| TEST FORM NUMBER | INSTRUCTIONS TO CANDIDATE | Maximum Marks : 160
Total Questions : 80
Time Allowed : 60 Min. |

Read the following instructions carefully before you begin to attempt the questions.

This booklet contains 80 questions in all comprising the following four parts.

Part-(I)   : General Intelligence & Reasoning   **(20 Questions)**
Part-(II) : General Knowledge & General Awareness   **(20 Questions)**
Part-(III) : Elementary Mathematics   **(20 Questions)**
Part-(IV) : English Language or Hindi Language   **(20 Questions)**

All the questions are compulsory and carry equal marks.

Before you start to attempt the questions, you must explore this booklet and ensure that it contains all the pages   and find that no page is missing or replaced. If you find any flaw in this booklet, you must get it replaced   immediately.

Each question carries negative marking also as 0.50 mark will be deducted for each wrong answer.

You will be supplied the Answer-sheet separately by the invigilator. You must complete the details of Name, Roll number, Test name/Id and name of the examination on the Answer-Sheet carefully before you actually start attempting the questions. You must also put your signature on the Answer-Sheet at the prescribed place. These instructions must be fully complied with, failing which, your Answer-Sheet will not be evaluated and you will be awarded 'ZERO' mark.

Answer must be shown by completely blackening the corresponding circles on the Answer-Sheet against the relevant question number by **pencil or Black/Blue ball pen** only.

A machine will read the coded information in the OMR Answer-Sheet. In case the information is incompletely/   different from the information given in the application form, the candidature of such candidate will be treated as cancelled.

The Answer-Sheet must be handed over to the Invigilator before you leave the Examination Hall.

Failure to comply with any of the above Instructions will make a candidate liable to such action/penalty as may be   deemed fit.

Answer the questions as quickly and as carefully as you can. Some questions may be difficult and others easy. Do   not spend too much time on any question.

Mobile phones and wireless communication device are completely banned in the examination halls/rooms.   Candidates are advised not to keep mobile phones/any other wireless communication devices with them even   switching it off, in their own interest. Failing to comply with this provision will be considered as using unfair means   in   the   examination   and action will be taken against them including cancellation of their candidature.

No rough work is to be done on the Answer-Sheet.

No candidate can leave the examination hall before completion of the exam.

NAME OF CANDIDATE:...
DATE :......................... CENTRE CODE :..................
ROLL No :..

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO

General Intelligence & Reasoning

Directions (1-2): Select the correct alternative from the given options that will complete the series.

1.   5, 7, 17, 55, ?
   (A) 225   **(B)** 113
   (C) 197   **(D)** 169

2.   DZ, FY, JV, ?
   (A) QS   **(B)** NP
   (C) PQ   **(D)** ST

3.   Arrange the following words as per order in the dictionary?

1. Annually   2. Fortnightly
3. Monthly   4. Daily
5. Weekly
   (A) 5, 2, 3, 4, 1   **(B)** 1, 4, 2, 3, 5
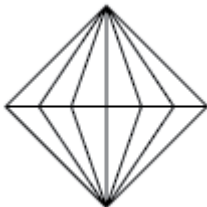   **(C)** 2, 5, 4, 3, 1   **(D)** 1, 4, 5, 3, 2

Directions (4-7): Select the related word/number/letters from given alternatives.

4.   167 : 14 : : 143 : ?
   (A) 7   **(B)** 8
   (C) 6   **(D)** 5

5.   XZTV : ? : : RTNP : LNHJ
   (A) TPRN   **(B)** RTNO

(C) RPTN   **(D)** RTNP

6. Tally : Votes : : ? : Population
(A) People   **(B)** Government
(C) Census   **(D)** Taxation

7. Pulp : Paper :: Hemp : ?
(A) Basket   **(B)** Yarn
(C) Rope   **(D)** Cotton

8. In a certain code language, "HEALTH" is written as "GSKZDG". How is "NORTH" written in that code language?
(A) GSNQM   **(B)** GSQNM
(C) MNSQG   **(D)** MNQSG

9. In a certain code language, "OUTLINE" is written as "PWWPLPF". How is "MENTION" written in that code language?
(A) NGQXLQO   **(B)** NGPLOPQ
(C) PGPKRWP   **(D)** QGPRKWP

10. If 'A' means '÷', 'B' means '−', 'C' means '×', then 46 A 2 B 3 C 4 = ?
(A) 34   **(B)** 23
(C) 17   **(D)** 11

11. If '−' stands for '+', '+' stands for '−', '÷' stands for '×' and '×' stands for '÷', then which one of the following equation is correct?
(A) $50 \times 5 \div 2 - 30 + 25 = 25$
(B) $50 - 30 + 5 \div 2 \times 30 = 25$
(C) $40 + 35 \times 2 - 50 \div 30 = 95$
(D) $30 \times 2 - 25 + 50 \div 5 = 100$

12. In a certain code language, "BREAKTHROUGH" is written as "EAOUHRBRGHKT". How is "DISTRIBUTION" written in that code language?
(A) TISTBUONDIRI   **(B)** STTIBUONRIDI
(C) STTIBUDIONRI   **(D)** RISTTIBUDION

13. Find the number of triangles in the given figure.
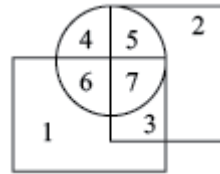

(A) 32   **(B)** 36
(C) 40   **(D)** 48

14. In the following question, a statement is given followed by two conclusions numbered (I) and (II). You have to assume everything in the statement to be true, then consider the two conclusions together and decide which of them logically follows beyond a reasonable doubt from the information given in the statement.
Statement: Fashion is a form of ugliness so intolerable that we have to alter it every six months.
Conclusions: I. Fashion designers do not understand the public mind very well.
II. The public by and large is highly susceptible to novelty.
(A) Only conclusion (I) follows
(B) Only conclusion (II) follows
(C) Neither conclusion (I) nor conclusion (II) follow
(D) Both conclusions (I) and (II) follow

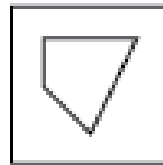**15.** In the given dice, which number is opposite to 3?

(A) 5   **(B)** 6
(C) 4   **(D)** 2

16. In the following diagram, Square represents Doctors, Circle represents Players and Rectangle represents Artists.
Which number represents those Doctors who are Players as well as Artists?

(A) 2   **(B)** 3
(C) 6   **(D)** 7

17. From the given answer figures, select the one in which the question figure is hidden/embedded.
Question Figure

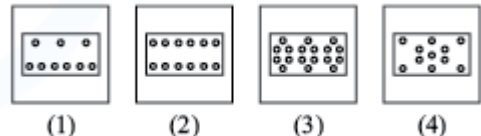**Answer Figures**

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

18. A piece of paper is folded and cut as shown below in the question figures. From the given answer figures, indicate how it will appear when opened.
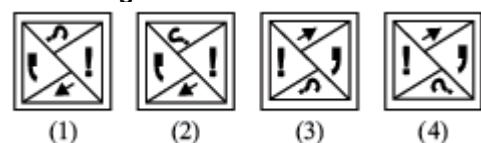**Question Figures**

Answer Figures

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

19. If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure?
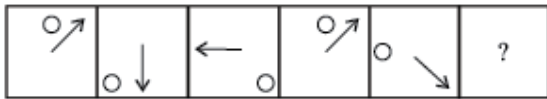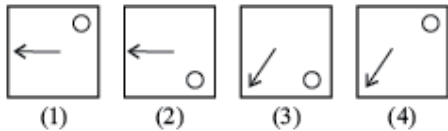**Question Figure**

Answer Figures

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

20. Select a figure from the answer figure, which will continue the series as established by the five problem figures.
Question Figure

Answer Figures

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

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

General Knowledge & General Awareness

21. Author Perumal Murugan has won the JCB Prize for Literature for which of his book?
(A) One Part Woman **(B)** Poonachi
(C) Black Goat **(D)** Fire Bird

22. Who was the inspirator behind the Young Bengal Movement?
(A) Madhusudan Dutt
(B) Henry Vivian Derozio
(C) Krishna Mohan Benerjee
(D) Ram Gopal Ghosh

23. Who was the first Indian Woman to preside over the Indian National Congress?
(A) Sarojini Naidu **(B)** Padmaja Naidu
(C) Annie Besant **(D)** Pritilata Weddekar

24. Which of the following is a Greco-Buddhist School of Art?
(A) Gandhara School of Art **(B)** Mathura School of Art
(C) Amravati School of Art **(D)** Gupta School of Art

25. During the tenure of which Governor General, dual government in Bengal ended?
(A) Robert Clive **(B)** Lord Cornwallis
(C) Warren Hasting **(D)** None of these

26. Where is the Bandipur National Park?
(A) Rajasthan **(B)** Andhra Pradesh
(C) Karnataka **(D)** Assam

27. "IPCC" stands for _____.
(A) Intergovernmental Panel on Climate Change
(B) Indian Panel on Climate Change
(C) International Policy on Climate Change
(D) Indian Policy on Climate Control

28. Which famous Indian scientist had a bacteria named after him?
(A) Raja Ramanna **(B)** Anil Kakodkar
(C) A. P. J. Abdul Kalam **(D)** Satyendra Nath Bose

29. The image formed on retina is _____.
(A) Equal to the object but inverted
(B) Smaller than the object and straight
(C) Smaller than the object and inverted
(D) Equal to the object and straight

30. Rutherford's scattering experiment proved the presence of _____.
(A) Atoms in all matter **(B)** Electrons in atoms
(C) Neutrons in atoms **(D)** Nucleus in atoms

31. Which element is always present with iron in mild steel?
(A) Aluminium **(B)** Carbon
(C) Chromium **(D)** Nickel

32. Which of the following natural sources contains oxalic acid?
(A) Lemon **(B)** Orange
(C) Spinach **(D)** Tamarind

33. Which is the largest synovial joint of the human body?

(A) Knee joint **(B)** Shoulder joint
(C) Elbow joint **(D)** Hip join

34. Acid that helps in DNA synthesis is _____.
(A) Folic acid **(B)** Pantothenic acid
(C) Amino acid **(D)** All of these

35. Brahmaputra takes a U-turn at _____ the time of entering into India.
(A) Nanga Parbat **(B)** Blue mountains
(C) Namcha Barwa **(D)** Dafla hills

36. Which of the following rivers doesn't form a delta?
(A) Luni river **(B)** Ganga river
(C) Mahanadi river **(D)** Godavari river

37. Which Indian Institute of Technology has developed India's first information platform on Incubators & Accelerators?
(A) IIT Madras **(B)** IIT Ropar
(C) IIT Dharwad **(D)** IIT Patna

38. 'Girl Powe r: Indian Women Who Broke The Rules', the book on 50 Indian women role models was written by _____.
(A) Arundhati Roy **(B)** Anita Desai
(C) Anita Nair **(D)** Neha J Hiranandani

39. Who has been honoured with "Special Recognition for Contribution to Bharatiya Cinema" Award at 54th IFFI?
(A) Aishwarya Rai **(B)** Sridevi
(C) Juhi Chawla **(D)** Madhuri Dixit

40. The recently launched book "Thread By Thread" is based on the life of whom?
(A) Anand Mahindra
(B) Kumar Mangalam Birla
(C) Radhakishan Damani
(D) Shambhu Kumar Kasliwal

Elementary Mathematics

41. What is the square root of $\left(\dfrac{x^5-1}{x-1}\right) + (x^3 + 2x^2 + x)$?

(A) $x^2 + x + 1$ **(B)** $x^2 - x + 1$
(C) $x^2 - x - 1$ **(D)** $x^2 + x - 1$

42. A grocer mixes 26 kg of tea which costs him ₹ 2.00 a kg with 30 kg of tea which costs ₹ 3.60 a kg and sells the mixture at ₹ 3 a kg. What is his total percentage of gain?
(A) 8% **(B)** 5%
(C) 10% **(D)** None of these

43. On dividing ₹ 1850 into two parts 1st part is invested at 5% and the second part is invested at 10%. If the interest is compounded annually, then amounts become same in two years. What is the amount that is invested at 10%?
(A) ₹ 968 **(B)** ₹ 882
(C) ₹ 920 **(D)** ₹ 1020

44. A shopkeeper offers successive discounts of 20%, 10% and 5% respectively on a Titan watch which is marked at ₹ 1500. He offers successive discounts of 20%, 20% and 10% respectively on a Ajanta watch which is marked at ₹ 2000. What is the difference between their selling price?
(A) ₹ 152 **(B)** ₹ 126
(C) ₹ 26 **(D)** ₹ 0

45. What is the value of $\left[\dfrac{(0.064-0.008)(0.16-0.04)}{(0.16+0.08+0.04)(0.4+0.2)^3}\right]^{\frac{1}{2}}$?

(A) 2/3 **(B)** 1/3
(C) 3 **(D)** 3/2

46. 5 men can prepare 10 toys in 6 days working 6 hours a day. Then in how many days can 12 men prepare 16 toys working 8 hours a day?
(A) 2 **(B)** 3
(C) 5 **(D)** 6

47. A pipe can fill 1/4 of cistern in 16 minutes. In how many minutes, it can fill 3/4 of the cistern?
(A) 48 **(B)** 32
(C) 36 **(D)** 60

48. What is the value of

$$\frac{3.254 \times 3.254 \times 3.254 - 0.746 \times 0.746 \times 0.746}{3254 \times 3254 + 0.746 \times 0.746 + 3.254 \times 0.746}?$$

(A) 2.702 **(B)** 2.502
(C) 2.508 **(D)** 3.168

49. If a : b = 3 : 5 and b : c = 4 : 7, then a : c = ?
(A) 11 : 35 **(B)** 35 : 11
(C) 35 : 12 **(D)** 12 : 35

50. Walking 3/4 of his usual speed, a person is 10 minutes late to his office. What is the usual time to the cover this distance?
(A) 25 minutes **(B)** 30 minutes
(C) 32 minutes **(D)** 24 minutes

51. If the difference of the squares of two natural numbers is 19, what is the sum of the squares of these numbers?
(A) 190 **(B)** 210
(C) 189 **(D)** 181

52. How much percent more than the cost price should a shopkeeper mark his goods so that after allowing a discount of 25% on the marked price, he gains 20%?
(A) 70% **(B)** 50%
(C) 60% **(D)** 55%

53. What is the value of

$$\frac{1}{\sqrt{9}-\sqrt{8}} - \frac{1}{\sqrt{8}-\sqrt{7}} + \frac{1}{\sqrt{7}-\sqrt{6}} - \frac{1}{\sqrt{6}-\sqrt{5}} + \frac{1}{\sqrt{5}-\sqrt{4}}?$$

(A) 0 **(B)** 1
(C) 1/3 **(D)** 5

54. 25% of a number is 20, what is 40% of that number?
(A) 25 **(B)** 32
(C) 40 **(D)** 20

55. The simple interest on a sum of money is $\frac{1}{9}$ of the principal, and the number of years is equal to the rate percent per annum. What is the rate percent?
(A) $4\frac{1}{3}$ % **(B)** $4\frac{1}{2}$ %
(C) $3\frac{1}{3}$ % **(D)** $3\frac{1}{2}$ %

56. If a man purchases 11 oranges for ₹ 10 and sells 10 oranges for ₹ 11. How much profit or loss percent does he make?
(A) 10% **(B)** 21%
(C) 20% **(D)** 11%

Directions (57-60): Study the following information carefully and answer the questions given below.

A Survey of film watching habits of people living in five cities P, Q, R, S and T is summarised below in a table. The column I in the table gives percentage of film-watchers in each city who see only one film in a week. The column II gives the total number of film-watchers who see two or more films per week.

Cities	I	II
P	60	24000
Q	20	30000
R	85	24000
S	55	27000
T	75	80000

57. The number of only one film-watchers of city P is what percent of two or more film-watcher of city R?
(A) 125% **(B)** 75%
(C) 100% **(D)** 150%

58. How many film-watchers in city R see only one film in a week?
(A) 24850 **(B)** 36000
(C) 136000 **(D)** 160000

59. Which city has the maximum number of film-watchers who see only one film in a week?
(A) P **(B)** R
(C) S **(D)** T

60. In which city with the minimum number of film-watchers?
(A) P **(B)** Q
(C) S **(D)** T

English Language

Directions (61-62): In the following questions, a part of the sentence has errors and others are correct. Find out which part of the sentence has an error. If there is no error, your answer is (D) i.e. 'No error'.

61. Inspite of my consoling her (A)/ she kept weeping (B)/ throughout the day. (C)/ No error (D)
(A) A **(B)** B
(C) C **(D)** D

62. It is evening and (A)/ please open (B)/ the light. (C)/ No error (D)
(A) A **(B)** B
(C) C **(D)** D

Directions (63-64): In the following questions, sentences are given with blanks to be filled in with an appropriate word. Four alternatives are suggested for each question. Choose the correct alternative out of the four as your answer.

63. _____ by people's perception, it seems that democracy has succeeded in India.
(A) Following **(B)** Going
(C) Making **(D)** Planned

64. The library expects you to return each and every book that you have _____.
(A) demanded **(B)** taken
(C) lent **(D)** handed

Direction (65-66): Choose the word which is most nearly the **SAME** in meaning as the word given below.

65. MALICE

(A) ABNORMAL   (B) CHARISMA
(C) VICIOUSNESS   (D) UNORGANISED

66. **HOSTILITY**
(A) HARMONIOUS   (B) CHARM
(C) BOMBASTIC   (D) ANTAGONISM

Direction (67-68): Choose the word which is most nearly the **OPPOSITE** in meaning as the word given below.

67. **LUNACY**
(A) SANITY   (B) STUPIDITY
(C) SENSIBILITY   (D) INSANITY

68. **EFFICACIOUS**
(A) PRODUCTIVE   (B) INEFFECTIVE
(C) IMPROPER   (D) URGENT

Directions (69-70): In the following questions, four alternatives are given for the idioms/phrases being underlined. You are required to choose the correct meaning of the given idioms/phrases.

69. Sowing wild oats
(A) Inviting trouble as a boy
(B) Warning others as a youngman
(C) Irresponsible pleasure seeking in young age
(D) Sowing grains called oats when young

70. An open book
(A) An uncomplicated one
(B) free from my stay
(C) An example to all
(D) An interesting biography

Directions (71-72): In the following questions, a part of sentence is underlined. Four alternatives are given to the underlined part which will improve the sentence. In case no improvement is needed, mark your answer as (D) i.e. "No improvement".

71. Is your brother yet at the university?
(A) brother still at   (B) brother continue at
(C) brother till at   (D) No improvement

72. There is nothing quite miserable than illiteracy in youth.
(A) as miserable   (B) very miserable
(C) more miserable   (D) No improvement

Direction (73-74): In the following questions, out of the four alternatives choose the one which can be substituted for the given words/sentence.

73. A workman who fits and repairs pipes.
(A) Mechanic   (B) Blacksmith
(C) Plumber   (D) Technocrat

74. The study of ancient societies.
(A) History   (B) Anthropology
(C) Ethnology   (D) Archaeology

Directions (75): In the following question, a sentence has been given in Direct/Indirect speech. Out of the four alternatives suggested, select the one which best expresses the same sentence in Indirect/Direct speech.

75. "Are you free tomorrow?" he asked.
(A) He asked me if I was free the next day.
(B) He asked me if I were free the next day.
(C) He demanded if I was free the next day.
(D) He enquired if I were free tomorrow.

Directions (76-80): The passage given below is followed by a set of five questions. Read the passage carefully and choose the best answer to each question out of the four alternatives.

In the past 50 years, doctors across the world have accepted the practice to prescribe antibiotics at the first sign of a trivial infection or treat patients with a handful of antibiotics. These days it is not uncommon to see practitioners prescribing multiple antibiotics without any real indication or relevance for such a combination of drugs. Antibiotics have traditionally been known as miracle drugs, but there is growing evidence that they are overworked miracles, especially in countries like ours where there is easy access to drugs across the counter, including antibiotics. We cannot think of a return to pre-antibiotic days. Yet the unbridled use of these agents is inexorably propelling us in that direction.

76. Antibiotics are called 'overworked miracles' because _____.
(A) they performed miracles
(B) they are hardly used
(C) they are over-used
(D) they exhausted their miracles

77. 'We cannot think of a return to pre-antibiotic days' means _____.
(A) Antibiotics became indispensable
(B) We must go back to pre-antibiotic days
(C) We cannot stop using antibiotics
(D) We can stop using antibiotics

78. The passage tells us that _____.
(A) the antibiotics work miracles
(B) the antibiotics are available at the counters
(C) the use of antibiotics is uncontrollable
(D) antibiotics are used indiscriminately

79. The passage discusses the use of _____.
(A) drugs in general
(B) miracle drugs
(C) antibiotics
(D) combination of different drugs

80. 'These days it is not uncommon to prescribe antibiotics' means _____.
(A) It is rare to prescribe antibiotics
(B) It is a common practice to prescribe antibiotics
(C) It is not a common practice to prescribe antibiotics
(D) It is compulsory to prescribe antibiotics

Hindi Language

61. पतझड़ पद में कौन सा समास है?
(A) तत्पुरुष समास   (B) अव्ययीभाव समास
(C) कर्मधारय समास   (D) बहुव्रीहि समास

62. निंदा शब्द का विलोम क्या है?
(A) भर्त्सना   (B) झिड़की
(C) ताड़ना   (D) स्तुति

63. "रामचंद्र जी के द्वारा खाना नहीं खाया गया" वाक्य है।
(A) संकेतवाचक वाक्य   (B) आज्ञावाचक वाक्य
(C) निषेधवाचक वाक्य   (D) विधानवाचक वाक्य

64. "तो पर वारौं उरबसी, सुन राधिके सुजान तू मोहन के उरबसी, है उरबसी समान" में अलंकार है
(A) उपमा अलंकार   (B) वक्रोक्ति अलंकार
(C) यमक अलंकार   (D) उत्प्रेक्षा अलंकार

65. 'बीजक' नामक ग्रंथ के संपादक थे।
(A) कबीरदास   (B) धर्मदास
(C) सूरदास   (D) मलूकदास

66. रिक्त स्थान की पूर्ति करो-
वृद्ध व्यक्ति दो चार रोटी खाकर .... हो गया|
(A) टप (B) तप्त
(C) तृप्त (D) तृण

निर्देश (67-69): नीचे दी गई जानकारी पढ़कर उस पर आधारित प्रश्नों के उत्तर दीजिए?

नीचे दिए गए शब्द समूह में एक समूह या वाक्यांश दिया गया है और फिर उसके बाद चार ऐसे शब्द सुझाये गए है जो की इस पूरे वाक्यांश या शब्द समूह का अर्थ एक शब्द में स्पष्ट कर देते हैं। आपको वह शब्द ज्ञात कर उसको उत्तर के रूप में दर्शाना है।

67. जो मार्ग में चलने वाला हो-
(A) बटोही (B) अवरोही
(C) हितैषी (D) आरोही

68. जो शत्रु की हत्या करता है।
(A) शत्रुघ्न (B) नष्वर
(C) जन्मांध (D) निर्दय

69. जो सबकुछ जानता हो-
(A) अज्ञ (B) सर्वज्ञ
(C) विशेषज्ञ (D) वाचाल

70. नीचे दिए गए प्रश्न में समास ढूंढिए:-
पाप-पुण्य
(A) कर्मधारय (B) द्विगु
(C) द्वन्द्व (D) तत्पुरूष

71. **रिक्त स्थान की पूर्ति करो-**
विश्व के कई अन्य देशों में भी हिन्दी के पत्र-पत्रिकाएँ.......... होते हैं।
(A) मुद्रित (B) प्रकाशित
(C) तैयार (D) छपती

72. माननीय न्यायाधीश ने वाद को ख़ारिज करते हुए वादी को कोई .... नहीं प्रदान किया|
(A) सहायता (B) पारितोषिक
(C) आश्वासन (D) अनुतोष

निर्देश (73-74): निम्नलिखित जानकारी को ध्यान से पढ़ें और नीचे दिए गए प्रश्न का उत्तर दें –

नीचे दी गयी जानकारी पढ़कर उस पर आधारित प्रश्नों के उत्तर दीजिये इन प्रश्नों में (a), (b), (c) एवं (d) एवं वाक्य दिए गए हैं इन वाक्यों को पुनः विकसित करके एक अर्थपूर्ण परिच्छेद बनायें और नीचे दिए गए प्रश्नों के उत्तर दें।
(a) सुनते ही शेर बोला - औरों का तो एक, किन्तु आपके अठारह अंग टेढ़े हैं|
(b) एक बार एक स्थान पर हाथी, बाघ, तोता, कुत्ता, बगुला, ऊंट आदि पशु-पक्षी मिल गए|
(c) उदाहरण देते हुए वह बोला-हाथी की सूंड, कुत्ते की पूंछ, बाघ के नाखून, तोते की चोंच और बगुले की गर्दन टेढ़ी हैं|
(d) उत्साही ऊंट को अपने ज्ञान का बहुत अभिमान था।
उत्साही ऊंट को अपने ज्ञान का बहुत अभिमान था|

73. परिच्छेद का चौथा वाक्य कौन-सा होगा?
(A) a (B) b
(C) c (D) d

74. परिच्छेद का दूसरा वाक्य कौन-सा होगा?
(A) a (B) b
(C) c (D) d

75. नीचे दिए गए प्रश्नों में संधि-विच्छेद कीजिये-
दिगम्बर
(A) दि + गम्बर (B) दिगम्ब + र
(C) दिग् + अम्बर (D) दिक् + अम्बर

76. 'इधर-उधर' शब्द युगम है-
(A) पुनरुक्त (B) सार्थक-निरर्थक
(C) निरर्थक (D) सार्थक

निर्देश (77-80): निम्नलिखित गद्यांश को पढ़कर इस पर आधारित प्रश्नों के उत्तर दीजिये:

सारा संसार नीले गगन के तले अनंत काल से रहता आया है। हम थोड़ी दूरी पर ही देखते हैं क्षितिज तक, जहाँ धरती और आकाश हमें मिलते दिखाई देते हैं। लेकिन जब हम वहाँ पहुँचते हैं, तो यह नज़ारा आगे खिसकता चला जाता है। और इस नज़ारे का कोई ओर-छोर हमें नहीं दिखाई देता है। ठीक इसी तरह हमारा जीवन भी है। ज़िंदगी की न जाने कितनी उपमाएँ दी जा चुकी हैं, लेकिन कोई भी उपमा पूर्ण नहीं मानी गई, क्योंकि ज़िंदगी के इतने पक्ष हैं कि कोई भी उपमा उस पर पूरी तरह फिट नहीं बैठती। बर्नार्ड शॉ जीवन को एक खुली किताब मानते थे, और यह भी मानते थे कि सभी जीवों को समान रूप से जीने का हक है। वह चाहते थे कि इंसान अपने स्वार्थ में अंधा होकर किसी दूसरे जीव के जीने का हक न मारे । यदि इंसान ऐसा करता है, तो यह बहुत बड़ा अन्याय है । हमारे विचार स्वाभाविक रूप से एक-दूसरे से मेल नहीं खाते हैं, लेकिन इसका मतलब यह नहीं होता कि हम दूसरों को उसके जीने के हक से वंचित कर दें। यह खुला आसमान, यह प्रकृति और यह पूरा भू-मंडल हमें दरअसल यही बता रहा है कि हाथी से लेकर चींटी तक, सभी को समान रूप से जीवन बिताने का हक है। जिस तरह से खुले आसमान के नीचे हर प्राणी बिना किसी डर के जीने, साँस लेने का अधिकारी है, उसी तरह से मानव-मात्र का स्वभाव भी होना चाहिए कि वह अपने जीने के साथ दूसरों से उनके जीने का हक न छीने । यह आसमान हमें जिस तरह से भय से छुटकारा दिलाता है, उसी तरह से हमें भी मानव-जाति से इतर जीवों को डर से छुटकारा दिलाकर उन्हें जीने के लिए पूरा अवसर देना चाहिए । दूसरों के जीने के हक को छीनने से बड़ा अपराध या पाप कुछ नहीं हो सकता ।

77. हम बहुत बड़ा अन्याय कर रहे होते हैं, यदि-
(A) किसी को लूट लेते हैं
(B) किसी को टिकने नहीं देते
(C) किसी को जीने का अधिकार नहीं देते
(D) किसी से दुश्मनी रखते हैं

78. यदि किसी का ओर-छोर नहीं है, तो-
(A) उसका सिरा नहीं मिलता (B) उसकी सीमा नहीं है
(C) उसका विस्तार अधिक है (D) उसके बहुत से सिरे हैं

79. बर्नार्ड शॉ ने जीवन की उपमा किससे दी है?
(A) खुली पुस्तक से (B) सभी जीवों
(C) क्षितिज से (D) पढ़ी जा रही पुस्तक से

80. आसमान हमें दिलाता है-
(A) साथ-साथ रहने का अनुशासन
(B) भय से छुटकारे का आश्वासन
(C) भयभीत न करने का आग्रह
(D) रक्षा करने का वचन

Space for rough work

General Intelligence & Reasoning

1.(A) The following pattern is:
$5 \times 1 + 2 = 7$
$7 \times 2 + 3 = 17$
$17 \times 3 + 4 = 55$
$55 \times 4 + 5 = 225$

2.(C) The Pattern is: $D + 2 \to F + 4 \to J + 6 \to P$
$Z - 1 \to Y - 3 \to V - 5 \to Q$

3.(B) (1) Annualy $\to$ (4) Daily $\to$ (2) Fortnightly $\to$ (3) Monthly $\to$ (5) Weekly

4.(B) $167 \Rightarrow 1 + 6 + 7 = 14$
$143 \Rightarrow 1 + 4 + 3 = 8$

5.(D)

```
R   T   N   P
-6↓ -6↓ -6↓ -6↓
L   N   H   J
```
Similarly,
```
X   Z   T   V
-6↓ -6↓ -6↓ -6↓
R   T   N   P
```

6.(C) As counting of 'Votes' is called 'Tally', so counting of 'Population' is called 'Census'.

7.(C) Raw material : Product

8.(B) To get the code, move the letter in the sequence –1, –1, –1, –1, –1 and reverse it.

9.(A) The following pattern is : $O + 1 = P$, $U + 2 = W$, $T + 3 = W$, $L + 4 = P$, $I + 3 = L$, $N + 2 = P$, $E + 1 = F$
Similarly, $M + 1 = N$, $E + 2 = G$, $N + 3 = Q$, $T + 4 = X$, $I + 3 = L$, $O + 2 = Q$, $N + 1 = O$

10.(D) Given, $46 \; A \; 2 \; B \; 3 \; C \; 4 = ?$
According to the question,
$\Rightarrow 46 \div 2 - 3 \times 4 = ?$
$\Rightarrow 23 - 3 \times 4 = 23 - 12 = 11$

11.(A) $50 \div 5 \times 2 + 30 - 25 = 10 \times 2 + 30 - 25$
$= 20 + 30 - 25 = 50 - 25 = 25$

12.(C) Divide the letters of the given word into pairs and label these pairs from 1 to 6.
DI – 1; ST – 2; RI – 3; BU – 4; TT – 5; ON – 6
Add arrange it in the order
2, 5, 4, 1, 6, 3

13.(D)

The above figure contain 48 triangles as :
A, 5, 1, 3, 7, C, B, 6, 2, 4, 8, D, A5, 51, 13, 37, 7C, B6, 62, 24, 48, 8D, A51, 513, 137, 37C, B62, 624, 248, 48D, A513, 5137, 137C, B624, 6248, 248D, A5137, 5137C, B6248, 6248D, A5137C, B6248D, 12, 34, 1256, 3478, A51B62, 3478CD.

14.(B) Conclusion (I) does not follows because nothing about the fashion designers is mentioned in the given statement.
Conclusion (II) follows because it provides suitable explanation to the given statement.

15.(A)

16.(D) 7 is part of all rectangle, square and circle.

17.(A)

18.(C)

19.(D)

20.(B) Circle moves one and half and one step anti-clockwise alternatively while arrow rotates 135° and 90° clockwise alternatively.

General Knowledge & General Awareness

21.(D)	22.(B)	23.(A)	24.(A)	25.(C)
26.(C)	27.(A)	28.(C)	29.(C)	30.(D)
31.(B)	32.(C)	33.(A)	34.(C)	35.(C)
36.(A)	37.(A)	38.(D)	39.(D)	40.(D)

Elementary Mathematics

41.(A)
$$\frac{x^5 - 1}{x - 1} + x^3 + 2x^2 + x$$

$$= \frac{x^5 - 1 + x^4 + 2x^3 + x^2 - x^3 - 2x^2 - x}{x - 1}$$

$$= \frac{x^5 + x^4 + x^3 - x^2 - x - 1}{x - 1}$$

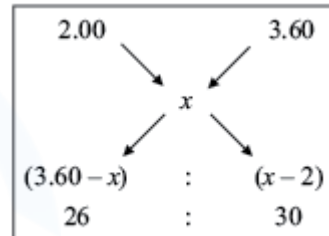$$= \frac{x^3(x^2 + x + 1) - 1(x^2 + x + 1)}{(x - 1)}$$

$$= \frac{(x^2 + x + 1)(x^3 - 1)}{x - 1}$$

$$= \frac{(x^2 + x + 1)(x - 1)(x^2 + x + 1)}{(x - 1)} = (x^2 + x + 1)^2$$

$\therefore$ Required square root $= \sqrt{(x^2 + x + 1)^2}$
$= (x^2 + x + 1)$

42.(B) Let the CP of the mixture be ₹ x.
Using the rule of alligation,

```
   2.00            3.60
         ↘     ↙
            x
         ↙     ↘
(3.60 – x)   :   (x – 2)
    26       :      30
```

$$\frac{26}{30} = \frac{3.60 - x}{x - 2}$$

$$\frac{13}{15} = \frac{3.60 - x}{x - 2}$$

$13x - 26 = 54 - 15x$
$28x = 80$

$$x = \frac{80}{28}$$

CP of mixture $= \dfrac{80}{28}$

SP of mixture $= 3.6 = \dfrac{18}{5}$

$$\text{Profit} = \frac{\dfrac{18}{5} - \dfrac{80}{28}}{\dfrac{80}{28}} \times 100 = 5\%$$

43.(B) Amount invested at 5% is P and at 10% is (1850 – P)

According to the question,

$$P\left(1 + \frac{5}{100}\right)^2 = (1850 - P)\left(1 + \frac{10}{100}\right)^2$$

$$\frac{1850 - P}{P} = \frac{\left(1 + \dfrac{5}{100}\right)^2}{\left(1 + \dfrac{10}{100}\right)^2}$$

$$\frac{1850 - P}{P} = \frac{(105)^2}{(110)^2}$$

$22 \times 22(1850 - P) = 21 \times 21(P)$
$895400 - 484P = 441P$

44.(B)
1500

2000

126

895400 = 925P
P = 968
Amount invested at 10% = ₹ 882
Selling price of Titan watch = 0.8 × 0.9 × 0.95 ×

= ₹ 1026
Selling price of Ajanta watch = 0.8 × 0.8 × 0.9 ×

= ₹ 1152
Difference is selling price = ₹ (1152 − 1026) = ₹

45.(B) $\left(\dfrac{0.056\times0.12}{0.28\times0.6\times0.6\times0.6}\right)^{\frac{1}{2}}$

$= \dfrac{1}{3}$

46.(B) $\dfrac{m_1 h_1 d_1}{w_1} = \dfrac{m_2 h_2 d_2}{w_2}$

$\dfrac{5\times6\times6}{10} = \dfrac{12\times8\times d_2}{16}$

d_2 = 3 days

47.(A) Pipe can fill 1/4 of cistern in 16 minutes.
Pipe on fill 3/4 of cistern in 3 × 16 = 48 minutes

48.(C) $a^3 − b^3 = (a − b)(a^2 + b^2 + ab)$
So, (3.254 − 0.746) = 2.508

49.(D) $\dfrac{a}{b}\times\dfrac{b}{c} = \dfrac{3}{5}\times\dfrac{4}{7}$

$\dfrac{a}{c} = \dfrac{12}{35}$

50.(B) s × t = D

$\dfrac{3}{4}s\times\dfrac{4}{3}t = D$

Time increases by $\dfrac{4}{3}t - t$

$\dfrac{1}{3}t = 10$

t = 30 minutes

51.(D) $x^2 − y^2 = 19$
(x + y)(x − y) = 19
So, (x − y) = 1 and (x + y) = 19
$(x + y)^2 − (x − y)^2 = 4xy$
361 − 1 = 4xy
2xy = 180
$x^2 + y^2 = (x + y)^2 − 2xy$
= 361 − 180
= 181

52.(C) Let the CP be ₹ 100.
So, SP = 100 + 20 = ₹ 120

$MP = \dfrac{SP}{(100-25)}\times100 = \dfrac{120}{75}\times100$

M = 160
So, mark up percent is 60%.

53.(D) By using rationalization,

$\sqrt{9}+\sqrt{8}-\sqrt{8}-\sqrt{7}+\sqrt{7}+\sqrt{6}-\sqrt{6}-\sqrt{5}+\sqrt{5}+\sqrt{4}$
$=\sqrt{9}+\sqrt{4} = 3+2 = 5$

54.(B) If 25% = 20

then, 1% = $\dfrac{20}{25}$

So, 40% = $\dfrac{20}{25}\times40 = 32$

55.(C) $SI = \dfrac{P\times R\times T}{100}$

$\dfrac{P}{9} = \dfrac{P\times R\times R}{100}$

$R = \dfrac{10}{3} = 3\dfrac{1}{3}\%$

56.(B) CP of 11 oranges = ₹ 10
SP of 10 oranges = ₹ 11
So, CP of 110 oranges = ₹ 100
SP of 110 oranges = ₹ 121

Profit percent = $\dfrac{21}{100}\times100 = 21\%$

57.(D) Total number of film-watchers of city P

$= \dfrac{24000}{40}\times100 \Rightarrow 60000$

Number of only one film-watche

$= 60000\times\dfrac{60}{100} = 36000$

Required percentage $= \dfrac{36000}{24000}\times100 \Rightarrow 150\%$

58.(C) Percentage of film-watcher who see only one film in a week from city R = 85%
∴ Percentage of film-watcher who see two or more films in a week from city R
= (100 − 85)
= 15%
Since 15% = 24000

$85\% = 85\times\dfrac{24000}{15} = 136000$

59.(D) The number of film-watchers who see only one film in a week in city

$P = \dfrac{24000}{40}\times60 = 36000$

$Q = \dfrac{30000}{80}\times20 = 7500$

$R = \dfrac{24000}{15}\times85 = 136000$

$S = \dfrac{27000}{45}\times55 = 33000$

$T = \dfrac{80000}{25}\times75 = 240000$

Hence, maximum number of one film-watcher is in T.

60.(B) Number of film-watcher in city

$P = \dfrac{24000}{40}\times100 = 60000$

$Q = \dfrac{30000}{80}\times100 = 37500$

$R = \dfrac{24000}{15}\times100 = 160000$

$S = \dfrac{27000}{45}\times100 = 60000$

$T = \dfrac{80000}{25}\times100 = 320000$

Hence, Q has minimum number of film watchers.

English Language

61.(B) kept 'on'.
62.(B) 'switch on/turn on' for 'open'.
63.(B) Use 'going' here; 'going by' means 'to understand'.
64.(B) Use 'taken' which means 'gain or receive'.
65.(C) Malice means 'harm or ill' same as 'viciousness'.
66.(D) Hostility means conflict, unfriendliness or antagonism.
67.(C)
68.(B) Efficacious (Adjective) means 'effective'.
69.(C) Irresponsible pleasure seeking in young age.

70.(A) An uncomplicated one.
71.(A) We use 'still' to show that something continues up to a time whereas 'yet' is used in negative clause to show that something has not happened by a particular time.
72.(C) Quite means 'fairly not very' but here it will come 'more miserable' to have a comparative degree usage to compare to illiteracy.
73.(C) Plumber
74.(D) Archaeology
75.(A) He asked me if I was free the next day.
76.(C) They are over-used.
77.(C) We cannot stop using antibiotics.
78.(D) Antibiotics are used indiscriminately.
79.(C) Antibiotics
80.(B) It is a common practice to prescribe antibiotics.

Hindi Language

61.(A) पतझड़ – वह ऋतु जिसमेँ पत्ते झड़ते हैँ - (बसंत) बहुव्रीहि समास - इस समास में कोई भी पद प्रधान न होकर अन्य पद प्रधान होता है विग्रह करने पर नया शब्द निकलता है।

62.(D) निंदा शब्द का अर्थ बुराई करना और स्तुति का अर्थ प्रशंसा होता है जो विपरीत अर्थ को दर्शाता है। अतः निंदा का विलोम स्तुति है अन्य शब्द निंदा के पर्यायवाची है - निदा के पर्याय – भर्त्सना, झिड़की, ताड़ना आदि

63.(C) निषेधवाचक वाक्य - निषेध वाचक वाक्य हमें किसी काम के ना होने या न करने का बोध कराते हैं। जिन वाक्यों से कार्य के निषेध का बोध होता है, वह वाक्य निषेधवाचक वाक्य कहलाते हैं। दिए गए वाक्य में निषेध शब्द का बोध होता है रामचंद्र जी के द्वारा खाना नहीं खाया गया।

64.(C) यमक अलंकार - जिस प्रकार अनुप्रास अलंकार में किसी एक वर्ण की आवृति होती है उसी प्रकार यमक अलंकार में काव्य का सौन्दर्य बढ़ाने के लिए एक शब्द की बार-बार आवृति होती है। प्रयोग किए गए शब्द का अर्थ हर बार अलग होता है। शब्द की दो बार आवृति होना वाक्य का यमक अलंकार के अंतर्गत आने के लिए आवश्यक है।

जैसे- तो पर वारौं उरबसी, सुन राधिके सुजान। तू मोहन के उरबसी, द्वै उरबसी समान।।

उरबसी = एक अप्सरा का नाम – उर्वशी
उरबसी = हृदय में बसी
उरबसी = एक आभूषण का नाम

65.(A) बीजक कबीर की मुख्य कृति है, इस कृति को कबीर पंथ की पवित्र पुस्तक मानी जाती है।

कबीरदास की प्रमुख रचनाएँ – रमैनी, सबद, साखी

66.(C) वृद्ध व्यक्ति दो चार रोटी खाकर तृप्त हो गया|

67.(A) मार्ग में चलने वाला बटोही कहलाता है|

68.(A) जो शत्रु की हत्या करता है शत्रुघ्न कहलाता है|

69.(B) जो सब कुछ जानता हो सर्वज्ञ कहलाता है|

70.(C)

71.(B) विश्व के कई अन्य देशों में भी हिन्दी के पत्र-पत्रिकाएँ प्रकाशित होते हैं।

72.(D) अनुतोष

73.(A) परिच्छेद का चौथा वाक्य सुनते ही शेर बोला - औरों का तो एक, किन्तु आपके अठारह अंग टेढ़े हैं|

74.(D) दूसरा वाक्य कौन उत्साही ऊंट को अपने ज्ञान का बहुत अभिमान था। उत्साही ऊंट को अपने ज्ञान का बहुत अभिमान था|

75.(D) दिक् + अम्बर

76.(A)

77.(C) हम बहुत बड़ा अन्याय कर रहे होते हैं, यदि हम किसी को जीने का अधिकार नहीं देते|

78.(B) यदि किसी का ओर-छोर नहीं है, तो उसकी सीमा नहीं है|

79.(A) बर्नार्ड शॉ ने जीवन की उपमा खुली पुस्तक से दी है|

80.(B) आसमान हमें भय से छुटकारे का आश्वासन दिलाता है|