The City School

**North Nazimabad Boys Campus**

**Second Monthly Test Session 2019 – 20**

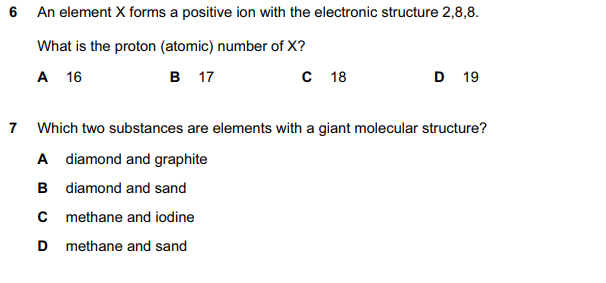
**Class - 9**

**Time: 35 Minutes Chemistry Marks 25**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Sec: \_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Q.1. Choose the best answers: [5]

1. An element X forms a positive ion with the electronic structure 2, 8.8.



1. Which of the following contains the same number of electrons as an atom of neon?
2. Cl-  **B.** Li+ **C.** C O-2 **D.** Na
3. The letters X, Y and Z represent different atoms.

|  |  |  |
| --- | --- | --- |
| atoms | Proton number | Nucleon number |
| X | 19 | 40 |
| Y | 19 | 39 |
| Z | 20 | 40 |

1. What can be deduced from the proton numbers and nucleon numbers of X, Y and Z?
2. X and Y are the same element.
3. X and Z are the same element.
4. X has more protons than Y.
5. Z has more neutrons than Y
6. An atom, X, contains 16 protons. Which statement about X is correct?
7. It cannot form an ion.
8. It contains 6 electrons in the outer shell.
9. It contains 6 neutrons.
10. It has relative atomic mass of 16.

Q2. Some atoms denoted by the letter A to E, have proton numbers which are

A = 3, B = 10, C = 9, D = 17, E = 11. [3]

1. Which of these have complete outermost shell?

…………………………………………………………………………………………………………..

1. Which of these are in Group I of Periodic table?

………………………………………………………………………………………………………………………

1. Which of these have 7 electrons in there outermost shell?

………………………………………………………………………………………………………………………

Q.3. Give scientific reasons: [4]

1. Mg ion is smaller than Mg atom.

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1. Non metals make Anion

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

Q.4. (a) Define the term isotopes. [2]

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(b) Draw atomic structures of isotopes of Hydrogen.

[3]

**(c) Radioactive iodine is used to treat some cancerous tumors.**

**Two radioactive isotopes of Iodine have**

1. A=125 Z= 53
2. A= 131 Z= 53

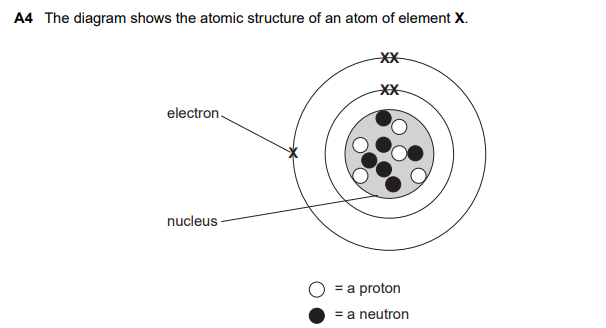
For each isotope state the type and number of subatomic particles present.

**………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….…… [2]**

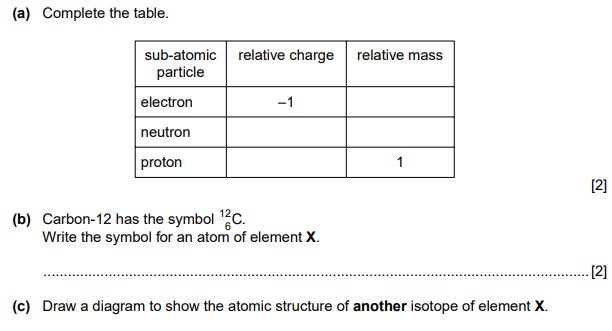
(d) Describe the applications of Radioisotopes.

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Q.5. The diagram shows the atomic structure of an atom of element X



1. Complete the given table:



1. How many electrons can be occupied by first shell?

………………………………………………………………………………………………………………….…..……. [1]

Look at given atomic structures

Which electron arrangement corresponds to the first element on period 2 of the Periodic Table?