Test 1

**1.** 
(A) 0
(B) 1
(C) 4
(D) 8

**2.**  of 96 is
(A) 72
(B) 76
(C) 80
(D) 84

**3.** If  and  Then what are the values of  and 
(A)  and 
(B)  and 
(C)  and 
(D)  and 

**4.** If  , then 
(A) 0
(B) 1
(C) 2
(D) 3

**5.** What is the 101st term of the sequence: 1, 4 7, 10, …. ?
(A) 281
(B) 291
(C) 301
(D) 311

**6.** What is the sum of the sequence: 10, 20, 30, 40, …. , 1000 ?
(A) 50,000
(B) 50,500
(C) 60,000
(D) 60,500

**7.**

Consider the larger circle and an inner circle. Point A is center of larger circle. If the line AB (not drawn) is 7 cm in length, then what is the area of larger circle.
(A) 154 cm
(B) 136 cm
(C) 112 cm
(D) 94 cm

**8.** A train traveled a distance of 6,000 km from Lahore to Karachi in 22 hours. And during travel from Karachi to Lahore the train got late due to engine failure and reached Lahore in 28 hours. What is the average speed of train?
(A) 180 km/hr
(B) 200 km/hr
(C) 220 km/hr
(D) 240 km/hr

**9.** If 6 men can complete a work in 15 hours. Then how many hours it will take if 10 men working on the same speed completes the work?
(A) 7
(B) 8
(C) 9
(D) 10

**10.** The ages of Sohail, Afzal and Bilal are 17, 16 and 12 respectively. If the age of Aslam also included the average of the ages is increased by 5. What is the age of Aslam?
(A) 32
(B) 33
(C) 34
(D) 35

Test 2

**1.** What is the solution of the equation


(A) 1
(B) 
(C) 
(D) 4

**2.** If , then what is the value of the function


(A) 2
(B) 4
(C) 8
(D) 12

**3.** What comes next in the sequence: 2   3   7   23   \_\_\_\_?
(A) 77
(B) 83
(C) 87
(D) 93

**4.** What is area of the shaded region (coloured region) in the following diagram


(A) 16 cm2
(B) 18 cm2
(C) 20 cm2
(D) 22 cm2

**5.** A car covered 300 km of distance in 3 hour 20 minutes, and then 240 km of distance in 2 hour and 40 minutes. What is the average speed of the car during this trip?
(A) 80 km/hr
(B) 90 km/hr
(C) 100 km/hr
(D) 110 km/hr

**6.** What is the value of  in the equation
(A) 1
(B) –2
(C) 2
(D) 3

**7.** How many feet there are in 4.5 meters? If 1 meter = 3.281 feet.
(A) 14.36
(B) 14.56
(C) 14.76
(D) 14.96

**8.** If person-A can complete a particular work in 10 days and person-B can completes that same work in 12 days. How much time it will take if they work together?
(A) 5 days and 11 hours
(B) 5 days and 16 hours
(C) 6 days and 11 hours
(D) 6 days and 16 hours

**9.** Consider the diagram below, where the length of the line AB is 6 cm. And, C is center of the circle


What is the area of the shaded region (region in maroon colour)?
(A) 19.09 cm2
(B) 19.29 cm2
(C) 19.49 cm2
(D) 19.69 cm2

**10.** A student obtained the marks: 60, 50, 70, 65 and 85 in Physics, Chemistry, Statistics, English and Biology respectively, and 0 marks in Mathematics. What the average marks he obtained?
(A) 55
(B) 60
(C) 65
(D) 70

**11.** What are values of  and y in the following pair of equations
(A)  and 
(B)  and 
(C)  and 
(D)  and 

**13.** What is the geometric mean of the numbers: 2, 4 and 8?
(A) 3
(B) 4
(C) 5
(D) 6

**14.** What is the 71st term of the sequence: 4, 7, 10, 13, …. ?
(A) 214
(B) 216
(C) 218
(D) 220

**15.** What is the sum of the sequence: 5, 10, 15, …., 5000 ?
(A) 250,2200
(B) 250,2300
(C) 250,2400
(D) 250,2500

Test 3

**Questions 1 – 7**
Nine individuals: Ahmed, Bilal, Danish, Faisal, Haroon, Liaquat, Maryam, Shiza and Zeeshan are to serve on three committees labeled A, B and C.

* Each candidate should serve on exactly one of the committees
* Every committee must have atleast one member
* Committee A should consist of exactly one member more than that of committee B
* Among Maryam, Shiza and Zeeshan none can serve on committee A
* Among Faisal, Harron and Liaquat none can serve on committee B
* Among Ahmed, Bilal and Danish none can serve on committee C

**QUESTIONS**

**1.** In case Danish and Zeeshan are the individuals serving on committee B, how many of the nine individuals should serve on committee C?
(A) 2
(B) 3
(C) 4
(D) 5
(E) 6

**2.** Of the nine individuals, the maximum number that can serve together on committee C is
(A) 5
(B) 6
(C) 7
(D) 8
(E) 9

**3.** In case Ahmed is the only individual serving on committee B, which among the following should serve on committee A?
(A) Bilal and Danish
(B) Bilal and Faisal
(C) Bilal and Liaquat
(D) Faisal and Haroon
(E) Danish and Haroon

**4.** In case, any of the nine individuals serves on committee C, which among the following could not be the candidate to serve on committee A?
(A) Ahmed
(B) Bilal
(C) Danish
(D) Liaquat
(E) Shiza

**5.** In case, Bilal, Danish and Maryam are the only individuals serving on committee B, the total membership of committee C should be
(A) 5
(B) 4
(C) 3
(D) 2
(E) 1

**6.** In case, Bilal, Danish and Maryam are the only individuals serving on committee B, then the members of committee C should be
(A) Haroon and Shiza
(B) Maryam and Zeeshan
(C) Shiza and Zeeshan
(D) Faisal and Shiza
(E) Haroon and Maryam

**7.** Among the following combinations which could constitute the membership of committee C?
(A) Danish and Shiza
(B) Faisal and Maryam
(C) Liaquat, Maryam and Shiza
(D) Faisal, Haroon and Liaquat
(E) Ahmed, Faisal, Maryam and Zeeshan