END OF TERM 1 EXAMINATIONS, 2007
S.1 CHEMISTRY
TIME: 1 HOUR.

Name…….. Stream……

Instructions:

- *Attempt ALL questions in Section A, B and C.*
- *For Section A; write the best correct alternative A, B, C or D in the answer sheet provided at the end of the section.*
- *NEAT WORK is a must in all Sections.*

SECTION A:

1. Small pieces of razor blade were mixed finely with soil dust, small pieces of the blade can be recovered by:
   A. Picking them one by one
   B. Filtration
   C. Use of a magnet
   D. Use of bee-hive shelf

2. In order to prevent our hands from getting burnt, the handles of sauce pans are covered with:
   A. Plastic
   B. An insulator
   C. Conductor
   D. Semi – conductor.

3. The process by which we obtain common salt from a solution containing salt and water is known as:
   A. Filteration
   B. Evaporating
   C. Distillation
   D. Condensation.

4. One of the following gases is used in the fire extinguisher, which one is this?
   A. Nitrogen
   B. Oxygen
   C. Carbondioxide
   D. Argon

5. Ethanol and water mix to give;
   A. a mixture
   B. a solution
   C. miscible liquids
   D. a solvent

6. Immiscible liquids can be better separated by;
   A. Filter funnel
   B. Sedimentation
   C. Separating funnel
   D. Distillation.

7. Chemistry involves the study of:
   A. Chemicals in the laboratory
   B. Matter and its behaviour
   C. None of the above
   D. Matter and relationship with energy.

8. The following are characteristics of non - luminous flame except;
   A. Blue in colour
   B. Burns back
   C. Quiet
   D. Noisy

9. A liquid when transferred into another container changes into its,
   A. Shape
   B. State
   C. Volume
   D. Mass

10. During the pouring of a mixture of two liquids A and B in a separating funnel, B was found to be less denser than A. When the tap is opened,
   A. Liquid A goes off first
   B. Liquid B goes off first
   C. Both liquids go out at the same time.
   D. Liquid A follows B.

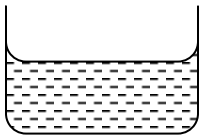
11. The most important gas used as a plant nutrient is:
   A. Oxygen
   B. Nitrogen
   C. Helium
   D. Carbondioxide

12. Ice, water and steam are;
   A. Different chemical states of the same compound
   B. Same physical states of same chemical substance.
   C. Different physical states of same compound
   D. Different chemical states of different compound.

13. Substances in the mixture are;
   A. Chemically combined
   B. Physically combined
   C. Separated through chemical means
   D. Can be mixed by heating.

14. Which of the following shows the collect order of steps when lighting a Bunsen burner?
   A. Open the gas tap fully, fix the gas tube onto the burner, light the gas, fix the gas tube onto the gas tap.
   B. Fix the gas tube onto the gas tap, fix the gas tube onto the burner, open the gas tap fully and light the gas.
   C. Fix the gas tube onto the burner, fix the gas tube onto the gas tap, light the gas and open the gas tap fully.
   D. Light the gas, open the gas tap, fix the gas tube onto the tap, fix the gas tube onto the burner.

15 The diagram of apparatus shown is of:



A. A beaker
B. A conical flask
C. A flat bottomed flask
D. Thermos flask.

16. The liquid obtained after filtration is called:
A. A solution
B. A residue
C. A distillate
D. A filterate

17. Which one of the following mixtures is best separated by using a separating funnel?
A. Ethanol and water
B. Petrol from crude oil
C. Oil and water
D. Sugar and water

In each of the questions 18 – 20 one or more of the answers given mat be correct. Read each questions carefully and then indicate the correct answer according to the following.

WRITE	*ANSWERS*
A	⟶ If 1, 2, 3 are correct
B.	⟶ If 1, 3 are correct
C.	⟶ If 2, 4 are correct
D.	⟶ If 4 only is correct.

18. The following describe a luminous flame.
1. Quiet
2. Noisy
3. Has four zones
4. Has three zones.

19. The following are true about a mixture of diesel and petrol.
1. They are miscible liquids
2. They can be separated by fractional distillation
3. They have different boiling points.
4. They can be separated by simple distillation.

20. In a separating funnel, a mixture of oil and water have the following properties:
1. They are immiscible liquids

2. Oil is more denser than water
3. Oil forms the top layer.
4. Water is less denser than oil.

ANSWER SHEET FOR SECTION A.

1.	6.	11.	16.
2.	7.	12.	17.
3.	8.	13.	18.
4.	9.	14.	19.
5.	10.	15.	20.

SECTION B:

Answer to questions in this section to be written NEATLY in spaces provided.

21. Write TRUE or FALSE against each of the statements given in (a – f).

(a) The liquid obtained after distillation is called a filtrate: ----------

(b) Blood is a natural example of a mixture: ----------

(c) Respiration by animals increases the amount of oxygen in the air: ----------

(d) A Bunsen burner is used for heating in the laboratory: ----------

(e) A non – luminous flame is noisy: ----------

(f) Oiling prevents rusting in moving parts of machines: ----------

22. *Match the statements given in (i –viii) with words provided in the list below.*

Chemical change, Air, Immiscible liquids, Miscible liquids, evaporation to dryness, zinc, mercury, ice, filtrate, distillate, condensation, luminous zone.

(i) Water in the solid state:----------

(ii) Digestion of a meal in the stomach: ----------

(iii) A gaseous mixture:----------

(iv) Is used to obtain salt crystals from a salt – water mixture: ----------

(v) Form a uniform layer when put in one container: ----------

(vi) Is a liquid metal at room temperature:----------

(vii) The process by which dew is formed: ----------

(viii) The liquid obtained after distillation:----------

SECTION C:

Answer to questions in this section to be written NEATLY in the spaces provided.

23. (a) Draw a well labelled diagram of the type of Bunsen burner flame obtained when the air – holes are open.

(b) Give any 4 differences between a luminous flame and a non – luminous.

LUMINOUS FLAME	*NON – LUMINOUS FLAME*
i)	
ii)	
iii)	
iv)	

(c) Explain why it is not advisable to use a luminous flame during experiments which involves heating in the laboratory.

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