Registration No.:_____

Time Allowed: 02:00hrs.

Max Marks: 80

Read the following instructions carefully before attempting the question paper.
1. Match the Paper Code shaded on the OMR Sheet with the Paper code mentioned on the question paper and ensure that both are the same.
2. This question paper contains 80 questions of 1 mark each. 0.25 marks will be deducted for each wrong answer.
3. Attempt all the questions in serial order.
4. Do not write or mark anything on the question paper and/or on rough sheet(s) which could be helpful to any student in copying, except your registration number on the designated space.
5. Submit the question paper and the rough sheet(s) along with the OMR sheet to the invigilator before leaving the examination hall.
6. use of calculators not allowed.

Q(1) . Find the sum of even factors of 240?
(a) 720
(b) 540
(c) 360
(d) None of these

CO1,L3

Q(2) Find 48 x 92 x 67 =?
(a) 295872
(b) 299872
(c) 229872
(d) 212872

CO1,L3

Q(3) Find the remainder when 2! + 40! is divided by 3!
(a) 5
(b) 1
(c) 2
(d) None

CO1,L3

Q(4) Find the remainder when 14 X 16 X 20 is divided by 7
(a) 2
(b) 0
(c) 1
(d) None

CO1,L3

Q(5) Evaluate: 2 + 44 + (22 + 22) × 2.
(a) 1
(b) 4
(c) 9
(d) None

CO1,L3

Q(6) What least number must be added to 1056, so that the sum is completely divisible by 23 ?
(a) 2
(b) 3
(c) 4
(d) 5

CO1,L3

Q(7) Find the number of Factors of 28
(a) 6
(b) 1
(c) 3
(d) None

CO1,L3

Q(8) What is the sum of two consecutive even numbers, the difference of whose squares is 84?
(a) 42
(b) 43
(c) 47
(d) 45

CO1,L3

Q(9) The sum of the digits of a two-digit number is 15 and the difference between the digits is 3. What is the two-digit number?
(a) 96
(b) 69
(c) 57
(d) can't say

CO1,L3

Q(10) Find the average of first 89 Whole numbers
(a) 82
(b) 44
(c) 46
(d) None

CO1,L3

Q(11) The difference between a two-digit number and the number obtained by interchanging the positions of its digits is 36. What is the difference between the two digits of that number?
(a) 4
(b) 3
(c) 6
(d) 7

CO1,L3

Q(12) A pupil's marks were wrongly entered as 83 instead of 63. Due to that the average marks for the class got increased by half. The number of pupils in the class is :
(a) 40
(b) 37
(c) 39
(d) 38

CO1,L3

Q(13) A two-digit number is such that the product of the digits is 8. When 18 is added to the number, then the digits are reversed. The number is:
(a) 24
(b) 67
(c) 68
(d) 25

CO1,L3

Q(14) If average of 25 persons is 50. Then if equally distributed each person SHOULD get .
(a) 25
(b) 50
(c) 1250
(d) 25x50

CO1,L3

Q(15) In a certain school,20% of students are below 8 years of age. The number of students above 8 years of age is $\frac{2}{3}$ of the number of students of 8 year of age which is 48. What is the total number of students in the school ?
(a) 100
(b) 110
(c) 120
(d) 130

CO2,L5

Q(16) Find 14.28% of 777
(a) 111
(b) 222
(c) 132
(d) None

CO6,L4

Q(17) The compound interest on a certain sum for 2 years at 10% per annum is Rs. 525. The simple interest on the same sum for double the time at half the rate percent per annum is:
(a) 400
(b) 500
(c) 450
(d) 600

CO2,L5

Q(18) In how many months will Rs.8000 yield Rs. 2648 as compound interest at 20% per annum compounded semi-annually?
(a) 18
(b) 24
(c) 12
(d) 30

CO2,L5

Q(19) If a sum of money at simple interest doubles in 7 years, it will become 3 times in:
(a) 14 years  (b) 21 years  (c) 90 years  (d) None

CO6,L4

Q(20) The percentage profit earned by selling an article for Rs. 1920 is equal to the percentage loss incurred by selling the same article for Rs. 1280. At what price should the article be sold to make 25% profit?
(a) 1800  (b) 2000  (c) 2200  (d) 2400

CO3,L2

Q(21) In an examination, 75% of candidates passed in English and 60% passed in Mathematics. 25% failed in both and 240 passed the examination. Find the total number of candidates.
(a) 492  (b) 300  (c) 500  (d) 400

CO2,L5

Q(22) What percentage of numbers from 1 to 70 have 1 or 9 in the unit's digit?
(a) 24  (b) 20  (c) 29  (d) 39

CO2,L5

Q(23) Water tax is increased by 50% but its consumption is decreased by 10%. Then, the increase or decrease percentage in the expenditure of the money is:
(a) 7 % increase  (b) 35% increase  (c) 7 % decrease  (d) None

CO2,L5

Q(24) A person incurs a loss of 5% be selling a watch for Rs. 1140. At what price should the watch be sold to earn 5% profit.
(a) 1100  (b) 1160  (c) 1200  (d) 1260

CO3,L2

Q(25) A man bought two goats for 1008. He sold one at a loss of 20% and other at a profit of 44%. If each goat was sold for the same price, the cost price of the goat which was sold at loss, was.
(a) 648  (b) 360  (c) 568  (d) 440

CO2,L5

Q(26) The simple interest on a certain sum at the rate of 16.25% for 4 years is Rs.12600 less than principal. Find out the principal?
(a) 32000  (b) 36000  (c) 40000  (d) 48000

CO2,L5

Q(27) In an election between two candidates, one got 55% of the total valid votes, 20% of the votes were invalid. If the total number of votes was 7500, the number of valid votes that the other candidate got, was:
(a) 2700  (b) 3678  (c) 3600  (d) 4500

CO2,L5

Q(28) A man spends 35% of his income on food, 25% on children's education and 80% of the remaining on house rent. What percent of his income he is left with ?
(a) 6%  (b) 7%  c) 8%  (d) 12%

CO3,L2

Q(29) AB, DEF, HIJK, ?, STUVWX
(a) LMNOP  (b) LMNOR  (c) MNOPQ  (d) QRSTU

,L1

Q(30) what should come in blank space? ELFA, GLHA, ILJA, _____, MLNA
(a) LLMA  (b) KLLA  (c) KLMA  (d) OLPA

CO6,L4

Q(31) 1, 1, 6, 6, 11, 11, 16, ? , ?
(a) 13, 11  (b) 16, 21  (c) 17, 21  (d) 21, 16

,L1

Q(32) If PEAR=2 and FROM = 1 and HOME = 2 then DEAR =
(a) 2  (b) 1  (c) 3  (d) None

CO3,L2

Q(33) If white is called blue, blue is called red, red is called yellow, yellow is called green, green is called violet, and violet is called orange, what would be the color of grass?
(a) VIOLET  (b) yellow  (c) GREEN  (d) None

CO3,L2

Q(34) If DBA is coded as 7 and ARE is coded as 24 How can PEA be written in that code?
(a) 22  (b) 29  (c) 31  (d) None

CO3,L2

Q(35) If PAR is coded as **%  LAP is coded as $**YOU is coded as @&# How can LPU be written in that code?
(a) $*#  (b) $**  (c) $##  (d) None

CO3,L2

Q(36) If code P is denoted by 7, X by 9, M by 5, Z by 8, L by 2, T by 1, then ZLTPXM will be
(a) 812651  (b) 821591  (c) 812715  (d) 821795

CO3,L2

Q(37) 22, 21, 23, 22, 24, 23, ... What number should come next?
(a) 28  (b) 25  (c) 29  (d) 21

CO3,L2

Q(38) If the animals which can walk are called dancers, animals who crawl are called Actors, those living in water are called criminals then what will a CAT be called ?
(a) Dancers  (b) Actors  (c) Criminals  (d) None

CO3,L2

Q(39) . If 'ACTOR' is coded as 'ZXGLI', and 'BOOK' is coded as 'YLLP', then 'PENCIL' will be coded as
(a) KVMXRO  (b) KUMRXO  (c) KVMXOR  (d) KZIXDG

CO3,L2

Q(40) In a certain code language,
(A) 'pit na som' means 'bring me water'
(C) 'tub od pit' means 'give me toy'
(B) 'na jo tod' means 'water is life'
(D) 'jo lin kol' means 'life and death'

Which of the following represents 'is' in that language ?
(a) tod
(b) na
(c) jo
(d) lin

**Q(41)** 14, 28, 20, 40, 32, 64, ... What number should come next?
(a) 56
(b) 79
(c) 41
(d) 40
CO6.L4

**Q(42)** 1.5, 2.3, 3.1, 3.9, ... What number should come next?
(a) 2.1
(b) 5.4
(c) 4.7
(d) 8.1
CO3.L2

**Q(43)** If x:y is 2:3, find the value of $(4x + 3y):(3x+7y)$
(a) 17 : 90
(b) 17 : 27
(c) 80:9
(d) None
CO3.L2

**Q(44)** The ratio of Boys & Girls is 7:5, when 40 girls more joined the ratio becomes 7 : 9. Find the initial number of girls
(a) 50
(b) 78
(c) 99
(d) None
CO1,L3

**Q(45)** A mixture contains alcohol and water in the ratio 4 : 3. If 5 liters of water is added to the mixture, the ratio becomes 4: 5. Find the quantity of alcohol in the given mixture.
(a) 10
(b) 12
(c) 15
(d) 13
CO1,L3

**Q(46)** In what ratio must a shopkeeper mix two varieties of pulses costing Rs. 10 per kg and Rs. 20 per kg respectively so as to get a mixture worth Rs. 12 per kg?
(a) 4 : 1
(b) 8:1
(c) 9 : 2
(d) None
CO1,L3

**Q(47)** In a fort, there are 1200 soldiers. If each soldier consumes 3 kg per day, the provisions available in the fort will last for 30 days. If some more soldiers join, the provisions available will last for 25 days given each soldier consumes 2.5 kg per day. Find the number of soldiers joining the fort in that case ?
(a) 400
(b) 500
(c) 528
(d) 582
CO1,L3

**Q(48)** The ratio of Boys & Girls is 2:5, when 50 girls more joined the ratio becomes 4 : 15. Find the initial number of boys
(a) 40
(b) 89
(c) 32
(d) None
CO1,L3

**Q(49)** A sum of Rs. 427 is to be divided among A, B and C such that 3 times A's share, 4 times B's share and 7 times C's share are all equal. The share of C is :
(a) 94
(b) 88
(c) 84
(d) 99
CO1,L3

**Q(50)** A invests Rs.600 for 7 months, B invests Rs.2100 for 2 months and C invests Rs.300 for 14 months in a business. If profit is Rs.2100 then what is the share of A?
(a) 200
(b) 700
(c) 900
(d) None
CO1,L3

**Q(51)** The number of oranges in three baskets are in the ratio of 3 : 4 : 5. In which ratio the no. of oranges in first two baskets must be increased so that the new ratio becomes 5 : 4 : 3?
(a) 1:2
(b) 2:1
(c) 3:4
(d) 4:3
CO1,L3

**Q(52)** In what ratio must a shopkeeper mix two varieties of pulses costing Rs. 10 per kg and Rs. 26 per kg respectively so as to get a mixture worth Rs. 18 per kg?
(a) 1:1
(b) 2 :1
(c) 4 : 1
(d) None
CO1,L3

**Q(53)** A mixture contains alcohol and water in the ratio 4 : 3. If 5 liters of water is added to the mixture, the ratio becomes 4: 5. Find the quantity of alcohol in the given mixture.
(a) 12
(b) 10
(c) 15
(d) 18
CO1,L3

**Q(54)** A sum of Rs. 427 is to be divided among A, B and C such that 3 times A's share, 4 tunes B's share and 7 times C's share are all equal. The share of C is :
(a) 84
(b) 96
(c) 140
(d) 120
CO1,L3

**Q(55)** A sum of Rs.312 was divided among 100 boys and girls in such a way that the boy gets Rs.3.60 and each girl Rs. 2.40 the number of girls is
(a) 30
(b) 35
(c) 40
(d) 45
CO1,L3

**Q(56)** Present ages of Sameer and Anand are in the ratio of 5 : 4 respectively. Three years hence, the ratio of their ages will become 11 : 9 respectively. What is Anand's present age in years?
(a) 24
(b) 26
(c) 28
(d) 30
CO1,L3

**Q(57)** The Indian Cricket team consists of 16 players. It includes 2 wicket keepers and 5 bowlers. In how many ways can a cricket eleven be selected if we have to select 1 wicket keeper and atleast 4 bowlers?
(a) 1092
(b) 1024
(c) 998
(d) 729
CO1,L3

**Q(58)** If there are 20 dots on a circle, how many triangles can be formed?
(a) 1140
(b) 540
(c) 940
(d) none of these
.L1

**Q(59)** How many numbers not exceeding 10000 can be made using the digits 2,4,5,6,8 if repetition of digits is allowed?
(a) 820
(b) 720
(c) 780
CO3.L2

Q(60) In how many different ways can the letters of the word 'CORPORATION' be arranged so that the vowels always come together?
(a) 47200
(b) 48000
(c) 42000
(d) 50400

CO3,L2

Q(61) Find the probability of getting heads in all four trials when a coin is tossed four times
(a) 1/16
(b) 1/32
(c) 1/64
(d) 1/8

CO3,L2

Q(62) How many integers, greater than 999 but not greater than 4000, can be formed with the digits 0, 1, 2, 3 and 4, if repetition of digits is allowed?
(a) 673
(b) 376
(c) 375
(d) 500

,L1

Q(63) Find number of diagonals in regular hexagon
(a) 9
(b) 19
(c) 199
(d) None

CO1,L3

Q(64) What is the probability that a number selected from 1, 2, 3....25 is a prime number?
(a) 7/29
(b) 9/25
(c) 8/25
(d) 11/25

CO3,L2

Q(65) How many words with or without meaning, can be formed by using all the letters of the word, 'DELHI' using each letter exactly once?
(a) 720
(b) 120
(c) 240
(d) None of these

CO3,L2

Q(66) A committee of 5 persons is to be formed from 6 men and 4 women. In how many ways can this be done when at least 2 women are included ?
(a) 196
(b) 186
(c) 206
(d) 216

,L1

Q(67) In How many different ways the letters of the word BLOCK can be arranged starting with B?
(a) 24
(b) 223
(c) 343
(d) None

CO1,L3

Q(68) One card is drawn at random from a pack of 52 cards. What is the probability that the card drawn is a face card (Jack, Queen and King only)?
(a) 1/13
(b) 2/13
(c) 3/13
(d) 9/52

CO1,L3

Q(69) In How many ways the word LOCKER be arranged such that all vowels are together?
(a) 240
(b) 120
(c) 22
(d) None

CO1,L3

Q(70) In a game show there are 5 prize cards and 20 blank cards. A contestant is asked to choose a card at random. What is the probability that he won a prize?
(a) 3/5
(b) 2/5
(c) 1/5
(d) 4/5

CO3,L2

Q(71) Introducing a man, a woman said, "He is the only son of my mother's mother." How is the woman related to the man ?
(a) mother
(b) neice
(c) sister
(d) daughter

CO6,L4

Q(72) T is father of V and W is son of U. X is brother of T. If V is sister of W, how is X related to W?
(a) Uncle
(b) Father
(c) Brother
(d) Son

CO6,L4

Q(73) Virat goes first 5 Km north then turns right and move 12 Km, how far is he from the starting point?
(a) 13 Km
(b) 23 Km
(c) 33 Km
(d) None

CO6,L4

Q(74) It is 4:30 by the clock. If the minute hand points towards the west direction, then which direction will the hour hand point to ?
(a) South-west
(b) North-west
(c) South-east
(d) North-east

CO6,L4

Q(75) A man walks 3 km toward East and then turns to his left. Now in which direction is he walking?
(a) South
(b) North
(c) East
(d) West

CO6,L4

Q(76) P +Q' means that P is the son of Q, 'P-Q' means that P is the wife of Q, 'P*Q' means that P is the brother of Q. 'P/Q' means that P is the mother of Q and 'P=Q' means that P is the sister of Q. then, what does X+Y+Z mean?
(a) X is the grandson of Z
(b) X is the brother of Z
(c) X is the mother of Z
(d) None

CO6,L4

Q(77) There are six persons A. B, C, D, E and F. C is the sister of F. B is the brother of E's husband. D is the father of A and grandfather of F. There are two fathers, three brothers and a mother in the group. Who is the mother ?
(a) A
(b) B
(c) C
(d) E

CO3,L2

Q(78) Shardul walked 21 km towards East and then 28 km towards South. How far is he from the starting point in km?
(a) 35
(b) 30
(c) 49
(d) 38

CO6,L4

Q(79) Showing Biden who is receiving the prize, Putin said, "He is the brother of my uncle's daughter." Who is Biden to Putin ?
(a) Son
(b) Cousin
(c) Nephew
(d) Brother-in-law

CO6,L4

Q(80) Amit started walking positioning his back towards the sun. After some time, he turned left, then turned right and towards the left again. In which direction is he going now?
(a) south
(b) north
(c) north or south
(d) west

CO3,L2

--End of Question paper--