Basic Mathematics

1. City A has a current population of 2000,000 with an annual growth rate of 2.5%. What will be its expected population after one year?
   a. 250,000
   b. 2275000
   c. 2350,000
   d. 2050,000
   e. 2225,000

2. In a class of 300, 5% students are with disability. What is the exact number of students with disability in the class?
   a. 30
   b. 15
   c. 25
   d. 10
   e. 18

3. District D has a population of 1800,000 with an average 170 cases of TB occurring each year in a population of 100,000. How many new cases of TB do you expect in the district during a year?
   a. 3500
   b. 3060
   c. 2500
   d. 4000
   e. 5000

Answer Key:
1. d
2. b
3. b
English Language

In each of the following sentences choose the word that fits best to complete the sentence.

1. He was leaning ______________ the wall.
   A. Behind  
   B. Beside  
   C. After  
   D. Against  
   E. Towards

2. To give an entertainer a hand is to ____________ him
   A. Applaud  
   B. Resent  
   C. Help  
   D. Jeer  
   E. Correct

3. A cohort study ____________ a sample size of 500 participants showed good results.
   A. resulted  
   B. With  
   C. About  
   D. Reflecting  
   E. Increasing

4. Lack of public health awareness take an increasing ____________ on the health of the society.
   A. Tax  
   B. Fee  
   C. Benefit  
   D. Awareness  
   E. Toll

5. To listen to reason is to display ____________.
   A. Wickedness  
   B. Order  
   C. Fair-mindedness  
   D. Generosity  
   E. Pity
Logic and Reasoning

1. A study of children in Charsadda showed that 80% of the children who went to school, developed nearsightedness (weak eyesight), while only 20% of the children who never went to school nor received formal education, developed nearsightedness. Which of the following statements is supported by this study?
   a. School education causes weak eyesight
   b. Illiterate children were not affected by poor eyesight
   c. Children going to school have higher chance of developing nearsightedness
   d. ¼ of the children are illiterate

2. A chemicals factory produces a number of different chemicals and has to follow certain rules about how different chemicals can be processed in the plant. The plant processes five different chemicals, with the following constraints:
   - On any given day, a maximum of three chemicals can be processed.
   - Chemical X may be processed any day except for Mondays and Thursdays.
   - Chemical O can be processed on Tuesdays and Wednesdays.
   - Chemical H may be processed on Mondays, Wednesdays and Fridays.
   - Chemical S cannot be processed on Fridays.
   - Chemical M cannot be processed on Wednesday.

Which three chemicals can be processed on Monday?
   a. X, S, M
   b. M, O, S
   c. H, S, M
   d. X, O, H

Answer Key:
1 c
2 c

Public Health

1. Which of the following is a common disease in Pakistan?
1. HIV/AIDS
2. Diarrhea
3. Multiple sclerosis
4. Alzheimer’s disease

2. A balanced diet contains:
   a. Water, Juices, Salad, Kebabs, Rice
   b. Carbohydrates, Proteins, Fats, Minerals, Vitamins
   c. Carbohydrates, Proteins, Minerals, Vitamins
   d. None of the above

Answer Key:
1 b
2 b

Writing Sample

Write a response (not more than one page) discussing how much you agree or disagree with this statement and why. Give suitable examples to where necessary, to support your point of view.

1. Pakistan’s government should address immediate problems of people of Pakistan rather than planning for future that has not arrived yet.
   OR

2. Social media such as Facebook and Twitter, have generally caused a negative effect on society rather than positive.