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

Code : 0417PI

Booklet Code

PAPER-I

A

BOOKLET FOR OBJECTIVE TYPE TEST

Full Marks : 100

Time Allowed : 1½ Hours

GENERAL INSTRUCTIONS

Candidates should read the following instructions carefully before answering the questions :

1. Verify the seriality of the page numbers. If there is any discrepancy, bring it to the Invigilator's notice immediately.
2. All the boxes, ovals and the entries in the Answer Sheet must be filled up using **Black Ballpoint Pen** only.
3. Before you mark in the Answer Sheet, please fill the following in the appropriate places :
 - ☛ Write name of the Examination Centre.
 - ☛ Write your full name in Capital Letters.
 - ☛ Put your Left Thumb Impression and Full Signature.
 - ☛ Write your Roll No. (10 digits) and darken the corresponding 10 ovals.
 - ☛ Darken the oval corresponding to your **Category**.
 - ☛ Darken the oval corresponding to your **Booklet Code (A, B or C)**.
 - ☛ Darken the oval to denote your **Gender**.

○ ○ ● ○
4. All questions are of Multiple Choice Answer type. **Answer all the questions**. Please darken only one of the four probable answers [A], [B], [C] or [D]. Darkening more than one oval means you are writing a wrong answer.
5. **There will be negative marking for each wrong answer @ 1:4.**
6. There are blank pages at the end of this Booklet for Rough Work. Roll No. must be written on the blank sheet used for Rough Work. The sheet should not be torn out of the Question Booklet.
7. **Hand over the OMR Answer Sheet to the Invigilator before leaving the Examination Hall.**
8. Please do not leave the Examination Hall until the examination is over.
9. Please do not fold, scratch, scrimp or tear any portion of the Answer Sheet by any chance as this will render the Answer Sheet unsuitable for computer evaluation. Keep the Sheet away from gum.
10. Please ensure that the blank dotted line along the left side of margin of side 1 as also the right side of side 2 is not damaged in any way as it may affect the computer evaluation.
11. If error is detected in any particular question, the candidates are advised not to attempt the same. The Commission do not award any marks to questions having any type of error.

1. If $A:B = 3:4$, $B:C = 5:6$ and $C:D = 2:3$, then $A:D$ equals
- [A] 2:3
[B] 5:9
[C] 5:12
[D] 7:12
2. The mean of 25 values is 67 and that of 30 values is 75. Find the mean of all 55 values.
- [A] 68
[B] 71.4
[C] 72
[D] 72.4
3. The average of 11 observations is 60. If the average of the first five observations is 58 and that of the last five is 56, then the 6th observation is
- [A] 90
[B] 110
[C] 85
[D] 100
4. A and B together can do a work in 8 days. If A alone can do the same work in 12 days, then B alone can do the same work in
- [A] 20 days
[B] 16 days
[C] 24 days
[D] 28 days
5. A train runs at 45 km/hr. How far does it go in 6 seconds?
- [A] 72 m
[B] 60 m
[C] 75 m
[D] 70 m
6. A train 200 m long takes 20 seconds to cross a platform 300 m long. The speed of the train in metres per second is
- [A] 20 m/sec
[B] 25 m/sec
[C] 35 m/sec
[D] 50 m/sec
7. A man can row a boat at 10 km/hr in still water. If the speed of the stream is 6 km/hr, what is the time taken to row a distance of 80 km down the stream?
- [A] 8 hr
[B] 20 hr
[C] 10 hr
[D] 5 hr
8. The simple interest on ₹ 730 for 300 days at 6% p.a. is
- [A] ₹ 72
[B] ₹ 74
[C] ₹ 36
[D] ₹ 27

9. The difference between simple interest of 12% p.a. and compound interest of 12% p.a. compounded half-yearly on a sum of ₹ 3,000 in 1 year is

- [A] ₹ 10.80
- [B] ₹ 12.00
- [C] ₹ 18.00
- [D] ₹ 24.00

10. In what time will ₹ 1,800 yield a simple interest of ₹ 390 @ 5% p.a.?

- [A] 4 years 4 months
- [B] 5 years 3 months
- [C] 3 and half years
- [D] 4 and half years

11. The area of a circle is 154 sq. cm. Its circumference is

- [A] 44 cm
- [B] 88 cm
- [C] 154 cm
- [D] 176 cm

12. How many bricks $20\text{ cm} \times 10\text{ cm}$ will be required to pave the floor of a hall 16 m long and 10 m wide?

- [A] 2000
- [B] 4000
- [C] 6000
- [D] 8000

13. The area of a square plot is 400 sq. m. Its perimeter is

- [A] 20 m
- [B] 80 m
- [C] 40 m
- [D] 60 m

14. Find the surface area of a cylinder whose radius is 3 m and height is 14 m.

- [A] 244 sq. m
- [B] 264 sq. m
- [C] 369 sq. m
- [D] 396 sq. m

15. The diameter of a sphere is 14 cm. Its total surface area is

- [A] 616 sq. cm
- [B] 666 sq. cm
- [C] 676 sq. cm
- [D] 1464 sq. cm

16. The circumferences of two concentric circles are 176 m and 132 m respectively. What is the difference between the radii? ($\pi = \frac{22}{7}$)

- [A] 5 m
- [B] 7 m
- [C] 8 m
- [D] 44 m

17. A man bought a secondhand typewriter for ₹ 1,200 and spent ₹ 200 on its repairs. He sold it for ₹ 1,680. His profit percentage is
- [A] 20%
[B] 10%
[C] 8%
[D] 16%
18. The difference between two positive numbers is 3. If the sum of their squares is 369, then the sum of the numbers is
- [A] 81
[B] 33
[C] 27
[D] 25
19. By giving a discount of 10% on the marked price of ₹ 1,100 of a cycle, a dealer gains 10%. The cost price of the cycle is
- [A] ₹ 1,100
[B] ₹ 900
[C] ₹ 1,089
[D] ₹ 891
20. $1/0.04$ is equal to
- [A] $1/40$
[B] $2/5$
[C] $5/2$
[D] 25
21. ₹ 1,050 is divided among P, Q and R. The share of P is $2/5$ of the combined share of Q and R. Thus P gets
- [A] ₹ 200
[B] ₹ 300
[C] ₹ 320
[D] ₹ 420
22. An umbrella marked at ₹ 80 is sold for ₹ 68. The rate of discount is
- [A] 15%
[B] 12%
[C] $\frac{300}{17}\%$
[D] 20%
23. A boy goes to school with a speed of 3 km/hr and returns to the village with a speed of 2 km/hr. If he takes 5 hours in all, the distance between the village and the school is
- [A] 6 km
[B] 7 km
[C] 8 km
[D] 9 km
24. The ratio of Vimal's age and Aruna's age is 3 : 5 and sum of their ages is 80 years. The ratio of their ages after 10 years will be
- [A] 1 : 2
[B] 2 : 3
[C] 3 : 2
[D] 3 : 5

25. If 16% of 40% of a number is 8, the number is

[A] 200

[B] 225

[C] 125

[D] 320

26. 5 out of 2250 parts of the earth is sulphur. What is the percentage of sulphur in the earth?

[A] $\frac{11}{50}\%$

[B] $\frac{2}{9}\%$

[C] $\frac{1}{45}\%$

[D] $\frac{2}{45}\%$

27. (5% of ₹ 100) + (100% of ₹ 5) equals

[A] ₹ 5

[B] ₹ 10

[C] ₹ 15

[D] ₹ 100

28. If $75:3 = x:9$, then the value of x is

[A] 27

[B] 87

[C] 225

[D] 25

29. If 6 men working 8 hours a day earn ₹ 840 per week, then 9 men working 6 hours a day will earn how much per week?

[A] ₹ 840

[B] ₹ 945

[C] ₹ 1,620

[D] ₹ 1,680

30. A manufacturer fixes his selling price at 33% over the cost of production. If the cost of production goes up by 12% and manufacturer raises his selling price by 10%, then his percentage of profit is (in %)

[A] 35

[B] $36\frac{5}{9}$

[C] $28\frac{3}{8}$

[D] $30\frac{5}{8}$

31. A boat moves downstream at the rate of 1 km in $7\frac{1}{2}$ minutes and upstream at the rate of 5 km an hour. The speed of the boat in still water is (in km/hr)

[A] $6\frac{1}{2}$

[B] $3\frac{1}{2}$

[C] $4\frac{1}{2}$

[D] 8

32. Given that the ratio of altitudes of two triangles is 4 : 5, ratio of their areas is 3 : 2. The ratio of their corresponding bases is

[A] 8 : 17

[B] 5 : 8

[C] 15 : 8

[D] 8 : 5

33. A man sells an article at 5% above its cost price. If he had bought it at 5% less than what he had paid for it and sold it at ₹ 2 less, he would have gained 10%. The cost price of the article is (in ₹)

[A] 300

[B] 400

[C] 200

[D] 150

34. AB and CD are two parallel chords of a circle of length 10 cm and 4 cm respectively. If the chords are on the same side of the centre and the distance between them is 3 cm, then the diameter of the circle is (in cm)

[A] $2\sqrt{29}$

[B] $\sqrt{21}$

[C] $2\sqrt{21}$

[D] $\sqrt{29}$

35. Find the missing number in the series

3, 15, 36, 63, ?

[A] 77

[B] 84

[C] 99

[D] 98

36. Find out the number that **does not** belong to the group.

[A] 484

[B] 442

[C] 361

[D] 289

37. If '+' means '-', '-' means '*', '*' means '/' and '/' means '+', then

$2/6*6/2 = ?$

[A] 1

[B] 0

[C] 10

[D] 5

38. Find the related word to complete the following analogy :

Thunder : Rain :: ? : Night

- [A] Day
- [B] Dusk
- [C] Dark
- [D] Evening

39. Find the related letters to complete the following analogy :

ACEG : NPRT :: ADGJ : ?

- [A] NRTX
- [B] ORVX
- [C] NQSU
- [D] NQTW

40. In a certain code, DECEMBER is written as ERMBCEDE. In that code, which word will be written as ERMBVENO?

- [A] SEPTEMBER
- [B] AUGUST
- [C] NOVEMBER
- [D] OCTOBER

41. If RED is coded as 6720, then how will GREEN be coded?

- [A] 9207716
- [B] 1677199
- [C] 1677209
- [D] 16717209

42. The trend results are shown at the end of each column. Find out the figure against the missing number.

9	8	7
6	7	8
5	4	?
270	224	336

- [A] 9
- [B] 6
- [C] 7
- [D] 5

43. A word is followed by four other words one of which **cannot** be formed by using the letters of the given word. Find the word.

APPROXIMATELY

- [A] APEX
- [B] APPRISE
- [C] APPROXIMATE
- [D] APRIL

44. The following question consists of two words which have some relationship. From the following four pairs of words, select the one which is related in the same way as the words of the given pair :

RACE : FATIGUE ::

- [A] Track : Athlete
- [B] Ant : Bug
- [C] Fast : Hunger
- [D] Walking : Running

45. Submarine is to Fish as Bird is to

- [A] Kite
- [B] Limousine
- [C] Feather
- [D] Chirp

46. Which one is like Hair, Grass and Fur?

- [A] Leather
- [B] Wood
- [C] Cloth
- [D] Feather

47. Man is to Child as Flower is to

- [A] Seed
- [B] Bud
- [C] Fruit
- [D] Butterfly

48. Music always has

- [A] instruments
- [B] words
- [C] notes
- [D] musicians

49. Only one of the following groups has some common characteristics to all the three words and is therefore difference from others. Find that group.

- [A] Writer, Poet, Publisher
- [B] Elephant, Jungle, Deer
- [C] Sun, Moon, Heat
- [D] Earth, Mars, Jupiter

50. Which one alternative represents a meaningful order of words given in the question?

1. Consultation
2. Illness
3. Doctor
4. Treatment
5. Recovery

[A] 43125

[B] 23415

[C] 51432

[D] 23145

51. 3 ladies are going together. Among them, there are 2 mothers and 2 daughters and 1 granddaughter. How are they related?

[A] They are 1 grandmother and 2 daughters

[B] They are mother, her sister and sister's daughter

[C] They are 1 grandmother and 2 granddaughters

[D] They are grandmother, mother and granddaughter

52. A is the father of B and B is the brother of C, but C is not the son of A. What is C to B?

[A] Niece

[B] Nephew

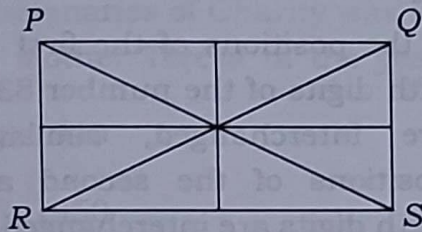
[C] Sister

[D] Cousin

53. Select the one which is different from the other three.

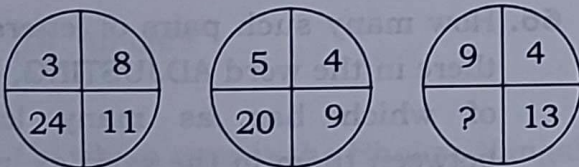
- [A] House
- [B] Apartment
- [C] Building
- [D] Society

54. How many triangles are there in the figure PQRS?



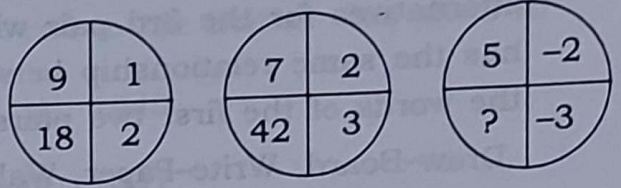
- [A] 16
- [B] 12
- [C] 10
- [D] 8

55. Put the suitable number in the blank space.



- [A] 36
- [B] 117
- [C] 52
- [D] 26

56. Put the missing number.



- [A] 13
- [B] 18
- [C] 30
- [D] -30

57. Which of the following series starts with a vowel and then has consonants appearing alternatively with vowels?

- [A] Emulsion
- [B] Itevation
- [C] Alemot
- [D] Violence

58. Which of the following will come next in the series?

nsi, org, pqe, qpc, ...

- [A] rqd
- [B] pqa
- [C] aor
- [D] roa

59. Circle is related to Circumference as Square is related to

- [A] Area
- [B] Angle
- [C] Diagonal
- [D] Perimeter

60. Find out one word from the given alternatives for the 3rd pair which has the same relationship between the words of the first two pairs.

Draw-Board, Write-Paper, Walk-?

- [A] Legs
- [B] Boots
- [C] Ground
- [D] Stick

61. Player is related to Team in the same way as Ship is related to

- [A] Water
- [B] Sea
- [C] Sailor
- [D] Fleet

62. If the following words were seen on a wall by looking in a mirror on the opposite wall, which word would appear exactly the same as if seen directly?

- [A] NOON
- [B] MOON
- [C] TOOT
- [D] WOOL

63. In a row of forty children, *R* is eleventh from the right end and there are fifteen children between *R* and *M*. What is *M*'s position from the left end of the row?

- [A] Fourteenth
- [B] Fifteenth
- [C] Thirteenth
- [D] Eleventh

64. In a certain code language, 'how many are there' is written as 'ka na ta da' and 'many are welcome here' is written as 'na pi ni ka'. How is 'how' written in that code language?

- [A] ta
- [B] da
- [C] ta or da
- [D] None of the above

65. If the positions of the first and the fifth digits of the number 83591427 are interchanged, similarly the positions of the second and the sixth digits are interchanged, and so on, then which of the following will be the second digit from the right end after rearrangement?

- [A] 3
- [B] 5
- [C] 9
- [D] 2

66. How many such pairs of letters are there in the word ADJUSTING, each of which has as many letters between them in the word as in the English alphabet series?

- [A] None
- [B] One
- [C] Two
- [D] Three

67. How many meaningful English words can be formed with the letters LBAE, using each letter only once in each word?
- [A] One
[B] Two
[C] Three
[D] Four
68. Missionaries of Charity was founded by Mother Teresa in the year
- [A] 1940
[B] 1950
[C] 1949
[D] 1955
69. Mother Teresa was born in
- [A] Switzerland
[B] India
[C] Germany
[D] Albania
70. On which river is the Bhakra Nangal Project built?
- [A] Kosi
[B] Jhelum
[C] Beas
[D] Sutlej
71. The famous Quit India Movement call to the British was given in
- [A] 1940
[B] 1941
[C] 1942
[D] 1943
72. Wright Brothers are regarded as inventors of the
- [A] Balloon
[B] Bicycle
[C] Aeroplane
[D] None of the above
73. The Quit India Movement was launched by
- [A] Mahatma Gandhi
[B] Jawaharlal Nehru
[C] Raja Rammohan Roy
[D] None of them
74. Which of the following is the 3rd planet from the sun?
- [A] Mercury
[B] Venus
[C] Mars
[D] Earth

75. The largest mint in India is located at

- [A] Kolkata
- [B] Mumbai
- [C] Hyderabad
- [D] Nasik

76. The Golden Temple is situated in

- [A] New Delhi
- [B] Agra
- [C] Amritsar
- [D] Mumbai

77. Which of the following cups/trophies is associated with football?

- [A] Davis Cup
- [B] Champions Trophy
- [C] Santosh Trophy
- [D] Deodhar Trophy

78. In which field of art did Jamini Roy make his name?

- [A] Sculpture
- [B] Music
- [C] Painting
- [D] Drama

79. Which of the following food items is rich in iron?

- [A] Rice
- [B] Apple
- [C] Pulses
- [D] Orange

80. Silk chemically is

- [A] carbohydrate
- [B] fat
- [C] protein
- [D] cellulose

81. Which one of the following is **not** a part of the balanced diet?

- [A] Vitamins
- [B] Carbohydrates
- [C] Proteins
- [D] Alcohol

82. Red blood corpuscles are produced in

- [A] liver
- [B] spleen
- [C] bone marrow
- [D] kidney

83. In which State, Panchayati Raj was introduced for the first time?

- [A] Bihar
- [B] Punjab
- [C] Andhra Pradesh
- [D] Rajasthan

84. The temples of Khajuraho were built by
- [A] Chalukyas
 - [B] Pallavas
 - [C] Rashtrakutas
 - [D] Chandelas
85. *India 2020* is a book written by
- [A] Chetan Bhagat
 - [B] Khushwant Singh
 - [C] P. Chidambaram
 - [D] A. P. J. Abdul Kalam
86. Empty metallic vessels create more noise due to
- [A] resonance effect
 - [B] Doppler effect
 - [C] musical effect
 - [D] None of the above
87. NPA stands for
- [A] Non-Performers Association
 - [B] Non-Performing Assets
 - [C] Neo-Political Activists
 - [D] None of the above
88. Which one is an example of physical change?
- [A] Digestion of milk
 - [B] Rusting of iron
 - [C] Burning of candle
 - [D] Magnetization of iron
89. A leech is an example of a/an
- [A] parasite
 - [B] mammal
 - [C] insect
 - [D] None of the above
90. CBDT stands for
- [A] Central Bureau of Direct Taxes
 - [B] Central Building Directorate of Tamil Nadu
 - [C] Central Board of Direct Taxes
 - [D] None of the above
91. The renowned vocalist, Pandit Jasraj, belongs to
- [A] Jaipur Gharana
 - [B] Gwalior Gharana
 - [C] Delhi Gharana
 - [D] Mewati Gharana

92. Kandla port is located at
[A] Bay of Kutch
[B] Rann of Kutch
[C] Bay of Bengal
[D] None of the above
93. The 1st Amendment in Indian Constitution was made in the year
[A] 1954
[B] 1951
[C] 1948
[D] 1962
94. Ho Chi Minh was associated with which of the following countries?
[A] Taiwan
[B] Vietnam
[C] China
[D] None of the above
95. The Indian subcontinent lies
[A] in the Northern hemisphere
[B] in the Southern hemisphere
[C] partly in the Southern hemisphere but majority in the Northern hemisphere
[D] None of the above
96. The phrase 'The Nightingale of India' is associated with
[A] M. S. Subbulakshmi
[B] Sarojini Naidu
[C] Indira Gandhi
[D] Sheila Dixit
97. The highest civilian award of India is
[A] Padma Vibhushan
[B] Padma Shri
[C] Bharat Ratna
[D] Param Vir Chakra
98. The age of retirement of the Supreme Court Judges is
[A] 70 years
[B] 65 years
[C] 62 years
[D] 60 years
99. The total population of West Bengal during 2011 was
[A] 85 millions
[B] 91 millions
[C] 98 millions
[D] 100 millions
100. FIFA World Cup U-17 tournament started from
[A] 6th October, 1917
[B] 10th October, 1917
[C] 7th October, 1917
[D] 12th October, 1917