SAMPLE PAPER-01

MENTAL ABILITY TEST

- 1. In a 100 metre race A beat B by 20 metre or 5 seconds. Find the speed of A
 - (1) 5 metre/sec
- (2) 4 metre/sec
- (3) 6 metre/sec
- (4) 4 metre/sec
- **2.** The unit digit of product of first 40 natural numbers is:
 - (1) 7

(2) 0

(3) 5

- (4) None of these
- **3.** The salary of a worker is first increased by 12% and there after it was decreased by 12% what was the change in salary
 - (1) 1.44% Decrease
- (2) 1% Increase
- (3) 1.44% Increase
- (4) No change
- **4.** The mean of $x + \frac{1}{x}$ is N. Then mean of $x^2 + \frac{1}{x^2}$ is
 - (1) N^2
- $(2) N^2 2$
- (3) $2N^2 1$
- (4) $4 N^2 2$
- **5.** It $x^{47} + 1$ is divided by $x^2 1$, the remainder will be
 - (1) x 1
- (2) x + 1

(3) x

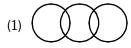
- (4) -x
- **6.** If $\frac{p}{q} + \frac{q}{p} = 2$, what is the value of $\left(\frac{p}{q}\right)^{23} + \left(\frac{q}{p}\right)^{7}$.
 - (1) 0

- (2) 2
- (3) -2
- (4) None of these
- **7.** Which one of the following is in ascending order
 - (1) $\frac{7}{6}, \frac{5}{4}, \frac{4}{3}, \frac{9}{7}$
- (2) $\frac{7}{6}, \frac{5}{4}, \frac{9}{7}, \frac{4}{3}$
- (3) $\frac{4}{3}, \frac{9}{7}, \frac{5}{4}, \frac{7}{6}$
- $(4) \ \frac{9}{7}, \frac{4}{3}, \frac{7}{6}, \frac{5}{4}$

Direction (Q. 8 to Q.11): There is a (number/letter) series in the following questions with an item missing marked with question mark (?). Find the best appropriate option from the given option

- **8.** 4, 18, (?), 100, 180, 294
 - (1) 32
- (2)36
- (3)48
- (4) 44
- **9.** 30, 68, 130, 222, (?), 520, 738
 - (1) 420
- (2)350
- (3)250
- (4)280

- **10.** 6072 (?), 200, 48, 14, 5, 3
 - (1) 1010
- (2) 1001
- (3) 1100
- (4) 1110
- **11.** N5V, K7T (?) EI4P BI9N
 - (1) H 9 R
- (2) H10Q
- (3) H10R
- (4) I10R
- **12.** An elevantor has the capacity to carry 12 adults or 20 children. How many adults can be carried by the elevator with 15 children.
 - (1) 4
- (2) 3
- (3)5
- (4)6
- **13.** If HE = 41 and SHE = 49 then COME = ?
 - (1) 36
- (2)70
- (3)72
- (4)78
- **14.** Which of the following four logical diagrams represent correctly the relationship between whale, fish, crocodile.







(3)



Direction (Q.15 to Q.18): In each of the following questions then are given a combination of letter . Followed by from $(A,\,B,\,C,\,D)$ alternative choose the alternative which resemble the mirror image of the given combination most appropriabely

- **15.** BUZZER
 - BUZZER (1)
- (2) REZZUB
- REZZUB (E)
- BUZSER (4)
- 16. JUDGEMENT
 - (1) TNEMEGDUJ
- JUDDEMENT (2)
- JUDGEMENT (E)
- TNEMEGDUJ(4)
- **17.** R4E3N2U
 - (1) R 34 N 2 U 3
- (2) U2N3E4R
- R4E3N2U (E)
- R4E3N2U (4)
- **18.** DBV8476
 - **GBV8416** (1)
- (2) 6 748 VBD
- (3) 8 4 7 6 DBV
- DBV8476(4)

NTSE: Sample Paper-01

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Direction (For Q.19 to Q.22): In each of the following questions a matrix of certain number is given with a question mark (?) in one block. These number follow a certain trend carefully go through the numbers and choose the missing (?) character

19.	4	5	6
	2	3	7
	1	8	3
	21	98	?

(1) 94 (2) 76

(3)73

(4) 16

 20.
 38
 44
 42

 23
 55
 28

 37
 ?
 39

(1) 33

(2)66

(3)22

(4)77

 21.
 ?
 13
 49

 9
 17
 69

 13
 11
 59

(1) 9

(2)5

(3) 10

(4) 11

22.

1	5	7	75
8	3	4	?
9	7	8	194

(1) 20

(2)43

(3)89

(4)96

Direction (Q.23 to Q.26): Read the information carefully and answer the question that follows.

A blacksmith has five iron articles A. B,C,D,E each having a different weight.

- (i) A weights twice as much as B.
- (ii) B weight four and half times as much as C
- (iii) C weight half as much has D
- (iv) D weight half as much as E
- (v) E weigh less than A but more than C.
- **23.** Which of the following is lightest in weight

(1) A

(2) B

(3) C

(4) D

- **24.** E is lighter in weight than which of the other two articles.
 - (1) A,B

(2) D, C

(3) A, C

(4) D, B

25. E is heavier than which of the following two articles

(1) D,B (2)

(2) D,C

(3) A, C

(4) A, B

26. Which of the following is heaviest in weight

(1) A

(2) B

(3) C

(4) D

Direction (Q.27 to Q.30): Read the information carefully and answer the question that follow

There are six children taking part in an essay competition namely A,B,C,D, E and F. A and E are brother. F and D are sister of E. C is the only son of A's uncle, B and D are the daughters of the brother of C's father.

27. How is D related to A?

(1) Uncle

(2) Sister

(3) Niece

(4) Cousin Sister

28. How many male competitor are there

(1) 6

(2)5

(3) 4

(4) 3

29. How many female competitors are there

(1) 5

(2)4

(3) 3

(4) 2

30. How is C related to F

(1) Cousin brother

(2) Brother

(3) Son

(4) Uncle

Direction(Q.31 to Q.35): Read the information carefully and answer the questions.

- (i) Six friends Rahul, Kabeer, Anup, Raghu, Amit and Alok were engineering graduates. All six of them were placed in six different companies and were placed in six different location namely Tisco-Jameshepur, Telco-Pune, wipro-Bengaluru. HCL-Noida, Mecom-Ranchi and Usha Martin-Kolkata. Each of them has their personal e-mails ids with different e-mails providers i.e. gmial, indiatimes, rediffimail, yahoo, hotmail and sancharnet though not necessarily in same order.
- (ii) The one having e-mail account with sancharnet works in Noida and the one having email account with India times works for Tisco.
- (iii) Amit does not stay in Bengaluru and does not work for Mecon and the one who works for Mecon has an email id with gmail.
- (iv) Rahul has an email id with rediffmial and works at Pune.
- (v) Alok does not work for Mecon and the one who work for wipro does not have an email account with yahoo.

- (vi) Kabeer is posted in Kolktata and does not have an account with hotmail.
- (vii) Nither Alok nor Raghu work in Noida.
- (vii) The one who posted in Ranchi, has an email id which is not an account of redffimial or hotmail.
- (ix) Anup is posted in Jamshedpur.

Direction (Q.31 to Q.35): According to given information, the distribution table is.

Name	Rahul	Kabeer	Anup	Raghu	Amit	Alok
Email	Rediff	Yahoo	Indiatimes	gmail	Sancharnet	hotmail
Location	Pune	Kolkata	Jamshedpur	Ranchi	Noida	Bengaluru
Company	Telco	Usha martin	Tisco	Mecon	HCL	Wipro

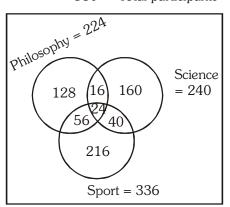
- **31.** The main who works in wipro has an email account with:
 - (1) Sancharnet
- (2) yahoo
- (3) Rediffinail
- (4) Hotmail
- **32.** Which of the following email, place of posting and person combination is correct?
 - (1) Kabeer-Kolkata-Rediffimail
 - (2) Alok-Bengularu-Indatimes
 - (3) Amit Noida-Yahoo
 - (4) Raghu Ranchi- Gmail
- **33.** Which of the following is true-
 - (1) Amit is posted in Ranchi
 - (2) Raghu is posted in Jameshpur
 - (3) Kabeer has an email id with yahoo
 - (4) Rahgu has an email id with indiatimes
- **34.** Which of the following sequence of location represents Alok, Kabeer, Anup, Rahul, Raghu and Amit in the same order
 - (1) Bengaluru, Noida, Pune, Jamshedpur, Ranchi, Kolkata
 - (2) Bengaluru, Kolkata, Jamshedpur, Pune, Noida, Ranchi
 - (3) Kolkta, Bengaluru, Jamshedpur, Pune, Noida, Ranchi
 - (4) None of these
- **35.** Peaple who have email account with Indiatimes suncharnet and yahoo work for which companies in the name sequence as the email account maintained
 - (1) Usha Martin, H.C.L, Wipro
 - (2) Tisco, Wipro, Usha Martin
 - (3) H.C.L, Tisco, Wipro
 - (4) Tisco, H.C.L, Usha Martin

- **36.** The number of boys in a calss is three times the number of girls. Which one of the following number can not represent the total number of children in the class
 - (1) 48
- (2)44
- (3)42
- (4) 40
- **37.** A + B > C + D and B + C > A + D then it is definite that
 - (1) D > B (2) C > D
- > D (
 - (3) A > D
- (4) B > D
- **38.** If 264 * 2 = 6, 870 * 3 = 11 then 735 * 5 be
 - (1) 5
- (2) 12
- (3) 16
- (4) 3
- **39.** There are 35 students in a class. Suman ranks 3rd among the girls in the class. Amit ranks 5th among the boys in the class. Suman is one rank below Amit in the class. No two students hold the same rank is the class. What is Amits rank in the class.
 - (1) 7th rank
 - (2) 5th rank
 - (3) 8th rank
 - (4) Cannot not determined

Direction (Q.40 to Q.44): Rafer to the data below and answer the question that follow-

A national level competition held last year, participants were free to choose their respective areas from which they were asked questions. Out of 880 participants, 224 choose philosophy 240 choose science and 336 choose sports, 64 choose both science and sports, 80 choose philosophy and sports, 40 choose philosophy and science and 24 choose all the three areas.

880 = Total participants



- **40.** The percentage of participants who did not choose any area is
 - (1) 23.59%
- (2) 30.25%
- (3) 37.46%
- (4) 27.27%

- Of these participating, the percentage who choose 41. only one area is
 - (1) 60%
- (2) More than 60%
- (3) Less than 60%
- (4) More than 75%
- Number of participants who choose at least two area is
 - (1) 112
- (2)24
- (3)136
- (4) None of these
- **43**. Which of the following area shows a ratio at 1:8?
 - (1) Philosophy and Science but not sports: Philosophy (only)
 - (2) Philosophy and sport but not science: Science
 - (3) Science: Sports
 - (4) None of these
- 44. The ratio of at students choosing sports and Science but not philosophy to science but not philosophy and sports is
 - (1) 2 : 5
- (2) 1 : 4
- (3) 1 : 5
- (4) 1 : 2

Direction (Q.45 to Q.47): Read the following information carefully and answer the questions based on there Ravi and Kunal are good in hockey and volleyball. Sachin and Ravi are good in hockey and base ball. Gaurav and Kunal are good in volley ball and Cricket. Sachin, Sagar and Gaurav are good to baseball and football

	Hockey	Vollyball	Baseball	Cricket	Football
Ravi	V	√	√		
Kunal	√	√		√	
Gaurav		√	√	√	√
Sagar			√		√
Sachin	V		√		√

- **45.** Who is good in hockey, cricket and volleyball?
 - (1) Sachin
- (2) Kunal
- (3) Sagar
- (4) Ravi
- **46**. Who is good is baseball, cricket volleyball and football
 - (1) Sachin
- (2) Kunal
- (3) Gaurav
- (4) Sagar
- **47.** Who is good in football and baseball but not good in hockey, volleyball and cricket.
 - (1) Sugar
- (2) Sachin
- (3) Ravi
- (4) Gaurav

Direction (Q.48 & Q.49): Find the correct choice from the given 4 options in place of question mark (?)

- Bank: Rupees:: Transport:?
 - (1) Goods
- (2) Road
- (3) Traffic
- (4) Speed
- **49**. Market: Demand:: Farming:
 - (1) Farmer
- (2) Monsoon
- (3) Foodgrain
- (4) Supply
- **50**. In certain language DEAF is coded on 3587 and FILIR is coded as 74665. How is IDEAL written in that code
 - (1) 43568
- (2) 43586
- (3)48536
- (4) 63548

Direction (Q.51 to Q.53): In each of the following question there is a number series with one term missing shown by question mark (?). This term is one of the alternative given. Choose the number.

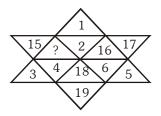
- **51.** 0, 6, 24, 60, 120, ?
 - (1) 180
- (2) 200
- (3) 210
- (4)220
- 8, 7, 16, 5, 32, 3, 64, 1, 128, ? **52**.
 - (1) 2
- (2) -1
- (3) 3
- (4) 13
- 22, 15, 8, 1, ?, -13 **53**.
 - (1) 8
- (2) -8
- (3) -6
- (4) 0

Direction (Q.54 to Q.56): There is a letter series with some term missing shown by (?). Find these letters from the 4 alternatives given.

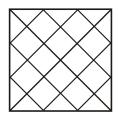
- aba _ bca _ ac _ cab _ cbc
 - (1) cbba
- (2) bbbb
- (3) ccba
- (4) caac
- **55**. OBDR, QACT, SZBV, (?), WXZZ
 - (1) ASVD
- (2) WUWZ (3) YTVB
 - (4) UYAX
- **56**. ak, eo, is, ?, qa, ue
 - (1) mw
- (2) iw
- (3) lv
- (4) nx
- **57**. In a certain code, PRACTICE is written PARTCCIE. How is TRAINS written in the same Code?
 - (1) TARNIS
- (2) TAIRNS
- (3) TANRIS
- (4) TARINS
- **58**. If BLOOD is coded as 24113, BURST is coded as 20678. Code ROBUST will be?
 - (1) 678102
- (2) 610732
- (3) 620781
- (4) 612078
- **59**. If ghost is coded as hoste then code rose in the same manner
 - (1) pose
- (2) dsep
- (3) oser
- (4) osep

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- **60.** In a certain code language '123' means "Disuza read book"; "245" means "Fernadese likes Disuza" which of the numerical symbols in that language stands for "reads"?
 - (1) 1
- (2) 2
- (3) 3
- (4) 4
- **61.** The number given in the figure are according to some rules. Get the rule and find out the proper option for the blank cell (?)



- (1) 21
- (2) 20
- (3) 14
- (4) 13
- **62.** The number of triangles in figure are



- (1) 26
- (2) 30
- (3) 36
- (4) 40
- **63.** If the sum of opposite faces of dice is 7 then, which diagram is correctly labelled?









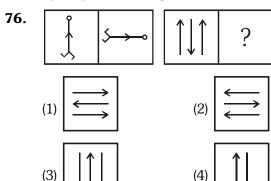
- **64.** Suppose a three centimetre cube has been painted green on all its sides. If is cut into one centimeter cubes, how many cubes will be there with three sides painted green?
 - (1) 0
- (2) 6
- (3) 8
- (4) 12
- **65.** If 8 men or 12 women can do a piece of work in 25 days, in how many days can the work be done by 6 men and 11 women working together?
 - (1)5
- (2) 15
- (3) 25
- (4) 20

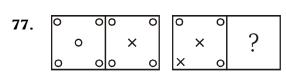
- **Directions (Q.66 & Q.67):** In a class of 33 students, 20 play cricket, 25 football, and 18 volleyball, 15 play both cricket and football, 12 football and volleyball and 10 cricket and volleyball. If each student plays at least one game
- **66.** How many play only cricket?
 - (1) 2
- (2) 4
- (3) 7
- (4) 8
- **67.** How many play all 3 games?
 - (1) 2
- (2) 4
- (3) 7
- (4) 8
- **68.** At an examination 7,500 candidates appeared. Each offered either computer or physics or both. If 75% offered computer and 45% offered physics. How many offered both?
 - (1) 1000
- (2) 1500
- (3) 1750
- (4) 2000
- **69.** John sits on the right of Jack. Jack sits between Tom and Harry. Who sits farthest from the left?
 - (1) John
- (2) Jack
- (3) Tom
- (4) Harry
- **70.** Which of the following comes third in dictionary?
 - (1) Measler
- (2) Meals
- (3) Marbles
- (4) Metals

Directions (Q.71 to Q.75): In each of the following questions a series begins with the figure on the extreme left. One and only of the four numbered (1, 2, 3, 4) figures in the series does not fit into the series. The number of that figure is the answer.

- 73. (1) (2) (3) (4)
- 75.

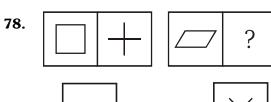
Direction (Q.76 to Q.80): The first two figures bear a definite relation with each other. Bearing that relation in mind pickup the fourth figure from the answer figures.

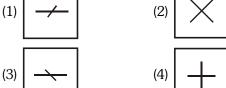








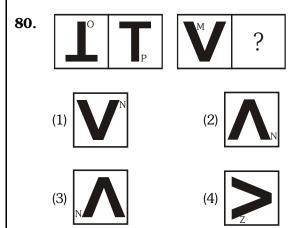












Direction (Q.81 to Q.85): In each of the following questions, there is a relationship between the two terms (word pairs). Find the same relationship among the choices which follow the pattern of the two words.

81. Enormous: Huge(1) rough: rock(2) muddy: unclear(3) purse: kitchen(4) white: flower

Warm: Hot(1) Climate: Weather(2) Right: Genius(3) Frown: Anger(4) Glue: Paste

83. Frame : Picture(1) Roof : Building(2) Chair : Room(3) Cup : Saucer(4) Table : Floor

84. Cloth: Texture(1) Wool: Silk(2) Book: Text(3) Wood: Grain(4) Wall: Frame

85. Diet: Weight(1) Drug: Pain(2) Dinner: Supper(3) Bread: Starchy(4) Food: Sugar

86. The sum of the present ages of X, Y and Z is 90 years. 6 year ago their ages were in the ratio of 1:2:3. What is Z's present age?

(1) 36 year (2) 30 year (3) 32 year (4) 48 year

87. The number of girls in a class is 5 times the number of boys. Which of the following number cannot be the total number of children in the clay?

(1) 24 (2) 30 (3) 35 (4) 42
88. X is 25 meter to the west of B, C is 40 meter to the east of X and D is 45 meter to the west of B. If all are standing along a straight line, how far is X from D?

(1) 15 meter (2) 20 meter (3) 60 meter (4) 70 meter

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- **89.** Arun walks north-east and after some distance turns left and walks straight then again he turns left. In which direction is he going now?
 - (1) South-West
- (2) West
- (3) East
- (4) North
- **90.** X and Y are children of A. A is the father of X but Y is not the son of A. What is Y to A?
 - (1) Sister
- (2) Brother
- (3) Daughter
- (4) Son
- **91.** A year is a leap year, in this 1^{st} February is sunday. Then which day will be on 1^{st} March of the same year
 - (1) Sunday
- (2) Monday
- (3) Tuesday
- (4) Saturday
- **92.** Which pair of the month among following have same last day
 - (1) March-August
- (2) May-December
- (3) April-December
- (4) June-November

Direction (Q.93 to Q.96): Below are given some symbols indicating some terms given opposite to them. Read these symbols carefully and then answer the questions.

 $\Delta = greater \; than, \; \theta = equal \; to, \; \square = not \; less \; than, \\ \mathsf{x} = less \; than, \; \mathsf{+} = not \; greater \; than, \; \varnothing = not \; equal \; to \; , \\ \mathsf{\mu} = square \; of \; and \; \div = square \; root \; of.$

- **93.** b \square c θ a implies that
 - (1) b \square a θ c
- (2) $c \times b \times a$
- (3) c Δ b Δ a(4) a \square b \square c

- **94.** a \square b \triangle c implies that
 - (1) b □ c □ a
- (2) $b \square c + a$
- (3) $c \square b + a$
- (4) a θ b Δ c
- **95.** a Δ b \times c does not imply that
 - (1) b Ø c Ø c
- (2) c Δ b \times a
- (3) $c \sqcap b + a$
- (4) a Δ c Δ b
- **96.** a Δ b θ c implies that
 - (1) c \times a Δ b
- (2) c ∆ a Ø b
- (3) a Δ b Δ c
- (4) a Δ c Δ b
- 97. If + means \div , \div means \times and \times means +, then what will be the value of $48 + 16 4 \div 2 \times 8 = ?$
 - (1) 6 (2)
- $(2) \ 3$
- (3) 36
- (4) 113
- **98.** If $x = +, = \div, \div = -; + = x$; then which statement is correct is correct
 - $(1) 16 + 5 10 \times 4 \div 3 = 9$
 - (2) $16 + 5 \div 10 \times 4 3 = 9$
 - (3) $16 5 \times 10 \div 4 + 3 = 12$
 - $(4)\ 16 \times 5 \div 10 + 4 3 = 19$
- **99.** A person while looking at the clock mistook the long hand for shot hand. He found that the time was 2 minutes past 6. What was the right time?
 - (1) 11 : 20
- (2) 12 : 30
- (3) 2 : 30
- $(4) \ 3 : 30$
- **100.** Write the following jumbled letters in the same order as in alphabet

'URPIGHT'

- (1) GHIPRTU
- (2) G H P I U T R
- (3) H G P R U T I
- (4) I H G P R U T

SPACE FOR ROUGH WORK