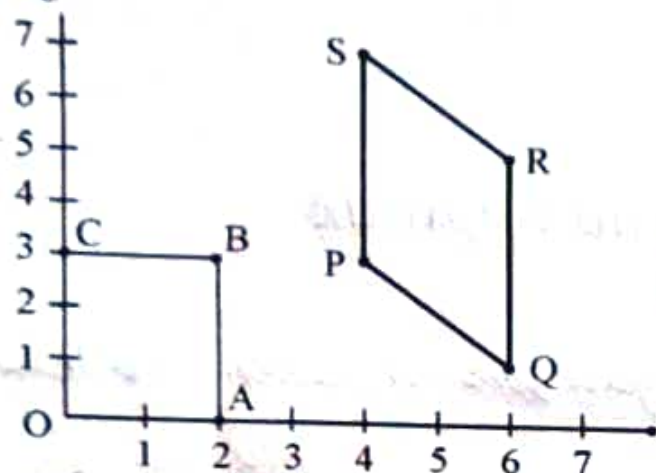
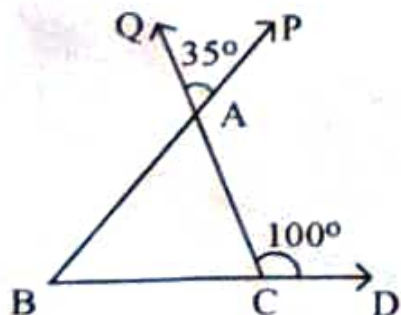


SECTION - 'A' : MATHEMATICS

- 001** Identify the correct coordinates of the vertices of rectangle OABC from the adjoining figure.



- (1) $O(0,0)$, $A(2,0)$, $B(2,3)$, $C(0,3)$
 (2) $P(4,3)$, $Q(6,1)$, $R(6,5)$, $S(4,7)$
 (3) $O(0,0)$, $A(0,2)$, $B(3,2)$, $C(3,0)$
 (4) $O(1,1)$, $A(0,2)$, $B(2,3)$, $C(3,3)$
- 002** A cistern can be filled by one tap in 4 hours and by another tap in 3 hours. How long will it take to fill it, if both taps are opened together?
- (1) $\frac{11}{7}$ hours (2) $\frac{12}{7}$ hours (3) $\frac{7}{12}$ hours (4) $\frac{7}{11}$ hours
- 003** Choose the correct remainder when $p(x): 3x^2 + 4x + 5$ is divided by $g(x): x - 2$
- (1) 20 (2) 25 (3) 30 (4) 35
- 004** In the Fig. $\angle QAP = 35^\circ$ and $\angle ACD = 100^\circ$. Find $\angle ABC$



- (1) 55° (2) 65° (3) 75° (4) 50°

005 Arun bought binder clips at the rate of 5 for a rupee. He had to sell them at the rate of 6 for a rupee. Find his loss percent in the transaction.

- (1) $\frac{40}{3}\%$ (2) $\frac{50}{3}\%$ (3) $\frac{10}{3}\%$ (4) $\frac{20}{3}\%$

006 For what value of m

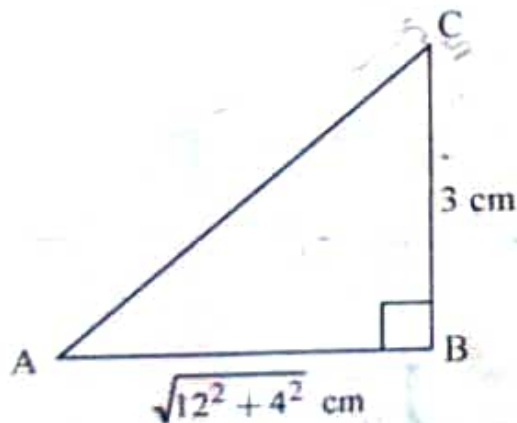
$$xy^2m = (2xy + 5y)^2 - (2xy - 5y)^2$$

- (1) -100 (2) 100 (3) 40 (4) -40

007 Which is the like term as $84xy^2z^2$?

- (1) $-3 \times 8 \times x \times y \times z \times z$ (2) $12 \times 7 \times x \times x \times y \times z \times z$
(3) $-5 \times 6 \times x \times x \times y \times y \times z$ (4) $6 \times 4 \times x \times z \times y \times z \times y$

008 ABC is a right angled triangle, which is right angled at B . If $AB = \sqrt{12^2 + 4^2}$ cm. $BC = 3$ cm, then find out the perimeter of the given figure :



- (1) $(4\sqrt{10} + 16)$ cm (2) $(16\sqrt{10} + 4)$ cm
(3) $(8\sqrt{10} + 2)$ cm (4) $(2\sqrt{10} + 8)$ cm

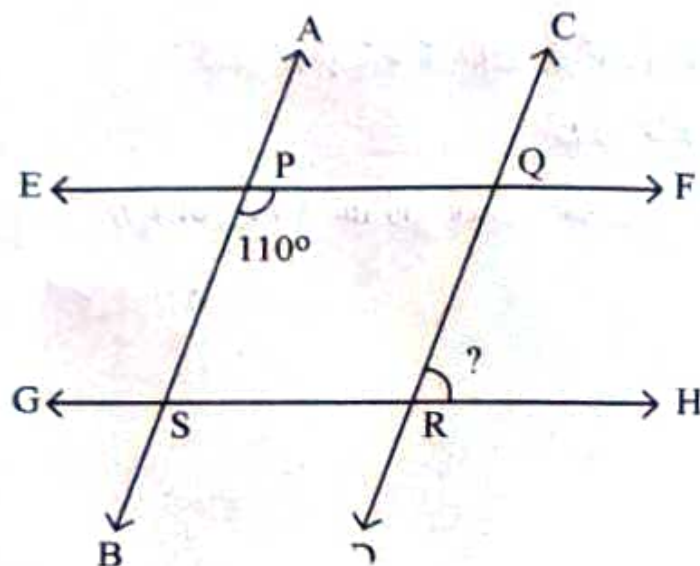
009 A bicycle wheel makes 1000 revolutions in moving 2 km. Find the diameter of the wheel.

- (1) 1.57 m (2) 1.27 m (3) 6.036 m (4) 0.636 m

010 15 boys earn ₹ 900 in 5 days. How much will 20 boys earn in 7 days ?

- (1) ₹ 1680 (2) ₹ 1720 (3) ₹ 1420 (4) ₹ 2008

011 If $AB \parallel CD$ and $EF \parallel GH$ then find $\angle QRH$:



- (1) 105° (2) 50° (3) 110° (4) 70°

012 In what time will ₹ 160000 amount to ₹ 176400 at 5% per annum compounded annually?

- (1) 4 years (2) 3 years (3) 2 years (4) 1 year

013 Anita borrows ₹ 1000 at 10% p.a. simple interest for 3 years. She immediately lends this money at compound interest at the same rate and for the same time. What is her gain at the end of 3 years ?

- (1) ₹ 40 (2) ₹ 41 (3) ₹ 30 (4) ₹ 31

014 Mohan can do a piece of work in 25 days alone and Rohan can finish it in 20 days. They work together for 5 days & then Mohan left the work. In how many days will Rohan finish the remaining work ?

- (1) 20 days (2) 9 days (3) 14 days (4) 11 days

015 Which of the following cannot be true for a polyhedron ?

(1) $V=4, F=4, E=6$

(2) $V=6, F=8, E=12$

(3) $V=20, F=12, E=30$

(4) $V=4, F=6, E=6$

016 Consider the following distribution :

Class	0 - 20	20 - 40	40 - 60	60 - 80	80 - 100
Frequency	17	28	32	f	19

If the mean of the above distribution is 50, what is the value of f ?

(1) 24

(2) 34

(3) 56

(4) 96

017 The mean of 20 observations is 19. On checking it was found that the two observations were wrongly copied as 3 & 6. If wrong observations are replaced by correct values 8 and 9, then what is the correct mean ?

(1) 19.4

(2) 16.6

(3) 15.8

(4) 14.2

018 A person has 2 bags. First bag has 3 black and 4 white balls. Second bag has 4 black and 3 white balls. A bag is selected at random and then a ball is selected from it. Find the probability of the ball to be black.

(1) $\frac{1}{3}$

(2) $\frac{1}{4}$

(3) $\frac{1}{7}$

(4) $\frac{1}{2}$

019 What is the probability that the number selected from the numbers 1, 2, 3, 30 is a prime number.

(1) $\frac{1}{29}$

(2) $\frac{5}{6}$

(3) $\frac{1}{3}$

(4) $\frac{2}{3}$

020 Match List-I with List-II ;

List-I

List-II

(A) $3m \times 2m$

(I) $16a^2$

(B) $-9m \times -3n$

(II) $6m^2$

(C) $4a^2 \times 4a^2$

(III) $27mn$

(D) $2a \times 8a$

(IV) $16a^4$

Choose the correct answer from the options given below :

(1) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)

(2) (A)-(III), (B)-(II), (C)-(I), (D)-(IV)

(3) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)

(4) (A)-(II), (B)-(III), (C)-(I), (D)-(IV)

021 If a 4-digit number $2x y 8$ is exactly divisible by 3, then which of the following is the least value of $(x + y)$?

(1) 2

(2) 4

(3) 6

(4) 5

022 Find the digits A and B if

$$\begin{array}{r} BA \\ \times A4 \\ \hline 13A0 \end{array}$$

(1) 5, 4

(2) 5, 2

(3) 4, 5

(4) 2, 5

023 One of the factors of $6x^2 + 5x - 6$ is :

(1) $2x - 3$

(2) $3x + 2$

(3) $2x + 3$

(4) $2x - 2$

024 A tree broke at a height of 6m from the ground and its top touched the ground at the distance of 8m from the foot of the tree. Find the height of the tree.

(1) 10 m

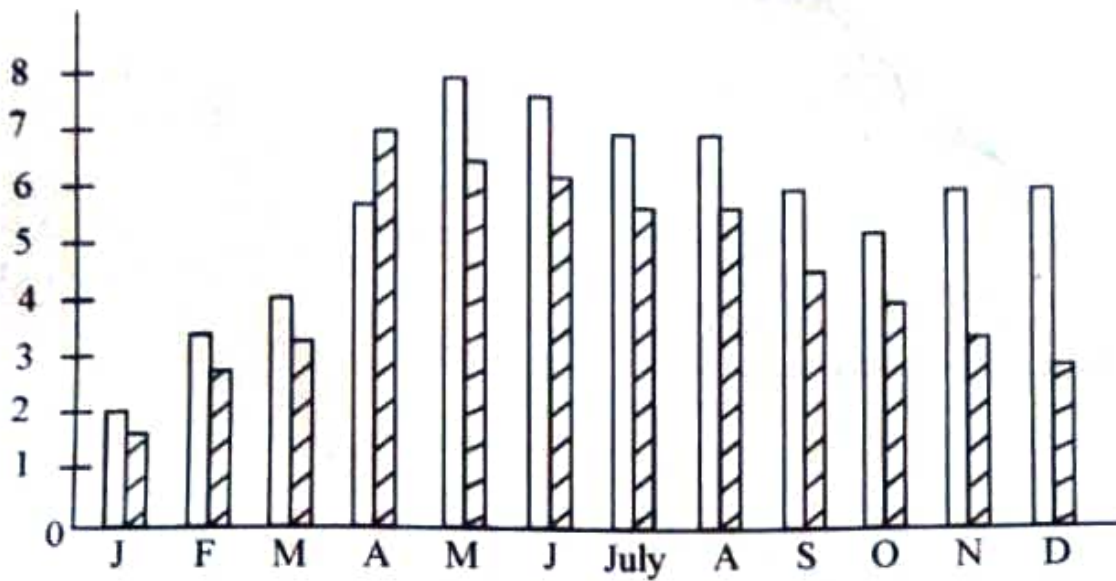
(2) 14 m

(3) 16 m

(4) 2 m

- 025 The following bar graph shows the average daily hours of sunshine in two cities during the year. Observe the double bar graph and answer the following question.

In which month is the difference between average hours of sunshine of two cities least?



- (1) ✓ December (2) May (3) January (4) February

- 026 If one of the number of a Pythagorean triplet is 10, the triplet is :

- (1) (23, 25, 10) (2) ✓ (10, 24, 26) (3) (5, 8, 10) (4) (3, 4, 10)

- 027 If one number is twice the other number and the sum of the squares of two numbers is 50,000, then find the difference of numbers.

- (1) ✓ 10000 (2) 50 (3) 100 (4) 10

- 028 Evaluate : $\sqrt[3]{1372} \times \sqrt[3]{1458}$

- (1) 126 (2) ✓ 136 (3) 116 (4) 106

- 029 If $a = 12$, $b = -5$ and $c = -7$, then the value of $a^3 + b^3 + c^3$ is :

- (1) 1360 (2) 420 (3) 1260 (4) ✓ -1260

- 030 The value of a smart phone depreciates every year by 40%. Find out its value after 2 years if its present value is ₹ 70000.

- (1) ₹ 28000 (2) ₹ 16800 (3) ₹ 25200 (4) ✓ ₹ 35000

031 There are 200 employees in an office. Food provision for them is for 20 days. How long will this provision last if 90 of them leave the group ?

- (1) 16 days (2) 25 days (3) 17 days (4) 30 days

032 5 pipes are required to fill a tank in 1 hour 36 minutes. How long will it take if 2 pipes stopped working ?

- (1) 57.40 minutes (2) 2 hours (3) 48 minutes (4) 2 hour 40 minutes

033 The Curved surface area of a cylindrical pipe is $2\pi(x^2 + x - 132)$ metres and its radius is $(x+12)$ metres. What will be the height of the pipe ?

- (1) $(x+12)$ sq. m (2) $(x-11)$ sq. m
(3) $(x-11)$ m (4) $(x+12)$ m

034 Match List-I with List-II :

List-I

List-II

- | | |
|----------------------|-----------------------------|
| (A) $(7a+6b)(7a-6b)$ | (I) $49a^2 + 84ab + 36b^2$ |
| (B) $(7a+6b)^2$ | (II) $49a^2 + 21ab - 18b^2$ |
| (C) $(7a-6b)^2$ | (III) $49a^2 - 36b^2$ |
| (D) $(7a+6b)(7a-3b)$ | (IV) $49a^2 - 84ab + 36b^2$ |

Choose the correct answer from the options given below :

- (1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
(2) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
(3) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)
(4) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

- 035 In India people speak different languages. Choose the correct option in degrees which represent the number of people speaking Tamil using the information given in the chart

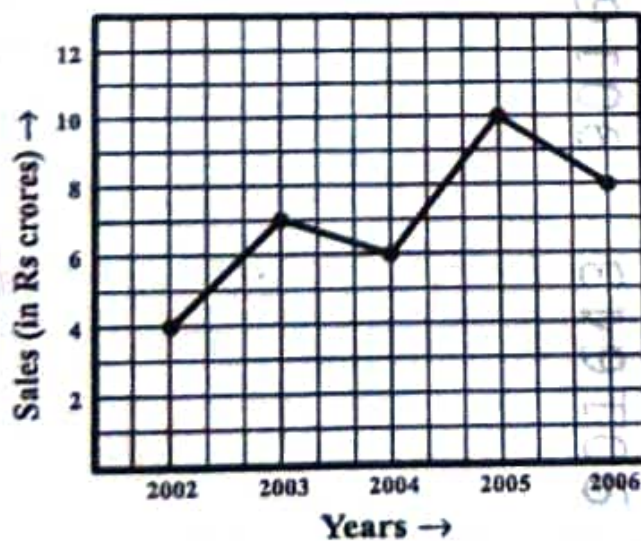


Language	Number of People
(i) Hindi	40
(ii) English	12
(iii) Marathi	9
(iv) Tamil	7
(v) Bengali	4
Total	72

- (1) 45° (2) 35° (3) 20° (4) 60°

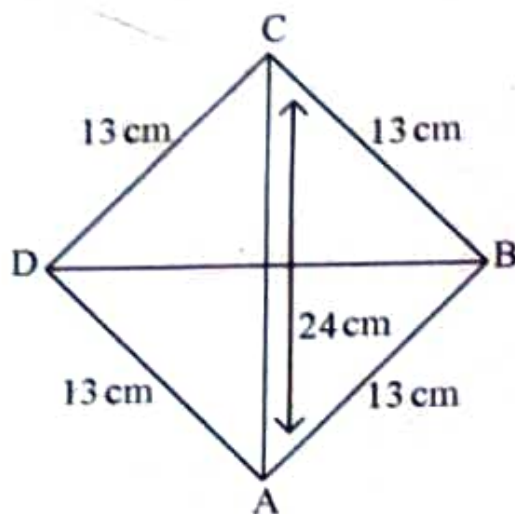
- 036 The following line graph shows the yearly sales figures for a manufacturing company. Study the line graph and answer the following question.

The average sales of the company of the even years will be,



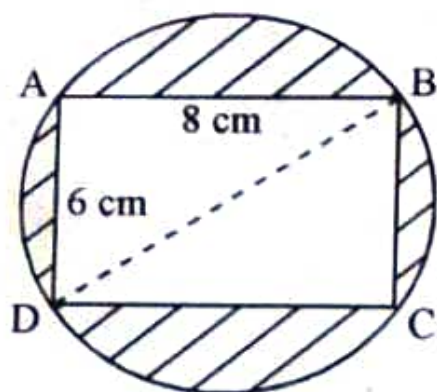
- (1) 7 (2) 8.5 (3) 6 (4) 18

- 037** Find the area of Rhombus $ABCD$ having each side equal to 13 cm and one of its diagonal is 24 cm.



- (1) 80 cm^2 (2) ☒ 140 cm^2 (3) 100 cm^2 (4) 120 cm^2

- 038** A rectangle $ABCD$ is inscribed in a circle having sides 8 cm and 6 cm. Find the area of the shaded region.



- (1) 32 cm^2 (2) 30.5 cm^2 (3) 40.5 cm^2 (4) 36 cm^2

- 039** Find m so that $(-5)^{m+1} \times (-5)^{m-1} = (-5)^3$

- (1) 1 (2) ☒ 3 (3) 5 (4) $\frac{3}{2}$

040 If $a = 5 + 2\sqrt{6}$ and $b = \frac{1}{a}$, then what will be the value of $a^2 + b^2$?

- (1) 100 (2) 96 (3) 102 (4) 98

041 Gauransh has 290 cards, Tanya has 150 cards. How many cards must Gauransh give to Tanya so that Tanya may have 3 times as many cards as Gauransh ?

- (1) 180 (2) 40 (3) 140 (4) 80

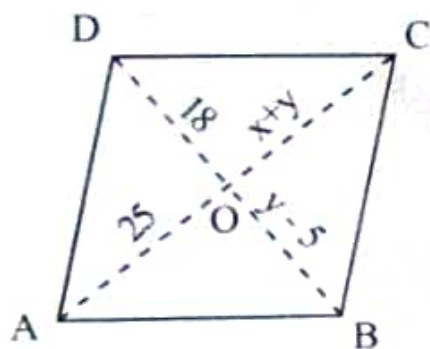
042 A's present age is twice that of B. If B's age 5 years ago was b , then what is A's present age ?

- (1) $2b + 5$ (2) $2b - 5$ (3) $2b - 10$ (4) $2b + 10$

043 If $ABCD$ is a parallelogram, then find the value of x and y ,

where $OC = x + y$, $OD = 18$

$OB = y - 5$ and $OA = 25$



- (1) $x = 13$, $y = 12$ (2) $x = 2$, $y = 23$ (3) $x = 23$, $y = 2$ (4) $x = 12$, $y = 13$

044 Statement A : Every parallelogram is a trapezium and every rhombus is a kite.

Statement B : Every rectangle is a square but every square is not a rectangle.

- (1) Both A and B are true
 (2) A is true and B is false
 (3) A is false and B is true
 (4) Both A and B are false

045 The denominator of a rational number is greater than its numerator by 2. If the denominator is increased by 5 and the numerator is decreased by 2, the number obtained is $\frac{1}{10}$. The rational number is :

- (1) $\frac{25}{8}$ (2) 3 (3) 1 (4) $\frac{3}{5}$

046 Which one of the following is a pythagorean triplet in which one side differs from the hypotenuse by two units ?

- (1) $(2n+1, 4n, 2n^2+2n)$ (2) $(2n, 4n, n^2+1)$
(3) $(2n^2, 2n, 2n+1)$ (4) $(2n, n^2-1, n^2+1)$

047 The ratio of the circumference of 2 wheels is 5:3. Find the ratio of the radii of the 2 wheels.

- (1) 5:3 (2) 3:5 (3) 9:10 (4) 10:9

048 The following marks are obtained by a student in different subjects during formative assessment in 8 subjects. Find median.

7, 3, 8, 0, 9, 10, 8, 7

- (1) 7.5 (2) 9 (3) 6.5 (4) 8, 7

049 Factorize $4a^2 - 9b^2 - 2a - 3b$. Identify the correct factorize answer.

- (1) $(2a-3b)(2a-3b-1)$ (2) $(2a-3b)(2a+3b+1)$
(3) $(2a+3b)(2a+3b+1)$ (4) $(2a+3b)(2a-3b-1)$

050 $\sqrt[4]{\sqrt[3]{2^2}}$ is equal to :

- (1) $2^{-\frac{1}{6}}$ (2) $2^{\frac{1}{6}}$ (3) 2^{-6} (4) 2^6

SECTION - 'B' : ENGLISH

051 Choose the correct option and fill in the blanks :

My sister said, "You lied to me yesterday."

My sister said that _____ to her _____.

- (1) you had lied, yesterday
- (2) I had lied, yesterday
- (3) I had lied, the previous day
- (4) you had lied, the previous day

052 Identify the subject in the following sentence :

The Board of Directors has arrived.

- (1) The Board
- (2) The Board of Directors
- (3) Directors
- (4) The Board of

053 Choose the correct option :

Sam is a _____ man.

- (1) first
- (2) handsome
- (3) half
- (4) delicious

054 Choose the correct option to fill in the blank :

The _____ man died in the hospital.

- (1) injury
- (2) injure
- (3) to injure
- (4) injured

055 Identify the positive degree from the following options :

- (1) Hottest
- (2) Hot
- (3) Hotter
- (4) Hotters

056 Choose the correct option to complete the following sentence :

Did _____ see her paintings ?

- (1) her
- (2) them
- (3) you
- (4) him

057 Choose the correct option :

The synonym of 'take' is _____

- (1) except (2) accept (3) ignore (4) refuse

058 Choose the correct option :

The antonym of 'Stiff' is _____

- (1) bland (2) dark (3) limp (4) bright

059 Choose the correct option to fill in the blank :

They aren't good scuba divers, _____ ?

- (1) could they ? (2) are they ? (3) can they ? (4) will they ?

060 Which of the following is an assertive sentence ?

- (1) Do you enjoy Idli Sambhar ?
(2) You are requested to stand in line.
(3) The Taj is a beautiful monument.
(4) Hurrah ! the school team has won the match.

061 Match the poems/books with poets/authors :

Poems/Books

Poets/Authors

- | | |
|------------------------|-------------------------|
| (A) Vocation | (I) Rabindranath Tagore |
| (B) Christmas Carol | (II) Jawaharlal Nehru |
| (C) Geography Lesson | (III) Charles Dickens |
| (D) Discovery of India | (IV) Zulfikar Ghose |

Choose the correct answer from the options given below :

- (1) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)
(2) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)
(3) (A)-(II), (B)-(IV), (C)-(III), (D)-(I)
(4) (A)-(I), (B)-(III), (C)-(IV), (D)-(II)

062 Choose the correct option that has the right rearrangement of words to make a meaningful sentence.

- (A) butter
- (B) is a
- (C) bread and
- (D) combination
- (E) tempting

Choose the correct answer from the options given below :

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

063 Choose the correct option that has the right rearrangement of words to make a meaningful sentence.

- (A) is important
- (B) rules
- (C) it
- (D) to observe
- (E) traffic

Choose the correct answer from the options given below :

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

064 Choose the correct option to fill in the blanks

The patient was _____ weak to walk without help.

- (1) too
- (2) little
- (3) much
- (4) few

065 Choose the correct preposition :

Are you looking for anything _____ particular ?

- (1) over
- (2) among
- (3) above
- (4) in

066 Match the following books/poems with their authors/poets :

Books / Poems	Authors / Poets
(A) Treasure Island	(I) Major H.P.S. Ahluwalia
(B) Swami and Friends	(II) Robert Louis Stevenson
(C) Harry Potter	(III) R.K. Narayan
(D) The Summit Within	(IV) J.K. Rowling

Choose the correct answer from the options given below :

- (1) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)
- (2) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
- (3) (A)-(I), (B)-(II), (C)-(IV), (D)-(III)
- (4) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)

067 Choose the correct option.

The mason is building the wall.

The above sentence would be written in passive form as :

- (1) The wall are being built by the mason.
- (2) The wall is being built by the mason.
- (3) The mason is being built by the wall.
- (4) The wall was being built by the mason.

068 Choose the correct option.

His _____ is in the ascendant.

- (1) galaxy
- (2) universe
- (3) star
- (4) luckily

069 Identify the error and choose the correct option.

Energy is very essential in succeed in life.

- (1) in-to
- (2) is-was
- (3) in-for
- (4) is-were

070 Choose the correct option :

Ramesh and his brother _____ dancing.

- (1) was
- (2) were
- (3) will
- (4) would

Direction : Read the passage given below : (Q. No. 071 to 075)

Valentin Haüy developed a system of reading for the blind. He printed normal letters in relief that could be felt by a touch of finger. He also started a school for the blind children. Haüy's system of reading for the blind was very useful. But it was quite difficult to learn. Moreover, it was only a reading system. There was no way for the blind to write in this system. In 1819, a ten-year-old blind boy named Louis Braille entered Haüy's school. He was an intelligent student and quickly learnt to read with the help of embossed letters. But he soon realised the disadvantages in Haüy's system. He made up his mind to develop an easier method of reading and writing for the blind. And in 1824, when he was only 15, Braille invented a system of writing which has been accepted all over the world. He was yet a student in Haüy's school. This school is now known as the National Institute for Blind Children. It is supported by the French government.

On the basis of your understanding of the passage, answer the following questions :

071 What according to the passage was the major disadvantage in Haüy's system ?

- (1) It was difficult to comprehend.
- (2) ☒ Haüy's system was difficult for the blind to use for writing.
- (3) It was easy to learn.
- (4) It was a regular reading and writing system.

072 What according to you is Louis Braille known for ?

- (1) A blind boy
- (2) A general student in Haüy's school
- (3) ☒ The inventor of a system of reading and writing for the blind
- (4) A ten year old boy

073 He printed letters in relief.

Here the word - 'relief' means _____.

- (1) ☒ engraved
- (2) in a depressed form
- (3) ☒ normal form
- (4) in a raised form

074 Give the *synonym* of the word - 'invent'.

- (1) ☒ create
- (2) realize
- (3) discover
- (4) unearth

075 Give the *antonym* of the word - 'develop'.

- (1) grow
- (2) ☒ decline
- (3) overweight
- (4) ripe

SECTION - 'C' : GENERAL SCIENCE

076 Identify the name of a book carrying information about endangered species from the following :

- | | |
|-------------------|----------------------|
| (1) Red Data Book | (2) Record Data Book |
| (3) Record Book | (4) Observation Book |

077 Identify the traditional methods of Irrigation -

- | | |
|----------------------|----------------------|
| (a) Chain pump | |
| (b) Lever system | |
| (c) Sprinkler system | |
| (d) Drip system | |
| (1) Both (a) and (c) | (2) Both (a) and (b) |
| (3) Both (c) and (d) | (4) Both (d) and (a) |

078 Name a National Park situated in Pachmarhi Biosphere Reserve from the following -

- | | |
|-------------------------------|------------------------|
| (1) Satpura National Park | (2) Bori National Park |
| (3) Jim Corbett National Park | (4) Tawa National Park |

079 Ankush has just entered his adolescence years. He wishes to know what should be eaten to remain healthy. Which of the following set of food should he consume to remain fit and healthy ?

- (1) Milk, rice, dal, leafy vegetables
- (2) Chips, leafy vegetables, milk, burger
- (3) Milk, dal, leafy vegetables, fried snacks
- (4) Dal, rice, burger, chips

080 At puberty which hormone is secreted by ovaries ?

- | | |
|------------------|--------------------|
| (1) Estrogen | (2) Growth hormone |
| (3) Testosterone | (4) Insulin |

081 Metamorphosis in frog is controlled by this hormone -

- | | | | |
|-------------|---------------|--------------|----------------|
| (1) Insulin | (2) Thyroxine | (3) Estrogen | (4) Adrenaline |
|-------------|---------------|--------------|----------------|

082 Choose the feasible displacement reaction from the options given below :

- (1) ~~Copper sulphate + Zinc granules~~ (2) Iron sulphate + Copper turnings
(3) Zinc sulphate + Iron nails (4) Zinc sulphate + Copper turnings

083 Plastic containers or boxes are mostly preferred to store food items because these are -

- (1) non biodegradable
(2) non reactive ✓
(3) poor conductor of heat and electricity
(4) more expensive

084 If current is passed through copper sulphate solution copper gets deposited on the plate connected to -

- (1) ~~positive terminal of battery~~ (2) negative terminal of battery
(3) when battery is not connected (4) copper deposited on both plates

085 ISRO stands for -

- (1) Indian Science Research Organisation
(2) International Science Research Organisation
(3) Indian Space Research Organisation ✓
(4) Interstate Research Organisation

086 Identify which is not a water pollutant from the following :

- (1) Sewage (2) ~~Algae~~ (3) Fertilisers (4) Weedicides

087 Which of these gases are responsible for global warming ?

- (1) CO₂, methane and water vapour (2) CO₂, sulphur dioxide, water vapour
(3) CO, CO₂ and water vapour (4) CO₂, ozone and methane

088 The bread or idli dough becomes fluffy because of -

- (1) Heat (2) Grinding
(3) Growth of yeast cells ✓ (4) Kneading

089 Which of the following statements is incorrect for CNG ?

- (1) It can be easily transported through pipes.
- (2) It is more polluting.
- (3) It is stored under high pressure.
- (4) It is used as fuel for transport vehicles.

090 Amish has to demonstrate a Science Activity on Ignition temperature from the objects given to him like paper sheets, candle, matchbox and water. The correct sequence for the activity to work will be -

- (A) Light the candle.
- (B) Pour the water in one of the cups.
- (C) Continue heating both the cups.
- (D) Make two paper cups by folding a sheet of paper.
- (E) Heat both the cups separately with a candle.

Choose the correct answer from the options given below :

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

091 Match List - I with List - II :

List-I	List-II
Cell organelles	Function
(A) Nucleus	(I) Contains cell organelles
(B) Cell membrane	(II) Control center of all activities of cell
(C) Chromosomes	(III) Transfer of characters
(D) Cytoplasm	(IV) Provide shape and protection

Choose the correct answer from the options given below :

- (1) (A)-(II), (B)-(IV), (C)-(III), (D)-(I)
- (2) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
- (3) (A)-(III), (B)-(IV), (C)-(II), (D)-(I)
- (4) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

092 Tadpole develops into an adult frog by the process of -

- (1) Fertilisation (2) ~~Metamorphosis~~ (3) Budding (4) Adaptation

093 Force acting opposite to the direction of motion of a body is -

- (1) Gravitational Force ✓ (2) Electrical Force
(3) Friction Force (4) Atmospheric Pressure

094 Human ears are sensory organs that help to hear sound. Its outer portion can be seen. The rest of the delicate ear is buried deep inside the skull. Identify the correct sequence from Outer ear to Inner ear -

- (A) Auditory Nerve
(B) Ear drum ✗
(C) Pinna
(D) Ear tube
(E) INNER EAR

Choose the correct answer from the options given below :

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

095 Match List I with List II :

List-I

- (A) Braille
(B) Kaleidoscope
(C) Dispersion
(D) Lateral inversion

List-II

- (I) Splitting of white light into seven colours
(II) Left of the object appears right and right appears left
(III) Resource for visually (Blind) challenged person
(IV) Beautiful patterns are formed because of multiple reflection

Choose the correct answer from the options given below :

- (1) (A)-(I), (B)-(IV), (C)-(III), (D)-(II)
(2) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
(3) ✓ (A)-(III), (B)-(IV), (C)-(I), (D)-(II)
(4) (A)-(IV), (B)-(II), (C)-(III), (D)-(I)

096 Identify the correct sequence of process that results in lightning -

- (A) Magnitude of accumulated charge becomes large.
- (B) Accumulation of negative charge near the lower edges of cloud.
- (C) Air becomes conductor of charges.
- (D) Accumulation of positive charge near the upper edges of cloud.
- (E) Negative and positive charge meet producing streaks of bright light and sound called as lightning.

Choose the correct answer from the options given below :

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

097 The calorific value of a fuel is expressed in the unit -

- (1) g/J
- (2) kg/J
- (3) kJ/kg
- (4) J/g

098 To electroplate silver (Ag) on a metal object, what will you choose as cathode, anode and electrolyte ?

- (1) Cathode - metal object, Anode - silver bar, Electrolyte - copper salt
- (2) Cathode - silver bar, Anode - metal object, Electrolyte - silver salt
- (3) Cathode - metal object, Anode - silver bar, Electrolyte - silver salt
- (4) Cathode - copper rod, Anode - silver bar, Electrolyte - copper salt

099 Rashi was unable to hold the greasy tumbler of milk in her hand. It would be because

- (1) Greasing has made the surface smooth, increasing the friction
- (2) Greasing has made the surface rough, decreasing the friction
- (3) Greasing has made the surface smooth, reducing the friction
- (4) Greasing has made the surface rough, increasing the friction

100 'Combine' is a machine. Identify from the following for which it is used ?

- (1) For harvesting and threshing
- (2) For sowing and harvesting
- (3) For threshing and sowing
- (4) For irrigation and sowing

SECTION - 'D' : SOCIAL STUDIES

- 101 Iron made from iron ore is the product of _____
(1) Marine industry (2) Mineral based industry
(3) Agro based industry (4) Forest based industry
- 102 When and to whom the British Parliament transferred their powers in order to ensure a more responsible management of Indian affairs ?
(1) 1857, East India Company ✓
(2) 1859, Lawrence - The Viceroy
(3) 1858, Governor General with the title of Viceroy
(4) 1887, Dinshaw Wacha
- 103 Which Article of the Constitution of India provides every citizen the Fundamental Right to life including the Right to health ?
(1) Article 15 ✓ (2) Article 360 (3) Article 12 (4) Article 21
- 104 Choose the meaning of the word Metamorphic from the following -
(1) Fire (2) Settle down
(3) Change of form (4) Air
- 105 Match List I with List II :
- | List-I | List-II |
|----------------------------|-------------------------|
| (A) The Brahmo Samaj | (I) Jyotirao Phule |
| (B) The Ramkrishna Mission | (II) Swami Dayanand |
| (C) Gulamgiri | (III) Raja Rammohan Roy |
| (D) Arya Samaj | (IV) Swami Vivekananda |
- Choose the correct answer from the options given below :
- (1) (B) - (IV), (C) - (I), (D) - (II), (A) - (III)
(2) (A) - (IV), (B) - (III), (C) - (II), (D) - (I)
(3) (C) - (II), (D) - (III), (A) - (IV), (B) - (I) ✓
(4) (D) - (II), (C) - (III), (B) - (I), (A) - (IV)
- 106 Choose the correct definition of 'birth rate' from the following options :
(1) The number of births per year
(2) The change in total population during a specific time
(3) The number of live births per 1,000 people
(4) The number of live births per year, per 10,000 people ✓

107 Match List I with List II :

List-I

- (A) Intensive subsistence
- (B) Shifting cultivation
- (C) Nomadic herding
- (D) Commercial farming

List-II

- (I) Slash and burn
- (II) Amount of capital use is large
- (III) Prevalent in the thickly populated areas
- (IV) Move from place to place with their animals

Choose the correct answer from the options given below :

- (1) (A)-(I), (B)-(II), (C)-(IV), (D)-(III)
- (2) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)
- (3) (A)-(II), (B)-(III), (C)-(I), (D)-(IV)
- (4) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)

108 Which of the following is a public sector company ?

- (1) Maruti Suzuki India Limited
- (2) Anand Milk Union Limited
- (3) Steel Authority of India Limited
- (4) Pesticide Factory of Union Carbide

109 Arrange in chronological order :

- (A) Tughlaq Dynasty
- (B) Early Turkish
- (C) Khalji Dynasty
- (D) Rajput Dynasty
- (E) Lodi Dynasty

Choose the correct answer from the options given below :

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

110 Match List I with List II :

List-I

- (A) Khilafat Agitation
- (B) Rowlatt Act
- (C) Salt March
- (D) Partition of Bengal

List-II

- (I) Mohammad Ali Jinnah
- (II) Viceroy Curzon
- (III) Shaikat Ali
- (IV) Mahatma Gandhi

Choose the correct answer from the options given below :

- (1) (B) - (I), (C) - (II), (D) - (III), (A) - (IV)
- (2) (A) - (III), (B) - (I), (C) - (IV), (D) - (II)
- (3) (D) - (IV), (B) - (III), (C) - (I), (A) - (II)
- (4) (A) - (III), (C) - (II), (D) - (I), (B) - (IV)

- 111 The neighbourhood markets are the ones which _____
(1) are far from our house (2) ~~are very expensive~~
(3) provide all necessary items (4) provide less items
- 112 The source of fresh water available for human use is -
(1) ~~Rivers~~ (2) Rain (3) Drains (4) Water vapour
- 113 The Khilafat Movement was led by whom, from the following ?
(1) Mahatma Gandhi (2) Mohammad Ali and Shaukat Ali
(3) C. R. Das (4) Mahamud Ali
- 114 The Veda Samaj established in Madras in 1864 worked for which of the following causes?
(1) Promotion of man.
(2) To abolish caste distinctions and for improving the conditions of women
(3) Poor people
(4) Against child marriage
- 115 The Ladakh desert is mainly inhabited by -
(1) Christians and Muslims (2) Buddhists and Muslims
(3) Christians and Buddhists (4) Only Buddhists
- 116 From the following options, choose which is not true about the Internet ?
(1) Provides worldwide information
(2) Provides interaction
(3) Allows moving physically from one place to another
(4) Enhances E-Commerce
- 117 From the following, choose the region that is known as 'Orchards of the World'.
(1) Coniferous region (2) Tropical region
(3) Mediterranean region (4) Temperate region
- 118 Sandstone is an example of _____ rock.
(1) Igneous (2) Metamorphic
(3) Sedimentary (4) Extrusive igneous rock

119 Match List I with List II :

List-I

(A) Right to Equality

(B) Right to Freedom

(C) Right to Freedom of Religion

(D) Right against Exploitation

List-II

(I) Prohibits human trafficking

(II) Equal before law

(III) The right to form associations

(IV) The right to practise any religion of their choice

Choose the correct answer from the options given below :

(1) (A)-(III), (B)-(I), (C)-(IV), (D)-(II) (2) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)

(3) (A)-(I), (B)-(II), (C)-(III), (D)-(IV) (4) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

120 Identify the crop which is not classified as a plantation crop ?

(1) Rice

(2) Tea

(3) Sugarcane

(4) Cashew

121 Who founded the "Brahmo Samaj" ?

(1) Dayanand Saraswati

(2) Raja Rammohan Roy

(3) Ishwar Chandra Vidyasagar

(4) Pandita Ramabai

122 Choose the correct meaning of 'Patent'.

(1) It means adding the value of any commodity.

(2) It means enhancing the usability of any thing.

(3) It means reducing cost of production.

(4) It means the exclusive right over any idea or invention.

123 Who am I ?

I am founder of Sur dynasty.

(1) Humayun

(2) Sher Shah

(3) Alauddin

(4) Genghis Khan

124 Identify the source of funds for the Gram Panchayats.

(1) Income tax

(2) Government school's fee

(3) Taxes on national highways

(4) Taxes on houses, market places etc.

125 Choose the landform, which is not formed by the river ?

(1) Ox-bow

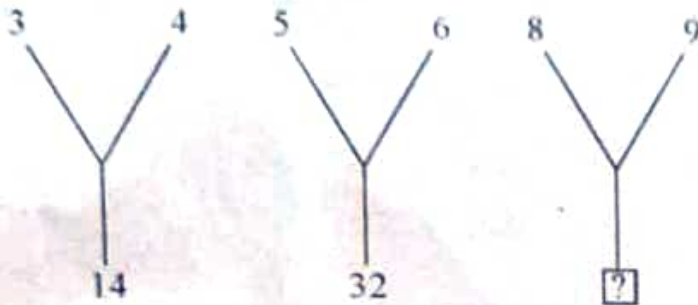
(2) Levees

(3) Meanders

(4) Loess

SECTION - 'E' : INTELLIGENCE

126 Choose the option that will replace question mark (?) in the following -



- (1) 28 (2) 42 (3) 74 (4) 72

127 Find the odd one out.

- (1) Alphonso (2) Kesar (3) Malgova (4) Sherbati

128 Find the odd one out.

- (1) Rhombus (2) Square (3) Rectangle (4) Kite

129 Choose the odd one out.

- (1) Scissors (2) Knife (3) Axe (4) Hammer

130 Complete the analogy

36 : 225 :: 1225 : _____

- (1) 7929 (2) 6929 (3) 5929 (4) 4929

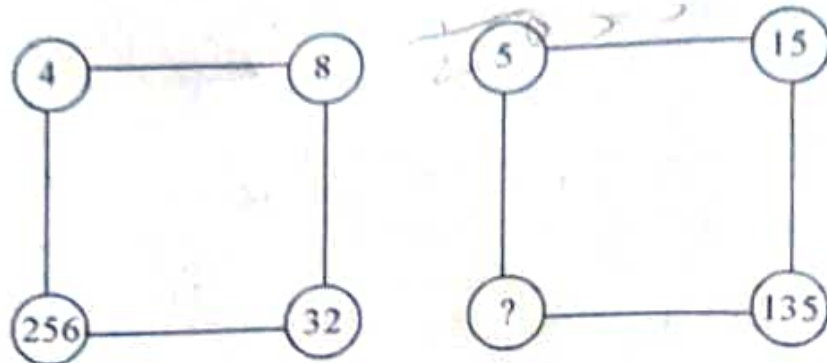
131 Find the missing number, which has the same relationship with the other number on the basis of the relation between the numbers in the given pair.

16 : 41 :: 20 : _____

- (1) 71 (2) 53 (3) 44 (4) 67

[30]

132 Find the missing number



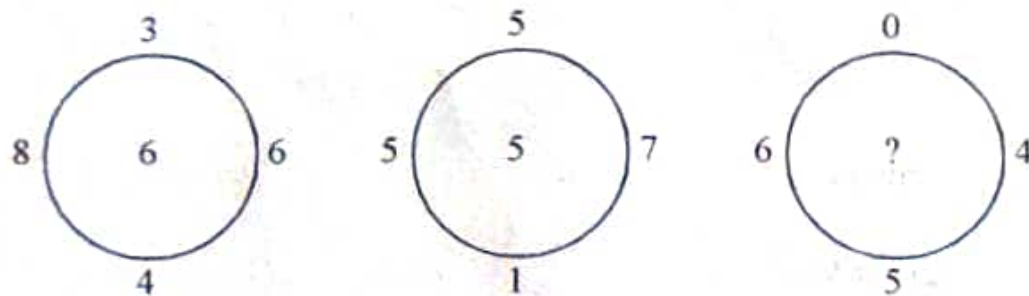
(1) 3800

(2) 3635

(3) 3435

(4) 3400

33 Find the missing term out of the options given below after studying the relationship among the given figures



(1) 7

(2) 6

(3) 4

(4) 5

134 Decipher the pattern (study the pattern and fill in the blank)

5	40	7
11	77	6
3	?	9

(1) 29

(2) 43

(3) 52

(4) 30

135 Which letter will come in the place of '?'



- (1) M (2) N (3) ~~O~~ (4) P

136 Which of the following is the water image of the given figure?

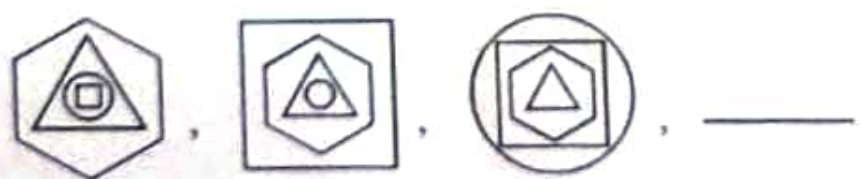


- (1) (2) (3) (4)

137 Identify the correct mirror image of word BLINK $\begin{matrix} X \\ | \\ Y \end{matrix}$ along the line XY.

- (1) KILNB (2) ~~BLNK~~ (3) BLNK (4) BILNB

138 Find the next pattern in the sequence



- (1) (2) (3) (4)

139 $\frac{2}{5} : \frac{8}{25} :: \frac{11}{15} : \underline{\hspace{2cm}}$

(1) $\frac{1331}{225}$ ✓

(2) $\frac{121}{3375}$

(3) $\frac{111}{155}$

(4) $\frac{128}{55}$

140 If word MATH is coded as 26, 2, 40, 16, then code for the word BOOK is -

(1) 2, 15, 15, 11 ✓

(2) 10, 20, 20, 44

(3) 4, 30, 30, 22

(4) 1, 12, 12, 14

141 A, B, C, D are four friends. A is shorter than B but taller than C who is shorter than D. Who is shortest among all -

(1) A

(2) B

(3) ✓ C

(4) D

142 Choose the correct alternative from the given options :

If 8th of April falls on Monday, what Day would be the 30th May of that year ?

(1) Sunday

(2) Monday

(3) ✓ Tuesday

(4) Wednesday

143 If the English alphabets are divided into two equal halves from A to M and N to Z such as A corresponds to N, then which letter in the later half would be corresponding to letter K.

(1) X

(2) Y

(3) ✓ Z

(4) W

144 Arrange the given responses in a meaningful sequence -

(A) Leaf

(B) Fruit ✓

(C) Stem

(D) Root

(E) Flower

Choose the correct answer from the options given below :

(1) (C), (D), (A), (E), (B)

(2) (D), (C), (E), (A), (B)

(3) ✓ (C), (D), (E), (A), (B)

(4) (D), (C), (A), (E), (B)

145 Complete the analogy.

Thermometer : Temperature :: _____ : Current.

- (1) Ammeter (2) ☒ Voltmeter (3) Anemometer (4) Berometer

146 Arrange the given words in the sequence in which they occur in the dictionary.

- (A) Aaerstd
(B) Aaersted
(C) Amquarine
(D) Aegledhi
(E) Aegledih

Choose the correct answer from the options given below :

- (1) (A), (B), (C), (D), (E) (2) (A), (B), (D), (C), (E)
(3) ☒ (A), (B), (D), (E), (C) (4) (A), (B), (C), (E), (D)

147 Find the missing word, which has the same relationship with the other word as that between words of different pair.

Pie : Cake :: π : _____.

- (1) Pasta (2) Pastry (3) ☒ Mathematics (4) Noodles

148 Complete the analogy.

Work : Joule :: _____ : Watt.

- (1) Volume (2) ☒ Area (3) Time (4) Power

149 Complete the analogy.

Chennai : Tamil Nadu :: Kohima : _____.

- (1) ☒ Nagaland (2) Gujarat (3) Orissa (4) Meghalaya

150 Choose the odd one out.

ZXV, LJH, IGE, UTR, PNL

- (1) PNL (2) ☒ IGE (3) UTR (4) ZXV