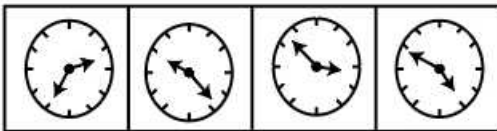
A B

B C

C A

D D

    Answer: D

Question 20

Seven friends are sitting in a row. Jyoti is to the immediate right of Priya and to the immediate left of Trisha. Aditi is to the immediate right of Akshaya. Aditi and Priya have one person between them. Trisha and Diksha have two persons between them. Anika and Priya have two persons between them. Who is at the extreme right end?

A   Anika

B   Akshaya

C   Jyoti

D   Trisha

   Answer: A

Question 21

Four number-pairs are given out of which three are alike in a certain way and one is different. Select the number-pair that is different from the rest

A   5 : 7

B   17 : 23

C   13 : 19

D   31 : 41

   Answer: A

Question 22

Select the option that is related to the third word in the same way as the second word is related to the first word.
Son : Daughter :: Stag : ?

A   Fawn

B   Doe

C   Moose

D   Buck

   Answer: D

Question 23

Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

Statements:
I. Some chocolates are toffees.
II. All toffees are eclairs.

Conclusions:
I. Some eclairs are toffees.
II. Some eclairs are chocolates.

A   Both conclusions I and II follow

B   Only conclusion II follows.

C   Only conclusion I follows.

D   Neither conclusion I nor II follows.

Question 24

Select the Venn diagram that represents the correct relationship between the following classes:
Singers, Homo Sapiens, Cricketers
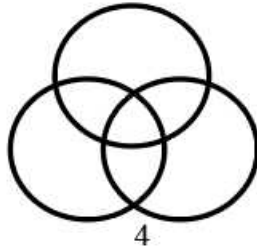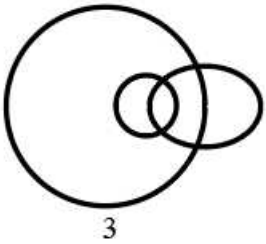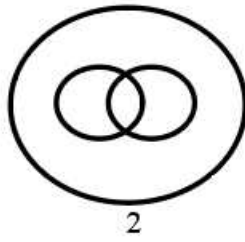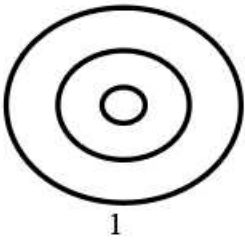
A 1

B 2

C 3

D 4

Answer: B

Question 25

Select the letter that can replace the question mark (?) in the following series.
W, T, O, L, ?, D

A J

B K

C G

D H

Answer: C

Question 26

Select the option in which the numbers are NOT related in the same way as are the numbers in the given set.
(143, 110, 88)

A (69, 36, 14)

B (61, 28, 6)

C (114, 82, 60)

Answer: C

Question 27

Four number-pairs are given out of which three are alike in a certain way and one is different. Select the number-pair that is different from the rest.

A 16 : 64

B 34 : 289

C 24 : 142

D 14 : 49

Answer: C

Question 28

Three of the following four words are alike in a certain way and one is different. Select the odd word.

A Depression

B Malaria

C Typhoid

D Flu

Answer: A

Question 29

Select the option that is related to the fifth number in the same way as the second number is related to the first number and the fourth number is related to the third number.
16 : 128 :: 18 : 162 :: 22 : ?

A 246

B 242

C 88

D 484

Answer: B

Question 30

Select the option in which the words share the same relationship as that shared by the given pair of words.
Anemometer : Wind

A Barometer : Depth

B Seismograph : Earthquake

C Scale : Current

D Odometer : Pressure

Answer: B

Question 31

Study the given pattern carefully and select the number that can replace question mark (?) in it

3	2	38	5
5	3	?	4
7	1	54	2

A 48

B 52

C 40

D 50

Answer: D

Question 32

If each of the letters of the English alphabet is assigned odd numerical value beginning with A = 1, B = 3 and so on, then what will be the total value of the letters of the word CARDINAL?

A 114

B 116

C 110

D 119

Answer: B

Question 33

Vimla starts from her home and walks 30 m towards north and then turns right and walks 40 m. Then, she turns left and walks 35 m. After that, she turns right and walks 40 m. From there, she turns right and walks 85 m. Then, she again turns right and walks 50 m. From there, she finally turns right and walks 20 m. How far is she from her home now and in which direction with reference to her home?

A 30 m, South

B 20 m, West

C 100 m, East

D 30 m, East

Answer: D

Question 34

Select the number that can replace the question mark (?) in the following series.
7, 11, 20, 36, 61, ?

A   97

B   99

C   95

D   94

Answer: A

Question 35

A piece of paper is folded and cut as shown in the following figures.How would this paper look when unfolded?

A

B

C

D
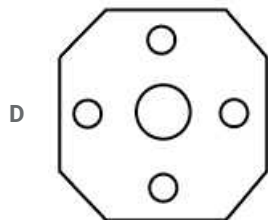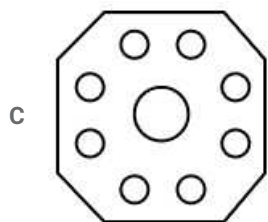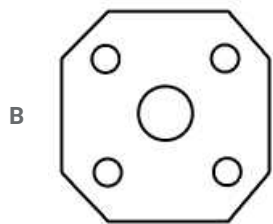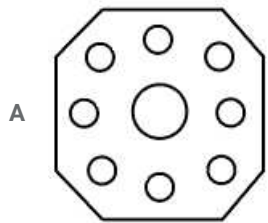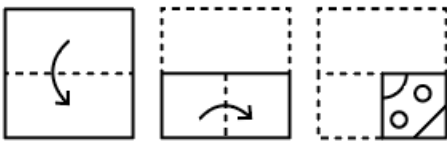
Answer: C

Question 36

How many triangles are present in the given figure?
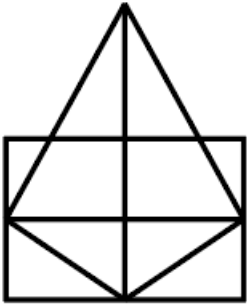
A 17

B 10

C 12

D 15

   Answer: D

Question 37

Select the option in which the numbers share the same relationship as that shared by the given pair of numbers.
78-57

A 35 - 14

B 67 - 42

C 45 - 21

D 24 - 19

   Answer: C

Question 38

In a certain code language, G is written as S, L as A, A as O, O as N, N as E, E as G, H as L and S as H. How will HALOGENS be written in that code?

A LNAOSGEH

B LOANSGEH

C HOANSGEL

D HOENSGAH

   Answer: B

Question 39

Read the given statement and conclusions carefully. Assuming that the information given in the statement is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statement.
Statement:
Most of the students usually fail to apply in practice what they studied on their courses in school and colleges because they studied the course just so they could pass the examination.
Conclusions:
I. Most of the students are just trying to pass the examination.
II. There is less emphasis on learning by teachers.

A   Both conclusions I and II follow.

B   Only conclusion II follows.

C   Only conclusion I follows.

D   Neither conclusion I nor II follows.

   Answer: C

Question 40

Select the option that is related to the third term in the same way as the second term is related to the first term.
TRAMPOLINE : RTMAQPILEN :: BINOCULARS : ?

A   RSLAVDNOBI

B   ICONVDALSR

C   IBONUCALSR

D   IBONDVALSR

   Answer: C

Question 41

Arrange the following words in the order in which they appear in an English dictionary
1. Heist
2. Height
3. Heart
4. Hackle
5. Higher

A   4, 3, 2, 1, 5

B   5, 4, 3, 1, 2

C   4, 2, 1, 3, 5

D   3, 5, 4, 1, 2

   Answer: A

Question 42

In a certain code language, SCIENCE is written as 7-5-16-7-11-5-21. How will MUSEUM be written in that code language?

A 14-22-5-5-22-14

B 13-21-6-21-21-13

C 15-23-7-21-23-15

D 13-23-7-21-23-13

Answer: C

Question 43

Select the Venn diagram that represents the correct relationship between the following classes:
Table, Stationary, Carpet

A

B

C

D
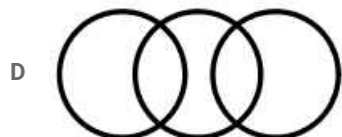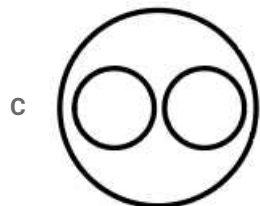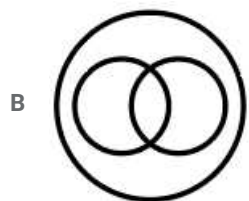
Answer: A

Question 44

In a certain code, CATHODE is written as X5GS2W4. How will RELATION be written in that code?

A J4O1G32N

B I3O1G32M

C I4O5G32M

D J3O5G32M

Answer: A

Question 45

Select the combination of mathematical signs that when sequentially placed in the blanks of the given equation will balance the equation.

(157_13)_36_1_5

A   + ÷ − =

B   − ÷ + =

C   + − ÷ =

D   ÷ − + =

  Answer: B

Question 46

Select the option in which the words share the same relationship as that shared by the given set of words (in the same order).

Track : Train : Driver

A   Road : Bus : Conductor

B   Sea : Ship : Captain

C   Sky : Pilot : Airhostess

D   Field : Athlete : Pole

  Answer: B

Question 47

Select the option that can replace the question mark (?) in the following series.

> O X	#	O X	
X	O	@	?

A

X   O
%

B

X   O
>

C

O   %
X

D
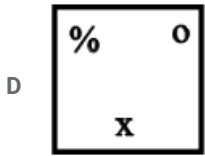
Answer: D

Question 48

Select the option that is related to the third term in the same way as the second term is related to the first term.
AQUARIUM : ZSREMONU :: HUMIDITY : ?

A IWJNYOMG

B GVJMXOMG

C GWJMYOMG

D IVJNYOMH

Answer: C

Question 49

Select the option that can replace the question mark (?) in the following series.

A

B

C

D
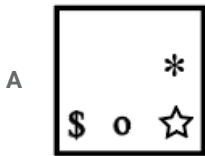
Answer: C

Question 50

Three of the following four pairs of letter cluster are alike in a certain way and one is different. Select the odd one.

A OPR - JKL

B BFX - YUC

C PHJ - KSQ

D RTV - IGE

    Answer: A

General Knowledge and General Awareness

Instructions

For the following questions answer them individually

Question 51

The noted freedom fighter Saheed Laxman Nayak belonged to the state of _____.

A Gujarat

B Chhatisgarh

C Uttar Pradesh

D Odisha

    Answer: D

Question 52

In October 2019, who received his 6th Golden Shoe as the top scorer in the European leagues?

A Lionel Messi

B Franz Beckenbauer

C Cristiano Ronaldo

D Johan Cruyff

    Answer: A

Question 53

What is the periodicity of Halley's comet?

A 30-31 years

B 45-46 years

C 85-86 years

D 75-76 years

Answer: D

Question 54

With a view to have animal protection world over, several countries have been brought under the cover of CITES with effect from 26th August, 2019. What does 'E' stand for in the acronym?

A Endangered

B Evolutionary

C Eco-friendly

D Environmental

Answer: A

Question 55

Who among the following was a Gupta ruler?

A Vima Kadphises

B Vikramaditya

C Dhana Nanda

D Kanishka

Answer: B

Question 56

The painting of Bharat Mata was originally done by _____

A Rabindranath Tagore

B Jamini Roy

C Nandalal Bose

D Abanindranath Tagore

Answer: D

Question 57

Which Indian historian won Israel's prestigious Dan David Prize?

A Sanjay Subrahmanyam

B Mridula Mukherjee

C Irfan Habib

D Sumit Sarkar

Answer: A

Question 58

Which of the following Articles of the Constitution of India provides for an independent office of the Comptroller and Auditor General (CAG) of India?

A   Article 148

B   Article 110

C   Article 343

D   Article 124

   Answer: A

Question 59

Under the provisions of which Article of the Constitution of India, can the Bharat Ratna Award NOT be used as a prefix or suffix to the recipient's name?

A   Article 17(2)

B   Article 16(2)

C   Article 18(1)

D   Article 19(1)

   Answer: C

Question 60

The SI (International system of units) unit of length is _____

A   metre

B   centimetre

C   millimetre

D   kilometre

   Answer: A

Question 61

Which former cricket player was appointed as the head of National Cricket Academy (NCA) in 2019?

A   Gautam Gambhir

B   Virender Sehwag

C   Ajay Jadeja

D   Rahul Dravid

   Answer: D

Question 62

Amar Sonar Bangla', the national anthem of Bangladesh was composed by

A Rabindranath Tagore

B Dwijendranath Tagore

C Devendranath Tagore

D Abanindranath Tagore

   Answer: A

Question 63

Which of the following is working capital in the farming sector?

A threshing machine

B money

C tractor

D land

   Answer: B

Question 64

Which Indian cricketer has scored two test triple centuries?

A Karun Nair

B Virender Sehwag

C Virat Kohli

D Sunil Gavaskar

   Answer: B

Question 65

Potassium is a chemical element with the symbol:

A Na

B S

C Ca

D K

   Answer: D

Question 66

What is the term used for pollination by wind?

A Endophily

B Siciophily

C Anemophily

D Angioplasty

   Answer: C

Question 67

The Kharif season in India largely coincides with the _____

A Southwest monsoon

B Southeast monsoon

C Northeast monsoon

D Northwest monsoon

   Answer: A

Question 68

In which year did the Tibetan Spiritual leader the Dalai Lama seek political asylum in India?

A 1973

B 1957

C 1959

D 1962

   Answer: C

Question 69

Eight times world champion squash player Nicol David belongs to which country ?

A Germany

B Malaysia

C Ghana

D Argentina

   Answer: B

Question 70

Name the queen associated with the Maheshwari saree.

A Ahilyabai Holkar

B Lakshmibai

C Kunti

D Mehrunnisa

Answer: A

Question 71

The Securities and Exchange Board of India is located in:

A Mumbai

B Kolkata

C Indore

D Chandigarh

Answer: A

Question 72

With reference to the Biosphere Reserves of India, which of the following is NOT a Biosphere Reserve?

A Achanakmar

B Agasthyamalai

C Dachigam

D Nokrek

Answer: A

Question 73

During the 1857 Uprising, who among the following took up the leadership at Faizabad?

A Kunwar Singh

B Maulvi Ahmadullah

C Begum Hazarath Mahal

D Khan Bahadur

Answer: B

Question 74

Who is the author of the book the 'Ministry of Utmost Happiness'?

A Jhumpa Lahiri

B Arundhati Roy

C   Anita Desai

D   Amitav Ghosh

Answer: B

Question 75

The abolition of Dyarchy in the provinces was recommended by the _____

A   Government of India Act of 1947

B   Government of India Act of 1858

C   Government of India Act of 1919

D   Government of India Act of 1935

Answer: D

Question 76

The line "Khoob lari mardani woh to Jhansi wali Rani thi", was written by _____.

A   Subhadra Kumari Chauhan

B   Suryakant Tripathi

C   Mahadevi Verma

D   Ramdhari Singh Dinkar

Answer: A

Question 77

Which of the following instruments can detect the presence of a current in a circuit?

A   Galvanometer

B   Sphygmomanometer

C   Barometer

D   Magnetometer

Answer: A

Question 78

In which year was the first Exchange-traded Index Derivative Contract traded on the Bombay Stock Exchange (BSE)?

A   2000

B   1994

C   1991

D   2004

Answer: A

Question 79

Which one of the following is NOT a compound?

A Sodium Chloride

B Carbon Monoxide

C Iron

D Water

    Answer: C

Question 80

Dhoti-Gamosa is the indigenous textile symbol of _____.

A Meghalaya

B Uttar Pradesh

C Nagaland

D Assam

    Answer: D

Question 81

Within what pH range does the human body work?

A 8.2 to 8.9

B 6.0 to 6.2

C 7.0 to 7.8

D 9.3 to 9.6

    Answer: C

Question 82

What allows the government to meet the expenses of administration until the new parliament passes the Budget for the whole year?

A Voice vote

B Vote-on-account

C Vote-on-adjustment

D Electronic vote

    Answer: B

Question 83

Who was the Chairman of the Second Backward Classes Commission?

A   BP Mandal

B   Jyotiba Phule

C   Babu Jagjivan Ram

D   Bhim Rao Ambedkar

Answer: A

Question 84

Which organisation publishes a Human Development Report?

A   WTO

B   ILO

C   World Bank

D   UNDP

Answer: D

Question 85

Who is the author of the book 'Arctic Home of the Vedas'?

A   Bipin Chandra Pal

B   Max Muller

C   Bal Gangadhar Tilak

D   Aurobindo Ghosh

Answer: C

Question 86

What is a Coppersmith Barbet?

A   A small herbivore

B   An insect

C   A carnivorous plant

D   A bird

Answer: C

Question 87

Who among the following invented a device called PM 2.5 which when fitted near the silencer pipe in vehicles will curb air pollution?

A   Debayan Saha

B   Deepak Gupta

C   Nikesh Arora

D   Asha Sharma

   Answer: A

Question 88

The term 'Peninsula' means a piece of land surrounded by water on:

A   three sides

B   one side

C   two sides

D   four sides

   Answer: A

Question 89

The Kaveri river rises in:

A   The Brahmagiri hills

B   The Trimbak hills

C   The Amarkantak plateau

D   Mahabaleshwar

   Answer: A

Question 90

In which year was the coveted Dadasaheb Phalke Award instituted?

A   1969

B   1968

C   1967

D   1966

   Answer: A

Question 91

Which of the following is NOT a part of the Meghalaya Plateau ?

A   Jaintia Hills

B   Khasi Hills

C   Garo Hills

D   Palamu Hills

   Answer: D

Question 92

The branch of geology that studies dinosaurs is an example of _____.

A   sophrology

B   petrology

C   paleontology

D   histology

   Answer: A

Question 93

WWith which gymnastics vaults style do we associate the name of Deepa Karmakar?

A   Handspring

B   Yurchenko

C   Produnova

D   Tsukahara

   Answer: B

Question 94

The Third Round Table Conference was held in the year _____

A   1932

B   1931

C   1933

D   1930

   Answer: A

Question 95

In which of the following Himalayan ranges is the Banihal Pass situated?

A   Great Himalayas

B   Pir Panjal

C   Ladakh

D   Zaskar

Answer: B

Question 96

Which acid makes the atmosphere of Venus have thick white and yellowish clouds?

A   Sulphuric acid

B   Nitric acid

C   Acetic acid

D   Hydrochloric acid

Answer: A

Question 97

In which novel did the National Song of India feature?

A   Sevasadan

B   Devi Chaudhurani

C   Anandamath

D   Durgeshnandini

Answer: C

Question 98

Which Article of the Indian Constitution gives right to minorities to establish and administer educational institutions?

A   Article 17

B   Article 32

C   Article 28

D   Article 30

Answer: D

Question 99

Who among the following made the first observation on Platinum as a catalyst and discovered similar triads of elements that led to the development of the Periodic Table of elements?

A   Dmitri Mendeleev

B   Hans Christian Oersted

C   Johann Wolfgang Dobereiner

D Michael Faraday

Answer: C

Question 100

The Mughal Sarai Railway Station has been renamed after _____.

A Gopal Krishna Gokhale

B Madan Mohan Malviya

C Deen Dayal Upadhyaya

D Ram Manohar Lohia

Answer: C

Quantitative Aptitude

Instructions

For the following questions answer them individually

Question 101

The internal length of a room is two times its breadth and three times its height. The total cost of painting its four walls at the rate of ₹25/m^2 is ₹3,600. What is the cost of laying a carpet on its floor at the rate of ₹90.50/m^2?

A ₹6,516

B ₹7,240

C ₹5,430

D ₹5,970

Answer: A

Question 102

Study the pie-chart and answer the question.

Distribution (degree wise) of the total number of employees of a company in its five offices A, B, C, D&E
Total Number of employees = 9200
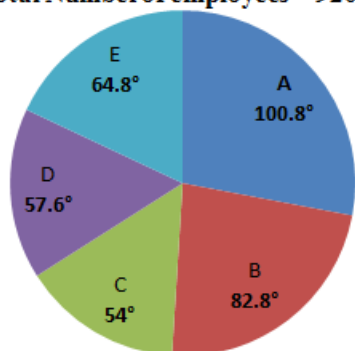
If 50% of the employees in office E are transferred to office D, then what percentage of the total number of employees of the company is the number of employees in office D?

A   28

B   25

C   26

D   30

   Answer: B

Question 103

On selling an article for ₹115, the gain is 20% more than the loss incurred on selling it for ₹104. If the article is sold for ₹130.80, then the profit percentage is:

A   25

B   18

C   30

D   20

   Answer: D

Question 104

In the Figure in △ PQR PT ⊥ QR at T and PS is the bisector of $\angle QPR$.If $\angle PQR = 78°$, and $\angle TPS = 24°$ then the measure of $\angle PRQ$ is
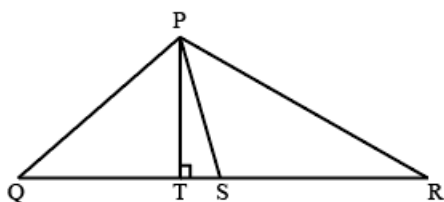
A $42°$

B $39°$

C $30°$

D $40°$

Answer: C

Question 105

The sides of a triangular field are 120 m, 170 m and 250 m.The cost of levelling the field at the rate of ₹7.40/m^2 is:

A ₹65,120

B ₹63,640

C ₹59,200

D ₹66,600

Answer: D

Question 106

ABCD is a cyclic quadrilateral in which AB = 15 cm, BC = 12 cm and CD = 10 cm. If AC bisects BD, then what is the measure of AD?

A 15 cm

B 13.5 cm

C 18 cm

D 20 cm

Answer: C

Question 107

In a class, there are 54 students. $33\frac{1}{3}$ % of the number of students are boys and rest are girls. The average score in mathematics of boys is 50% more than that of the girls. If the average score of all the students is 70, then what is the average score of the boys?

A 81

B 84

C 87

D 90

Answer: D

Question 108

The value of $\frac{(0.321)^3+(0.456)^3-(0.777)^3}{0.9\times(0.107)(0.76)(0.777)}$ is

A 60

B -6

C   -3

D   30

  Answer: B

Question 109

If $x^2 - 4x + 1 = 0$, then what is the value of $(x^6 + x^{-6})$?

A   2786

B   2702

C   2716

D   2744

  Answer: B

Question 110

3 men and 5 womentogether can complete a work in 6 days, whereas 4 men and 9 womentogether can doit in 4 days. How many womenare required to do the same work in 7 days?

A   15

B   12

C   14

D   10

  Answer: B

Question 111

The value of $\dfrac{5-2\div 4\times[5-(3-4)]+5\times 4\div 2 \ of \ 4}{4+4\div 8 \ of \ 2\times(8-5)\times 2\div 3-8\div 2 \ of \ 8}$

A $\dfrac{9}{8}$

B $\dfrac{9}{4}$

C $\dfrac{15}{32}$

D $\dfrac{89}{4}$

  Answer: A

Question 112

Aright circular cylinder of maximum possible size is cut out from a solid wooden cube. The remaining material of the cube is what percentage of the original cube? (Take π= 3.14)

A   22.4

B   21.5

C 22.8

D 21.8

Answer: B

Question 113

A person bought an article at 30% discount on its marked price. The person then sold it at 30% profit for ₹427.70. What was the marked price of the article?

A ₹470

B ₹450

C ₹500

D ₹480

Answer: A

Question 114

The average of 19 numbers is 22.8. The average of the first ten numbers is 18.4 and that of the last ten numbers is 28.6. If the 10th number is excluded from the given numbers, then what is the average of the remaining numbers? (Your answer should be nearest to an integer.)

A 21

B 23

C 22

D 20

Answer: C

Question 115

How many natural numbers up to 2001 are divisible by 3 or 4 but not 5?

A 768

B 801

C 934

D 1067

Answer: B

Question 116

A student was asked to find the value of $\frac{\left(2\frac{1}{3}+2\frac{1}{2}-\frac{1}{6}\right)\div 2\frac{1}{3}\times 5\frac{2}{3}\div 1\frac{1}{3} \ of \ 4\frac{1}{4}}{3\frac{1}{5}\div 4\frac{1}{2} \ of \ 5\frac{1}{3}+5\frac{1}{3}\times \frac{3}{4}\div 2\frac{2}{3}}$. His answer was $\frac{6}{7}$ .what is the difference between correct answer and his answer?

A $\frac{9}{14}$

B $\frac{5}{14}$

C $\frac{11}{49}$

D $\frac{6}{49}$

   Answer: D

Question 117

A ladder leaning against a window of a house makes an angle of 60° with the ground. Ifthe distance of the foot of the ladder from the wall is 4.2 m, then the height of the point, where the ladder touches the window from the ground is Closest to:

A 7. 3 m

B 6.8 m

C 7.8 m

D 7 m

   Answer: C

Question 118

In △ ABC, $\angle C = 90°$. M and N are the mid-points of sides AB and AC,respectively. CM and BN intersect each other at D and $\angle BDC = 90°$. If BC = 8 cm, then the length of BN is:

A $6\sqrt{3}$ cm

B $6\sqrt{6}$ cm

C $4\sqrt{6}$ cm

D $8\sqrt{3}$ cm

   Answer: D

Question 119

A train of length 342 m is running at 54 km/h. In how much time(in seconds) will it cross a bridge of length 438 m?

A 48

B 50

C 54

D 52

   Answer: B

Question 120

A, B ,And c started a bussiness. A invested $33\frac{1}{3}\%$ of the total capital. B invests $33\frac{1}{3}\%$ of the remaining capital and c, the remaining.If the total profit at the end of the year was ₹ 20,250 then the profit of c excceds the profit of B by

A ₹5,200

B ₹4,500

C ₹6,750

D ₹2,700

Answer: B

Question 121

The LCM of165, 176, 385 and 495 is k. When is divided by the HCF of the numbers, the quotientis p. What is the value of p?

A 2520

B 5040

C 6720

D 3360

Answer: B

Question 122

The ratio of expenditure and savings of a person is 5 : 3. If the incomeincreases by 20% and the expenditure increases by 10%, then the person's savings increase by:

A $36\frac{2}{3}\%$

B $:3\frac{1}{3}\%$

C $13\frac{2}{3}\%$

D $30\frac{1}{3}\%$

Answer: A

Question 123

Study the graph and answer the question.

Weekly earnings (in ₹) of workers in a factory
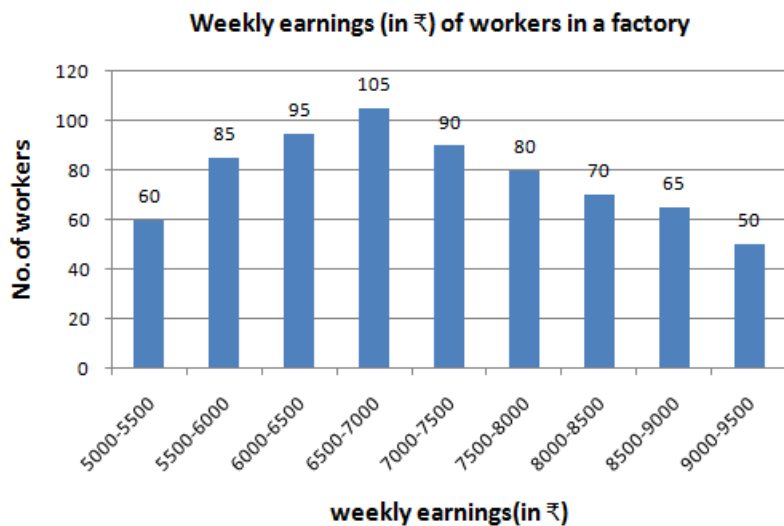
The number of workers in the factory whose weekly earnings are below ₹7,000 is what percentage more than the Number of workers whose weekly earnings are ₹7,000 or above but less than ₹8,500?

A   43.75

B   42.50

C   44.25

D   45.25

Answer: A

Question 124

A pole of length 7 m is fixed vertically on the top of a tower. The angle of elevation of the top of the pole observed from a point on the ground is $60°$ and the angle of depression of the same point on the ground from the top of the tower is $45°$. The height (in m) of the tower is:

A $7(2\sqrt{3} - 1)$

B $\frac{7}{2}(\sqrt{3} + 2)$

C $7\sqrt{3}$

D $\frac{7}{2}(\sqrt{3} + 1)$

Answer: D

Question 125

Study the graph and answer the question.

Weekly earnings (in ₹) of workers in a factory
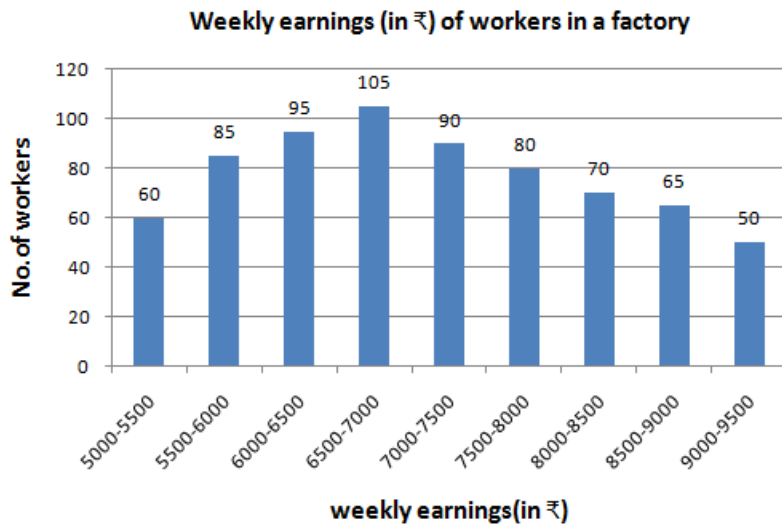
What percentage of total number of workers in the factory is the number of workers whose weekly earnings are ₹6,500 or above but less than ₹8,500? (Your answer should be correct to one decimal place.)

A   50.2

B   42.6

C   35.8

D   49.3

Answer: D

Question 126

A is 75% less than B and C is 75% of the difference between A and B. C is what percentage more than A?

A   125

B   100

C   75

D   90

Answer: A

Question 127

In a test consisting of 120 questions, Anuradha answered 65% of the first 60 questions correctly. What percentage of the remaining questions does she need to answer correctly to score 75% in the test?

A   80

B   85

C   84

D 90

Answer: B

Question 128

Taps A and can fill a tank in 15 minutes and 10 minutes, respectively while tap C can empty the full tank in x minutes. If all the three taps are opened together, the tank is filled completely in 8 minutes. Tap C alone will empty on part of the tank in 5 Tap calone will empty $\frac{3}{8}$ th part of the tank in:

A 10 minutes

B 10 $\frac{1}{2}$ minutes

C 9 minutes

D 8 $\frac{1}{2}$ minutes

Answer: C

Question 129

Study the graph and answer the question.

Exports (in ₹ millions) of cars of Type A and Type B over the years
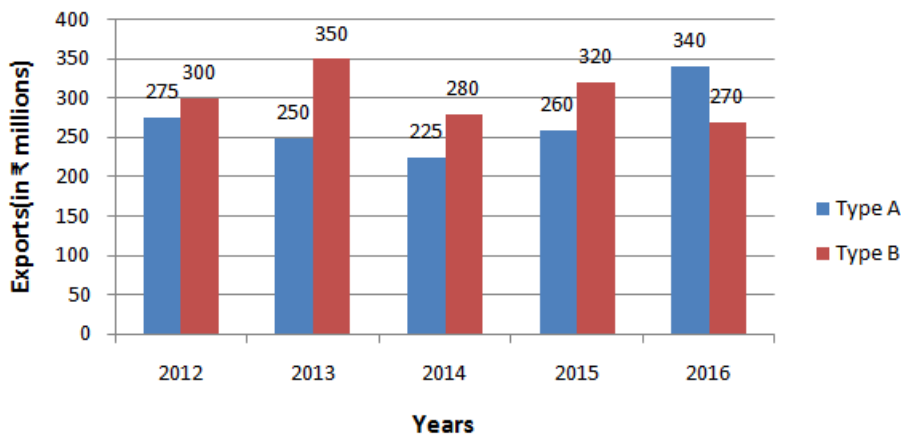
In which year, were the exports of type B cars exactly 20% more than the exports of type A cars in 2014?

A 2015

B 2016

C 2012

D 2013

Answer: C

Question 130

If r is the remainder 2013 when each of 6454, 7306 and 8797is divided by the greatest number d(d > 1), then (d−r) is equal to:

A 126

B 64

C 137

D 149

Answer: D

Question 131

Study the pie-chart and answer the question.

Distribution (degree wise) of the total number of employees of a company in its five offices A, B, C, D & E
Total Number of employees = 9200
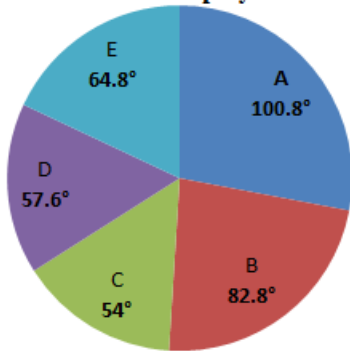
Total number of employees of the company in offices C and D exceeds the number of employees in office B by x, where X lies between:

A 720 and 740

B 680 and 700

C 700 and 720

D 740 and 760

Answer: A

Question 132

Pipe A and B can empty a full tank in 18 hours and 24 hours, respectively. Pipe C alone can fill the tank in 36 hours. If the tank is $\frac{5}{6}$ full and all the three pipes

A $10\frac{1}{2}$

B $12\frac{1}{2}$

C 10

D 12

Answer: D

Question 133

If $3(\cot^2 \theta - \cos^2 \theta) = 1 - \sin^2 \theta, 0° < \theta < 90°$, then the θ equal to

A 30°

B 60°

C 45°

D 15°

Answer: B

Question 134

If $\left(x^3 + \frac{1}{x^3} - k\right)^2 + \left(x + \frac{1}{x} - p\right)^2 = 0$ where k and p are real numbers and x ≠ 0, then $\frac{k}{p}$ is equal to:

A $P^2 + 1$

B $P^2 + 3$

C $P^2 - 1$

D $P^2 - 3$

Answer: D

Question 135

Study the graph and answer the question.

Weekly earnings (in ₹) of workers in a factory
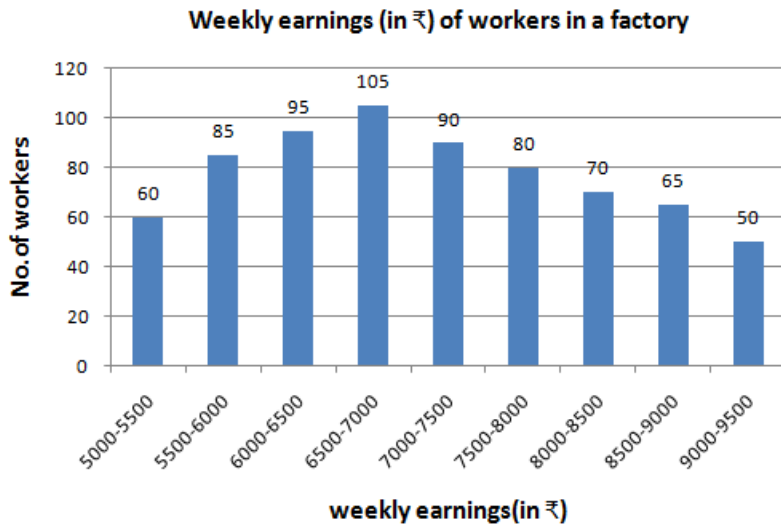
The number of workers in the factory whose weekly earnings are ₹5,500 or more but less than ₹7,500 is:

A 375

B 285

C 345

D 240

Answer: A

Question 136

If $x^4 + x^2y^2 + y^4 = 133$ and $x^2 - xy + y^2 = 7$, then what is the value of xy?

A   8

B   12

C   4

D   6

Answer: D

Question 137

The value of $\tan^2 48° - \csc^2 42° + \csc(67° + \theta) - \sec(23° - \theta)$ is:

A   -1

B   0

C   1

D   -2

Answer: A

Question 138

The value of $\sqrt{9 - 2\sqrt{11 - 6\sqrt{2}}}$ is closest to:

A   2.7

B   2.9

C   2.4

D   2.1

Answer: C

Question 139

Two chords AB and CD of a circle intersect each other at P internally. If AP = 3.5 cm, PC = 5 cm, and DP = 7 cm, then what is the measure of PB?

A   8 cm

B   12 cm

C   10 cm

D   10.5 cm

Answer: C

Question 140

The marked price of a washing machine is ₹7,200.if it sold for ₹5,512.50 after two successive discounts of x % each . The value of x is

A   12

B   12.5

C   10.5

D   15

  Answer: B

Question 141

The compound interest on a certain sum invested for 2 years at 10% per annum is ₹1,522.50, the interest being compounded yearly. The sum is:

A   ₹7,250

B   ₹7,200

C   ₹7,500

D   ₹7,000

  Answer: A

Question 142

The radius and height of a right circular cone are in the ratio 1: (2.4). If its curved surface area is 2502.5 cm ^{2}, then what is its volume(Take $\pi= \frac{22}{7}$)

A   8085 cm^3

B   8820 cm^3

C   11550 cm^3

D   13475 cm^3

  Answer: D

Question 143

Study the graph and answer the question.

Exports (in ₹ millions) of cars of Type A and Type B over the years
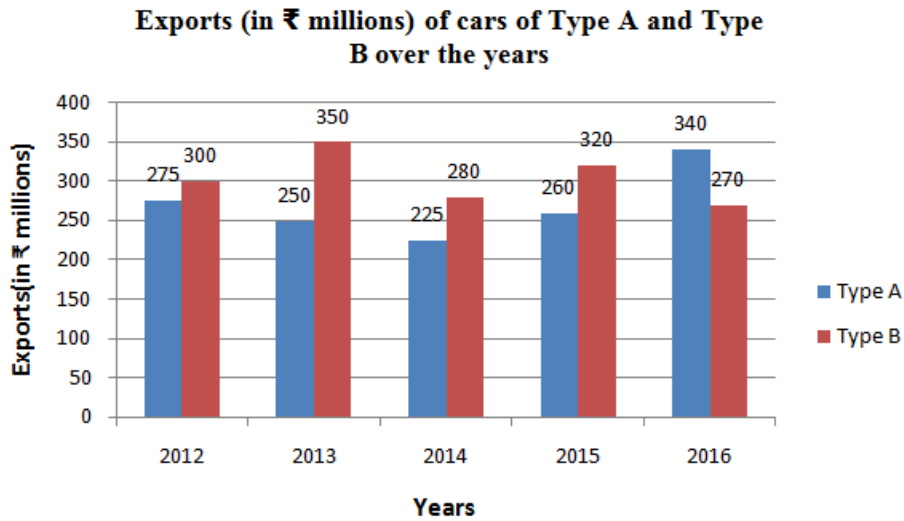
In how many years were the exports of type B cars more than the average exports of type A cars during 2012 to 2016?

A   2

B   3

C   1

D   4

Answer: D

Question 144

A boat takes 4 hours to travel from a place X to Y downstream and back from Y to X upstream.If the distance from X to Y is 10.5 km, and the speed of the current is 9 km/h, then the speed of the boat in still water, in km/h is:

A $10\frac{1}{2}$

B   15

C   12

D $12\frac{1}{2}$

Answer: C

Question 145

Study the graph and answer the question.

Exports (in ₹ millions) of cars of Type A and Type B over the years
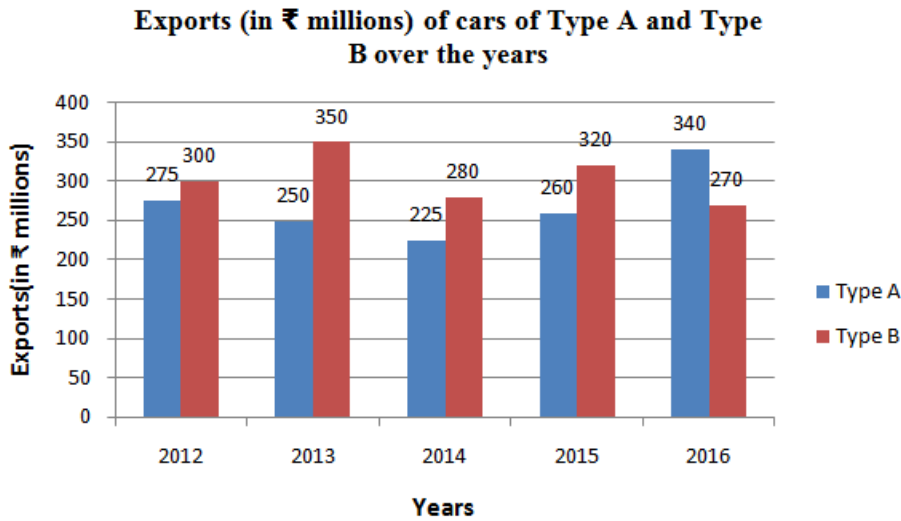
The exports of type A cars in 2016 are what percentage less than the total exports of type B cars in 2014 and 2015?

A $26\frac{2}{3}$

B 32

C 45

D $43\frac{1}{3}$

Answer: D

Question 146

Study the pie-chart and answer the question.

Distribution (degree wise) of the total number of employees of a company in its five offices A, B, C, D & E
Total Number of employees = 9200
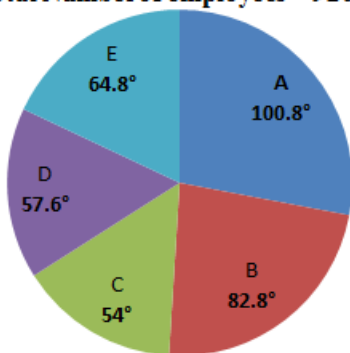
The total number of employees of the company in offices D and E is what percentage more than the number of employees in office A? (Your answer should be correct to one decimal place.)

A 21.8

B 20.6

C 21.4

D 22.2

Answer: C

Question 147

A can complete one-third of a work in 10 days and B can do $\frac{3}{5}th$ of the same work in 24 days. They worked together for 10 days. The remaining work was completed by C alone in 15 days. In how many days can C alone do $\frac{2}{3}rd$ of the same work?

A ₹12,800

B ₹12,500

C ₹13,200

D ₹12,000

Answer: B

Question 148

Two equal sums(in ₹) are lent at 8% and 4% simple interest p.a, respectively at the same time.The first sum is received 2 years earlier than the other and the amount received in each case is ₹14,500. Each sum is:

A ₹12,800

B ₹12,500

C ₹13,200

D ₹12,000

Answer: B

Question 149

A sum of ₹12,000 is divided between A, B, C and D such that the ratio of shares of A and is 8 : 9, that of B and C is 2:3 and that of C and D is 9 : 13. What is the difference between the shares of B and D?

A ₹1,320

B ₹2,400

C ₹2,520

D ₹2,760

Answer: C

Question 150

The height of a cylinder is $\frac{2}{3}rd$ of its diameter. Its volume is equal to the volume of a sphere whose radius is 4 cm. What is the curved surface area (in cm^2) of the cylinder?

A $\frac{112}{3}\pi$

B 32π

C $\frac{128}{3}\pi$

D 40π

    Answer: C

English Comprehension

Instructions

For the following questions answer them individually

Question 151

Select the most appropriate synonym of the given word.
EXASPERATE

A Infuriate

B Appreciate

C Imitate

D Desperate

    Answer: A

Explanation:
Synonym of exasperate - Infuriate, incense, anger, annoy, irritate

Question 152

Select the most appropriate option to fill in the blank
This is the reason _____ I don't attend parties.

A why

B since

C because

D so

    Answer: A

Question 153

Select the most appropriate meaning of the given idiom
To read between the lines

A to understand the implied meaning

B to completely misunderstand the meaning

C to read with great difficulty

D to critically analyse a piece of writing

    Answer: A

Question 154

Select the most appropriate antonym of the given word.
REPRIMAND

A   Reproof

B   Reward

C   Redeem

D   Rebuke

   Answer: B

Question 155

Select the most appropriate option to substitute the underlined segment. If no substitution is required select 'No substitution'
Employees refrain to indulge in undesirable activities if they are monitored

A   refrain for indulgence

B   refrain from indulging

C   refrain against indulging

D   No substitution

   Answer: B

Question 156

Select the most appropriate meaning of the given idiom.
To blaze a trail

A   to initiate something new

B   to act impulsively

C   to set fire to something

D   to complete a project

   Answer: A

Question 157

Select the most appropriate option to substitute the underlined segment. If no substitution is required select 'No substitution.
Some people in the audience were asleep while the chief guest was speaking.

A   whenever the chief guest spoke

B   when the chief guest has spoken

C   while a chief guest is speaking

D   No substitution

   Answer: D

Question 158

Select the most appropriate option to substitute the underlined segment. If no substitution is required select 'No substitution'
The colour of her cheeks is like a rose.

A   are like a rose

B   are just as a rose

C   is like that of a rose

D   No substitution

   Answer: C

Question 159

Select the correctly spelt word.

A   Credible

B   Credibel

C   Creddible

D   Credibal

   Answer: A

Question 160

Select the option which is the most appropriate one word substitution for the given group of words.
One who is sixty years old

A   Sexagenarian

B   Octogenarian

C   Septuagenarian

D   Nonagenarian

   Answer: A

Question 161

Identify the segment that contains a grammatical error. If there is no error, select 'No error
The day before yesterday he left for Europe by the air.

A   The day before yesterday

B   No error

C   by the air

D he left for the Europe

Answer: C

Question 162

Identify the segment that contains a grammatical error. If there is no error, select 'No error'
I wish I have worked harder than I did.

A I wish

B I have worked

C harder than I did

D No error

Answer: B

Question 163

Select the most appropriate synonym of the given word.
FEIGN

A Hinder

B Instruct

C Foretell

D Pretend

Answer: D

Question 164

Select the wrongly spelt word

A Refurbish

B Residue

C Relagate

D Retrospect

Answer: C

Question 165

Identify the segment that contains a grammatical error. If there is no error, select 'No error'
This document has signed by two persons.

A This document

B No error

C by two persons

D has signed

Answer: D

Question 166

Select the most appropriate antonym of the given word.
COMPLY

A   Consent

B   Defer

C   Adhere

D   Oppose

   Answer: D

Question 167

Select the most appropriate synonym of the given word.
EFFICACIOUS

A   Voracious

B   Effective

C   Audacious

D   Impotent

   Answer: A

Question 168

Select the wrongly spelt word

A   Embarrass

B   Embrace

C   Embody

D   Embelish

   Answer: D

Question 169

Select the option which is the most appropriate one word substitution for the given group of words.
That which cannot be seen through

A   opaque

B   transparent

C   impervious

D   translucent

   Answer: A

Question 170

Select the most appropriate antonym of the given word.
BESEECH

A   Implore

B   Exhort

C   Command

D   Invoke

   Answer: C

Question 171

Select the correctly spelt word.

A   Benigne

B   Bennine

C   Benine

D   Benign

   Answer: D

Question 172

Select the wrongly spelt word

A   Tranquillity

B   Conscientious

C   Hinderance

D   Quarrelled

   Answer: C

Question 173

Select the most appropriate meaning of the given idiom.
A dark horse

A   an expected outcome

B   an unknown genius

C   a well kept secret

D   a horse of a fine breed

Answer: B

Question 174

Select the most appropriate meaning of the given idiom.
To make castles in the ai

A   to be very ambitious

B   to accomplish difficult tasks

C   to show signs of cowardice

D   to create impossible dreams or hopes

Answer: D

Question 175

Select the most appropriate option to fill in the blank.
He had hardly gone a few kilometres _____ his car broke down.

A   when

B   that

C   where

D   than

Answer: A

Question 176

Select the most appropriate option to fill in the blank.
This fabric is _____ though cheaper than other fabrics.

A   as good as

B   as good

C   more good

D   so good as

Answer: A

Question 177

Select the most appropriate synonym of the given word.
BEGUILE

A   Repulse

B   Hasten

C   Deceive

D   Disenchant

Answer: C

Question 178

Select the most appropriate option to substitute the underlined segment. If no substitution is required select 'No substitution'
The assignment <u>was so difficult</u> for Mohit to do on his own.

A   was too difficult

B   was so much difficult

C   No substitution

D   were so difficult

   Answer: A

Question 179

Select the most appropriate option to fill in the blank.
She had won the match when we _____ the venue

A   reach

B   reached

C   had been reaching

D   are reaching

   Answer: B

Question 180

Select the option which is the most appropriate one word substitution for the given group of words.
A place where weapons and ammunitions are stored

A   Godown

B   Hangar

C   Museum

D   Arsenal

   Answer: D

Instructions

Read the given passage and answer the questions that follow.

Comprehension:

It was the buzz of boardrooms, power lunches and anxious phone calls from the freeway. It was debated by stockbrokers, real estate agents, Hollywood producers and media big feet. Mid-level executives who wouldn't leave home without a phone in their pocket - or at their ear - were putting off calls or finding other ways to make them. Sales of cellular phones which had been growing at a sizzling 20% to 70% a year for the past decade were temporarily put on hold.

Do cellular phones really cause brain tumours? The safety of the ultimate yuppie accessory was called into question by the news in the U.S. that two prominent executives had been stricken by brain cancer (though the connection to phone use is unclear) and by a well publicised lawsuit in which a Florida man charged that his wife's fatal brain tumour was caused by her cellular phone.

It was not the kind of evidence that would be accepted by the new England Journal of Medicine, but it struck a nerve. American viewers tuned in to hear David Reynard, the Florida widower tell the story of his wife's death to Larry King, Bryant Gumbel, Faith Daniels and dozens of radio talk-show hosts.

Even wall street took notice, knocking a couple of points off McCaw Cellular, Contel Cellular and Motorola the day after Reynard's appearance on the Larry King live show. The Cellular Telecommunications Industry Association was finally forced to respond, announcing that it would fund new studies and ask the government to review the findings.

The phone flap is the latest in a series of scares linking everyday electrical objects (hair dryers, electric razors, electric blankets, home computers) to one dreaded disease or another. Despite the panic, the case against cellular phones is nowhere near as strong as the ones mounted against electric power lines, electric blankets or even hand held police radars.

Question 181

What was the buzz of boardrooms and the issue for debate among stockbrokers, real estate agents, producers and others?

A   Excitement about the popular talk shows on radio

B   The concern whether cellular phones caused brain tumours

C   . Growing sales of cellular phones

D   The safety of all electrical gadgets

   Answer: B

Question 182

What was the result of the controversy over cellular phones?

A   David Reynard won the lawsuit against cellular companies.

B   The cellular phones became more poular.

C   The share value of cell phone companies fell in the stock market

D   The New England Journal of Medicine accepted that cell phones caused brain tumour

   Answer: C

Question 183

Which of the following statements is Not true?

A   David Reynard claimed that his wife's tumour was due to use of cellular phone.

B   The news on adverse effects of cell phones affected the sales

C   Brain tumour is more probable in cell phone users than in those living near power lines

D   McCaw, Motorola and Contel are cellphone companies.

   Answer: C

Question 184

According to the passage which of these is Not linked to any dreaded disease?

A   Hair dryer

B   Electric razor

C Hair dyes

D Electric blanket

Answer: C

Question 185

Larry King is probably

A a wall street broker

B a famous TV show host

C an owner of a cellular phone company

D a famous criminal lawyer

Answer: B

Instructions

In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

Comprehension:

If we accept the aim of education as the harmonious development of human personality, we observe that examinations fail to (1)_____ this development accurately. They neither take a (2)_____ of one's physical and spiritual development (3)_____ even of one's intelligence. All they can claim (4)_____ is to test one's (5)_____ or one's capacity for cramming.

Question 186

Select the most appropriate option to fill in blank No.1

A assess

B accept

C except

D excess

Answer: A

Question 187

Select the most appropriate option to fill in blank No.2

A quota

B magnitude

C Scope

D measure

Answer: D

Question 188

Select the most appropriate option to fill in blank No.3

A   nor

B   not

C   or

D   and

   Answer: A

Question 189

Select the most appropriate option to fill in blank No.4

A   to be doing

B   to be done

C   to do

D   for doing

   Answer: C

Question 190

Select the most appropriate option to fill in blank No.5

A   . memory

B   memorial

C   memories

D   . memorable

   Answer: A

Instructions

For the following questions answer them individually

Question 191

Select the most appropriate meaning of the given idiom
Of the first water

A   of ancient origin

B   of favorable opinion

C   of no significance

D   of the best quality

   Answer: D

Question 192

Select the most appropriate option to fill in the blank.

Plenty of information about the flora and fauna of India _____ available in this book.

A   are

B   has

C   is

D   were

   Answer: C

Question 193

Select the most appropriate synonym of the given word
DEFERENCE

A   Contrast

B   Delay

C   Ignorance

D   Obeisance

   Answer: D

Question 194

Identify the segment that contains a grammatical error. If there is no error, select 'No error'
I ordered his dismissal when he flouted the company rules.

A   I ordered his dismissal

B   No error

C   when he flouted

D   the company rules

   Answer: B

Question 195

Select the option which is the most appropriate one word substitution for the given group of words.
Giving up one's authority or throne

A   Abdication

B   Abduction

C   Abjection

D   Abjuration

   Answer: A

Question 196

Select the option which is the most appropriate one word substitution for the given group of words.
Careful in performing duties

A Obedient

B Sincere

C Punctilious

D Punctual

Answer: C

Question 197

Identify the segment that contains a grammatical error. If there is no error, select 'No error'
Fate smiled above him in all his business ventures.

A No error

B in all his

C business ventures

D Fate smiled above him

Answer: D

Question 198

Select the most appropriate antonym of the given word.
SAGACIOUS

A Prudent

B Ingenious

C Ignorant

D Astute

Answer: C

Question 199

Select the most appropriate antonym of the given word.
ADORN

A Grace

B Disfigure

C Enrich

D Subdue

Answer: B

Question 200

Select the most appropriate option to substitute the underlined segment. If no substitution is required select 'No substitution'
The student, with his parents <u>were asked for waiting</u> outside the Principal's office.

A   was asked to wait

B   were asked to wait

C   No substitution

D   were asked to be waiting

Answer: A