PA0926
ENGLISH

Test Booklet Code

X

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) : SHRIYA MITTAL

Roll Number : in figures : 2302049018

: in words : _____

Centre of Examination (in CAPITALS) : PRATAP PUBLIC SCHOOL, JARNAILLY COLONY

Candidate's Signature : Shriyamittal   Invigilator's Signature : H.

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 **X**. 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.

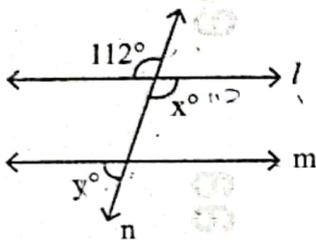## SECTION – "A" : MATHEMATICS

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

(1) 154   (2) 200

(3) 180   (4) 168

002. 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 I, IV   (2) only I, III

(3) only II, III   (4) only I, II, III

003. 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 work after 4 days. In how many days the work got completed ?

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

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

004. 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 ?

(1) 16 days

(2) 14 days

(3) 15 days

(4) 12 days

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

(1) 2

(2) 0

(3) 1

(4) −1

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

(1) 117

(2) 112

(3) 115

(4) 113

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

(1) 13

(2) 9

(3) 11

(4) 7

008. 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) ₹ 59,000

(2) ₹ 55,500

(3) ₹ 57,000

(4) ₹ 55,000

009. 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) 900

(2) 800

(3) 850

(4) 760

010. 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) 4%

(2) 3%

(3) 2%

(4) 5%

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

(1) 18

(2) 12

(3) 15

(4) 20

012. Seven equal solid metallic spheres having 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 ? $\left(\text{Use } \pi = \dfrac{22}{7} \right)$

    (1) 9 cm

    (2) 7 cm

    (3) 8 cm

    (4) 6 cm

013. A solid metallic cuboid having dimensions 250 cm × 40 cm × 100 cm is melted and recast into a solid cube. The edge (in meter) of the cube so formed is

    (1) 25 m

    (2) 1 m

    (3) 50 m

    (4) 100 m

014. The area of a parallelogram is 63 cm². If its base is 7 cm, then what is the height of the parallelogram ?

    (1) 11 cm

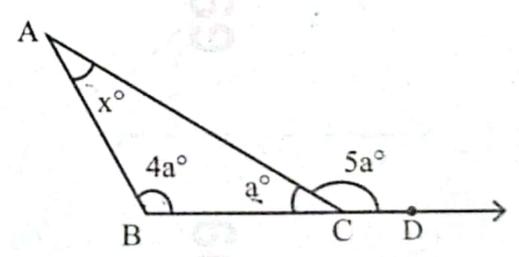   (2) 8 cm

    (3) 9 cm

    (4) 7 cm

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

    (1) 25 cm

    (2) 15 cm

    (3) 20 cm

    (4) 10 cm

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

    (1) 60°

    (2) 20°

    (3) 40°

    (4) 10°

017. In the given figure.

    The values of a and x, respectively are

    (1) 36, 40

    (2) 30, 60

    (3) 30, 30

    (4) 25, 50

018. 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) 2.5 m (2) 4 m

(3) 3 m (4) 5 m

019. In the figure, in $\triangle ABC$, $\angle A = 80°$ and $\angle ABC = 40°$. BD and CD bisect angles B and C, respectively. The values of x and y respectively are
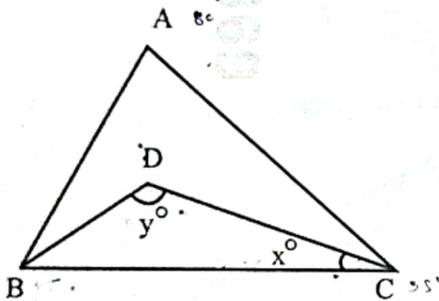
(1) 20 and 125 (2) 10 and 125

(3) 30 and 130 (4) 10 and 130

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

(1) 7 (2) 5

(3) 6 (4) 4

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

(1) $(5x + 10)$ (2) $5(x - 2)$

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

022. 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.
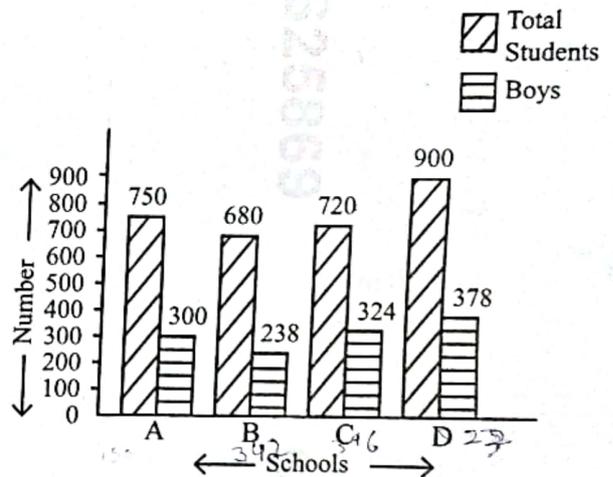
Which school has maximum number of girls and what is the percentage of girls in that school ?

(1) D, 44%

(2) A, 62%

(3) D, 58%

(4) A, 40%

023. 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 ?
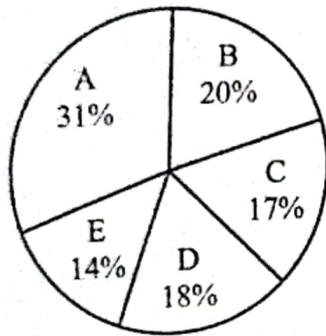
(1) 182   (2) 152

(3) 160   (4) 164

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

(1) 50   (2) 30

(3) 45   (4) 15

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

(1) 5   (2) 1

(3) 3   (4) 0

026. 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) $\dfrac{5}{28}$ (2) $\dfrac{7}{36}$

(3) $\dfrac{1}{9}$ (4) $\dfrac{5}{72}$

027. Evaluate

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

(1) 84   (2) 3

(3) $\dfrac{64}{3}$ (4) $\dfrac{20}{3}$

028. 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 the age of his son. The present age of the father is

(1) 30 years

(2) 50 years

(3) 40 years

(4) 45 years

029. 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) $\frac{6}{17}$

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

(3) $\frac{4}{13}$

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

030. In the figure, ABCD is a parallelogram. The measures of the angles x, y and z are
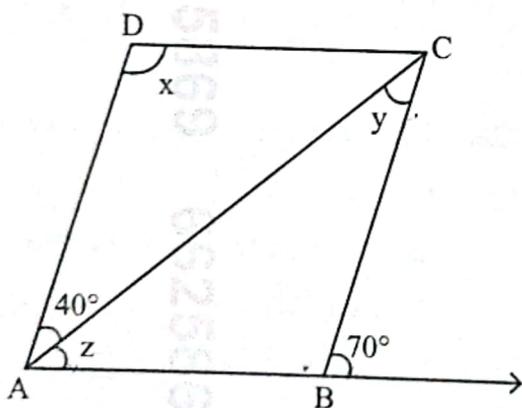
(1) $x = 70°, y = 40°, z = 30°$

(2) $x = 110°, y = 40°, z = 30°$

(3) $x = 90°, y = 20°, z = 70°$

(4) $x = 100°, y = 50°, z = 30°$

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

(1) 11.5

(2) 11

(3) 11.2

(4) 10

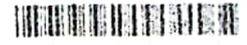032. The median of ten consecutive even natural numbers starting from 8 is

(1) 12.5

(2) 16

(3) 17

(4) 15

033. 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) 4

(2) 16

(3) 25

(4) 9

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

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

(2) $\frac{1}{25}$

(3) $\frac{7}{12}$

(4) $\frac{5}{12}$

035. 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) $\dfrac{3}{7}$

(2) $\dfrac{4}{7}$

(3) $\dfrac{1}{8}$

(4) $\dfrac{3}{4}$

036. 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) ₹ 1,320

(2) ₹ 1,260

(3) ₹ 1,080

(4) ₹ 1,140

037. 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) ₹ 600

(2) ₹ 650

(3) ₹ 620

(4) ₹ 680

038. 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.

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

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

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

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

039. Which of the following is equal to

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

(1) 0.438

(2) 0.186

(3) 1

(4) $\dfrac{93}{219}$

040. If $a^2 + \dfrac{1}{a^2} = 51$, $a > 1$, then the value of $a - \dfrac{1}{a}$ is

   (1) 11   (2) 7

   (3) 9   (4) 5

041. 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) 198 cm^2

   (2) 324 cm^2

   (3) 72 cm^2

   (4) 121 cm^2

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

   (1) $18\sqrt{3}$

   (2) 52

   (3) $52\sqrt{3}$

   (4) 76

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

   (1) 24

   (2) 12

   (3) 18

   (4) 10

044. 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) 8

   (2) 5

   (3) 6

   (4) 4

045. 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 15 minutes

   (2) 1 hour 45 minutes

   (3) 1 hour 20 minutes

   (4) 1 hour 30 minutes

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

(1) 45%

(2) 33%

(3) 40%

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

047. 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) ₹ 4,250

(2) ₹ 4,140

(3) ₹ 4,200

(4) ₹ 3,980

048. 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) 8

(2) 6

(3) 7

(4) 5

049. 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) 25%

(2) 20%

(3) 10%

(4) 12%

050. 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) ₹ 600

(2) ₹ 500

(3) ₹ 515

(4) ₹ 484

SECTION – "B" : INTELLIGENCE

051. 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) M

(2) P

(3) K

(4) R

052. Choose the odd one out :

(1) (12, 49, 5)

(2) (14, 36, 4)

(3) (13, 25, 8)

(4) (11, 64, 3)

053. In a certain code language if 'SCIENCE' is written as 'RBHDMBD' then how will be 'HISTORY' written in the same language ?

(1) IJTUPSZ

(2) GHRSPSX

(3) GHTSNQX

(4) GHRSNQX

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

(1) Practice

(2) Patient

(3) Medicine

(4) Hospital

055. '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) Daughter

(2) Mother

(3) Wife

(4) Sister

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

(1) Friday

(2) Tuesday

(3) Wednesday

(4) Thursday

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

(1) A T G R N E I L

(2) G L R F T N I E

(3) G R I A T E M N

(4) L R N T L H E A

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

(1) 2341

(2) 2314

(3) 3214

(4) 1432

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

(1)

(2)

(3)

(4)
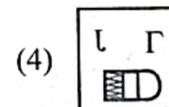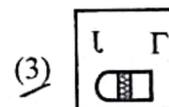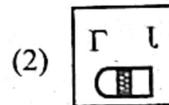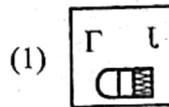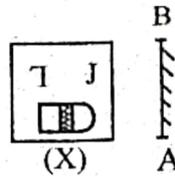
060. One term in the following series is wrong. Find the wrong term.

2483, 3584, 4685, 5786, 6898, 7988

(1) 6898

(2) 4685

(3) 7988

(4) 5786

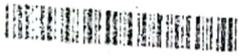061. Ram goes straight 40 m towards North. He turns left and covers 50 metres and then again turns left. In which direction is he facing now ?

    (1) West

    (2) South

    (3) East

    (4) North

062. 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) 14

    (2) 17

    (3) 15

    (4) 18

063. 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) 75

    (2) 78

    (3) 77

    (4) 80

064. Find the missing number in the following series :

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

    (1) 42

    (2) 48

    (3) 9

    (4) 6

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

    (1) 30

    (2) 1

    (3) 25

    (4) 0

066. 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 ?
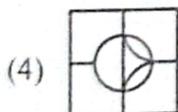
    (1) C

    (2) A

    (3) D

    (4) B

067. Choose the figure from given alternatives which contains figure (X) as it's part.

fig. (X)

(1)

(2)

(3)

(4)
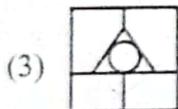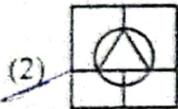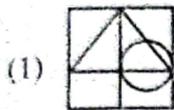
068. Choose the odd one out :

(1) W U S

(2) N L J

(3) K I G

(4) T Q N

069. Complete the following analogy :

CAT : 24 :: MAN : ?

(1) 25

(2) 28

(3) 26

(4) 22

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

A. Brоucher

B. Brother

C. Broadcast

D. Brought

E. Broadband

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

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

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

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

071. Complete the following analogy.

Circle : Diameter :: Rectangle : ?

(1) Angle

(2) Perimeter

(3) Diagonal

(4) Radius

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

    (1) Sea

    (2) River

    (3) Drought

    (4) Operation Flood

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

    (1) 18

    (2) 17

    (3) 19

    (4) 20

074. Amit is faster than Bobby but slower than Dharam. Chetan is the slowest. Who is the fastest among these ?

    (1) Chetan   (2) Amit

    (3) Dharam   (4) Bobby

075. The first two figures are related in same way. To establish the similar relation with third figure.
Choose the correct option.

    (1)

    (2)

    (3)

    (4)
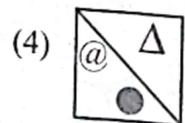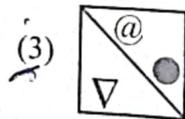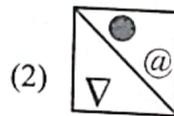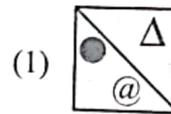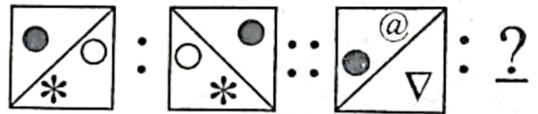
Instructions : *Each questions has four options. There is only one correct answer to each question. Choose the* **Correct / Most Appropriate** *option and darken/blacken the corresponding circle on the OMR Answer Sheet.*

SECTION – "C" : ENGLISH

076. Choose the sentence from the options given below that has the correct usage of transitive verb :

  (1) The glass broke

  (2) The elephant walks

  (3) She burnt with revenge

  (4) She walks the dog

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

  (1) I have known her for a long time

  (2) I think you are right

  (3) I am thinking you are right

  (4) Pawan received his letter a week ago

078. Identify the tense of the following sentence :

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

  (1) Present Perfect Continuous Tense

  (2) Present Continuous Tense

  (3) Present Perfect Tense

  (4) Simple Present Tense

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

  As usual he is <u>blowing his own trumpet.</u>

  (1) praising himself and others

  (2) playing a tune on the trumpet

  (3) praising himself

  (4) refusing to use anybody else's trumpet

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

Sukriti and Sara are at cross-purposes.

(1) are each others sworn enemies

(2) misunderstand each other

(3) are pursuing different things in life

(4) are continuously harming each other

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

Krishna is stronger than all students.

(1) all the students

(2) any other student

(3) all student

(4) any other students

082. Spot the error in the following sentence :

None of the	two boys	could complete
A	B	C

the job.
D

(1) D   (2) B

(3) C   (4) A

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

(1) Intuition

(2) Intrigue

(3) Invariability

(4) Intrepidity

084. 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 that the office be closed.

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

(3) It is time for the office to be closed.

(4) It is time the office be closed.

085. 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 should take proper diet.

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

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

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

Read the passage carefully and answer the questions given below : **(from 086 – 090)**

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 mice models, killing super bugs that cause drug resistance and MSRA, 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.

086. The passage does not talk about

(1) use of homeopathy to cure bacterial disease

(2) drug resistance

(3) bacterial mutation

(4) generative A.I.

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

(1) generation

(2) destructive

(3) creative

(4) generous

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

(1) mice models

(2) antimicrobial resistance

(3) new antibiotics

(4) generative A.I.

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

   (1) decoding the journal published by various organisations

   (2) promoting excessive use of antibiotics

   (3) providing generative A.I. feature to structure new antibiotics

   (4) helping bacterial mutation to resist the drug

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

   (1) global public health

   (2) excessive use of antibiotics

   (3) death of 5 million people

   (4) use of generative A.I.

091. 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 insurance company _____ their client.

   (1) on behalf of, in lieu of

   (2) in lieu of, on behalf of

   (3) in event of, in lieu of

   (4) by way of, in lieu of

092. 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) lest, unless

   (2) provided, if

   (3) if, provided

   (4) unless, supposing

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

_____ she is clever, she often makes mistakes.

   (1) Yet   (2) Since

   (3) Although   (4) Despite

094. Choose the correct spelling from the following options :

   (1) conspicouous   (2) congrous

   (3) connosseur   (4) conjuncture

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

   (1) Discrepansy

   (2) Descrepancy

   (3) Discripancy

   (4) Discrepancy

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

   Somebody has called, _____ ?

   (1) haven't they   (2) hasn't they

   (3) have they   (4) has they

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

   They haven't come yet , _____ ?

   (1) hadn't they

   (2) has they

   (3) have they

   (4) haven't they

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

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

   (1) As well as

   (2) Similarly

   (3) No matter

   (4) In addition

099. Fill in the blank with the correct modal verb :

   _____ you show me the way to the station.

   (1) May

   (2) Shall

   (3) Might

   (4) Could

100. Fill in the blank with the correct verb :

   Five thousand rupees _____ charged by him.

   (1) were

   (2) is

   (3) was

   (4) am

SECTION – "D" : GENERAL SCIENCE

101. What is the full form of ORS ?

    (1) Oral Rehydration Solvent

    (2) Oral Rehydration Solute

    (3) Oral Rehydration Solution

    (4) Oral Rehydration Salt

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

    (1) 10°C to 110°C

    (2) –10°C to 110°C

    (3) –10°C to 90°C

    (4) 10°C to 90°C

103. Choose the incorrect statement.

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

    (2) Coal and natural gas are fossil fuels.

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

    (4) Fossil Fuels are exhaustible resources.

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

    (1) Electrostatic

    (2) Electrophoresis

    (3) Electroplating

    (4) Electrolysis

PA0926/X

(22)

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

(1) Straight Line

(2) Elliptical

(3) Hyperbolic

(4) Parabolic curve

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

(1) Carnivorous

(2) Oviparous

(3) Ovoviviparous

(4) Viviparous

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

(1) Lens

(2) Iris

(3) Cornea

(4) Pupil

108. 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 – ii   B – i   C – iv   D – iii

(2) A – iii   B – iv   C – i   D – ii

(3) A – iv   B – iii   C – i   D – ii

(4) A – i   B – ii   C – iii   D – iv

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

(1) Sorting → Rolling → Scouring → Shearing

(2) Shearing → Scouring → Sorting → Rolling

(3) Scouring → Shearing → Rolling → Sorting

(4) Rolling → Scouring → Shearing → Sorting

110. Micro – organisms act upon the dead plants to produce _____

    (1) Humus

    (2) Wood

    (3) Sand

    (4) Mushrooms

111. Which of the following relation is correct ?

    (1) $\text{Speed} = \dfrac{1}{\text{Distance} \times \text{Time}}$

    (2) $\text{Speed} = \text{Distance} \times \text{Time}$

    (3) $\text{Speed} = \dfrac{\text{Distance}}{\text{Time}}$

    (4) $\text{Speed} = \dfrac{\text{Time}}{\text{Distance}}$

112. Which of the following statement is NOT true ?

    (1) The process of conversion of water vapour into its liquid state is called condensation.

    (2) Water changes its state on heating or cooling.

    (3) Water is found in different states-solid, liquid and gas.

    (4) Evaporation causes heating effect.

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

    (1) Velocity

    (2) Frequency

    (3) Wavelength

    (4) Amplitude

114. Which of the following statement is incorrect ?

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

    (2) Air is present in water and soil.

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

    (4) Air does not occupy space.

115. Which of the following statement is incorrect ?

    (1) A cylindrical magnet has only one pole.

    (2) Iron, Nickel and Cobalt are magnetic material.

    (3) A freely suspended magnet always aligns in N – S direction.

    (4) Magnetite is a natural magnet.

116. What is the chemical name of milk of magnesia ?
(1) Ammonium hydroxide
(2) Magnesium hydroxide
(3) Calcium hydroxide
(4) Sodium hydroxide

117. Choose the correct arrangement of different forces of friction.
(1) static friction → sliding friction → rolling friction
(2) rolling friction → sliding friction → static friction
(3) sliding friction → static friction → rolling friction
(4) rolling friction → static friction → sliding friction

118. 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

Choose the correct answer from the options given below.
(1) i – b   ii – a   iii – c
(2) i – c   ii – b   iii – a
(3) i – b   ii – c   iii – a
(4) i – c   ii – a   iii – b

119. 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 – 2   b – 1   c – 3

(2) a – 1   b – 2   c – 3

(3) a – 3   b – 1   c – 2

(4) a – 2   b – 3   c – 1

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

(1) Plane lens

(2) Concave mirror

(3) Convex mirror

(4) Plane mirror

121. What is the function of Alveoli ? Choose the correct one.

(1) To filter the air

(2) To exchange gases

(3) Air reaches our lungs through this part

(4) To protect lungs

122. What is the function of bile in digestion ?

(1) Digestion of fats

(2) Digestion of Carbohydrates

(3) Digestion of Amino acid

(4) Digestion of Proteins

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

(1) Insulation

(2) Radiation

(3) Conduction

(4) Convection

124. Richter scale is used to measure _____

(1) Earthquake

(2) Tsunami

(3) Lightning

(4) Thunder

125. Which of the following is NOT a part of Pistil ?

(1) Stigma

(2) Ovule

(3) Anther

(4) Style

PA0926/X

(26)

SECTION – "E" : SOCIAL SCIENCE

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

    (1) The Himadri have a more moderate climate, allowing rich diversity and human habitation

    (2) The Shivalik hills are the lowest ranges of the Himalayas

    (3) Mount Everest is the part of Himachal ranges of Himalayas

    (4) The Himachal are the highest and most rugged part of the Himalayas

127. Identify the correctly matched pair.

    (1) Atmospheric Pressure – Hygrometer

    (2) Atmospheric Pressure – Thermometer

    (3) Atmospheric Pressure – Anemometer

    (4) Atmospheric Pressure – Barometer

128. 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) Desert

    (2) Mountain

    (3) Plateau

    (4) Plain

129. 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) 120°   (2) 60°

    (3) 90°   (4) 45°

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

    (1) Quit India Movement – 1942

    (2) Non-Cooperation Movement – 1928

    (3) Civil-Disobedience Movement – 1930

    (4) Champaran Movement – 1917

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

Column – I (Members of Parliament)	Column – II (Numbers)
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-C   III-B
   (2) I-C   II-B   III-A
   (3) I-A   II-B   III-C
   (4) I-C   II-A   III-B

132. Which of the following is NOT a part of Parliament of India ?

   (1) The Panchayat Samiti
   (2) The Lok Sabha
   (3) The Prime Minister
   (4) The Rajya Sabha

133. Which one of the following is a method of soil conservation in hilly areas ?

   (1) Mulching
   (2) Terrace farming
   (3) Strip cropping
   (4) Shelter belts

134. Which of the following is a part of Local Self Government ?

   (1) Vidhan Sabha
   (2) Lok Sabha
   (3) Rajya Sabha
   (4) Gram Panchayat

135. On which of the following Lists of the Constitution of India both Union and State Governments Legislate ?

   (1) Residuary Subject List
   (2) State List
   (3) Concurrent List
   (4) Union List

136. Identify the correctly matched pair.

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

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

   (1) Goa
   (2) Hyderabad
   (3) Mysore
   (4) Bengal
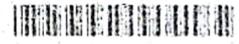
138. Who amongst the following was the author of 'Prayaga Prashasti' of Samudragupta ?

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

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

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

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

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

141. 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, B, D
(2) B, C, D
(3) A, C, D
(4) A, B, C

142. In which of the following categories 'Thar' region of India belongs to ?

(1) River valleys
(2) Deserts
(3) Volcanoes
(4) Glaciers

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

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

(1) Sprinkler irrigation
(2) Drip irrigation
(3) Agricultural runoff
(4) Rain water harvesting

145. Which of the following statements is correct regarding equator ?
    (1) It is the frigid zone
    (2) It is the longest latitude
    (3) It is the longest longitude
    (4) It is the meridian of latitude

146. Match List – I with List – II and choose the correct option.

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

    Choose the correct answer from the options given below :
    (1) A-IV   B-III   C-II   D-I
    (2) A-IV   B-I   C-III   D-II
    (3) A-III   B-II   C-IV   D-I
    (4) A-II   B-IV   C-III   D-I

147. Who amongst the following British Governor Generals introduced the Permanent Settlement in Bengal ?
    (1) William Bentinck
    (2) Charles Cornwallis
    (3) Henry Hardinge
    (4) Warren Hastings

148. The 'Battle of Plassey' was fought between
    (1) The British and Shah Alam
    (2) The British and Sirajuddaulah
    (3) The British and Tipu Sultan
    (4) The British and Nadir Shah

149. Who amongst the following rulers composed, 'Amuktamalyada' poem in Telugu ?
    (1) Krishnadeva Raya
    (2) Bukka
    (3) Rama Raya
    (4) Harihara

150. An event occurred in 330 CE. How many years it dates back from the year 2024 ?
    (1) 2353 years
    (2) 1893 years
    (3) 2354 years
    (4) 1694 years