

31.03.2016

Grade - 9.



1st Term Test - 2016

Grade - 9

Science

2 hrs.

Answer all the questions.

Underline the correct answer.

- (1) Select the vector quantity.
1) Distance 2) speed 3) Force 4) Time.
- (2) The first astronomer who forwarded the heliocentered idea,
1) Pythagorus 2) copernicus 3) Aristorcas 4) Aristotle.
- (3) The most suitable equipment to observe micro-organisms
in a sample of water.
1) Simple microscope 2) Handlens 3) optical microscope
4) Binocular.
- (4) When you heat a substance in a crucible, the crucible
should be kept,
1) On a stand 2) on a watch glass.
3) On a tripod 4) on a clay triangle.
- (5) In which disease the Anopheles mosquito acts as a vector.
1) Filaria 2) Malaria 3) Dengue 4) Rabies.

(6) Readings can be taken by the voltmeter and the ammeter that are connected to the circuit respectively,

- 1) current and potential difference.
- 2) Resistance and current
- 3) Potential difference and current
- 4) Potential difference and resistance.

(7) What are the changes occurred in carbohydrates and lipids during food spoilage.

- 1) Fermentation, Rancidification
- 2) Rancidification, Putrefaction.
- 3) Rancidification, fermentation.
- 4) Fermentation, Putrefaction.

(8) Two diseases caused by bacteria.

- | | | | |
|-----------------|-------------|-----------------|-------------|
| 1) Aluham | , diarrhoea | 3) Typhoid | , Influenza |
| 2) Tuberculosis | , Rabies | 4) Tuberculosis | , Syphilis. |

(9) Least amount of mass can be measured by the chemical balance is,

- 1) 0.1 g 2) 0.001 g 3) 0.01 g 4) 0.0001 g.

(10) The instrument in the laboratory which cannot be used to measure mass.

- 1) spring balance
- 2) Triple beam balance
- 3) chemical balance
- 4) watch glass.

(2 × 10 = 20)

PART II

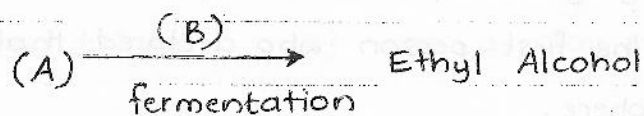
Answer all the Questions

- ① • Students of grade 9 have to do an activity to show that scientific method is most suitable to solve problems. Their problem was "the electric fan in the class did not work when it is switched"

- i) Draw a flow chart to represent the steps of the scientific method.
- ii) Who introduced the scientific method?
- iii) Write 2 assumptions that can be made by the students for the above problem.
- iv) What is a control experiment?
- v) Write the 4 main systems in an optical microscope.
- vi) If the magnifying power of the eye piece lens of a light microscope is $\times 15$ and the magnifying power of the objective lenses are $\times 20$, $\times 10$, $\times 15$, find the maximum magnification.
- vii) Write 4 instances where we use a simple microscope.

- ② • Micro-organisms are useful for our daily activities as well as they become harmful.

- i) Write 5 products made by using the micro-organisms except the industry given below.
- ii) Name A, B, C, D in the following process.



- iii) What is artificial vinegar available in the market?
- iv) Write 2 harmful effects of micro-organisms.
- v) Write 3 methods of spreading causative agents and write

a disease spread by each method.

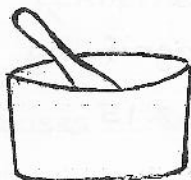
vi) What is an antibiotic?

③ (i) Draw the following laboratory equipments.

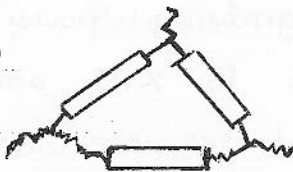
- measuring cylinder
- conical flask
- Thistle funnel with a tap
- Density bottle.
- crucible with a lid.

(ii) Name the following laboratory equipments.

a)



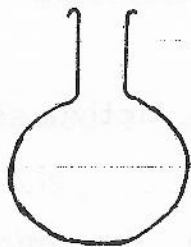
b)



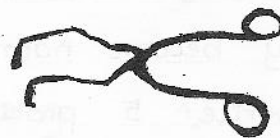
c)



d)



e)

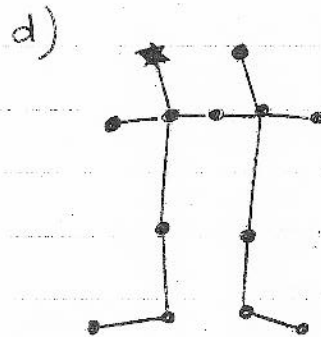
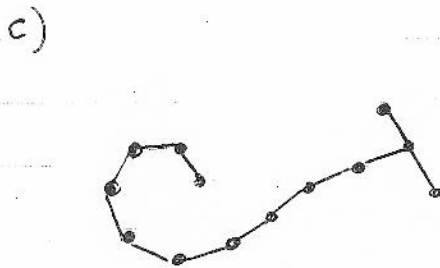
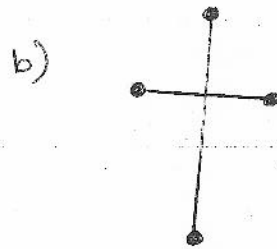
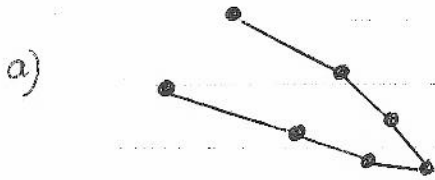


④

Discoveries of astronomers in an ages when technology was not highly developed was spectacular.

- (i)
- Name the first person who declared that the earth is a sphere.
 - Name the first astronomer who put forward the heliocentered idea.
 - Who compiled the book 'Almagest'?
 - Who formulated the laws of planetary motion?
 - Who is considered as the father of modern astronomy?

(2) Name the constellations given below.



(3) Draw the following constellations

- i) Orion ii) Leo iii) Ursa major.

(4) Name the constellations of the following brightest stars.

- i) Rigel ii) Sirius iii) Castor
iv) Regulus v) Pollux