



NATIONAL UNIVERSITY OF MODERN LANGUAGES
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF PEACE AND CONFLICT STUDIES

ENTRANCE TEST MODEL PAPER FOR BRIDGING PROGRAMS

Name: _____

Time: 1 Hour

Father's Name: _____

Total Marks: 75

Roll No: _____

Note

(The test is divided into four parts. Each part is compulsory. The detail regarding the marks distribution is given below)

English Language composition, Grammar Comprehension etc	20
Arithmetic	10
Analytical	15
Subject Based	30

PART 1

Q 1: Read the following passage and answer the questions.

(10 Marks)

The origin of water on Earth is linked to the formation of Earth. According to some currently accepted theories Earth began as a waterless mass of rock surrounded by cloud of gas. Radioactive materials in the rock and increasing pressure in the Earth's interior gradually produced enough heat to melt the interior of the Earth. The heavy materials, such as iron ores, then sank. The light silicates (rocks made up of silicon and oxygen) rose to the Earth's surface and formed the earliest crust.

Many silicate rocks have water molecules integrated into their atomic arrangement – water can be driven out of such rocks by the action of heat. Thus the heating of the

Earth's interior caused release of water contained in such rocks to the surface. Over millions of years, water thus released collected slowly in low places of the crust and formed the oceans. Whatsoever might have been the origin of water, earth's original supply of water is still in use and very little, if any, has been added during the past billion years or so. The same water has been pumped time and again from the oceans into the air, dropped down upon the lands and transferred back to sea. A single drop of water spends 8 to 10 days passing through air, 2 to 3 weeks in a river, as long as 100 years in a Himalayan Glacier or from 100 to 40,000 year underground.

As chemical, water is unique and rather odd. All its oddities can be traced to its molecular structure. It is a rather sturdy molecule. Until some 180 years ago water was believed to be an invisible element rather than a chemical compound. Today students of science know that each of its molecules is made up of two atoms of Hydrogen and one atom of oxygen, the bond between the oxygen and the hydrogen atom is polar, that is, it has positive and negative charged ends because of an unequal distribution of electrons. The oxygen atom has a denser distribution of electrons around it and hence a net negative charge. The hydrogen atoms in a water molecule, on the other hand, are positively charged. This leads to a lopsided (molecule with electrical charges concentrated on opposite sides). Water molecules, are therefore, attracted to each other as well as to other molecules having a similar charge distribution. And many of the characteristic features of water can be traced to the so-called hydrogen bond between its molecules.

When a substance dissolves in another substance, the resulting distribution of the molecules of the two substances has lesser number of molecules of either substance surrounded by its own kind. This necessitates disrupting prevailing intermolecular forces in each of them. The molecules of most organic compounds (e.g., oily substances are nonpolar) as a consequence the intermolecular forces between organic molecules are much weaker than in water. If such a substance is to mix with water – the resulting distribution of molecules must lead to lowering of energy content.

If more energy is required to separate water molecules from each other (by breaking hydrogen bonds) than is gained when water molecules get closer to organic molecules, the two substances will not mix together. It is for this reason that water and oil do not mix and many organic compounds do not dissolve in water.

Now answer the following questions

1. How can you say that water is a chemical?

2. Why is the supply of water on earth limited?

3. What do you know about the formation of the earliest crust of earth?

How are oceans formed?

4. Is it possible to mix oil and water?

**Q2. Choose the right option.
Marks)**

(10

1. It _____ (rain) since last night, and it _____ (look) as if it may rain for the rest of the day.
2. My school _____ (hold) a food-and-fun fair next month to raise money for the school building-fund.
3. Look! Those bees _____ (buzz) round the flowers. The bees _____ not only _____ (collect) honey, but they _____ (pollinate) the flowers as well.
4. Mary told him what _____ (happen) to his dog, so he _____ (run) home to see how it _____ (be).
5. _____ the taxi _____ (come) yet ? It _____ (be) already ten minutes late. I hope it _____ (be) here soon.

PART 2

Basic Arithmetic's (10 Marks)

(The section may contain 5 or 10 questions based on the level of difficulty)

1. $7/20 =$
A. 0.035
B. 0.858
C. 0.35
D. 3.5
2. Which of the following is closest to 27.8×9.6 ?
A. 280
B. 300
C. 2,800 D. 3,000
3. Three people who work full-time are to work together on a project, but their total time on the project is to be equivalent to that of only one person working full-time. If one of the people is budgeted for one-half of his time to the project and a second person for one third of her time, what part of the third worker's time should be budgeted to this project?
A. 13.3%
B. 35.2%
C. 16.7% D. 18.7%
4. $313 - 225 =$
A. 112
B. 115
C. 88
D. 1115

5. $2\frac{1}{2} + 4\frac{2}{3} =$

- a) $6\frac{1}{6}$
- b) $6\frac{5}{6}$
- c) $7\frac{1}{6}$
- d) $7\frac{5}{6}$

PART 3

Analytical

(15 Marks)

7 persons live in a street, having houses in line. Consider the following:

1. A lives in the corner's house
2. C is between E and G
3. There is 1 house between D and F
4. F is neighbour of G
5. There are two houses between A and G

Answer the following questions based on the information below

1. Who lives in the second corner?

- (A) B
- (B) C
- (C) D
- (D) E
- (D) F

2. Who lives in the middle?

- (A) C
- (B) D
- (C) E
- (D) F
- (E) G

3. Who lives between B and G?

- (A) C
- (B) D
- (C) E
- (D) F
- (E) G

4. _____ is neighbor of A?

- (A) B
- (B) C
- (C) E
- (D) F
- (E) G

5. There are _____ houses between B and E?

- (A) 0
- (B) 1
- (C) 2
- (D) 3
- (E) 4

PART 4(30 Marks)

Choose the right answer.

(15 Marks)

1). Which are the aligned years in Pakistan's foreign policy:

- a) 1963-1972
- b) 1954-1962
- c) 1947-53
- d) None of these

2). Zia established a course for Pakistan that enabled the government to manage a complex:

- a) Foreign policy
- b) Co-existence
- c) None of these

3). In the hindukush mountains all passes connect Pakistan with:

- a) China
- b) Afghanistan
- c) Tajikistan
- d) None of these

4). The Hasni tribe is settled in:

- a) Southern NWFP

- b) Western Baluchistan[/b]
- c) Central Sindh
- d) None of these

5). Rechna and Bari Doabs are considered:

- a) Thickly populated region
- b) Very thickly populated region
- c) Most thickly populated region
- d) None of these

6. Presidential form of Govt. was declared in which constitution?

- (a) 1962
- (b) 1973
- (c) 1985
- (d)None of these

7) On the map of the world which country appears as long shoe?

- (a) Italy
- (b) Malta
- (c) Croatia
- (d) Moldova

8) The Headquarter of Red Cross are in:

- (a) London
- (b) New York
- (c) Berlin
- (d) Geneva

9) Diamer-Bhasha Dam has been planned on the river:

- (a) Jehlum
- (b) Chenab
- (c) Indus
- (d) None of these

10) The Rio conference on sustainable development was convened in:

- (a) 1972
- (b) 1992
- (c) 2002
- (d) None of these

11) World Trade Organization was established in:

- (a) 1992
- (b) 1993
- (c) 1994
- (d) 1995
