INSTRUCTIONS TO CANDIDATES

1. (a) Candidates are allowed 10 minutes to fill up the basic information about themselves on OMR Answer-Sheet such as Name, Roll No., etc.

(b) After this, Question Booklet will be given to the candidates. They are required to do the following:

(i) Examine the Question Booklet to ensure that all paper seals are intact. Do not accept the Question Booklet if the paper seals are not intact.

(ii) Count the number of paper along with the number of questions printed on the cover page of the Question Booklet.

(iii) Check the Question Booklet contains the questions of all the subjects/Sections as required and stated in the booklet and no repetition or omissions of questions.

In case of any discrepancy, please get the Question Booklet revalued. This should be done within 24 hours of receiving the Question Booklet, after which neither the valuation nor the correction of valuation will be given.

(iv) After examining the Question Booklet, please enter the Serial No. of the Question Booklet at the appropriate place on the Answer-Sheet and the corresponding circles, be darkened with Black Ball-point Pen.

(v) Candidates are not permitted to mark answers in the Answer-Sheet in these 15 minutes. Two Marks more will be given to mark the answers.

(vi) On Page 1 of the Answer-Sheet, in the upper half portion, write Name, Roll No., Name of Exam. Centre, Date of Exam. and S.r. No. of Question Booklet supplied to you. Put your signature also. On the bottom part of this page, write the serial no. of the first topmost line in capital letters, your surname and name (English). Write only one letter of name (first name) in the square box. Below each letter darken with Black Ball-point Pen the circle O having same letter.

(vii) On Page 2 of the Answer-Sheet, fill in your Roll No., etc., by writing in the O's and below it by writing the corresponding O's.

(viii) On Page 2 of the Answer-Sheet, only the answers to questions are to be marked. The instructions for O's are available on the back cover page of this Question Booklet.

(vix) All entries are to be made with black Ball-point Pen.

(ix) Machine prepares the Optical Mark Sheet by reading a string of vertical columns with the symbols 

O


and

0

such as the symbols shown on Pages 1 and 2 of the Answer-Sheet, hence the candidate must be extremely careful in marking these to avoid inputting errors.

(x) Do not write anything on this page or on the Optical Mark Sheet.

(xi) No use of calculators, dictionaries, or other electronic devices is allowed for this examination.

2. In Section A, questions are to be answered in English.

3. In Section B, you may use English or Hindi.

4. In Section C, one or the other language may be used.

5. No electronic calculator is allowed in any section.

6. You may use pen or pencil in any section.

7. All candidate should ensure that all the columns are filled. The candidate will not be permitted to change the medium (English or Hindi) after the question paper has been distributed.

8. The candidate is required to fill in the Roll No. and Name of Exam. Centre on the Optical Mark Sheet as given on the back cover of this Question Booklet.
### NOTE

1. This Question Booklet has three Sections:
   - **Section-A**: General Knowledge and Logical Knowledge (Q. Nos. 1-40)
   - **Section-B**: Mental Ability and Mental Aptitude (Q. Nos. 41-70)
   - **Section-C**: Science and Simple Arithmetic (Q. Nos. 71-100)

2. This Question Booklet contains 100 questions numbered from 1 to 100 and each question carries 1 mark. All questions are compulsory. There is no negative marking.

3. Tally the number of pages along with the number of questions printed on the cover page of the Question Booklet. Also check that Question Booklet contains the questions of all relevant Subjects/Sections, as required and stated above and no repetition or omission of questions is evident.

4. If any discrepancy is found in the Question Booklet, the same can be replaced with another correct Question Booklet within first 15 minutes.

5. In the Question Booklet all the questions are printed in Hindi and English. If any discrepancy is found in Hindi and English version of a question, the English version will be treated as correct.

6. Before answering the questions, please read carefully the instructions printed on the back cover page of the Question Booklet and strictly follow them. There is no provision of erasing or changing of the answer marked in the OMR Answer-Sheet by any other means. Therefore, **indicate your answers by blackening full circles by Black Ballpoint Pen carefully on the OMR Answer-Sheet provided.**

7. Use of any type of calculator, mobile phone or any other electronic equipments and log table, etc., is strictly prohibited.

### नोट

1. इस प्रश्न-पृष्ठलिखिता में तीन भाग हैं:
   - **भाग—A**: सामान्य ज्ञान एवं तात्क्षणिक ज्ञान (प्रश्न संख्या 1-40)
   - **भाग—B**: नैसर्गिक ध्यान एवं मानसिक अभिव्यक्ति (प्रश्न संख्या 41-70)
   - **भाग—C**: विज्ञान एवं सरल अंकांकित (प्रश्न संख्या 71-100)

2. इस प्रश्न-पृष्ठलिखिता में कुल 100 प्रश्न, क्रमांक 1 से 100 तक हैं एवं प्रत्येक प्रश्न 1 अंक का है। सभी प्रश्न अनिवार्य हैं। कोई विवादास्पद मूल्यांकन नहीं है।

3. प्रश्न-पृष्ठलिखिता के पृष्ठों तथा प्रश्नों की संख्या का मिल युक्त यूनिट पर ही नहीं संख्याओं से कर लें। साथ ही प्रश्न-पृष्ठलिखिता में सभी सहाय्यित विशेष रूप से-भाग, जैसा: ऊपर दिया गया है, के प्रश्न संस्थित हैं तथा 1 है दुबारा अंकित नहीं है। प्रश्न छोड़ ही नहीं हैं जो की जैसा अंविवार्य रूप से करे।

4. प्रश्न-पृष्ठलिखिता में किसी प्रश्न की हूट पाए जाए उसे प्रश्न 15 मिनट में बदलकर सही प्रश्न-पृष्ठलिखिता जाए।

5. प्रश्न-पृष्ठलिखिता में सभी प्रश्न हिंदी एवं अंग्रेजी भाषा में सुनिश्चित हैं। यदि किसी प्रश्न के हिंदी एवं अंग्रेजी भाषा में असमानता पाई जाती है, तो अंग्रेजी की सही माना जाए।

6. प्रश्न हल करने के पश्चात प्रश्न-पृष्ठलिखिता के अनुसार पर अंकित निर्देशों को ध्यानपूर्वक पढ़ एवं उनकी सहायता से पाएं। ओ.एच. 2020 उपर-पत्र परिचय किए गए उपर को पिटाया या अन्य किसी जैसे से परिवर्तित करने का कोई प्रवर्धन नहीं है। अपने के उपर डे पाई ओ.एच. 2020 उपर-पत्र पर सांगित उपर को पाठ बॉल-पॉइंट से पूर्ण रूप से काला किया ही अंकित करें।

7. किसी भी प्रश्न का चैट्टिपुटर, मोबाइल या किसी भी प्रश्न के अनुसार इलेक्ट्रॉनिक उप एवं लॉस्ट टेलिक आदि का उपयोग करना अंकित है।
Direction (Q. Nos. 1 and 2): In the given figure, the circle represents teachers, the triangle represents farmers and the rectangle represents doctors. Study the figure carefully and answer the questions given below.

1. Which region represents the teachers and doctors but not farmers?
   (A) 2
   (B) 1
   (C) 4
   (D) 5

2. Which region represents the farmers and teachers?
   (A) 3
   (B) 4
   (C) 6
   (D) 5
3. Suez Canal joins
   (A) Persian Gulf and Arabian Sea
   (B) Red Sea and Mediterranean Sea
   (C) Mediterranean Sea and Black Sea
   (D) Red Sea and Arabian Sea

4. Who built the famous Dilwara Temple at Mount Abu in Rajasthan in the 13th century?
   (A) Mahendrapala
   (B) Mahipala
   (C) Rajyapala
   (D) Tejapala

5. Black Death is
   (A) cancer
   (B) plague
   (C) AIDS
   (D) gonorrhoea

6. Dry ice is nothing but
   (A) gaseous carbon dioxide
   (B) washing soda
   (C) solid carbon dioxide
   (D) carbon monoxide

7. In the industrial production of vegetable ghee, the process involved is
   (A) dissociation
   (B) reduction
   (C) oxidation
   (D) ionization
8. In which of the following systems of government is bicameralism an essential feature?
(A) Parliamentary system
(B) Presidential system
(C) Federal system
(D) Unitary system

9. Kuldip Nayar, a journalist, was appointed as a High Commissioner in
(A) England
(B) Pakistan
(C) Sri Lanka
(D) Australia

10. How many spokes are there in the Dharmachakra of the National Flag?
(A) 22
(B) 24
(C) 14
(D) 18

11. The seat of Madhya Pradesh High Court is located at
(A) Bhopal
(B) Jabalpur
(C) Gwalior
(D) Indore

12. Which of the following is called ‘Pink City’?
(A) Lucknow
(B) Jabalpur
(C) Jaipur
(D) Kolkata

8. सरकार की निम्न प्रणालियों में से किसमें हिस्सदन पंद्रहा एक अभिवाद्य लक्षण है?
(A) संसदीय प्रणाली
(B) राष्ट्रपति प्रणाली
(C) संचित प्रणाली
(D) एकालक प्रणाली

9. कुलदीप नायर, एक पत्रकार, को उच्चायुक्त नियुक्त किया गया था?
(A) इंग्लैंड में
(B) पाकिस्तान में
(C) श्रीलंका में
(D) ऑस्ट्रेलिया में

10. राष्ट्रपति घर के धर्मचक्र में कितने अंग (स्पोक) हैं?
(A) 22
(B) 24
(C) 14
(D) 18

11. मध्य प्रदेश उच्च न्यायालय की पीठ स्थित है?
(A) भोपाल में
(B) जबलपुर में
(C) ग्वालियर में
(D) इंदौर में

12. निम्न में से किसे 'गुलाबी नगर' कहा जाता है?
(A) लखनऊ
(B) जबलपुर
(C) जयपुर
(D) कोलकाता
13. The sweet taste of fruits is due to
(A) maltose
(B) ribose
(C) lactose
(D) fructose

14. Railway coaches are manufactured at
(A) Perambur
(B) Varanasi
(C) Jamshedpur
(D) Chittaranjan

15. Which of the following cereals was among the first to be used by man?
(A) Barley
(B) Oat
(C) Rye
(D) Wheat

16. Who among the following Presidents held office for two consecutive terms?
(A) Dr. S. Radhakrishnan
(B) Dr. Zakir Hussain
(C) Dr. Rajendra Prasad
(D) Both (A) and (C)

17. Which Amendment Act reduced the voting age from 21 to 18?
(A) 42nd
(B) 44th
(C) 52nd
(D) 61st
18. Which of the following is a trans-Himalayan river?
   (A) Ganga
   (B) Yamuna
   (C) Sutlej
   (D) Ravi

19. Which of the following items is not used in Local Area Networks (LANs)?
   (A) Computer
   (B) Modem
   (C) Interface Card
   (D) Cable

20. The 65th National Football Championship (Santosh Trophy, 2011) was won by
   (A) Manipur
   (B) Goa
   (C) Bengal
   (D) Punjab

21. The brightest planet is
   (A) Jupiter
   (B) Mars
   (C) Venus
   (D) Mercury

22. The Maratha Saint, who was a contemporary of Shivaji, was
   (A) Saint Dhyanchand
   (B) Namdev
   (C) Saint Eknath
   (D) Saint Tukaram
Direction (Q. Nos. 23 to 32) : In the questions below are given two statements followed by two conclusions. You have to take the two given statements to be true even if they seem to be absurd and decide which of the given conclusions logically follow(s).

23. Statements :
   I. All cats are animals.
   II. No animal is a man.

   Conclusions :
   (1) Some cats are men.
   (2) Some men are animals.

   (A) Only conclusion (1) follows
   (B) Only conclusion (2) follows
   (C) Neither (1) nor (2) follows
   (D) Both (1) and (2) follow

24. Statements :
   I. Some girls are birds.
   II. Some birds are animals.

   Conclusions :
   (1) Some girls are animals.
   (2) Some animals are girls.

   (A) Only conclusion (1) follows
   (B) Only conclusion (2) follows
   (C) Neither (1) nor (2) follows
   (D) Both (1) and (2) follow
25. Statements:
I. Some copies are pens.
II. Some pens are bags.

Conclusions:
(1) Some copies are bags.
(2) No bag is a pen.
(A) Only conclusion (1) follows
(B) Only conclusion (2) follows
(C) Neither (1) nor (2) follows
(D) Both (1) and (2) follow

26. Statements:
I. All papers are files.
II. Some pens are files.

Conclusions:
(1) No paper is a pen.
(2) Some pens are papers.
(A) Only conclusion (1) follows
(B) Only conclusion (2) follows
(C) Neither (1) nor (2) follows
(D) Both (1) and (2) follow

27. Statements:
I. Some buildings are rooms.
II. All rooms are bricks.

Conclusions:
(1) Some buildings are bricks.
(2) Some rooms are buildings.
(A) Only conclusion (1) follows
(B) Only conclusion (2) follows
(C) Neither (1) nor (2) follows
(D) Both (1) and (2) follow
28. Statements:
I. Some men are clocks.
II. All clocks are keys.

Conclusions:
(1) Some keys are men.
(2) Some men are keys.

(A) Only conclusion (1) follows
(B) Only conclusion (2) follows
(C) Neither (1) nor (2) follows
(D) Both (1) and (2) follow

29. Statements:
I. Some boys are parrots.
II. Some parrots are flowers.

Conclusions:
(1) Some boys are flowers.
(2) Some parrots are flowers.

(A) Only conclusion (1) follows
(B) Only conclusion (2) follows
(C) Neither (1) nor (2) follows
(D) Both (1) and (2) follow

30. Statements:
I. Only cats are animals.
II. No historian is an animal.

Conclusions:
(1) Some cats are not historians.
(2) Some historians are cats.

(A) Only conclusion (1) follows
(B) Only conclusion (2) follows
(C) Neither (1) nor (2) follows
(D) Both (1) and (2) follow
31. Statements:
   I. All men are heavy.
   II. Some women are heavy.

Conclusions:
   (1) Some heavy are not men.
   (2) Some women are men.

(A) Only conclusion (1) follows
(B) Only conclusion (2) follows
(C) Neither (1) nor (2) follows
(D) Both (1) and (2) follow

32. Statements:
   I. Science teachers do not use plastic bags.
   II. Plastic bags are not used by some engineers.

Conclusions:
   (1) All science teachers are engineers.
   (2) All engineers do not use plastic bags.

(A) Only conclusion (1) follows
(B) Only conclusion (2) follows
(C) Neither (1) nor (2) follows
(D) Both (1) and (2) follow

31. कथन:
   I. सभी आदमी भारी हैं।
   II. कुछ महिलाएं भारी हैं।

विष्कार्य:
   (1) कुछ भारी आदमी नहीं हैं।
   (2) कुछ महिलाएं आदमी हैं।

(A) केवल विष्कार्य (1) सही है
(B) केवल विष्कार्य (2) सही है
(C) न तो (1) और न ही (2) सही है
(D) दोनों (1) व (2) सही है

32. कथन:
   I. विज्ञान के अध्यापक प्लास्टिक के बैले का प्रयोग नहीं करते।
   II. प्लास्टिक के बैले का प्रयोग कुछ इंजीनियरों द्वारा नहीं किया जाता।

विष्कार्य:
   (1) विज्ञान के सभी अध्यापक इंजीनियर हैं।
   (2) सभी इंजीनियर प्लास्टिक के बैले का प्रयोग नहीं करते।

(A) केवल विष्कार्य (1) सही है
(B) केवल विष्कार्य (2) सही है
(C) न तो (1) और न ही (2) सही है
(D) दोनों (1) व (2) सही है
Direction (Q. Nos. 33 to 40): In the questions given below, there is a statement followed by two assumptions. Give the answer by deciding which of the assumptions is/are implicit in the statement.

33. Statement:
We need to appoint more teachers—
Principal informs the school staff.

Assumptions:
I. Teachers are available.
II. Present teachers are not good.

(A) Only assumption (I) is implicit
(B) Only assumption (II) is implicit
(C) Neither (I) nor (II) is implicit
(D) Both (I) and (II) are implicit

34. Statement:
The pen is mightier than the sword.

Assumptions:
I. The pen is made of stronger metal than the sword.
II. The power of the mind is much stronger than brute physical power.

(A) Only assumption (I) is implicit
(B) Only assumption (II) is implicit
(C) Neither (I) nor (II) is implicit
(D) Both (I) and (II) are implicit
35. Statement:
The hike in kerosene and LPG prices has mitigated the increase in the oil pool deficit.

Assumptions:
I. Subsidy on petroleum products adds to the oil pool deficit.
II. The consumption of kerosene and LPG is expected to decrease.

(A) Only assumption (I) is implicit 
(B) Only assumption (II) is implicit 
(C) Neither (I) nor (II) is implicit 
(D) Both (I) and (II) are implicit 

36. Statement:
Why don't you invite Ashish for the Diwali party this year?

Assumptions:
I. Ashish is not from the same city. 
II. Unless invited, Ashish will not attend the party.

(A) Only assumption (I) is implicit 
(B) Only assumption (II) is implicit 
(C) Neither (I) nor (II) is implicit 
(D) Both (I) and (II) are implicit
37. Statement:
“Everyone desires to buy a personal computer.” (Statement of a college student)

Assumptions:
I. Personal computers are not a need but a luxury.
II. Use of personal computer improves quality of skill.

(A) Only assumption (I) is implicit
(B) Only assumption (II) is implicit
(C) Neither (I) nor (II) is implicit
(D) Both (I) and (II) are implicit

38. Statement:
Economic development and social justice should go hand-in-hand.

Assumptions:
I. Only economic development can bring social justice.
II. Life without social justice is worth not living.

(A) Only assumption (I) is implicit
(B) Only assumption (II) is implicit
(C) Neither (I) nor (II) is implicit
(D) Both (I) and (II) are implicit
39. Statement:
Read the book to get detailed and comprehensive information on this issue.

Assumptions:
I. The person who wants this information can read the book.
II. There are other books available on this issue.

(A) Only assumption (I) is implicit
(B) Only assumption (II) is implicit
(C) Neither (I) nor (II) is implicit
(D) Both (I) and (II) are implicit

40. Statement:
Read the notice before entering the club.

Assumptions:
I. People are literate.
II. Club is not for blind persons.

(A) Only assumption (I) is implicit
(B) Only assumption (II) is implicit
(C) Neither (I) nor (II) is implicit
(D) Both (I) and (II) are implicit
41. Which of the following will replace the question mark (?) sign?

\[ ZA : YB :: XC : ? \]

(A) VC  
(B) YD  
(C) NP  
(D) WD

42. If 4325 is to 5324, then REAP is to

(A) PEAR  
(B) RAEP  
(C) PAER  
(D) ERAP

41. प्रश्नवाकृचक चिह्न (?) के स्थान पर निम्नलिखित में से कौन-सा आएगा?

\[ ZA : YB :: XC : ? \]

(A) VC  
(B) YD  
(C) NP  
(D) WD
43. Which of the following letters will come next in the same pattern in the given letter series?

DFIMR ?

(A) Y
(B) W
(C) V
(D) X

44. Complete the following letter series which follows a particular pattern:

c _ bba _ cab _ ac _ ab _ ac

(A) bcaca
(B) abcab
(C) acbcb
(D) None of the above

45. If in a row, Rahul is standing on 16th position from the front and on 29th position from behind, then the total number of persons in that row is

(A) 43
(B) 44
(C) 45
(D) None of the above
46. If $x$ and $y$ are two positive integers such that $x^y = 125$, then the value of $y$ is

(A) 5  
(B) 3  
(C) 4  
(D) 2

47. If $\frac{5}{6}$ of 20% of a number is 150, then the number is

(A) 900  
(B) 750  
(C) 600  
(D) 1500

48. The value of $6308 \times 931 - 6308 \times 831$ is

(A) 63080  
(B) 93100  
(C) 630800  
(D) 83100

46. यदि $x$ और $y$ दो धनात्मक पूर्णांक इस प्रकार हैं कि $x^y = 125$, तो $y$ का मान है

(A) 5  
(B) 3  
(C) 4  
(D) 2

47. यदि किसी संख्या के 20% का $\frac{5}{6}$ भाग 150 है, तो संख्या है

(A) 900  
(B) 750  
(C) 600  
(D) 1500

48. $6308 \times 931 - 6308 \times 831$ का मान है

(A) 63080  
(B) 93100  
(C) 630800  
(D) 83100
49. If $1250 + 450 = 300 = \frac{2}{5} \times x$, then the value of $x$ is

(A) 3000
(B) 1500
(C) 4500
(D) 3500

50. Which of the following numbers will replace the question mark (?) sign?

<p>| | | |</p>
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<td>14</td>
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<td>?</td>
<td>30</td>
<td>34</td>
</tr>
</tbody>
</table>

(A) 26
(B) 24
(C) 28
(D) None of the above

51. The value of

\[
\frac{(10-1)(10-2)(10-3)\ldots(10-19)(10-20)}{10 \times 9 \times 8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1}
\]

is

(A) 2
(B) 1
(C) 0
(D) Cannot be determined

49. यदि $1250 + 450 = 300 = \frac{2}{5} \times x$, तो $x$ का मान है

(A) 3000
(B) 1500
(C) 4500
(D) 3500

50. प्रश्नवाचक विन्ध्य (?) के स्थान पर निम्नलिखित में से कौन-सी संख्या आएगी?

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<table>
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<td>2</td>
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<td>22</td>
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<td>?</td>
<td>30</td>
<td>34</td>
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(A) 26
(B) 24
(C) 28
(D) ऊपरी में से कोई नहीं

51. $\frac{(10-1)(10-2)(10-3)\ldots(10-19)(10-20)}{10 \times 9 \times 8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1}$

का मान है

(A) 2
(B) 1
(C) 0
(D) झाल नहीं किया जा सकता
52. How many triangles are there in the figure given below?

(A) 12
(B) 16
(C) 18
(D) None of the above

53. Which of the following numbers will replace the question mark (?) sign?

0, 7, 26, 63, __

(A) 176
(B) 114
(C) 138
(D) 124

54. If $a$ means $\cdot$, $b$ means $\div$, $c$ means $\times$ and $d$ means $+$, then the value of $16c10b14a24d4$ is

(A) 242
(B) 168
(C) 152
(D) None of the above
55. Find the odd one out.

(A) 23
(B) 17
(C) 13
(D) 15

56. If in a certain coded language HOUSE is coded as IPVTF, then BZQQNL will be coded as

(A) CARROM
(B) CASSON
(C) AXPPMN
(D) AYRRMN

57. If GIVE is coded as 5137 and BAT is coded as 924, how is BITE coded?

(A) 7941
(B) 9147
(C) 4971
(D) 9417
58. In a certain coded language, 3456 is coded as ROSE and 12783 is coded as CHAIR, then 567312 is the code for

(A) SEARCH
(B) PEARCH
(C) RACESH
(D) None of the above

59. Which of the following numbers will replace the question mark (?) sign?
17, 12, 18, 11, ?, 10

(A) 16
(B) 19
(C) 21
(D) 22
60. The missing term in the letter series
ABE, BCF, CDG, DEH, __?

(A) EFG
(B) EFI
(C) DEH
(D) HIK

61. The number of rectangles in the figure

\[\begin{array}{ccc}
\hline
\quad & \quad & \\
\hline
\quad & \quad & \\
\hline
\quad & \quad & \\
\hline
\end{array}\]

is

(A) 7
(B) 8
(C) 9
(D) 10

62. If Ram is to the south of Shyam and Naresh is to the east of Shyam, then in which direction is Ram with respect to Naresh?

(A) South-East
(B) South-West
(C) West
(D) North-East
63. Seema walks 75 metres towards east; she turns to the left and walks 25 metres. Again she turns to the left and walks a distance of 40 metres; again she turns to the left and walks a distance of 25 metres. How far is she from the starting point?

(A) 35 metres
(B) 25 metres
(C) 90 metres
(D) 165 metres

64. In a month of 31 days, third Thursday falls on 16th. What will be the last day of the month?

(A) 5th Friday
(B) 5th Saturday
(C) 5th Wednesday
(D) 5th Thursday
65. If \( '+' \) means \( '−' \), \( '−' \) means \( '+' \), \( 'x' \) means \( '÷' \) and \( '÷' \) means \( 'x' \), then the value of
\[
\frac{26 \times 5 - 5 \times 3}{6 + 5 \times 2 + 15 + 2}
\]
is
(A) \(-12\)
(B) \(11\)
(C) \(10\)
(D) \(8\)

66. Which of the following numbers will replace the question mark (?) sign in the given series?

9, 11, 26, 97, ___, 2861

(A) 524
(B) 642
(C) 478
(D) 428

67. A person spends \( \frac{1}{3} \)rd of his income on food. Of the remaining, he spends \( \frac{1}{4} \)th on clothes and \( \frac{1}{5} \)th on education. After this, he has ₹1,980 with him. His income is

(A) ₹ 5,400
(B) ₹ 4,800
(C) ₹ 6,500
(D) ₹ 7,600
68. Rakesh's present age is \( \frac{2}{3} \)rd of Ramesh's age. After 5 years, Rakesh will be of 45 years. Ramesh's present age is

(A) 45 years

(B) 60 years

(C) 40 years

(D) None of the above

69. Which letter is opposite to the face E?

(A) C

(B) F

(C) A

(D) D

70. Which number is opposite to the face 1?

(A) 5

(B) 4

(C) 6

(D) 3
SPACE FOR ROUGH WORK / रस्ता कार्य के लिए स्थान
71. Which one of the following gases is used by the plants in photosynthesis?

(A) Oxygen  
(B) Nitrogen  
(C) Hydrogen  
(D) Carbon dioxide

72. Magnetic north pole of the earth is near to geographical —— pole.

(A) east  
(B) west  
(C) north  
(D) south

73. The reason for falling down of the stone which is thrown upward is

(A) friction force  
(B) rotational force  
(C) gravitational force  
(D) magnetic force
74. In which of the following, vitamin A is found in highest quantity?

(A) Amla
(B) Potato
(C) Pulse
(D) Carrot

75. Malaria is caused by

(A) bacteria
(B) virus
(C) fungi
(D) parasite

76. The component present in food which supplies energy to the body is

(A) water
(B) vitamin
(C) chlorophyll
(D) carbohydrate

77. The purification of blood takes place in

(A) heart
(B) kidneys
(C) lungs
(D) bones

74. निम्न में से किसमें विटामिन A अधिकतम मात्रा में है?

(A) आमला
(B) आलू
(C) बाल
(D) गाजर

75. मलाईया रोग का कारण है

(A) जीवाणु
(B) विशाणु
(C) कवक
(D) परजीवी

76. भोजन में सतीर को ऊर्जा प्रदान करने वाला अवयव है

(A) पानी
(B) विटामिन
(C) क्लोरोफिल्ल
(D) कार्बोहाइड्रेट

77. रक्त का सुक्ककरण होता है

(A) हृदय में
(B) मुद्रों में
(C) क्षीण में
(D) छिद्रों में
78. Which of the following is not a unicellular organism?

(A) Earthworm  
(B) Bacteria  
(C) Amoeba  
(D) Paramoecium

79. The formula of velocity is

(A) Distance/Time  
(B) Displacement/Time  
(C) Distance × Time  
(D) Speed × Time

80. Due to which, the colour of blood is red?

(A) Haemoglobin  
(B) Chlorophyll  
(C) Cytoplasm  
(D) Platelet
81. Among 263, 323, 361, 403, the prime number is

(A) the first one
(B) the second one
(C) the third one
(D) the fourth one

82. The value of $27^{-\frac{2}{3}} \times 64^{-\frac{1}{3}}$ is

(A) 144
(B) $\frac{1}{169}$
(C) 36
(D) $\frac{1}{144}$

83. The value of

$$15 - (-3)(4 - 4) + 3(5 + (-3) \times (-6))$$

is

(A) 15
(B) 0
(C) $\frac{15}{39}$
(D) Cannot be determined
84. The compound interest on ₹8,000 for two years at 12\% interest per annum is

(A) ₹2,125
(B) ₹212
(C) ₹21
(D) ₹400

85. Which of the following is a pure recurring decimal?

(A) 0.2954
(B) 3.18
(C) 42.06
(D) 0.142857

86. Among -100, -20, -80, 0, the greatest one is

(A) the first term
(B) the second term
(C) the third term
(D) the fourth term
87. In
\[
\begin{array}{c}
P16 \\
-78Q \\
\hline
1R3
\end{array}
\]
the value of \((P, Q, R)\) is

(A) (3, 3, 9)

(B) (9, 3, 3)

(C) (9, 3, 6)

(D) (6, 3, 9)

88. The difference of the place values of both the 6's in 460436 is

(A) 59999

(B) 59994

(C) 60006

(D) None of the above

89. A shopkeeper marks on an article 20% above the cost price and allows 5% discount. His gain is

(A) 15%

(B) 14%

(C) 13%

(D) 16%
90. The least prime number is

(A) 1
(B) 3
(C) 2
(D) 5

91. Three athletes step off from same place. If measures of their steps are 40 cm, 45 cm and 48 cm respectively, then from the starting point, they will again step together after the distance

(A) 450 cm
(B) 670 cm
(C) 500 cm
(D) 720 cm

92. The value of \((-2)^{-3} \times (2)^5\) is

(A) \((-2)^8\)
(B) \((-2)^{-8}\)
(C) \((-2)^{-15}\)
(D) \((-2)^2\)

93. Two-fifth of a number is greater than one-third of the number by 2. The number is

(A) 30
(B) 22
(C) 20
(D) 28
94. The ratio of cotton and wool in a shirt of 140 gm is 3:4. The weight of the cotton in it is

(A) 90 gm
(B) 80 gm
(C) 60 gm
(D) 70 gm

95. The average of 5 observations was found 35. But later on it was found that 55 was misread as 35. After the correction, the average is

(A) 35
(B) 39
(C) 40
(D) 45

96. In \(729^{149}\), the digit at the unit's place is

(A) 1
(B) 9
(C) 7
(D) 2

97. Which of the following statements is false?

(A) The sum of two integers is always an integer
(B) The difference of two integers is always an integer
(C) \(-14 > -8 - (-7)\)
(D) \(-5 - 2 > -8\)
98. The value of $1^2 + 2^2 + 3^2 + \ldots + 10^2$ is

(A) 1050

(B) 485

(C) 385

(D) None of the above

99. Conversion of $\frac{5}{6}$ into percentage is

(A) 83%

(B) 120%

(C) 110\(\frac{1}{3}\)%

(D) 83\(\frac{1}{3}\)%

100. If the first, second and fourth terms of a proportion are 15, 21 and 49 respectively, then the third term of it is

(A) $\frac{45}{7}$

(B) 50

(C) 35

(D) 56

***

PTNC-II/13-A/1-A

43 [P.T.O.]
INSTRUCTIONS REGARDING METHOD OF ANSWERING QUESTIONS

(Please use Black Ballpoint Pen)

1. Method of Marking Answers:
   To answer a question, please darken only one circle out of the given four, in the OMR Answer-Sheet against that question.

2. Valuation Procedure:
   There are four alternative answers to a question, only one of them is correct. One mark will be awarded for each correct answer. If more than one circle are darkened for a question, it will be presumed that the candidate does not know the correct answer, hence, no mark shall be awarded.

3. Cancellation or Change in Answer:
   It will not be possible to change the marked circle with Black Ballpoint Pen. Therefore, correct answer should be carefully chosen before marking it on the OMR Answer-Sheet.

4. Handing over of Answer-Sheet to Invigilator:
   (i) Please ensure that all entries in the Answer-Sheet are filled up properly, i.e., Name, Roll No., Signature, Question Booklet No., etc., before handing over to the Invigilator.
   (ii) CANDIDATES ARE PERMITTED TO CARRY AWAY THE QUESTION BOOKLET WITH THEM AFTER THE EXAMINATION.

5. Care in Handling the Answer-Sheet:
   While using Answer-Sheet, adequate care should be taken. Do not tear or spoil the Answer-Sheet by folding or wrinkling. The impression of the circle made by Black Ballpoint Pen should not come behind the Answer-Sheet.