Registration No.:_____

23242PEA31489

Paper Code:A

Course Code:PEA305
Course Title:ANALYTICAL SKILLS-I

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 calculator/log table is not allowed.*

Q(1) Find the sum of squares of the greatest value and the smallest value of K in the number so that the number 45082K is divisible by 3. ,L4

(a) 68 (b) 64 (c) 100 (d) 50

Q(2) 37.5% of 800 – 6.25% of 1600 =? ,L4

(a) 200 (b) 350 (c) 400 (d) 250

Q(3) What will be the highest power of 15 in 200! ? ,L4

(a) 13 (b) 15 (c) 48 (d) 49

Q(4) Ben exercises every 4 days and Isabel every 6 days. Ben and Isabel both exercised today. How many days will it be until they exercise together again? ,L5

(a) 11 (b) 12 (c) 13 (d) None

Q(5) What is that least number that should be added to 478 so that the number obtained becomes exactly divisible by 5,6, and 12? ,L4

(a) 6 (b) 12 (c) 2 (d) 52

Q(6) Find the least number which when divided by 9, 24 and 40, will leave in each case a remainder 5.Find the least number which when divided by 9, 24 and 40, will leave in each case a remainder 5. ,L4

(a) 360 (b) 355 (c) 365 (d) 185

Q(7) The average of 5 positive integers is 65.8. If the average of first two integers is 60 and the average of fourth and fifth integers is 89.5.Then, find the third integer. ,L4

(a) 20 (b) 30 (c) 40 (d) 50

Q(8) Find number of trailing zeros in 50! ,L5

(a) 25 (b) 22 (c) 18 (d) 12

Q(9) If the 7-digit number x468y08 is divisible by 24. Then what is the minimum value of (x + y)? ,L4

(a) 2 (b) 4 (c) 1 (d) 8

Q(10) The numbers 2, 4, 6, 8.....98, 100 are multiplied together. The number of zeros at the end of the product must be: ,L4

(a) 10 (b) 12 (c) 11 (d) 13

Q(11) Let x be least 2-digit number which leaves 1 as remainder when divided by 6 & 7 & y be least 2- digit number which leaves remainder 3 & 7 respectively, when divided by 7 & 11 then (y + x)/(y-x)? ,L4

(a) 54/7 (b) 48/17 (c) 42/5 (d) 58/15

Q(12) Find the total number of factors of 2400 ,L5

(a) 18 (b) 24 (c) 36 (d) 40

Q(13) What is the HCF of 4 / 5 , 6 / 8 , 8 / 25 ? ,L4

(a) 1/200 (b) 1/100 (c) 1/5 (d) 1/50

Q(14) Three numbers are in the ratio of 3:4:5 and their LCM is 4200. Their HCF is ? ,L4

(a) 70 (b) 60 (c) 20 (d) None of these

Q(15) A student multiplied a number by 3/5 instead of 5/3, What is the percentage error in the calculation ? ,L4

(a) 64 (b) 62 (c) 60 (d) 80

Q(16) A's salary is 40% of B's salary which is 25% of C's salary. What percentage of C's salary is A's salary ? ,L5

(a) 10 (b) 20 (c) 30 (d) 40

Q(17) Sujit scored 2240 marks in an examination that is 128 marks more than the minimum passing percentage of 64%. What is the percentage (approx.) of marks obtained by Manish if he scores 907 marks less than Sujit? ,L5

(a) 35 % (b) 40% (c) 45% (d) 36%

Q(18) A's salary is 40% of B's salary which is 25% of C's salary. What percentage of C's salary is A's salary? ,L3

a]10 b] 20 c] 30 d] 40 ,L5

Q(19) 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 30% profit?
(a) 2000 (b) 2050 (c) 2100 (d) 2080

Q(20) How much will Rs. 20000 amount to (approximately) in 2 years at the rate of 15% per annum, the interest being compounded semi-annually? ,L5
(a) 27809 (b) 27609 (c) 26709 (d) 28709

Q(21) What percent of 7.2 kg is 18 gms ? ,L5
(a) .25 (b) .50 (c) .20 (d) .30

Q(22) Murali deposited a certain sum of money at S.I, which amounts to Rs. 720 after 2 years and to Rs. 1020 after a further period of 5 years. The sum is ,L5
a] Rs.500 b] Rs.600 c] Rs.1200 d] Rs.1300

Q(23) If the income is increased by 17% then the nett income is decreased by 3%. Then find the rate of income tax. ,L4
(a) 15% (b) 20% (c) 24% (d) 29%

Q(24) John made a profit of 25% while selling a book for Rs.250. Find the cost price of the book. ,L5
a] Rs.160 b] Rs.170 c] Rs.180 d] Rs.200

Q(25) Two numbers are less than a third number by 30% and 37% respectively. How much percent is the second number less than the first? ,L5
(a) 7 (b) 10 (c) 4 (d) 3

Q(26) If A = x% of y and B = y% of x, then which of the following is true? ,L4
(a) A is smaller than B (b) A is greater than B
(c) Relationship between A and B cannot be determined (d) A is Equal to B.

Q(27) If the rate of interest be 4% per annum for first year, 5% per annum for second year and 6% per annum for third year, then the compound interest of 10,000 for 3 years will be ,L5
(a) 1600 (b) 1625 (c) 1575.20 (d) 2000

Q(28) A person borrows Rs. 5000 for 2 years at 4% p.a. simple interest. He immediately lends it to another person at6 1/4% per annum for 2 years. Find his gain in the transaction per year? ,L4
(a) 112.50 rs (b) 125 rs (c) 150 rs (d) 167.5 rs

Q(29) ABD, DGK, HMS, MTB, SBL, ... ? ,L5
(a) ZKU (b) ZKW (c) XKW (d) ZAB

Q(30) Which number would replace question mark in the series 70, 10, 90, ?, 110,50,130,70 ,L5
(a) 20 (b) 30 (c) 89 (d) None

Q(31) If water is called air, air is called green, green is called brown, brown is called steel, steel is called red, red is called rain, rain is called tree and tree is called road, what is the colour of human blood? ,L5
(a) Red (b) Water (c) Road (d) Rain

Q(32) In a certain code, MONKEY is written as XDJMNL. How is TIGER written in that code ? ,L5
(a) QDSHF (b) QDFHS (c) DQHFS (d) FDQSH

Q(33) C4X, F9U, I16R, ? ,L5
(a) L25P (b) L25O (c) L27P (d) None of these

Q(34) In a certain language KINDLE is coded as ELDNIK, how can CRITIC be coded in that code? ,L5
(a) EXOCRI (b) CXOICR (c) COXICR (d) CITIRC

Q(35) Find the missing term- F, L, Q, U, X, ? ,L5
(a) Y (b) Z (c) A (d) B

Q(36) Find the sum of the infinite series 4 + 2 + 1 + 1/2 + 1/4 + 1/8..... ,L5
(a) 8 (b) 7 (c) 5 (d) 6

Q(37) In a certain code 'il be pee' means 'roses are blue', 'sik hee' means 'red flowers' and 'pee nut hee' means 'flowers are vegetables'. How is 'vegetables are red flowers' written in that code? ,L5
(a) sik pee hee be (b) il sik nut hee (c) pee sik nut hee (d) Cannot be determined

Q(38) Find the missing number in the following series? 3, 5, 5, 19, 7, 41, 9, ? ,L5
(a) 71 (b) 41 (c) 56 (d) 89

Q(39) Find the first term of an AP whose 8th and 12th terms are 39 and 59 respectively? ,L5
(a) 5 (b) 4 (c) 3 (d) 2

Q(40) What will come next 2807,1400,697,346,171,__ ,L4
(a) 80 (b) 66 (c) 88 (d) 84 ,L2

Registration No.:_____

Q(41) Directions : Read the following information carefully and answer the questions given below.
In a certain code language,
"filter water found everywhere" is coded as "bhu man juk lop"
"found lost items everywhere" is coded as " gan bhu nut juk"
"apply filter search items" is coded as " vax der man nut"
"found water desert search" is coded as "but juk der lop"
What is the code for "lost water"?
(a) juk gan (b) nut gan (c) gan lop (d) lop bhu
,L5

Q(42) Find the next number in the given sequence? 11, 17, 39, 85, ?
(a) 163 (b) 170 (c) 190 (d) 200
,L5

Q(43)Two vessels A and B contain milk and water mixed in the ratio 8:5 and 5:2 respectively. The ratio in which these two mixtures be mixed to get a new mixture containing $69\frac{3}{13}$% milk,is
(a) 2 : 7 (b) 3 : 5 (c) 5 : 2 (d) 5 : 7
CO4,L5

Q(44) A milkman mixed some water with milk to gain 25% by selling the mixture at the cost price. The ratio of water and milk is respectively
(a) 5 : 4 (b) 4 : 5 (c) 1 : 5 (d) 1 : 4
CO4,L4

Q(45) . P and Q are two alloys of aluminum and brass pre- pared by mixing metals in proportions 7:2 and 7:11, respectively. If equal quantities of the two alloys are melted to form a third alloy R, the proportion of aluminum and brass in R will be:
(a) 5:9 (b) 5:7 (c) 7:5 (d) 9:5
CO4,L4

Q(46) 20 litres of a mixture contains milk and water in the ratio 3 : 1. Then the amount of milk to be added to the mixture so as to have milk and water in ratio 4 :1 is
(a) 7 litres (b) 4 litres (c) 5 litres (d) 6 litres
CO4,L4

Q(47) A milk vendor has 2 cans of milk. The first contains 25% water and the rest milk. The second contains 50% water. How much milk should he mix from each of the containers so as to get 12 litres of milk such that the ratio of water to milk is 3:5 ?
(a) 4 litres, 8 litres (b) 6 litres, 6 litres (c) 5 litres, 7 litres (d) 7 litres, 5 litres
CO4,L2

Q(48) What number must be added in each term of the fraction 7/31 so that it may become 5: 17?
(a) 9 (b) 10 (c) 11 (d) 3
CO4,L1

Q(49) A can contains a mixture of two liquids A and B in the ratio 7 : 5. When 9 litres of mixture are drawn off and the can is filled with B, the ratio of A and B becomes 7 : 9. How many litres of liquid A was contained by the can initially ?
(a) 10 (b) 20 (c) 21 (d) 25
CO4,L5

Q(50) The students in three batches at Mindworkzz are in the ratio 2:3:5. If 20 students are increased in each batch, the ratio changes to 4:5:7. The total number of students in the three batches before the increases were
(a) 10 (b) 90 (c) 100 (d) 150
CO4,L4

Q(51) One quality of wheat at Rs. 9.30 per kg is mixed with another quality at a certain rate in the ratio 8 : 7. If the mixture so formed be worth Rs.10 per kg, what is the rate per kg of the second quality of wheat ?
(a) Rs. 10.30 (b) Rs. 10.60 (c) Rs. 10.80 (d) Rs. 11
CO4,L5

Q(52) 8 litres are drawn from a cask full of wine and is then filled with water. This operation is performed three more times. The ratio of the quantity of wine now left in cask to that of the water is 16 : 65. How much wine did the cask hold originally ?
(a) 18 litres (b) 24 litres (c) 32 litres (d) 42 litres
CO4,L4

Q(53) Two vessels A and B contain spirit and water mixed in the ratio 5 : 2 and 7 : 6 respectively. Find the ratio in which these mixtures be mixed to obtain a new mixture in vessel C containing spirit and water in the ratio 8 : 5 ?
(a) 4 : 3 (b) 3 : 4 (c) 5 : 6 (d) 7 : 9
CO4,L2

Q(54) Tea worth Rs.126 per kg and Rs. 135 per kg are mixed with a third variety in the ratio 1 : 1 : 2. If the mixture is worth Rs. 153 per kg, the price of the third variety per kg will be :
(a) Rs. 169.50 (b) Rs. 170 (c) Rs. 175.50 (d) Rs. 180
CO4,L5

Q(55) In a mixture of 60 litres, the ratio of milk and water is 2:3. How much water must be added to this mixture so that the ratio of milk and water becomes 1:2?
(a) 10 litres (b) 12 litres (c) 15 litres (d) 20 litres
CO4,L2

Q(56) A container contains 40 litres of milk. From this container 4 litres of milk was taken out and replaced by water. This process was repeated further two times. How much milk is now contained by the container ?
(a) 26.34 litres (b) 27.36 litres (c) 28 litres (d) 29.16 litres
CO4,L5

Q(57) In a group of 6 boys and 4 girls, four children are to be selected. In how many different ways can they be selected such that at least one boy should be there?
a) 205 b) 194 c) 209 d) 159
,L5

Q(58) A basket contains 5 red 4 blue 3 green marbles. If three marbles picked up random, What is the probability that either all are green or all are red?
(a) 1/20 (b) 7/20 (c) 3/20 (d) 9/20
,L4

Registration No.:_____

Q(59) When two fair dice are rolled together, what is the probability that they both show even numbers?
(a) 1/2 (b) 2/3 (c) 3/4 (d) 1/4 ,L3

Q(60) How many 5-digit numbers are possible, criteria being all 5 digits are odd?
(a) 625 (b) 3125 (c) 125 (d) 120 ,L4

Q(61) A card is drawn from a pack of 52 cards. What is the probability that card is a Queen of red color?
(a) 1/4 (b) 1/5 (c) 1/26 (d) None ,L5

Q(62)A 4- digit number is formed by the digits 0, 1, 2, 5 and 8.without repetition.Find the probability that the number is divisible by 5.
(a) 1/5. (b) 2/5 (c) 3/5 (d) 4/5 ,L5

Q(63) The probability of getting at least one tail in 5 throws of a coin is?
a] 1/32 b] 31/32 c] 1/5 d] None of these ,L4

Q(64) In how many ways can 8 Indians, 4 Pakistanis and 6 Dutch be seated in a row so that all persons of the same nationality sit together?
(a) 18! (b) 8! 4! 6! (c) 3! (d) 3! 8! 4! 6! ,L4

Q(65) In how many ways can a group of 4 LADIES and 2 GENTLEMEN be made out of a total of 7 LADIES and 3 GENTLEMEN?
a) 135 b) 63 c) 105 d) 64 ,L5

Q(66) Two dice are thrown simultaneously. What is the probability of getting two numbers whose product is even?
(a) 3/4 (b) 2/3 (c) 4/5 (d) none ,L5

Q(67) In how many ways a committee, consisting of 5 men and 6 women can be formed from 8 men and 10 women?
(a) 11760 (b) 8550 (c) 15660 (d) None ,L5

Q(68) In a simultaneous toss of 3 coins find the probability of Exactly 1 Tail?
(a) 1/3 (b) 2/3 (c) 3/8 (d) 1/2 ,L5

Q(69) How many ways two teachers and three students sit around a circular table?
(a) 24 (b) 65 (c) 45 (d) None ,L5

Q(70) Find the probability that in a randomarrangement of the letter of words in the word 'PROBABILITY' the two I's cometogether
(a) 2/11 (b) 1/11 (c) 3/11 (d) 4/11 ,L4

Q(71) The length and breadth of a room are 8 m and 6 m respectively. A cat runs along all the four walls and finally along a diagonal order to catch a rat. How much total distance is covered by the cat?
(a) 33 (b) 38 (c) 23 (d) 28 ,L5

Q(72) One evening before sunset Rekha and Hema were talking to each other face to face. If Hema's shadow was exactly to the right of Hema, which direction was Rekha facing?
(a) South (b) North (c) East (d) Data inadequate ,L5

Q(73) Santosh goes first 7 km north then turns left and move 10 km, again he turns left and moves 7 km, how far is he from the starting point?
(a) 7 km (b) 10 km (c) 17 km (d) 24 km ,L3

Q(74) One morning Udai and Vishal were talking to each other face to face at a crossing. If Vishal's shadow was exactly to the left of Udai, which direction was Udai facing?
(a) East (b) West (c) North (d) South ,L5

Q(75) Gaurav walks 20 metres towards North. He then turns left and walks 40 metres. He again turns left and walks 20 metres. Further, he moves 20 metres after turning to the right. How far is he from his original position?
(a) 50 m (b) 60 m (c) 70 m (d) 80 m ,L2

Q(76) Pointing to a girl in the photograph,
Umesh said, "Her mother's brother is the only son of my mother's father." How is the girl's mother related to Umesh?
(a) Mother (b) Sister (c) Niece (d) Grandmother ,L2

Q(77) Two cars start from the opposite places of a main road, 150 km apart. First car runs for 25 km and takes a right turn and then runs 15 km. It then turns left and then runs for another 25 km and then takes the direction back to reach the main road. In the mean time, due to minor break down the other car has run only 35 km along the main road. What would be the distance between two cars at this point?
(a) 65km (b) 70 km (c) 75 km (d) 80 km ,L5

Q(78) Z is the father of X and Y is the brother of X. What is Y to Z?
(a) Daughter (b) Brother (c) Sister (d) Son ,L2

Q(79) T is the son of Q. Q is the daughter of Z, Z is the Husband of W and W is the mother of only son X. What is X to T?
(a) Uncle (b) Father (c) Son (d) Grandfather ,L2

Q(80) A is father of C and D is son of B. E is brother of A. If C is sister of D, how is B related to E ?
(a) Daughter (b) Brother (c) Husband (d) Sister-in-law ,L5

-End of Question paper-