



## Entry Test - MS Chemistry (sample Paper)

Govt. College Women University Sialkot

Time allowed: 100 min

Marks: 100

Student's Name:

Father's Name:

### Marks Distribution:

Chemistry: 70 %

Quantitative: 15 %

English: 15 %

### Chemistry Sample Questions

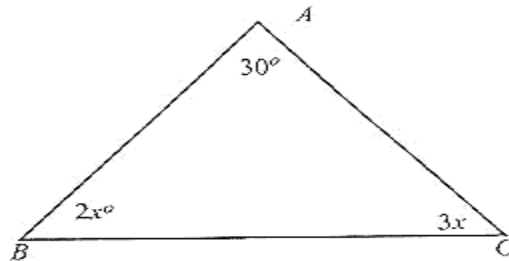
#### Q. Encircle the correct answer. Each question carries 1 mark.

- A bathochromic shift is also:
  - Called the blue shift
  - Called the red shift
  - Related with red end of the spectrum
  - All of the above
- Keto-enol tautomerism is possible only in those aldehydes and ketones which have atleast:
  - One oxygen atom
  - One hydrogen atom
  - One alpha hydrogen
  - None of them
- The NMR spectroscopy is related to which of the following region:
  - Microwave
  - X-rays
  - Radio frequency
  - Far UV
- Which of the following is not expected to be coloured:
  - Mn<sup>2+</sup>
  - Fe<sup>3+</sup>
  - Ti<sup>3+</sup>
  - Cu<sup>+</sup>
- Soft acids are mostly:
  - Heavy transition metal ions of 4d series
  - Heavy transition metal ions of Lanthanide series
  - Ions of low oxidation state
  - All are correct
- One among the following set of quantum numbers defines the highest energy electron in scandium (I) ion
  - $n = 3, l = 1, m = 0, s = -1/2$
  - $n = 3, l = 0, m = 0, s = -1/2$
  - $n = 4, l = 0, m = 0, s = +1/2$
  - $n = 3, l = 2, m = 2, s = +1/2$
- 50 m<sup>3</sup> of a gas at 298 K is heated to 322 K at constant pressure. What is the new volume of gas?
  - 54 m<sup>3</sup>
  - 0.022 m<sup>3</sup>
  - 190 m<sup>3</sup>
  - 46 m<sup>3</sup>

8. Order of a chemical reaction?
- |                              |                       |
|------------------------------|-----------------------|
| a. Is always a whole number  | b. Cannot be negative |
| c. Can have a fraction value | d. Cannot be zero     |

**Quantitative Sample Questions**

9. If it is now April, what month will be after the 100 months from now?
- |           |            |
|-----------|------------|
| a. April  | b. June    |
| c. August | d. October |
10. What is the value of  $x$  in the following figure?



- |               |               |
|---------------|---------------|
| a. $30^\circ$ | b. $40^\circ$ |
| c. $50^\circ$ | d. $60^\circ$ |
11. If  $x$  is increased by 10% and  $y$  is decreased by 10%, the resulting numbers will be equal. What is the ratio  $x$  to  $y$ ?
- |          |           |
|----------|-----------|
| a. $3/4$ | b. $9/11$ |
| c. $4/3$ | d. $5/3$  |

**English sample Questions**

12. The controversy is likely to create ..... between the two rivals
- |               |            |
|---------------|------------|
| a. doubt      | b. amity   |
| c. bitterness | d. revenge |
13. You have to leave your shoes ..... the door when you enter the house.
- |       |         |
|-------|---------|
| a. in | b. over |
| c. to | d. by   |
14. Synonym of ARROGANT is ..... ?
- |                |           |
|----------------|-----------|
| a. progressive | b. humble |
| c. conceited   | d. noble  |
15. LIQUID: HYDRAULICS
- |                     |                       |
|---------------------|-----------------------|
| a. motion: dynamics | b. water: hydroponics |
| c. data: statistics | d. music: eurythmic   |