Time : 2 1/2 Hrs   Max. Marks : 350

Name in Full ....Roll No. ....

Initial of Invigilator ....Code No. ....

(To be filled by the Office)

PAPER I – MATHS, ENGLISH, GEN SC AND SOC STUDIES

Note : Candidate **NOT TO WRITE** Name or Roll Number on any page in the Main Answer Book.

Marks Obtained	A Maths	B Eng	C Gen SC	D SSt	Code No. _____

Full Signature of Examiner _____Checked By _____

INSTRUCTIONS

1.   This question paper contains of FOUR sections and you have to answer all questions in the OMR answer sheet. Section "A" Mathematics contains 50 questions of 4 marks each, Section "B" English, Section 'C' Gen Science and Section "D" Soc Studies contains 25 questions of 2 marks each respectively.

2. Section 'E' Intelligence paper contains 25 questions. The Question Paper will be given after 2 hours. Answers for 'Section E' is also to be written in the same OMR answer sheet.

3.   There is only one correct answer for each question. Darken only one bubble for each question. If you darken more than one bubble, your answer will be treated as wrong.

4. Evaluation of OMR answer sheet will be done on a computer. Be careful and ensure no un-necessary marks on the OMR answer sheet/ fold or attempt to deface the OMR answer sheet, otherwise it will not be evaluated.

5.   Rough work must be done on the additional sheet only and **NOT** on OMR answer sheet.

6.   Write your answers in Blue/Black ink only. Do not use pencil.

7.   There are total   20   pages in the question paper.

Q.1. If a number 573 xy is divisible by 90, then what is the value of x +y ?
(a) 6 (b) 9 (c) 3 (d) 8

Q.2. Which of the following numbers is in standard form?
(a) $\dfrac{-24}{52}$ (b) $\dfrac{-49}{71}$ (c) $\dfrac{-27}{48}$ (d) $\dfrac{28}{-105}$

Q.3. What should be added to $\dfrac{-5}{7}$ to get $\dfrac{-2}{3}$?
(a) $\dfrac{-29}{21}$ (b) $\dfrac{29}{21}$ (c) $\dfrac{1}{21}$ (d) $\dfrac{-1}{21}$

Q.4. The age of A and B are in the ratio 5 : 7. Four years from now the ratio of their ages will be 3 : 4. Then the present age of B is :
(a) 20 years (b) 28 years (c) 15 years (d) 21 years

Q.5. Two consecutive even numbers are such that half of the larger number exceeds one-forth of the smaller number by 5. Then the larger number is:
(a) 16 (b) 18 (c) 32 (d) 34

Q.6. If 0.25 (4f-3) = 0.05 (10f-9), then f is equal to :
(a) 0.6 (b) 0.8 (c) 0.5 (d) 0.4

Q.7. A number consists of two digits. The digit in the tens place exceeds the digit in the units place by 4. The sum of the digit is $\dfrac{1}{7}$ of the number. The number is :
(a) 27 (b) 72 (c) 48 (d) 84

Q.8. How many sides does a regular polygon have, wherein, whose interior angle is eight times its exterior angle ?
(a) 16 (b) 24 (c) 18 (d) 20

Q.9. ABCD is a rectangle with $\llcorner BAC = 48^0$. Then $\llcorner DBC$ is equal to :
(a) 38^0 (b) 42^0 (c) 48^0 (d) 132^0

Q.10. The angles A,B,C,D of a quadrilateral ABCD taken in order are in the ratio 3 :7 :6 :4, then ABCD is a :
(a) Rhombus (b) Parallelogram (c) Trapezium (d) Kite

Q.11. A data set of n observations has mean $2\bar{x}$. While another data set of 2n observations has mean $\bar{x}$. Then the mean of the combined data set of 3n observations will be :

(a) $\bar{X}$ (b) $\frac{3}{2}\bar{x}$ (c) $\frac{2}{3}\bar{X}$ (d) $\frac{4}{3}\bar{X}$

Q.12. In a class of 17 students, six boys failed in a test. Those who passed scored 12, 15,17, 15,16,15,19, 17, 18, 18 and 19 marks. The median score of 17 students in the class is :
(a) 15   (b) 16   (c) 17   (d) 18

Q13. The mean age of a class is 16 years . If the class teacher aged 40 years old is also included, the mean age increases to 17 years. The number of students in the class are:
(a) 23   (b) 33   (c) 44   (d) 16

Q.14. From a well-shuffled deck of 52 cards, one card is drawn at random. What is the probability that the drawn card is a queen?

(a) $\frac{1}{4}$ (b) $\frac{1}{52}$ (c) $\frac{1}{13}$ (d) $\frac{1}{26}$

Q. 15. Which of the following numbers is not a perfect square ?
(a) 3600   (b) 6400   (c) 81000   (d) 2500

Q.16. Which least number must be subtracted from 176 to make it a perfect square?
(a) 16   (b) 7   (c) 10   (d) 4

Q. 17. $\dfrac{\sqrt{288}}{\sqrt{128}}$ is equal to :

(a) $\frac{3}{2}$ (b) 1.49   (c) $\frac{\sqrt{3}}{2}$ (d) $\frac{3}{\sqrt{2}}$

Q.18. The volume of a cubical box is 32.768 cubic metres. Then the length of a side of the box is :
(a) 32m   (b) 320m   (c) 768m   (d) 3.2m

Q.19. By what least number should 648 be multiplied to get a perfect cube?
(a) 3   (b) 6   (c) 9   (d) 18

Q.20. Given that 3048625 = 3375 x 729. Then what is the cube root of 3048625 ?
(a) 155   (b) 135   (c) 45   (d) None of these

Q. 21. I borrowed Rs. 12000 from Jamshed at 6% per annum simple interest for 2 years. Had I borrowed this sum at 6% per annum compound interest, what extra amount would I have to pay ?
(a) Rs. 144   (b) Rs. 1440   (c) Rs. 72   (d) Rs. 43.20

Q.22. During a sale, a shop offered a discount of 10% on the marked price of all the items. What would a customer have to pay for a pair of jeans marked at Rs. 1450 and two shirts marked at Rs. 850 each?
(a) Rs. 2835   (b) Rs.3150   (c) Rs. 2300   (d)   None of these

Q. 23. If the cost price of 10 greeting cards is equal to the selling price of 8 greeting cards. Then the gain or loss % is:

(a) Loss of 25% (b) Loss of 20%   (c) gain of 25%   (d) gain of 20%

Q.24. 'A' can do a piece of work in 20 days which 'B' alone can do in 12 days. 'B' worked at it for 9 days then 'A' can finish the remaining work in :
(a)   3 days   (b) 5 days   (c)   7 days   (d) 11 days

Q.25. A car takes 2 hours to reach a destination by travelling at 60 km/hr. How long will it take while travelling at 80 km/hr?
(a)   1 hrs 30 min   (b)   1 hrs 40 min   (c)   2 hrs 40 min   (d) none of these

Q. 26. If $x + \dfrac{1}{x} = 5$ then $x^2 + \dfrac{1}{x2} = ?$

(a)   25   (b) 27   (c)   23   (d) $25\dfrac{1}{25}$

Q. 27. $(a+1)(a-1)(a^2+1)$ is equal to :-
(a) $(a^4 - 2a^2-1)$ (b) (a^4-a^2-1) (c) (a^4+1) (d) (a^4-1)

Q.28. $(82)^2 - 18^2$ is equal to :
(a)   8218   (b)   6418   (c)   6400   (d)   7204

Q. 29. How many edges does a square prism have ?
(a)   9   (b)   12   (c)   16   (d)   8

Q.30. Three cubes of iron whose edges are 6cm, 8cm and 10 cm respectively are melted and formed into a single cube. The edge of the new cube formed is :
(a)   12cm   (b)   14cm   (c)   16 cm   (d)   24 cm

Q.31. If the capacity of a cylindrical tank is 1848m^3 and the diameter of its base is 14m, the depth of the tank is :

(a) 8m   (b)   12m   (c)   16m   (d) 18m

Q.32. The edges of a cuboid are in the ratio 1:2:3 and its surface area is 88cm^2 . The volume of the cuboid is :
(a)   64cm^3 (b)   96cm^3 (c) 120cm^3 (d)   48cm^3

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Q.33. The parallel sides of a trapezium are in the ratio 4:3 and the perpendicular distance between them is 12cm. It the Area of the trapezium is 630 cm^2, then its shorter of the parallel side is :
(a)   45cm   (b)   42cm   (c)   60cm   (d)   36 cm

Q.34. The base of a triangle is four times its height and its area is 50m^2. The length of its base is
(a) 10m   (b)   15m   (c)   20m   (d) 25m

Q. 35. $\dfrac{3^n \cdot 3^{2n+1}}{9^n \cdot 3^{n-1}}$ is equal to :

(a)   1   (b)   9   (c)   3   (d) 3^n

Q.36. $4^{3.5} : 2^5$ is the same as :

(a)   4 : 1   (b)   2 : 1   (c)   7 : 5   (d)   7 : 10

Q.37. If $a = b^{2/3}$ and $b = c^{-2}$, then what is the value of a in terms of c ?

(a) $\dfrac{4}{c^3}$ (b) $\sqrt[3]{c^4}$ (c) $\dfrac{1}{\sqrt[3]{c^4}}$ (d) $\sqrt[4]{c^3}$

Refer the following graph for Q No. 38 to 42

Time (in hrs)

5
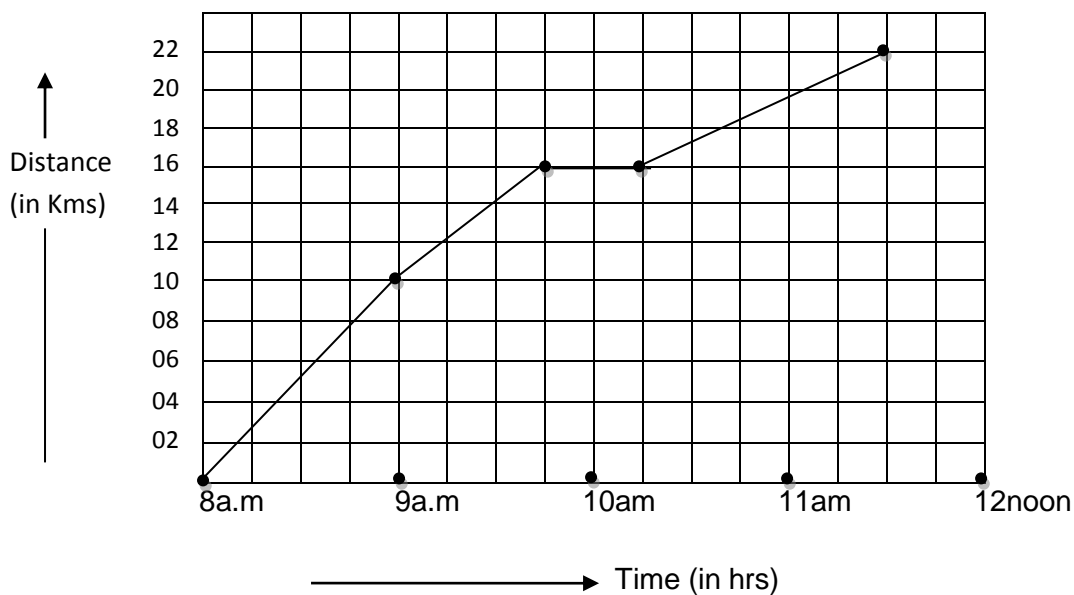
A courier–person cycles from a town to a neighbouring suburban area to deliver a parcel to a merchant. His distance from the town at different times is shown by the above graph?

Q.38.   What is the scale taken for the time axis?
(a) .2 units =1hour   (b)   1 unit =2 hours   (c)   1 unit = 4 hours   (d) 4 units = 1hour

Q.39.   How much time did the person take for the travel?
(a)   2 hours   (b) $2\frac{1}{2}$ hours   (c) $3\frac{1}{2}$ hours   (d) 4 hours

Q.40.   How far is the place of the merchant from town?
(a)   11 km   (b)   22 km   (c)   13 km   (d) 26 km

Q.41.   When did the person stop on the way?
(a)   between 8 am to 9 am   (b)   between 9 am to 10 am
(c)   between 10.00 am to 10.30 am   (d)   between10.30 am to 11.30 am

Q.42.   During which period did he ride the fastest ?
(a)   between 8 am to 9 am   (b)   between 9 am to 10 am
(c)   between 10.00 am to 10.30 am   (d)   between 10.30 am to 11.30 am

Q.43.   Find the values of A, B, C in the following.

```
       _____
9)   4AB       (5C
    - 45
      3B
    - 36
       0
```

Then what is the value of A+B+C ?
(a) 10   (b)   14   (c)   16   (d) 18

Q.44.   If y denotes the digit at hundreds place of the number 67y 19, such that the number is divisible by 11. The value of y is :
(a)   3   (b)   5   (c)   4   (d)   7

Q.45.   Find three whole numbers a, b and c such that a + b + c = a x b x c, then what is the value of $a^2 + b^2 + c^2$?
(a)   14   (b)   15   (c)   16   (d)   17

Q.46. $3 +23y – 8y^2$ is equal to :
(a)   (1-8y) (3+y)   (b)   (1+8y) (3-y)   (c)   (1-8y) (y-3)   (d) (8y-1) (y+3)

Q.47.   A motor car starts with a speed of 70 km/hr with its speed increasing every 2 hrs by 10 km/hr. In how many hours will it cover 345 kms ?
(a) $2\frac{1}{4}$ hrs   (b) 4hrs 5 min   (c) $4\frac{1}{2}$ hrs   (d) 3 hrs

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Q. 48. $(\frac{1}{4}x^2 - \frac{1}{2}x - 12) \div (\frac{1}{2}x - 4)$ is equal to :

(a) $(x + \frac{3}{2})$ (b) $(\frac{1}{2}x - 3)$ (c) $(2x + 3)$ (d) $(\frac{1}{2}x + 3)$

Q.49. 1200 soldiers in a fort had enough food for 28 days. After 4 days, some soldiers were transferred to another fort and thus the food lasted now for 32 more days. How many soldiers left the fort?

(a) 300   (b) 400   (c) 200   (d) 100

Q. 50. If the perimeter of an isosceles right triangle is $(6 + 3\sqrt{2})$m , then the area of the triangle is

(a) 5.4m^2 (b) 81m^2 (c) 9 m^2 (d) 4.5m^2

ENGLISH LANGUAGE

.

Q.51 **The correctly punctuated sentence is :**

(a) He asked me, "whether I had done my work".

(b) He asked me, "whether I had done my work"?

(c) He asked me whether I had done my work ?

(d) He asked me whether I had done my work.

Q.52 **Which of the following will be the correct indirect speech if the statement given below is changed into it?**

He said, "I shall leave these papers here."

(a) He said that he would leave those papers there.

(b) He said that he should leave those papers there.

(c) He said that he would leave these papers there.

(d) He said that he would leave those papers here.

Q.53 **The correct passive form of the following sentence is :**

They asked me my name.

(a) My name was asked me by them.

(b) I was asked my name.

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(c)   Me was asked my name by them.

(d)   My name was asked from them.

Q.54   The correct meaning of the word 'calamity' is:

(a)   disaster

(b)   scourge

(c)   harm

(d)   injury

Q.55   'Red Letter Day' means :

(a)   a dangerous day

(b)   a rosy day

(c)   an important day

(d)   a bloody day

Q.56   The correct antonym of the word 'assets' is:

(a)   liabilities

(b)   estate

(c)   responsibilities

(d)   hindrances

Q.57   The plural form of 'alumnus' is:

(a)   alumnuses

(b)   alumna

(c)   alumnae

(d)   alumni

Q.58 **'Alma Mater' is the place where one:**

(a) studied

(b) married

(c) died

(d) was born

Q.59 **Identify the part which contains an error in the following sentence.**

Ten miles are not a long distance.

(a) ten miles

(b) are not

(c) a long distance

(d) no error

Q.60 **Choose the correct order to make the sentence below meaningful.**

History of India/ than / was there a / Mahatma Gandhi/ never in the /greater man.
        1   2   3   4   5   6

(a) 124356

(b) 634521

(c) 513126

(d) 513624

Q.61 **Fill in the blank with a suitable Phrase Preposition.**

He accepted the car _____ his claim for Rs 3,25,000.

(a) on account of

(b) by dint of

(c) in lieu of

(d) because of

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Q.62 **The suitable prefix for the word "bitter" is:**

(a)   im

(b)   in

(c)   un

(d)   em

Q.63 **Fill in the blank with a suitable Conjunction.**

He is slow, _____ he is sure.

(a)   and

(b)   for

(c)   but

(d)   or

Q.64 **Complete the following maxim.**

Genius without education is like silver in the _____.

(a)   shop

(b)   mine

(c)   Well

(d)   pit

Q.65 **Select the word that is opposite in meaning to the underlined word.**

My first lecture in the classroom was a <u>fiasco.</u>

(a)   success

(b)   joy

(c)   fun

(d)   disaster

Q.66. **The right suffix for the word 'just' to make it an abstract noun is:**

(a)   - ly

(b)   - ify

(c)   - ice

(d)   - ing

Q.67 **Select the word that is similar in meaning to the underlined word.**

The <u>requisite</u> energy is derived from the battery.

(a)   insignificant

(b)   necessary

(c)   different

(d)   special

Q.68 **Select the word that is similar in meaning to the underlined word.**

His <u>candid</u> opinion has won him many friends.

(a)   kind

(b)   courteous

(c)   generous

(d)   frank

Q.69 **Select the word that is opposite in meaning to the underlined word.**

Everyone agreed that it was a piece of <u>meticulous</u> research.

(a)   careless

(b)   careful

(c)   cautious

(d)   scrupulous

Q.70   The word 'avert' means:

(a)   avoid

(b)   fall

(c)   hatred

(d)   degenerate

Q. 71   The adjective form of 'boast' is :

(a)   boastful

(b)   boastly

(c)   boasty

(d)   boastile

Read the following passage and answer the questions that follow .

Vehicles do not move about the roads for mysterious reasons of their own. They move only because   people want them to move in connection with the activities which the people are engaged in. Traffic is therefore a 'function of activities', and   because, in towns, activities mainly take place in buildings, traffic in towns is a 'function of buildings'. The implications of this line of reasoning are inescapable.

Q.72   Line 1 of the passage means that the vehicles move on the roads

(a)   for reasons difficult to explain.

(b)   to serve specific purposes of people.

(c)   in a haphazard fashion.

(d)   in ways beyond our control.

Q.73   The author says that traffic is a 'function of activities'. He means that

(a)   human activities are taking place.

(b)   human activities are dependent on traffic.

(c)   traffic is not dependent on human activities.

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(d)   traffic is connected with human activities.

Q.74   The author suggests by his argument that

(a)   to regulate traffic, more policemen have to be employed.

(b)   to regulate activities, traffic has to be controlled.

(c)   to regulate traffic, buildings have to be taken into consideration.

(d)   to understand the traffic problem, we must examine the social context in which it is found.

Q. 75   By 'this line of reasoning', the author means

(a)   idea contained in this line.

(b)   idea contained in any one line of his argument.

(c)   the manner of arguing.

(d)   this row of printed characters.

SUBJECT : GENERAL SCIENCE

Q.76.   Tungsten (a transition element) being a metal exhibits the following properties:-
(I)   It is sonorous
(II)   It possesses high tensile strength
(III)   It possesses high melting point
(IV)   It has high density

Which of the above property/properties of Tungsten made it a suitable material for the filament of an electric bulb?
(a)   I, II and II   (b)   II and III   (c)   Only   III   (d)   II, III and IV

Q.77.   Hepatitis-B is caused due to :-
(a)   Virus   (b)   Protozoa   (c)   Bacteria   (d)   Fungi

Q.78.   The production of an exact copy of an animal by asexual reproduction is known as :-
(a)   Cloning   (b)   Mating   (c) Budding   (d)   Hatching

Q.79.   The device which can be used to detect very small current following in an electric circuit is:
(a)   LEAD   (b)   MCB   (c)   LED   (d)   None of these

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Q.80. Which of these unicellular organisms has no definite shape?

(a)   Amoeba   (b)   Paramecium   (c)   Euglena   (d)   Bacteria

Q.81. Which is a thermosetting plastic?

(a)   Polythene   (b)   Melamine   (c)   PVC   (d)   Nylon

Q.82. Solution of which of the following oxides in water will change the colour of blue litmus to red?

(a)   Sulphur dioxide (b)   Magnesium oxide (c)   Iron oxide   (d)   copper oxide

Q.83. In India, PCRA advises how to save petrol/diesel while driving. For this, PCRA gave several tips. Here, PCRA stands for :

(a)   Pollution Control Research Association

(b)   Petroleum Conservation Research Association

(c)   Petroleum Collection and Reserve Association

(d)   None of the above.

Q.84. An electrolyte is :

(a)   a metal   (b)   a solution

(c)   a liquid that conducts current   (d)   All of the above.

Q.85. As the angle between two plane mirrors is decreasing gradually, the number of images of an object placed between them:

(a)   first increases then decreases   (b)   first decreases then increases

(c)   increases   (d)   decreases

Q.86. Purest form of carbon is:

(a)   Coal   (b)   Charcoal   (c)   Coke   (d)   All of these

Q.87. Value of one light year in S.I unit is:

(a) 1.5×10^{11} m   (b) 9.46×10^{15} m   (c) 1.5×10^{15} m   (d) 9.46×10^{12} m

Q.88. Which of the following liquids does not conduct electricity?

I   Lemon juice   II   Sugar solution

III   Distilled water IV   Dilute Hydrochloric acid

(a)   I, II, and IV   (b)   Only III   (c)   Only IV   (d)   III and IV

Q.89. **I**- Fungi, **II**- Bacteria

Consider the following statements and find the correct one:

(a) **II** are small prokaryotes while **I** are large celled eukaryotes with defined mitochondria and other organelles.

(b) **II** have a sexual reproduction through conjugation and transformation but **I** through genetic recombination.

(c) **II** have a sexual reproduction through conjugation and transformation but **I** through genetic recombination.

(d) All of the above

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Q.90   When the applied force is doubled and the object is still at rest, then friction becomes:
(a)   doubled   (b)   halved   (c)   quadrupled   (d)   zero

Q. 91.   Oxides of which element(s) is/are present in acid rain?
I   Carbon   II   Nitrogen   III   Sulphur

(a)   I and II   (b)   II and III   (c)   I and III   (d)   I, II and III

Q.92.   Which of the following tools would a farmer use to remove weeds from the field?
(a)   Hoe   (b)   plough   (c)   Axe   (d)   cultivator

Q.93.   _____are the smallest micro-organisms which can develop only inside the cell of the _____ Organism. They do not respire, feed, grow, excrete or move on their own but they cannot _____When they are outside the _____cell, they behave as _____.
Choose the correct order to fill the blanks:

(a)   Bacteria, Host, Multiply, Animal, Living
(b)   Virus, Bacteria, Reproduce, Living, Non-living
(c)   Virus, Host, Exchange gases, Living, Non-living
(d)   Virus, Host, Reproduce, Living, Non-living

Q.94. In the process of vulcanisation, Natural rubber is treated with an element **X** to improve its properties.
The element **X** can be:
(a)   Carbon   (b)   Nitrogen   (c)   Sulphur   (d)   Phosphorus

Q.95.   The standard value of atmospheric pressure is
(a)   78 cm of Hg   (b)   76mm of Hg   (c)   45 cm of Hg   (d)   0.76cm of Hg

Q.96.   The sound from a mosquito is produced when it vibrates its wings at an average rate of 500 vibrations per second. What is the time period of vibration?

(a)   2 s   (b)   0.002 s   (c)   0.02 s   (d)   0.2 s

Q.97.   The change in focal length of an eye lens to focus the image of objects at varying distances is done by the action of
(a)   Pupil   (b)   Iris   (c)   Retina   (d)   Ciliary muscles

Q.98.   Which cell organelle is called the power House of a cell ?
(a)   Lysosomes   (b)   Golgi bodies   (c)   Mitochondria   (d)   Ribosomes

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Q.99. The dramatic changes in body features associated with puberty are mainly because of the secretions of

| (i) | Thyroxine | (ii) Estrogen | (iii) | Adrenalin | (iv) | Testosterone |
| (a) | (i) & (ii) | (b) (ii) & (iii) | (c) | (i) & (iii) | (d) | (ii) & (iv) |

Q.100. The earth rotates around its axis. The sun appears to rise in the east. Venus rotates in the opposite direction of Earth . We can therefore assume that on Venus, the sun sets in the
    (a)   East   (b) West   (c)   North   (d) South

SUBJECT : SOCIAL SCIENCE

Q.101. Who became the Nawab of Bengal after the death of Alivardi Khan?
    (a)   Murshid Quli Khan
    (b)   Mir Jafar
    (c)   Sirajuddaulah
    (d)   Mir Qasim

Q.102. FIR means:
    (a)   Final Information Report
    (b)   First Information Report
    (c)   Full Information Report
    (d)   First Investigation Report

Q.103. How many MPs are elected to the Rajya Sabha?
    (a)   272   (b)   250   (c)   245   (d)   233

Q.104. What is the meaning of 'media sets the agenda?
    (a)   Media supports the government
    (b)   Media directs the people to agitate
    (c)   Media shapes our thoughts by giving more importance to some issues
    (d)   Media criticizes the government

Q.105. The process in which different crops are grown in alternate rows is known as :
    (a)   Crop rotation
    (b)   Intercropping
    (c)   Terrace farming
    (d)   Contour cropping

Q.106. Which of the following statements is/are correct?
    1.   'Diwani' is the right to collect revenue
    2.   'Faujdari adalat' refers to a civil court
    3.   Richard Wellesley implemented the Subsidiary Alliance
    Select the correct answer using the codes given below :-
        (a)   1 only

(b)   1,2 and 3
(c)   1 and 3 only
(d)   2 and 3 only

Q.107. Which type of farming is practised to meet the needs of a farmer's family?
(a)   Subsistence Farming
(b)   Organic Farming
(c)   Commercial Farming
(d)   Mixed Farming

Q.108. Biotic resources are :
(a)   made by human beings
(b)   derived from living things
(c)   derived from non-living things
(d)   none of the above

Q.109. Separation of religion from the state means :
(a)   Communalism
(b)   Democracy
(c)   Secularism
(d)   All of the above

Q.110. Arrange the following events of the Indian Freedom Movement in correct sequence beginning from the earliest:
1.   The Non-Cooperation Movement
2.   Quit India Movement
3.   The Rowlatt Satyagraha
4.   The March to Dandi
Select the correct answer using the code given below :-
(a) 3-1-4-2
(b) 1-2-3-4
(c) 3-1-2-4
(d) 1-3-2-4

Q.111. The Young Bengal Movement was led by :
(a)   Swami Vivekananda
(b)   Keshab Chandra Sen
(c)   William Jones
(d)   Henry Louis Vivian Derozio

Q.112. _____refers to the court declaring that a person is not guilty of the crime which he/she was tried for by the court.
(a)   Appeal   (b)   Acquit   (c)   Accuse   (d)   None of these.

Q.113. Which of the following pairs is NOT correctly matched.
1.   Nana Saheb   -   Kanpur
2.   Rani Lakshmibai -   Jhansi

17

3.   Kunwar Singh   -   Lucknow
4   Bakht Khan   -   Delhi

Select the correct answer using the codes given below :
(a)   1 and 3
(b)   3 only
(c)   4 only
(d)   2 and 3

Q.114. Which one of the following is a leading producer of copper in the world?
(a)   Bolivia   (b)   Ghana   (c)   Peru   (d)   Zimbabwe

Q.115. AMUL stands for :
(a)   Anand Milk Union Limited
(b)   Anand Milk United Limited
(c)   Anand Mazdoor Union Limited
(d)   Ahmedabad Milk Union Limited

Q.116. How many permanent members are there in the UN Security Council?
(a)   Three   (b)   Four   (c)   Five   (d)   Six

Q.117. Cultivation on planter's own land was referred to as :
(a)   Ryoti   (b)   Mahalwari   (c)   Batai   (d)   Nij

Q.118. Which of the following is a secondary activity?
(a)   Transport   (b)   Farming
(c)   Obtaining sugar from sugarcane   (d)   Bee keeping

Q.119. Which one of the following is not a factor of soil formation?
(a)   Topography   (b)   Soil texture   (c)   Climate   (d) Time

Q.120. Viceroy_____ partitioned Bengal in 1905.
(a)   Curzon   (b)   Minto   (c)   Irwin   (d)   Mountbatten

Q.121. The leaders of the Khilafat agitation were:
(a) Sayyid brothers   (b)   Ali brothers   (c) Both (a) and (b)   (d)   None

Q.122. Which of the following is not a fundamental right of citizens of India?
(a)   Right to equality
(b)   Right to education
(c)   Right to property
(d)   Right to freedom

Q.123. To complain about the problem of hygiene & sanitation, a person living in a big city should go
to :-
(a)   Municipal Corporation
(b)   Municipal Committee

    (c)   Nagar Panchayat

    (d)   Zila Parishad

Q.124. The Supreme Court was established on :
    (a)   26 January 1950
    (b)   15 August 1947
    (c)   26 November 1949
    (d)   15 August 1950

Q.125. Which one of the following refers to the tomb of a Sufi Saint?
    (a)   Idgah   (b)   Khanqah   (c)   Dargah   (d) None

ROUGH WORK

ROUGH WORK

सैनिक स्कूल प्रवेश परीक्षा : 2018
ALL INDIA SAINIK SCHOOLS ENTRANCE EXAMINATION : 2018
कक्षा - CLASS IX
बौद्धिक परीक्षा प्रश्न पत्र PAPER II- INTELLIGENCE TEST

समय : 30मिनट / **Time : 30**Min   अंक: 50 / **Marks :50**

पूरा नाम / Name in Full _____   अनुक्रमांक / Roll No. _____

कक्ष निरीक्षक के हस्ताक्षर/Initial of Invigilator_____कोडसंख्या / Code No._____

बौद्धिक परीक्षा प्रश्न पत्र PAPER II- INTELLIGENCE TEST: CLASS IX

Note: Candidate NOT TO WRITE Name or Roll Number on any page in the Main Answer Book

प्राप्तांक / Marks Obtained व ⎿____⏋   Code No._____

_____

निर्देश
INSTRUCTIONS

1.   This paper contains 25 questions of 2 marks each.
    इस प्रश्न-पत्र में 25 प्रश्न है, प्रत्येक प्रश्न के लिए 2 अंक है ।

2.   Answer all questions. Write your answer in OMR Answer sheet
    सभी प्रश्नों के उत्तर देने है। अपना उत्तर OMR में लिखे।

3.   There are total 14 pages in the question paper

_____

1

ILLUSTRATION SET / सोदाहरण समूह

जिस प्रकार के प्रश्न आपको परीक्षा में मिलेंगे उससे सम्बंधित कुछ प्रश्नों को उदाहरण के रूप में यहाँ नीचे प्रस्तुत किया गया है। अब इन उदाहरणों को ध्यानपूर्वक देखिये और समझिए उनको कैसे हल किया गया है।

Below are given examples of the type of questions that you will find in the test. Now, look at these examples carefully and understand how they are solved.

A. पाँच आकृतियों का एक समुच्चय(सेट) दिया गया है जिनमें से कोई चार आकृतिया एक समान गुण के आधार पर अपना एक समूह बनाती है और एक भिन्न है। आपको यह ज्ञात करना है कि उनमें से कौन सी आकृति अन्य चार आकृतियों से भिन्न है।

There are five sets of figures in which 4 share a common property and make a group whereas one of them is different. Find out which figure is different from the other four.
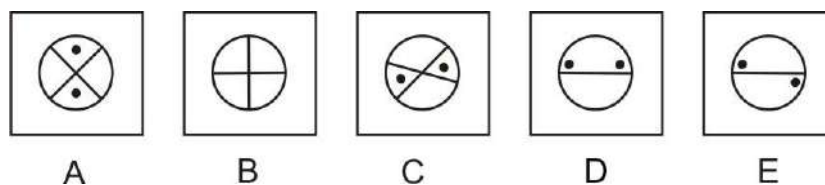
यहाँ ऊपर दी गयी सभी आकृतियों **A,B,C,D** तथा **E** में सिर्फ आकृति **'B'** को छोड़ सभी आकृतियों में दो काले बिन्दु दिये गए है इसलिए यह सभी एक वर्ग से सबंधित है। जबकि आकृति **'B'** मे कोई काला बिन्दु नहीं है। अत: विकल्प **'B'** सही उत्तर है, जोकि उत्तर वाले खाने में लिखा गया है।

Out of the above figures **A, B, C, D & E** except figure **'B'** all figures have two black dots in the figure and thus form one group. Figure **'B'** stands out as it does not have any black dot in it. So, the right answer is **'B'** which is written in the answer box.

Answer is

B

ठीक इसी रूप में अक्षरों अथवा संख्या पर आधारित प्रश्न आपको मिलेंगे जोकि अपने वर्ग से भिन्न है। समस्याओं मे दिये गए तर्क को समझते हुए कि यह किस प्रकार एक समान है, इसको हल करने का प्रयास करे।

2

In a similar manner you may be asked to choose the set of alphabets or number which differ from their group. Try to understand the logic how they are grouped and solve the problem.

B. नीचे कुछ संख्याएं एक व्यवस्थित क्रम में एक निश्चित श्रृंखला के रूप में दी गयी है लेकिन उनमें से एक संख्या छूटी हुई है। नीचे दिये गए विकल्पों में से आपको उस एक विकल्प को चुनना होगा जोकि उस श्रृंखला को पूरा करेगा।

Given below, some numbers are arranged in a particular sequence but one of the number is missing. Find the missing number from the given choices to complete the series.

11   21   31   41   ....

(A) 42   (B) 51   (C) 61   (D) 71   (E) 60

ऊपर दी गयी श्रृंखला में पहली संख्या से दूसरी संख्या के बीच दस अंको का अन्तर है इसलिए श्रृंखला को पूरा करते हुए रिक्त स्थान पर **51** की संख्या आएगी। अत: विकल्प **'B'** सही उत्तर है जोकि उत्तर वाले खाने में लिखा गया है।

In the above series, there is a gap of ten numbers between the first number and the second consecutive number. To continue the series, the missing number would be **51**. Therefore choice **'B'** is the correct answer to be written in the answer box.

Answer is | **B** |

ठीक इसी रूप में संख्याओं, अक्षरों अथवा आकृतियों से संबंधित श्रृंखला को पूरा करने वाले प्रश्न आपसे पूछे जाएंगे, जिनमे दिये गये विकल्पों में से किसी एक को चुनना होगा। आपको दी गयी श्रृंखला को समझकर समस्या का समाधान करना होगा।

In a similar manner you may be asked to choose the set of given options to complete the series for alphabets or figures. You have to grasp the sequence logic and solve the given problems.

C. आकृति '**A**' तथा '**B**' का आपस में जो सम्बन्ध है, ठीक वही सम्बन्ध आकृति '**C**' तथा '**D**' के बीच स्थापित करते हुए आकृति '**D**' (प्रश्नवाचक चिन्ह) के स्थान पर दिये गए विकल्पों **1, 2, 3, 4** में से कौन सी आकृति आएगी।

Figures '**A**' and '**B**' have a particular relationship. Establish the similar relationship between figures '**C**' and '**D**' by choosing right figure amongst the four alternatives **1, 2, 3, 4** which would replace the question mark in **figure 'D'**.

Answer is

4

'B' बॉक्स की आकृति बनाने के लिए 'A' बॉक्स में दी गयी आकृति घड़ी की विपरीत दिशा में 90^0 पर घूम जाती है। ठीक इसी प्रकार 'C' बॉक्स में दी गई आकृति को घड़ी की विपरीत दिशा में 90^0 पर घुमाया जाए तो 'D' बॉक्स की आकृति बन जाएगी। अतः आकृति 4 इसका उत्तर है। जोकि उत्तर वाले खाने में लिखा गया है।

Figure of box 'A', gets rotated anticlockwise at 90^0 to form a figure in box 'B'. Similarly, figure in box 'C' has to be rotated anticlockwise at 90^0 to form a figure in box 'D'. Hence, figure **(4)** is the answer that is written in the answer box.

D. यहाँ दिये गए प्रश्न के विकल्पों **A, B, C** तथा **D** में से कौन सी एक आकृति सही रूप में '**X**' आकृति का निर्माण करेंगी।

In the following question, find out which one of the four alternative figures **A, B, C** and **D** will exactly make up the key figure '**X**.'

Answer is

4

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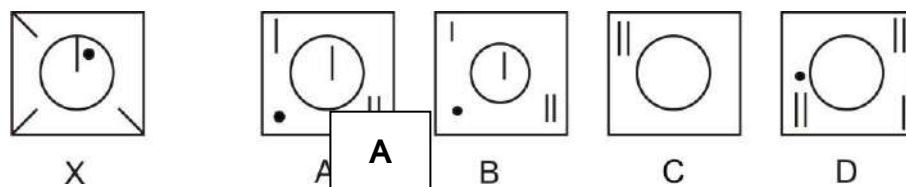
यहाँ दी गयी सभी आकृतियों का अवलोकन करने पर पाते है कि आकृति **'A'** ही **'X'** आकृति की कुंजी है। यघपि आकृति **'B'** भी **'A'** आकृति के समान ही दिखाई देती है लेकिन यह आकृति **'A'** की तुलना में छोटी है। अत: **'A'** सही उत्तर है जोकि उत्तर के खाने में लिखा गया है।

If you join the given fragments of figure **'A'** it will make up the Figure **'X'**. Though figure **'B'** also looks like figure 'A' but the fragments of figure 'B' are smaller in size in comparison to figure **'X'**. So, the right answer is '**A**' which is written in the answer box.

E. एक आदमी ने एक व्यक्ति की ओर संकेत करते हुए स्त्री से कहा, "इसकी माता अपने पिता की इकलौती पुत्री है" उस स्त्री का उस व्यक्ति के साथ क्या संबंध है?

Pointing towards a person, a man said to the woman, "His mother is the only daughter of your father". How is the women related to that person?

  A) Daughter   B) Sister   C) Mother   D) Wife

Answer is   **C**

उसने स्वयं को अपने पिता की इकलौती पुत्री बतायां । अत: वह व्यक्ति उस स्त्री का बेटा, वही स्त्री उस व्यक्ति की माता है। अत: विकल्प 'C' सही उत्तर है।

The only daughter of a woman's father is she herself. So, the person is woman's son i.e. the woman is the person's mother. Hence the answer is 'C'.

F. '**X**' आकृति के दाहिनी तरफ चार विकल्प आकृतियाँ **A, B, C** तथा **D** दी गयी है। यदि आप **'X'** आकृति को पानी में देखते है तो उसका प्रतिबिम्ब दी गयी चार आकृतियों में से किसी एक के समान होगा, वह कौन सी विकल्प आकृति है?

On the right side of the figure **'X'** four choice figures **A, B, C** and **D** are given. If you see the reflection of **figure 'X'** in water, which of the figure out of the four figures given will resemble the water image of **figure 'X'**.

Answer is   **C**

5
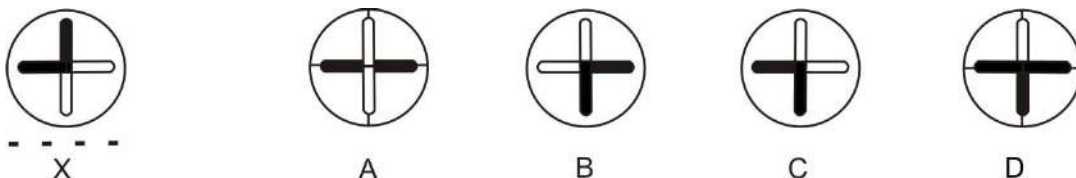
जब आप किसी वस्तु का प्रतिबिम्ब पानी में देखते है तो वह उल्टे रूप में दिखायी देती है, यानि वस्तु का ऊपर का भाग नीचे की तरफ दिखायी देता है। अत: विकल्प **'C'** सही उत्तर है।

When you see a reflection of an object in water the image formed is inverted i.e. the object is turned upside down. Thus choice **'C'** is the correct answer.

G. यहाँ पर **'X'** आकृति दी गयी है। **'X'** आकृति के दाहिनी तरफ चार विकल्प आकृतियाँ A, B, C तथा D दी गयी है। यदि आप **'X'** आकृति को दर्पण में देखते है तो उसका प्रतिबिम्ब दी गयी चार आकृतियों में से किसी एक के समान होगा, वह कौन सी विकल्प आकृति है।

If you see the figure **'X'** in the mirror, which figure out of the four choice figures will be the mirror image of figure **'X'**. Write the answer in the answer box.

Mirror
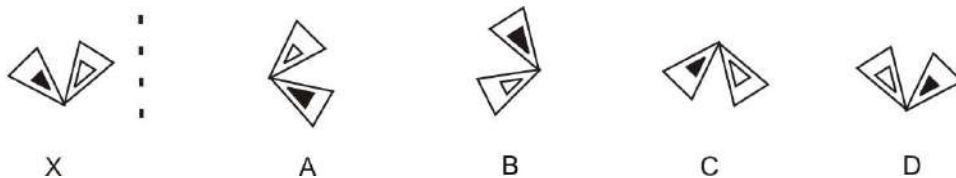
जब हम किसी वस्तु को दर्पण में देखते है तो उस वस्तु का बायी तरफ का भाग दायी तरफ तथा दायी तरफ का भाग बायी तरफ दिखायी देता है। उसी नियम का अनुसरण करते हुए आकृति '**D**' सही उत्तर है जोकि उत्तर वाले खाने में लिखी हुई है।

Answer is

D

When you see something in the mirror the left appears right and right appears left. This way figure '**D**' is the right answer and written in the answer box.

H. नीचे दिये गए वेन डायग्राम में किस वर्ग का डायग्राम अस्पताल, मरीज तथा नर्स का प्रतिनिधित्व करेगा।

In the following Venn diagram which diagram represents Hospital, Patient and Nurse.

Answer is

D
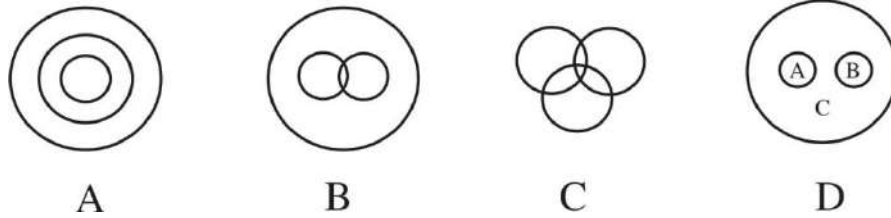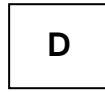
मरीज और नर्स भिन्न है। लेकिन दोनों अस्पताल के रूप में समानता रखते है। अत: यह सभी डायग्राम 'D' के द्वारा प्रतिनिधित्व किए जा सकते है। डायग्राम 'D' में मरीज का प्रतिनिधित्व वृत 'A' करता है, वृत 'B' नर्स का तथा वृत 'C' अस्पताल का प्रतिनिधित्व करता है। अत: इसका उत्तर 'D' है जोकि उत्तर वाले खाने में लिखा गया है।

Patient and nurse are separate but both are related to the hospital. So, they would be represented by the diagram '**D'.** Circle '**A'**, represents patient circle '**B'**, represents nurse and '**C'** represents hospital. So the answer is '**D'** which is written in the answer box.

I. यहाँ A, B, C तथा D के रूप में चार आकृतियाँ दी गयी है। इन चार आकृतियों में से कोई एक आकृति यहाँ दिये गए 'X' पैटर्न के अन्दर छिपी हुई है। आपको दिये गए 'X' पैटर्न के अन्दर उस छिपी हुई आकृति को ढूंढना है। दिये गए विकल्पों A, B, C तथा D में से किसी एक सही विकल्प वाली आकृति को चुनकर अपना उत्तर सम्बंधित खाने में लिखे।

Four figures marked **A, B, C & D** are given. Out of the four figures A, B, C & D one of the figure is hidden in the figure marked 'X'**.** Find the correct option and write the answer in the answer box.

Figure X

Answer figure

A　　　　**B**　　　　**C**　　　　**D**

The correct answer is A because

Answer is

A

7
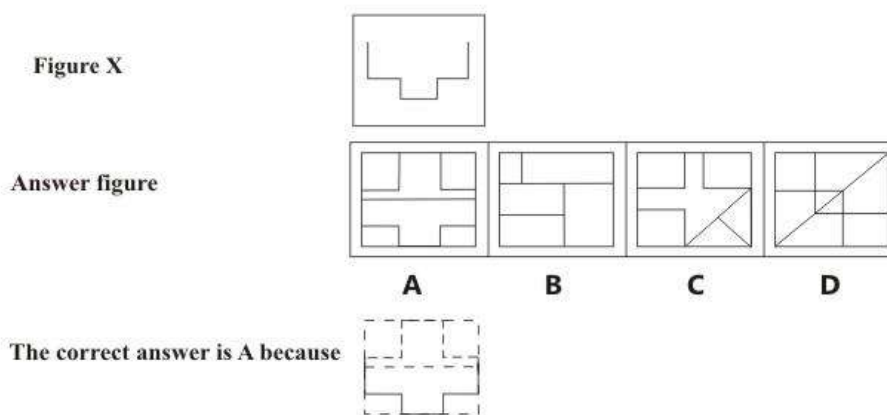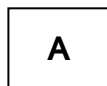
यहाँ दी गयी आकृतियों B, C तथा D में से कोई भी आकृति 'X' पैटर्न में छिपी हुई दिखायी नहीं देती है। जबकि 'A' विकल्प वाली आकृति 'X' पैटर्न के अन्दर छिपी हुई आकृति के समान दिखाई देती है। अत: 'A' सही उत्तर है जो उत्तर वाले खाने में लिखा गया है।

Out of the four figures, **B, C & D** does not match with figure 'X' whereas figure '**A'** matches. '**A'** is the right answer and written in the answer box.

J. नीचे जो डिज़ाइन दिया गया है, उसके बाएँ ओर नीचे की तरफ का भाग कटा हुआ है और '**?'** से चिन्हित है। यह कटा हुआ भाग दी गयी चार विकल्प आकृतियों **A, B, C** तथा **D** में से कोई एक है। आपको सही आकृति वाले विकल्प को चुन कर लिखना है, जिससे वह डिजाइन पूरा बन जाए।

In the figure given below a portion of the design is cut and marked by '**?'**. Cut design is placed among the other choices **A, B, C** and **D**. Write the choice of the correct figure, which will complete the design.

Answer is

    C
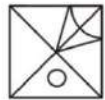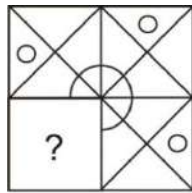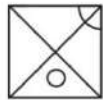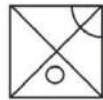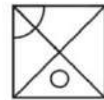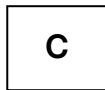
यदि हम दिए गए अभिकल्प (डिज़ाइन) को देखे तो स्पष्ट होता है कि विकल्प '**C'** वाली आकृति को प्रश्नवाचक (?) स्थान पर रखने से यह डिज़ाइन पूर्ण हो जाता है। अत: विकल्प '**C'** सही उत्तर है।

If you see the design clearly and put figure '**C'** in the place of the question mark (?) the design gets completed. So choice '**C'** is the correct answer.

******

126. WINTER : IWTNRE :: LACSAP : ?
    (a)   PASCAL   (b) SPLACA   (c) ALSCPA   (d) LACSPA

127. GDLM : IBNK :: XSOH : ?
    (a)   ZQQF   (b)   WTMO   (c)   APQF   (d) ZQLF

128 TQW is to MJP as ZHN is to
    (a)   SAG   (b)   GSA   (c)   YGM   (d)   TEG

129. WEIGHT is related to KILOGRAM in the same way as DISTANCE is related to
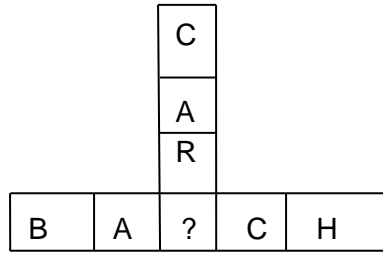   (a)   GRAM   (b)   POUND   (c) LENGTH   (d)   KILOMETER

130. 26 : 5 :: 65 : ?
    (a)   6   (b)   7   (c)   8   (d)   9

131. 16 : 56 :: 36 : ?
    (a)   96   (b)   112   (c)   118   (d)   128

132. AT, BS, CR, DQ, ?
    (a)   EP   (b)   FP   (c)   ED   (d)   EN

133. 4, 9, 16, 25, ? 49
    (a)   50   (b)   36   (c) 64   (d)   39

134. 0, 1, ? 27, 64
    (a)   16   (b) 32   (c) 4   (d)   8

135. A 5, C 10, E 15, G 20, ?
    (a)   H 30   (b) I 30   (c)   I 25   (d) H 25

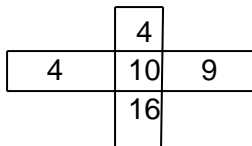136. Insert a letter which completes both the words given below :-

```
      C
      A
      R
B | A | ? | C | H
```

(a)   T   (b)   K   (c)   V   (d)   L

137. Insert the missing terms in the figure, so that the word formed is the name of a country when read clockwise direction.
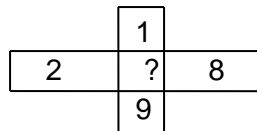
```
   L    ?    N
   I         ?
   R    ?    A
```
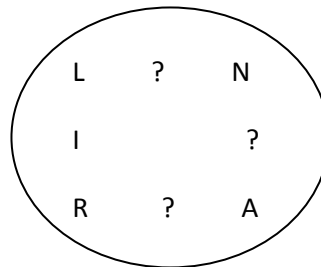
(a)   SAA   (c)   APR

(b)   SAK   (d)   PLC

138. Find the number that replaces the question mark.

```
        4                   1                   5
  4 | 10 | 9          2 | ? | 8          16 | 13 | 9
       16                   9                   5
       (i)                 (ii)                (iii)
```
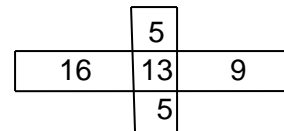
(a)   12   (b)   6   (c)   5   (d)   7

139. In a class of 30 students, swati's rank is 11th from the top, what is her rank from the bottom?

(a)   19TH   (b)   20TH   (c)   22ND   (d) 21ST
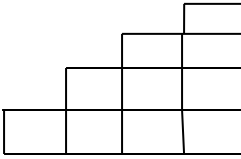
140. Ritu walks 50 m towards East, then turns to her right and walks 50m, now she turns left and walks another 50m, now again she turns left and walks another 50 m. In which direction is she from the starting point?

(a)   East   (b)   North   (c)   North-East   (d)   South –West
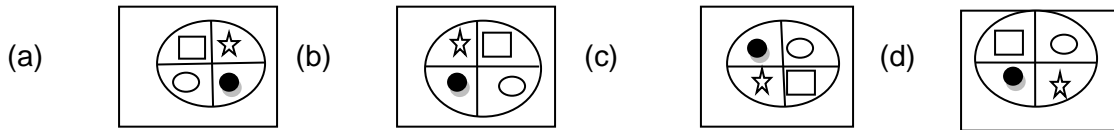
141. Find the fourth proportional to 3,7 and 9,

(a)   23   (b)   27   (c)   21   (d)   None of these

10

142. Count the number of squares in the given figure
.

(a)   14   (b) 13   (c)   10   (d)   None of these

143. Choose the figure, which is different from others ?

(a)   (b)   (c)   (d)

144. What is the sequence of the following when arranged in a dictionary?
(1)   Telegraph   (2)   Telephone (3) Teleprinter (4)   Telemetry (5) Telepathy

(a)   14532   (b) 14253   (c)   14523   (d) 14325

145. CLOCK is 42145, LEAN is 2068.
CARE is 4690, then NECKLACE is
(a)   80546240   (b)   6054842   (c)   80452640   (d)   50842604

146. Which among the following year is a leap year?
(a)   2500   (b)   2800   (c)   2600   (d) 2700

Directions :-   In each of the following questions, Find the word which can not be made from the letters of the given word.

147. CARPENTER
(a)   NECTAR   (b) CARPET   (c) PAINTER   (d) REPENT
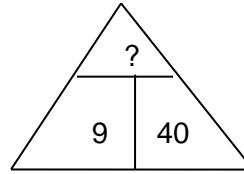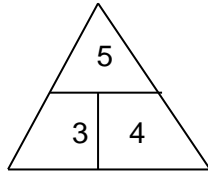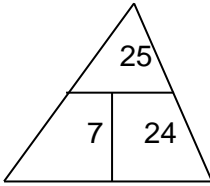

148. REASONABLE
(a)   BRAIN   (b) BONES   (c) NOBLE   (d) ARSON

149. If '÷'   stands for 'X'   'X' stands for '+'. '+' stands for '-' , then what is the value of
7÷ 21 x 81 + 9 – 3 x 14 ?
(a)   21   (b)   24   (c)   27   (d)   28

11

150. Determine the term that would replace the question mark.

(a) 36   (b) 41   (c) 35   (d) 45

ROUGH WORK

12

13

14