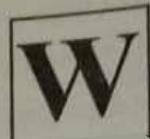


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PA0926
ENGLISH

Test Booklet Code



Test Booklet Number

434065



This Test Booklet contains 32 pages.

Do not open this Test Booklet until you are asked to do so.
Read carefully the Instructions given in this Test Booklet.

Name of the Candidate (in CAPITALS) : _____

Roll Number : in figures : _____

: in words : _____

Centre of Examination (in CAPITALS) : _____

Candidate's Signature : _____

Invigilator's Signature : _____

Facsimile signature stamp of _____

Centre Superintendent : _____

INSTRUCTIONS

1. This Test Booklet contains **FIVE** Sections. Section "A" **Mathematics** contains 50 questions of 4 marks each. Section "B" **Intelligence**, Section "C" **English**, Section "D" **General Science** and Section "E" **Social Science** contain 25 questions each, of 2 marks per question. In all, the Test Booklet consists of 150 questions for a total of 400 marks. Answer all questions.
2. Duration of the test is 3 hours and (180 minutes).
3. The Test Booklet is in English only, for all the Candidates.
4. The Test Booklet is of 32 pages. Please check and ensure that the Test Booklet is complete and contains all the pages.
5. Answer all the questions in the OMR Answer Sheet only.
6. The OMR Answer Sheet is inside this Test Booklet. When you are directed to open the Test Booklet, take out the OMR Answer Sheet and fill in the particulars carefully with Blue/Black ball point pen only.
7. Darken only one circle as your answer for each question. If you darken more than one circle for the same question, your answer will be treated as wrong.
8. There is no negative marking for a wrong answer.
9. Do not make unnecessary marks on the OMR Answer Sheet or fold or attempt to deface it. If you do so, your OMR answer sheet will not be evaluated.
10. Use Blue/Black ball point pen only for writing particulars on this page and for writing answers. Do not use pencil.
11. Rough work is to be done in the space provided for this purpose in the Test Booklet only and not on the OMR Answer Sheet.
12. On completion of the test, hand over the OMR Answer Sheet to the Invigilator before leaving the Room/Hall.
13. You are allowed to take away this Test Booklet with you.
14. The CODE for this Test Booklet is **W**. Make sure that the CODE printed on the OMR Answer Sheet is the same as that on this Test Booklet. In case of discrepancy, report the matter immediately to the Invigilator for replacement of both the Test Booklet and the OMR Answer Sheet.
15. Do not write your Roll No, anywhere else except in the specified space in the Test Booklet/OMR Answer Sheet.
16. Do not use white fluid for carrying out any correction on the OMR Answer Sheet.





Instructions : Each question has four options. There is only one correct answer to each question. Choose the **Correct/Most Appropriate** option and darken/blacken the corresponding circle on the OMR Answer Sheet.

SECTION - "A": MATHEMATICS

001. What is the mean of the observations 2, 5, 7, 5, 12, 16, 14, 18, 15 and 16 ?

(1) 11.2 (2) 10
 (3) 11.5 (4) 11

002. The median of ten consecutive even natural numbers starting from 8 is

(1) 17 (2) 15
 (3) 12.5 (4) 16

003. If mode of the observations 5, 7, 11, 14, 15, 16 and $(2k + 3)$ is 11, then the value of $(k + 1)^2$ is

(1) 25

004. A coin is tossed 60 times and head appears 25 times. What is the probability of getting a tail ?

(1) $\frac{7}{12}$ (2) $\frac{5}{12}$
 (3) $\frac{1}{2}$ (4) $\frac{1}{25}$

005. A bag contains 6 black and 8 white balls. One ball is drawn at random. What is the probability that the ball drawn is white ?

(1) $\frac{1}{8}$ (2) $\frac{3}{4}$
 (3) $\frac{3}{7}$ (4) $\frac{4}{7}$

006. A shopkeeper was selling all his items at 25% discount. During the off season, he offered 30% discount over and above the existing discount. If an item is marked for ₹ 2,400, then how much the customer has to pay for it ?

(1) ₹ 1,080

✓ 25

(2) 9
(3) 4
(4) 16

(1) ₹ 1,080

(2) ₹ 1,140

(3) ₹ 1,320

✓ (4) ₹ 1,260

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(3)

[P.T.O.]



007. A shopkeeper marked an item for ₹ 800 and sold the item by allowing 10% discount. If he earned a profit of 20% in the transaction, then what was the cost price of the item ?

(1) ₹ 620
(2) ₹ 680
✓ (3) ₹ 600
(4) ₹ 650

008. Two statement are given below :

Statement (I) : The sum of $(4a + 2ab - c)$ and $(6a + 3c)$ is $(10a + 2ab + 4c)$.

Statement (II) : $(6a + 3c)$ when subtracted from $(4a + 2ab - c)$ gives $(-2a + 2ab - 4c)$.

Choose the correct answer from the options given below.

009. Which of the following is equal to

$$\frac{(312)^2 - (126)^2}{(719)^2 - (281)^2} ?$$

(1) 1
(2) $\frac{93}{219}$
(3) 0.438
✓ (4) 0.186

010. If $a^2 + \frac{1}{a^2} = 51$, $a > 1$, then the value of

$a - \frac{1}{a}$ is

(1) 9
(2) 5
(3) 11
✓ (4) 7

options given below.

(1) Both Statements (I) and (II) are true

(2) Statement (I) is true and Statement (II) is false

(3) Both Statements (I) and (II) are false

(✓) Statement (I) is false and Statement (II) is true

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(✓) 7

011. What is the difference between the greatest and the smallest of the fractions

$$\frac{5}{8}, \frac{3}{4}, \frac{4}{7}, \frac{2}{3}, \frac{5}{9} ?$$

(1) $\frac{1}{9}$

(2) $\frac{5}{72}$

(3) $\frac{5}{28}$

(✓) (4) $\frac{7}{36}$

(4)

012. Evaluate

$$256 + \frac{4}{3} + 5 \times \frac{4}{3} - 8 + \frac{27}{24} \times \left(\frac{1}{3} \text{ of } 81 \right).$$

(1) $\frac{64}{3}$

(✓) (2) $\frac{20}{3}$

(3) 84

(4) 3

013. The present age of a father is five times the age of his only son. After 10 years, the age of the father will be three times

014. The denominator of a fraction is 5 more than twice its numerator. If the numerator is increased by 4 and the denominator is decreased by 1, the fraction becomes $\frac{2}{3}$. The original fraction is

(✓) (1) $\frac{4}{13}$

(2) $\frac{2}{9}$

(3) $\frac{6}{17}$

(4) $\frac{3}{11}$

015. In the figure, ABCD is a parallelogram. The measures of the angles x, y and z are



the age of his only son. After 10 years, the age of the father will be three times the age of his son. The present age of the father is

(1) 40 years

(2) 45 years

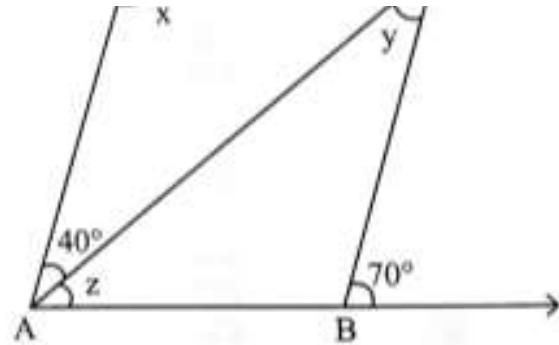
(3) 30 years

(4) 50 years

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(5)

[P.T.O.]



(1) $x = 90^\circ, y = 20^\circ, z = 70^\circ$

(2) $x = 100^\circ, y = 50^\circ, z = 30^\circ$

(3) $x = 70^\circ, y = 40^\circ, z = 30^\circ$

(4) $x = 110^\circ, y = 40^\circ, z = 30^\circ$



016. When $(5x^2 + 70x - 160)$ is divided by $(x + 16)$, then the quotient is

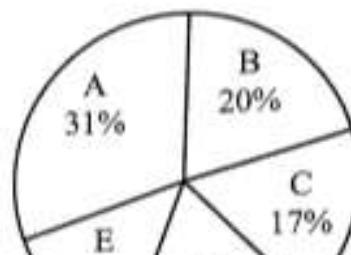
(1) $2(x + 5)$ (2) $5(x - 5)$

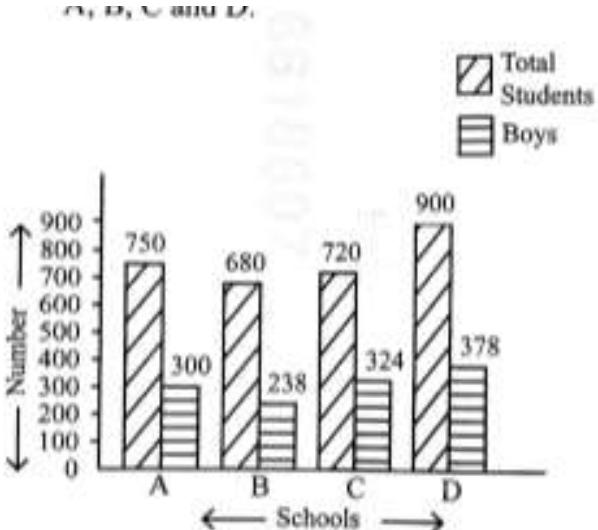
(3) $(5x + 10)$ (4) $5(x - 2)$

017. In the following bar graph, total number of students and number of boys in the school have been presented for schools A, B, C and D.

Total Students

018. A shopkeeper sold 5 kinds of cosmetic creams A, B, C, D and E. The number of creams sold by the shopkeeper in a month is presented in the given pie chart. If the total number of creams sold by the shopkeeper is 800, then how many cream B were sold by the shopkeeper?



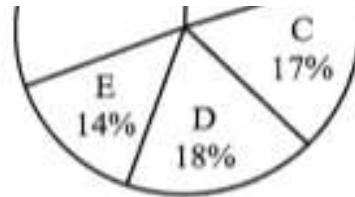


Which school has maximum number of girls and what is the percentage of girls in that school ?

(1) D, 58%
 (2) A, 40%
 (3) D, 44%
 (4) A, 62%

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(6)



(1) 160 (2) 164
 (3) 182 (4) 152

019. If the 4-digit number 48ab is divisible by 2, 5 and 7, then the value of (10a-b) is

(1) 45 (2) 15
 (3) 50 (4) 30

020. If 7-digit number 78*3945 is divisible by 11, then value of '*' is

(1) 3 (2) 0
 (3) 5 (4) 1

021. The angles of a quadrilateral are in the ratio 2 : 4 : 5 : 7. The measure of smallest of these angles is

(1) 40°
 (2) 10°

023. A 5 m long ladder is placed against a wall. The foot of the ladder is 3 m away from the base of the wall. How far up the wall does the top of the ladder reach ?

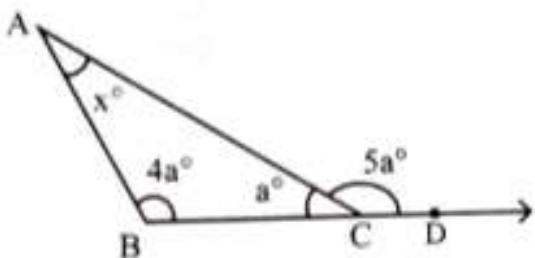
(1) 3 m

(2) 10°

(3) 60°

(4) 20°

022. In the given figure,



The values of a and x , respectively are

(1) 30, 30

(2) 25, 50

(3) 36, 40

(4) 30, 60

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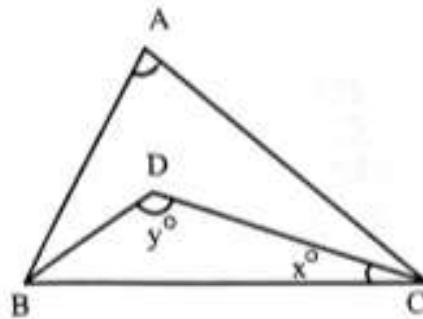
(1) 3 m

(2) 5 m

(3) 2.5 m

(4) 4 m

024. In the figure, in $\triangle ABC$, $\angle A = 80^\circ$ and $\angle ABC = 40^\circ$. BD and CD bisect angles B and C, respectively. The values of x and y respectively are



(1) 30 and 130

(2) 10 and 130

(3) 20 and 125

(4) 10 and 125

(7)

[P.T.O.]



025. If P is the smallest number that should be added to 669 to get a perfect square,

028. A, B and C can do a work in 10 days, 16 days and 20 days respectively. They started working together, but B left the

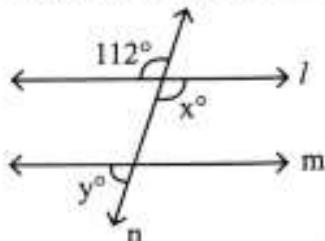
025. If P is the smallest number to be added to 669 to get a perfect square, then what is the value of $\sqrt{3P+4}$?

(1) 6 (2) 4

(3) 7 (4) 5

✓ 5

026. In the following figure, $l \parallel m$ and n is a transversal. Find the value of $(x + y)$.



✓ 180 (2) 168
(3) 154 (4) 200

027. Which of the following statements are true ?

Statement I : If two lines are parallel to a third line, then they themselves are parallel.

Statement II : All the eight angles made by a transversal with two parallel lines are always equal.

Statement III : If the alternate angles made by a transversal with a pair of lines are 80° and 100° , then the lines are parallel.

Statement IV : If the lines are parallel, then the interior angles on the same side of the transversal are supplementary.

(1) only II, III (2) only I, II, III
✓ (3) only I, IV (4) only I, III

16 days and 20 days respectively. They started working together, but B left the work after 4 days. In how many days the work got completed ?

(1) $5\frac{1}{2}$ (2) 4

(3) $4\frac{3}{4}$ (4) 5

029. Amit and Sunil together can do a work in 6 days. If Amit can do it in 10 days, then in how many days can Sunil do it ?

✓ 15 days (2) 12 days

(3) 16 days (4) 14 days

030. If $5^{2x} \times 5^{x+3} \times 5^{5-x} = (\sqrt{5})^{20}$, then the value of 'x' is

✓ 1 (2) -1

(3) 2 (4) 0

031. If $\sqrt{18 \times 14 \times x} = 168$, then the value of x is

(1) 115 (2) 113

(3) 117

✓ (4) 112

032. What is the smallest number by which 3087 must be divided, so that the number obtained is a perfect cube?

- (1) 11
- (2) 7
- (3) 13
- (4) 9

033. Karishma paid 15% of her monthly salary towards an EMI. From the remaining salary she paid 10% as internet bill and 20% as rent of the house. If after the mentioned expenses she was left with ₹ 35,105, then what was Karishma's monthly salary?

- (1) ₹ 57,000
- (2) ₹ 55,000
- (3) ₹ 59,000
- (4) ₹ 55,500

034. 76% of the students in a school are boys. If there are 204 girls in the school, then what is the total number of students?

- (1) 850
- (2) 760
- (3) 900
- (4) 800

035. A shopkeeper bought a table and a chair for ₹ 8,000 each. He sold them and made a profit of 8% on the table and incurred a loss of 4% on the chair. The gain percent on the whole transaction is

- (1) 2%
- (2) 5%
- (3) 4%
- (4) 3%

036. A square and a rectangle have same perimeter. If area of the square is 121 cm^2 and length of the rectangle is 18 cm, then area of the rectangle is

- (1) 72 cm^2
- (2) 121 cm^2
- (3) 198 cm^2
- (4) 324 cm^2

037. If $x = 2 + \sqrt{3}$, then the value of $x^3 + x^{-3}$ is

- (1) $52\sqrt{3}$
- (2) 76
- (3) $18\sqrt{3}$
- (4) 52

038. The value of $(3^2)^3 \times 3^{-5} \times \sqrt[3]{216} \div \sqrt{9} \times \sqrt[3]{8}$ is

- (1) 18
- (2) 10
- (3) 24
- (4) 12



039. There are 24 men who can build a wall in 10 days. If the wall is to be built in 8 days, then how many additional men need to be employed ?

(1) 6

(2) 4

(3) 8

(4) 5

040. If 5 similar pipes can fill a tank in 2 hours 8 minutes, then in how much time 8 similar pipes will fill the tank ?

(1) 1 hour 20 minutes

(2) 1 hour 30 minutes

(3) 1 hour 15 minutes

(4) 1 hour 45 minutes

041. If the cost price of 14 chairs is equal to the selling price of 10 chairs, then the gain percentage is

(1) 40%

(2) $28\frac{4}{7}\%$

042. The simple interest on a certain sum at the rate of 8.5% for 3 years is ₹ 7,140. Find the simple interest on the same sum at the rate of 7.5% for 2 years.

(1) ₹ 4,200

(2) ₹ 3,980

(3) ₹ 4,250

(4) ₹ 4,140

043. In how many years, ₹ 1,500 will produce the same simple interest at the rate of 8% as ₹ 6,000 produce in 3 years at the rate of 4% ?

(1) 7

(2) 5

(3) 8

(4) 6

044. On compound interest a certain sum of money amounts to ₹ 34,560 in 2 years and to ₹ 41,472 in 3 years at the same rate of interest. Find the rate of interest per annum.

(1) 10%

(2) 12%

(2) $28\frac{4}{7}\%$

(3) 45%

(4) 33%

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(2) 12%

(3) 25%

(4) 20%

(10)



045. The compound interest on a certain sum of money for 2 years at 10% per annum is ₹ 525. The simple interest on the same sum of money for double the time at half the rate of interest per annum is

(1) ₹ 515

(2) ₹ 484

(3) ₹ 600

(4) ₹ 500

046. In a polyhedron, there are 18 vertices and 28 edges. The number of faces is

(1) 15

(2) 20

(3) 18

(4) 12

047. Seven equal solid metallic spheres having radius 6 cm are melted to cast a cuboid

048. A solid metallic cuboid having dimensions $250\text{ cm} \times 40\text{ cm} \times 100\text{ cm}$ is melted and recast into a solid cube. The edge (in meter) of the cube so formed is

(1) 50 m

(2) 100 m

(3) 25 m

(4) 1 m

049. The area of a parallelogram is 63 cm^2 . If its base is 7 cm, then what is the height of the parallelogram?

(1) 9 cm

(2) 7 cm

(3) 11 cm

(4) 8 cm

050. If the diagonals of a rhombus are 8 cm and 6 cm, then perimeter of the rhombus is

047. Seven equal solid metallic spheres of radius 6 cm are melted to cast a cuboid with length 33 cm and width 24 cm.

What will be the height of the cuboid so formed ? (Use $\pi = \frac{22}{7}$)

(1) 8 cm

(2) 6 cm

(3) 9 cm

(4) 7 cm

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and 6 cm, then perimeter of the rhombus is

(1) 20 cm

(2) 10 cm

(3) 25 cm

(4) 15 cm

(11)

[P.T.O]



Instructions : Each question has four options.

There is only one correct answer to each question. Choose the Correct/Most Appropriate option and darken/blacken the corresponding circle on the OMR Answer Sheet.

SECTION - "B" : INTELLIGENCE

051. Ram goes straight 40 m towards North. He turns left and covers 50 metres and then again turns left. In which direction is he facing now ?

(1) East

(2) North

(3) West

053. Which number will come in the place of question mark (?) to complete the following matrix ?

3	5	7	9	11	13
8	23	46	?	116	163

(1) 77

(2) 80

(3) 75

(4) 78

054. Find the missing number in the following series :

3, 12, 36, 72, 72, 36, ?

(1) 9

(2) 6

(3) 42

(Ans should be 12)

But it not in
option.

(3) West

(1) South

052. If the boy's position in a row is seventh from left end and eighth from right end. How many boys are there in that row ?

(1) 15

(2) 18

(3) 14

(4) 17

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option -

(3) 42

(4) 48

055. If 'P' denotes multiplied by, 'T' denotes subtracted by, 'M' denotes added to and 'B' denotes divided by, then $28B7P8T6M4$ is equal to

(1) 25

(2) 0

(3) 30

(4) 1

(12)

056. A, B, C and D are four friends. A and C like Computer Science while others do not. B and C like Physics while others do not. Who does not like any of these subjects ?

(1) D

(2) B

(3) C

(4) A

057. Choose the figure from given alternatives which contains figure (X) as its part.

058. Choose the odd one out :

(1) K I G

(2) T Q N

(3) W U S

(4) N L J

059. Complete the following analogy :

CAT : 24 :: MAN : ?

(1) 26

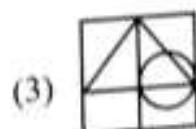
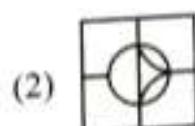
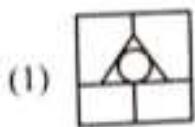
(2) 22

(3) 25

(4) 28



fig. (X)



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(3) 25

✓ (4) 28

060. Arrange the given words as they appear in the dictionary.

A. Broucher

B. Brother

C. Broadcast

D. Brought

E. Broadband

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

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

✓ (3) E, C, B, A, D

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

(13)

[P.T.C]



061. In the following sequence, if the first half of the alphabets are written in reverse order, then which is the 9th letter from the right?

(Left) E P M Z N R B | C K F G H T N (Right)

(1) K

(2) R

✓ 062. 'Teacher' is related to 'Student' in the same way as 'Doctor' is related to

(1) Medicine

(2) Hospital

(3) Practice

(4) Patient

(2) R
 (3) M
 ✓ (4) P

062. Choose the odd one out :
 (1) (13, 25, 8)
 (2) (11, 64, 3)
 (3) (12, 49, 5)
 ✓ (4) (14, 36, 4)

063. In a certain code language if 'SCIENCE' is written as 'RBHDMBD' then how will be 'HISTORY' written in the same language ?
 (1) GHTSNQX
 ✓ (2) GHRSNQX
 (3) IJTUPSZ
 (4) GHRSPSX

(4) Patient

065. 'A' is the father of 'D', 'D' is not his son, 'B' is the brother of 'D', 'C' is the mother of 'B'. How is 'C' related to 'A' ?
 ✓ (1) Wife
 (2) Sister
 (3) Daughter
 (4) Mother

066. Complete the following analogy.
 Circle : Diameter :: Rectangle : ?
 ✓ (1) Diagonal
 (2) Radius
 (3) Angle
 (4) Perimeter

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(14)

067. 'Cyclone' is related to 'Anti cyclone' in the same way as 'Flood' is related to :

✓ (1) Drought

069. Amit is faster than Bobby but slower than Dharam. Chetan is the slowest. Who is the fastest among these ?
 ✓ (1) Dharam (2) Bobby

✓ (1) Drought

(2) Operation Flood
(3) Sea
(4) River

068. The members in each figure follow a similar pattern. Find the missing number.



(1) 19

(2) 20

✓ (3) 18

(4) 17

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(15)

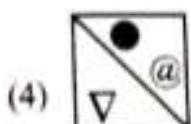
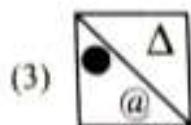
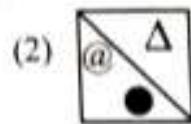
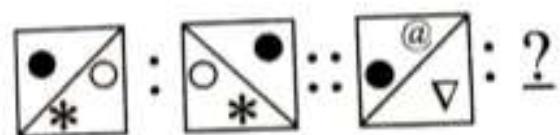
[P.T.C

✓ (1) Dharam

(2) Bobby
(3) Chetan
(4) Amit

070. The first two figures are related in same way. To establish the similar relation with third figure.

Choose the correct option.





071. If the day before yesterday was Sunday, what day of the week is day after tomorrow?

- (1) Wednesday
- (2) Thursday
- (3) Friday
- (4) Tuesday

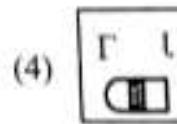
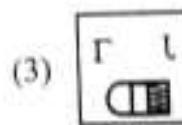
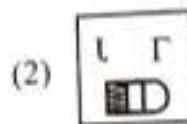
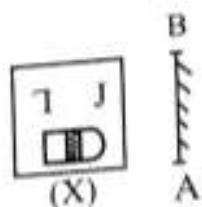
072. Which of the following groups of letters can be rearranged to get the word 'TRIANGLE'?

- (1) GRIATEMN
- (2) LRNTLHEA
- (3) ATGRNEIL
- (4) GLRFTNIE

073. In a certain code language, if 'LATE' is coded as '1234', then how is 'TALE' coded in the same language?

- (1) 3214
- (2) 1432
- (3) 2341
- (4) 2314

074. Choose the correct mirror image of the following figure (X). If the mirror is kept as shown at line AB.



075. One term in the following series is wrong. Find the wrong term.

- (1) 7988
- (2) 5786
- (3) 6898
- (4) 4685

Instructions : Each question has four options. There is only one correct answer to each question. Choose the **Correct/Most Appropriate** option and darken/blacken the corresponding circle on the OMR Answer Sheet.

SECTION - "C" : ENGLISH

076. Choose the correct option to improve the underlined part of sentence :

Krishna is stronger than all students.

- (1) all student
- (2) any other students
- (3) all the students
- (4) any other student

077. Spot the error in the following sentence :

None of the two boys could complete
 A B C
the job.
 D

- (1) C
- (2) A

078. Choose the opposite of the word 'Reasoning' from the given options :

- (1) Invariability
- (2) Intrepidity
- (3) Intuition
- (4) Intrigue

079. Choose the correct passive transformation of the following sentence from the options given below :

It is time to close the office.

- (1) It is time for the office to be closed.
- (2) It is time the office be closed.
- (3) It is time that the office be closed.

(1) C

(2) A

(3) D

✓ (4) B

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(4) It is time that the office is to be closed.

080. Choose the correct indirect transformation of the following sentence from the options given below :

My mother said, "You should take proper diet."

(1) My mother told me that I must take the proper diet.

(2) My mother said that I should take proper diet.

✓ (3) My mother told me that I should take proper diet.

(4) My mother said that I must take the proper diet.

081. Fill in the blanks with the correct pair of prepositional phrase from the options given below :

She accepted the offer _____ her settlement claim that was finalized by the

082. Fill in the blanks with the correct conjunctions :

She will help you _____ you ask her but he will be penalised _____ that the charges of aiding and abetting are proved beyond doubt.

✓ (1) if, provided

(2) unless, supposing

(3) lest, unless

(4) provided, if

083. Choose the correct conjunction to fill in the blank :

_____ she is clever, she often makes mistakes.

settlement claim that was finalized by the insurance company _____ their client.

- (1) in event of, in lieu of
- (2) by way of, in lieu of
- (3) on behalf of, in lieu of
- (4) in lieu of, on behalf of

mistakes.

(1) Although

- (2) Despite
- (3) Yet
- (4) Since

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084. Choose the correct spelling from the following options :

- (1) connisseur
- (2) conjuncture
- (3) conspicouous
- (4) congrous

085. Find out the correctly spelt word from the options :

- (1) Discripancy
- (2) Discrepancy
- (3) Discrepansy

087. Fill in the blank with the suitable question tag :

They haven't come yet, _____ ?

- (1) have they
- (2) haven't they
- (3) hadn't they
- (4) has they

088. Choose the correct conjunction to fill in the blank :

_____ teaching, my father has always been involved in public affairs.

- (1) No matter
- (2) In addition

(3) As well as

(3) Discrepancy

(4) Descrepancy

086. Fill in the blank with the suitable

question tag :

Somebody has called, _____?

(1) have they

(2) has they

(3) haven't they

(4) hasn't they

(2) In addition

(3) As well as

(4) Similarly

089. Fill in the blank with the correct modal

verb :

_____ you show me the way to the station.

(1) Might

(2) Could

(3) May

(4) Shall

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090. Fill in the blank with the correct verb :

Five thousand rupees _____ charged by him.

(1) was

(2) am

(3) were

(4) is

091. Choose the sentence from the options given below that has the correct usage of

093. Identify the tense of the following sentence :

"They have been building the stadium for several years."

(1) Present Perfect Tense

(2) Simple Present Tense

(3) Present Perfect Continuous Tense

(4) Present Continuous Tense

094. Choose from the options which best describes the underlined idiom :

As usual he is blowing his own trumpet.

given below that has the correct usage of transitive verb :

- (1) She burnt with revenge
- (2) She walks the dog
- (3) The glass broke
- (4) The elephant walks

092. Choose the sentence with the correct "Present Continuous Tense" usage from the options given below :

- (1) I am thinking you are right
- (2) Pawan received his letter a week ago
- (3) I have known her for a long time
- (4) I think you are right

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(20)

Read the passage carefully and answer the questions given below : (from 096 – 100)

Diagnosing disease and prompting treatment options is one thing, but can artificial intelligence really design new drugs to tackle the source of antimicrobial resistance ? Apparently it can, right down to the atom.

Massachusetts Institute of Technology (MIT) has used generative A.I. to structure two new antibiotics that have shown much promise in

describes the underlined idiom :

As usual he is blowing his own trumpet.

- (1) praising himself
- (2) refusing to use anybody else's trumpet
- (3) praising himself and others
- (4) playing a tune on the trumpet

095. Choose the correct meaning of the underlined idiom from the options given below :

Sukriti and Sara are at cross-purposes.

- (1) are pursuing different things in life
- (2) are continuously harming each other
- (3) are each others sworn enemies
- (4) misunderstand each other

098. According to the passage, around 5 million people lost their lives in 2019 due to

- (1) new antibiotics
- (2) generative A.I.
- (3) mice models
- (4) antimicrobial resistance

Massachusetts Institute of Technology (MIT) has used generative A.I. to structure two new antibiotics that have shown much promise in mice models, killing super bugs that cause drug resistance and MRSA, a bacterial infection many antibiotics fail to cure.

Antimicrobial resistance has become a global public health threat. In 2019, it led to around 5 million deaths, according to World Health Organisation estimates. Excessive use of antibiotics has made bacteria mutate to resist the drug, but very few new antibiotics have been launched over the decades. The MIT study, published in the journal 'cell', aims to bridge the gap.

096. The passage does not talk about

- (1) bacterial mutation
- (2) generative A.I.
- (3) use of homeopathy to cure bacterial disease
- (4) drug resistance

097. Out of the given options, choose the synonym of 'generative'.

- (1) creative
- (2) generous
- (3) generation
- (4) destructive

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✓ 100. Name the process by which heat is transferred from the hotter end to the colder end of an object.

(1) antimicrobial resistance

099. According to the passage, which of the following shows the utility of A.I. in providing treatment options ?

- (1) providing generative A.I. feature to structure new antibiotics
- (2) helping bacterial mutation to resist the drug
- (3) decoding the journal published by various organisations
- (4) promoting excessive use of antibiotics

100. According to the passage, what is the cause of bacterial mutation to resist the drug ?

- (1) death of 5 million people
- (2) use of generative A.I.
- (3) global public health
- (4) excessive use of antibiotics



*Instructions : Each question has four options. There is only one correct answer to each question. Choose the **Correct / Most Appropriate** option and mark your answer on the corresponding circle on the answer sheet.*

103. Name the process by which heat is transferred from the hotter end to the colder end of an object.

Choose the **Correct / Most Appropriate** option and darken/blacken the corresponding circle on the OMR Answer Sheet.

SECTION - "D" : GENERAL SCIENCE

101. What is the function of Alveoli ?

Choose the correct one.

- (1) Air reaches our lungs through this part
- (2) To protect lungs
- (3) To filter the air

(4) To exchange gases

102. What is the function of bile in digestion ?

- (1) Digestion of Amino acid
- (2) Digestion of Proteins
- (3) Digestion of fats
- (4) Digestion of Carbohydrates

Choose the correct option

(1) Conduction

(2) Convection

(3) Insulation

(4) Radiation

104. Richter scale is used to measure _____

- (1) Lightning
- (2) Thunder
- (3) Earthquake
- (4) Tsunami

105. Which of the following is NOT a part of

Pistil ?

- (1) Anther
- (2) Style
- (3) Stigma
- (4) Ovule



106. What is the full form of ORS ?

(1) Oral Rehydration Solution

(2) Oral Rehydration Salt

(3) Oral Rehydration Solvent

(4) Oral Rehydration Solute

107. What is the range of temperature of laboratory thermometer ?

(1) -10°C to 90°C

(2) 10°C to 90°C

(3) 10°C to 110°C

(4) -10°C to 110°C

108. Choose the incorrect statement.

(1) Fossil fuels are formed from the dead remains of living organisms.

(2) Fossil Fuels are exhaustible resources.

(3) Fossil fuels can be made in the laboratory.

(4) Coal and natural gas are fossil fuels.

109. The process of depositing a layer of any desired metal on another material by means of electricity is called _____

(1) Electroplating

(2) Electrolysis

(3) Electrostatic

(4) Electrophoresis

110. The distance - time graph for the motion of an object moving with a constant speed will be _____

(1) Hyperbolic

(2) Parabolic curve

(3) Straight Line

(4) Elliptical

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111. The animals such as frog, lizard which lay eggs are called

- (1) Ovoviviparous
- (2) Viviparous
- (3) Carnivorous
- (4) Oviparous**

112. Distinctive colour of the human eyes are due to which part of the eye ?

- (1) Cornea
- (2) Pupil
- (3) Lens
- (4) Iris**

113. Match the micro-organisms given in Column -A with their action given in Column - B :

Column - A	Column - B
A. Rhizobium	i. Causing Malaria
B. Lactobacillus	ii. Rust of Wheat
C. A protozoan	iii. Setting of curd
D. A fungi	iv. Nitrogen fixation

Choose the correct answer from the options given below.

- (1) A - iv B - iii C - i D - ii**
- (2) A - i B - ii C - iii D - iv

114. Choose the correct order for the processing of fibre into wool.

- (1) Scouring → Shearing → Rolling → Sorting
- (2) Rolling → Scouring → Shearing → Sorting
- (3) Sorting → Rolling → Scouring → Shearing
- (4) Shearing → Scouring → Sorting → Rolling**

115. Micro - organisms act upon the dead plants to produce _____

- (1) Sand
- (2) Mushrooms
- (3) Humus**
- (4) Wood

116. Which of the following relation is correct?

- (1) Speed = $\frac{\text{Distance}}{\text{Time}}$**
- (2) Speed = $\frac{\text{Time}}{\text{Distance}}$

(2) A - i B - ii C - iii D - iv
 (3) A - ii B - i C - iv D - iii
 (4) A - iii B - iv C - i D - ii

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(2) Speed = $\frac{\text{Distance}}{\text{Time}}$
 (3) Speed = $\frac{1}{\text{Distance} \times \text{Time}}$
 (4) Speed = Distance \times Time

(24)

117. Which of the following statement is NOT true ?

(1) Water is found in different states-solid, liquid and gas.
 ✓ (2) Evaporation causes heating effect.
 (3) The process of conversion of water vapour into its liquid state is called condensation.
 (4) Water changes its state on heating or cooling.

118. The number of oscillations per second of a vibrating object is called as

(1) Wavelength
 (2) Amplitude
 (3) Velocity
 ✓ (4) Frequency

119. Which of the following statement is incorrect ?

120. Which of the following statement is incorrect ?

(1) A freely suspended magnet always aligns in N - S direction.
 (2) Magnetite is a natural magnet.
 ✓ (3) A cylindrical magnet has only one pole.
 (4) Iron, Nickel and Cobalt are magnetic material.

121. What is the chemical name of milk of magnesia ?

(1) Calcium hydroxide
 (2) Sodium hydroxide
 (3) Ammonium hydroxide
 ✓ (4) Magnesium hydroxide

122. Choose the correct arrangement of different forces of friction.

(1) sliding friction \rightarrow static friction \rightarrow rolling friction
 (2) rolling friction \rightarrow static friction \rightarrow

incorrect?

(1) We cannot see air, but we can feel it.

(2) **Air does not occupy space.**

(3) Aquatic animals use dissolved oxygen in water for respiration.

(4) Air is present in water and soil.

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123. Match the objects mentioned in Column – I with their action mentioned in Column – II :

Column – I

Column – II

i. Opaque objects a. allow light to pass through them partially

ii. Transparent objects b. do not allow light to pass through them

iii. Translucent objects c. allow light to pass through them and we can see through these objects easily

124. Different types of interactions occurs between organisms.

Match Column – I and Column – II.

Column – I

Column – II

a. Parasitism 1. Both organisms benefit

b. Commensalism 2. One organism benefits while other is harmed

c. Mutualism 3. One organism benefits while the other is not affected

Choose the correct answer from the options given below.

(1) a – 3 b – 1 c – 2

(2) **a – 2 b – 3 c – 1**

(3) a – 2 b – 1 c – 3

Choose the correct answer from the options given below.

(1) i - b ii - c iii - a

(2) i - c ii - a iii - b

(3) i - b ii - a iii - c

(4) i - c ii - b iii - a

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(3) a - 2 b - 1 c - 3

(4) a - 1 b - 2 c - 3

125. Which of the following mirror is used by dentists to see an enlarged image of the teeth ?

(1) Convex mirror

(2) Plane mirror

(3) Plane lens

(4) Concave mirror

(26)

Instructions : Each question has four options. There is only one correct answer to each question. Choose the **Correct/Most Appropriate** option and darken/blacken the corresponding circle on the OMR Answer Sheet.

SECTION - "E" : SOCIAL SCIENCE

126. Match List - I with List - II and choose the correct option.

List - I (Leaders of the Revolt of 1857)	List - II (Regions)
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A. Rani Lakshmibai	I. Lucknow
B. Nana Saheb	II. Bihar
C. Kunwar Singh	III. Kanpur
D. Birjis Qadr	IV. Jhansi

128. The 'Battle of Plassey' was fought between

(1) The British and Tipu Sultan

(2) The British and Nadir Shah

(3) The British and Shah Alam

(4) The British and Sirajuddaulah

129. Who amongst the following rulers composed, 'Amuktamalyada' poem in Telugu ?

(1) Rama Raya

(2) Harihara

C. Kunwar Singh III. Kanpur

D. Birjis Qadr IV. Jhansi

Choose the correct answer from the options given below :

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

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

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

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

127. Who amongst the following British Governor Generals introduced the Permanent Settlement in Bengal ?

(1) Henry Hardinge

(2) Warren Hastings

(3) William Bentinck

(4) Charles Cornwallis

128. Name the

(2) Harihara

(1) Krishnadeva Raya

(4) Bukka

130. An event occurred in 330 CE. How many years it dates back from the year 2024 ?

(4) 2354 years

(2) 1694 years

(3) 2353 years

(4) 1893 years

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131. Which of the following are the characteristics of sustainable development ?

A. Justiciable usage of resources.

B. Unlimited use of resources in present time.

C. Balancing the need to use resources.

D. Conserve the resources for future generation.

Choose the correct option from the answers given below :

(1) A, C, D

(2) A, B, C

134. Which one of the following is NOT a method of water conservation ?

(1) Agricultural runoff

(2) Rain water harvesting

(3) Sprinkler irrigation

(4) Drip irrigation

135. Which of the following statements is correct regarding equator ?

(1) It is the longest longitude

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

132. In which of the following categories 'Thar' region of India belongs to ?
(1) Volcanoes (2) Glaciers
(3) River valleys (4) Deserts

133. Read the following statements in the context of wind and choose the correct option.

Statement I : Wind is the movement of air from areas of high pressure to low pressure areas.

Statement II : Speed and direction are the only factors affects the wind.

Statement III : Hygrometer is used to measure wind direction.

(1) Only I and II are correct
(2) Only I is correct
(3) Only II and III are correct
(4) Only II is correct

(1) It is the longest longitude

(2) It is the meridian of latitude

(3) It is the frigid zone

(4) It is the longest latitude

136. Match Column – I with Column – II and choose the correct answer from the options given below.

Column – I

**(Members of
Parliament)**

I. Elected members of Lok Sabha	A. 233
II. Elected members of Rajya Sabha	B. 12
III. Nominated members of Rajya Sabha	C. 543

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

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137. Which of the following is NOT a part of Parliament of India ?
(1) The Prime Minister
(2) The Rajya Sabha
(3) The Panchayat Samiti
(4) The Lok Sabha

141. Which among the following is correct in the context of Himalayas ?

(1) Mount Everest is the part of Himachal ranges of Himalayas
(2) The Himachal are the highest and most rugged part of the Himalayas

✓ (1) The Panchayat Samiti
(4) The Lok Sabha

138. Which one of the following is a method of soil conservation in hilly areas ?
(1) Strip cropping
(2) Shelter belts
(3) Mulching
✓ (4) Terrace farming

139. Which of the following is a part of Local Self Government ?
(1) Rajya Sabha
✓ (2) Gram Panchayat
(3) Vidhan Sabha
(4) Lok Sabha

140. On which of the following Lists of the Constitution of India both Union and State Governments Legislate ?
(1) Concurrent List
(2) Union List
✓ (3) Residuary Subject List
(4) State List

(2) The Himachal are the highest and most rugged part of the Himalayas
(3) The Himadri have a more moderate climate, allowing rich diversity and human habitation
✓ (4) The Shivalik hills are the lowest ranges of the Himalayas

142. Identify the correctly matched pair.
(1) Atmospheric Pressure – Anemometer
✓ (2) Atmospheric Pressure – Barometer
(3) Atmospheric Pressure – Hygrometer
(4) Atmospheric Pressure – Thermometer

143. Choose the appropriate option to fill in the blank.
The _____ is a landform that rises up from the surrounding land and has a more or less flat surface, some of its sides are often steep slopes. They have been called 'store house of minerals'.
✓ (1) Plateau
(2) Plain
(3) Desert
(4) Mountain

(29)

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144. Puneet called up his friend who resides in another country. He was surprised to know when his friend told him that it was 6 pm there. While he was calling at 9 pm local time. What is the longitudinal difference between the given two countries ?

(1) 90° (2) 45°
(3) 120° (4) 60°

145. Find the incorrect option regarding the Nationalist Movement of India.

(1) Civil-Disobedience Movement – 1930
(2) Champaran Movement – 1917
(3) Quit India Movement – 1942
(4) Non-Cooperation Movement – 1928

146. Identify the correctly matched pair.

(1) Kalibanga – Punjab
(2) Dholavira – Rajasthan
(3) Lothal – Gujarat
(4) Ropar – Himachal Pradesh

147. Which of the following regions was the first to enter into 'subsidiary alliance' of British in 1798 ?

(1) Mysore (2) Bengal
(3) Goa (4) Hyderabad

148. Who amongst the following was the author of 'Prayaga Prashasti' of Samudragupta ?

(1) Suradasa
(2) Kalidasa
(3) Bharata
(4) Harisena

149. Chinese traveller Fa-Hien visited India during the reign of :

(1) Kushana empire
(2) Gupta empire
(3) Satvahana empire
(4) Mauryan empire

150. How many of the following constituencies are reserved for the Scheduled Tribes in the Lok Sabha ?

(1) 47
(2) 23
(3) 56
(4) 84

