

Year End Examination - 2015

SCIENCE

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Grade 9

Time: 02 Hours & 30 min.

Name/ Index No.

PART - I

- Answer all questions.

- Underline the correct answer.

01 The third step of scientific method is,

- (1) Observation (2) Problem identification
(3) Formulate hypothesis (4) Testing the hypothesis

02 What is the equipment used to measure liquids by removing a definite volume and which is calibrated from top to bottom,

- (1) Measuring cylinder (2) Pipette
(3) Burette (4) Volumetric Flasks

03 Who put forward the heliocentric mode about the solar system ?

- (1) Aristarchus (2) Aristotle (3) Johann Kepler (4) Galileo Galilei

04 The closest star to the earth is,

- (1) Alpha Centuary (2) Proxima Centuary (3) Polaris (4) Betelgeuse

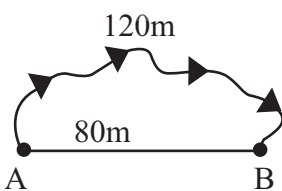
05 Select the vector quantity from the following quantities,

- (1) Distance (2) Speed (3) time (4) Displacement

06 Standard international unit for is,

- (1) MS^{-1} (2) Ms^{-1} (3) ms (4) ms^{-1}

07



Shortest distance between A and B is 80m and time taken to travel from A to B in that path was 10 s. The velocity of the object is?

- (1) $8ms^{-1}$ (2) $10ms^{-1}$
(3) 40ms (4) $12ms^{-1}$

08 Not an application of microbial activity,

- (1) Compost production (2) Glass production
(3) Dairy production (4) Vinegar production

09 Some chemical reactions are given below,


- A Calcium Oxide and water B Urea and water
C Glucose and water D Sodium Hydroxide and water

From above reactions which reaction absorb heat from environment and gets the container cold,

- (1) A and B (2) B and C (3) C and D (4) A and D

10 Symbols of Phosphorous, Silicon and Argon are given respectively in,

- (1) P, Si, Ar (2) P, S, Ar (3) Si, Al, P (4) Ci, P, Ar

- 11 A yellow colour non metal was burnt in Oxygen. It gave out a blue colour flame and formed a gas with irritating smell. This non-metal could be,
 (1) C (2) P (3) S (4) Si
- 12 Because of its high resistance to electricity alloy Nichrome is used to make heat generating parts in electrical appliances. The components of this alloy are,
 (1) Nickel and Iron (2) Copper and Nickel
 (3) Iron and Chromium (4) Nickel and Chromium
- 13 A test has been conducted to identify a nutrient in a food sample. As the result a red coloured globules could be seen floating on top of the solution this nutrient could be,
 (1) Lipids (2) Protein (3) Glucose (4) Starch
- 14 What are the composite materials strengthened by fibres,
 (1) Concrete (2) Cardboard (3) Plywood (4) Asbestos
- 15 An example for perennial plant is,
 (1) Chillies (2) Jak (3) Brinjals (4) Paddy
- 16 What type of a lens should wear to correct the defect of long sightedness,
 (1) a concave lens (2) a plain glass
 (3) a convex lens (4) both convex lens and a concave lens
- 17 A floral formula of a flower is given below.
- 
- According to this the incorrect statement is,
 (1) It has a radial symmetry. (2) It's a female flower.
 (3) It has 5 petals. (4) The number of stamens are infinite.
- 18 One nanometer is equal to,
 (1) 10^{-9} m (2) 10^9 cm (3) 10^{-1} m (4) 10^{-9} cm
- 19 Select the answer which is the composite fruit,
 (1) Apple (2) Tomato (3) Pineapple (4) Strawberry
- 20 Is not a region that is considered as regions where droughts occur frequently is Sri Lanka,
 (1) Mannar (2) Hambantota
 (3) North Central Province (4) Gampaha

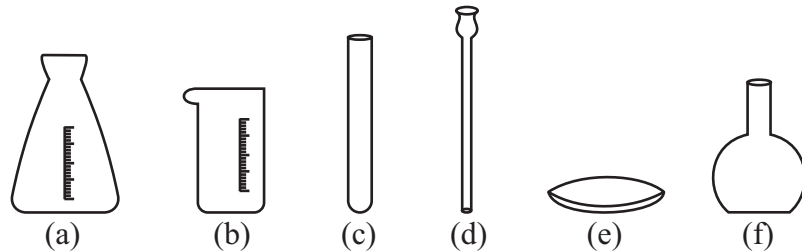
PART - II

- **First question is compulsory. Answer the first question and four more.**
- 01 You are assigned to arrange a poster on diversity of plants by your science teacher as a group assessment. The topics given by the teacher are,
- Classification of fruits.
 - Adaptations of fruits and seeds for the wide dispersal of plants.
- A (i) What are the materials you need to make the poster. (01m.)
 (ii) Give two sources where you can find information to make the poster. (02m.)
 (iii) What are the problems you encountered during the group work?
 Give two of them. (02m.)
 (iv) How did you overcome them? (02m.)

- B (i) Give the simple classification of fruits and give one example for each. (03m.)
 (ii) Why plants have adaptations to disperse fruits and seeds. (02m.)
 (iii) Give four main methods of fruits and seeds dispersal and write one adaption which can be seen in fruits and seeds for disperse by each method. (04m.)

- 02 A (i) Name three main methods of preparing compost. (03m.)
 (ii) Which groups of micro - organisms help in preparing compost. (01m.)
 (iii) What do you understand by food spoilage. (01m.)
 (iv) Write 02 changes occur in food after spoilage. (01m.)

B

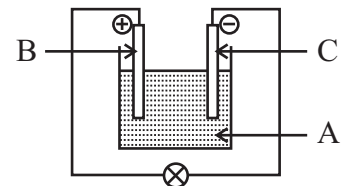


- (i) Name the equipments a to f. (03m.)
 (ii) Write two things you should consider when using the laboratory equipments. (01m.)
 (iii) Write down the uses of following equipments.
 (a) Crucible with lid (b) Pipette (01m.)

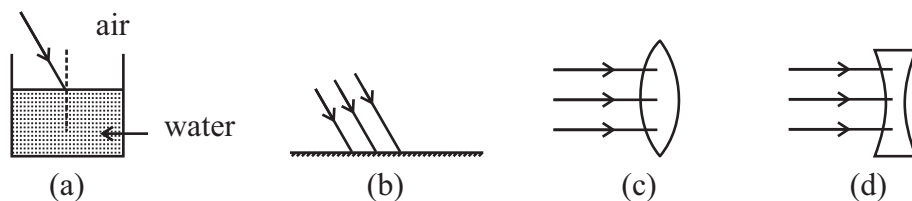
- 03 A We use different types of energies to do our - day - to day activities. There are many energy resources that we use to generate power.
 (i) What are primary energy resources? (01m.)
 (ii) Name two primary energy resources. (01m.)
 (iii) What are secondary energy resources? (01m.)
 (iv) Name two secondary energy resources. (01m.)
 (v) What is meant by energy crisis? (01m.)
 (vi) Give two alternative energy resources which are popular around the world. (01m.)

B Above diagram shows a simple cell.

- (i) Name the A, B and C parts. (03m.)
 (ii) Write two major disadvantages of this. (02m.)

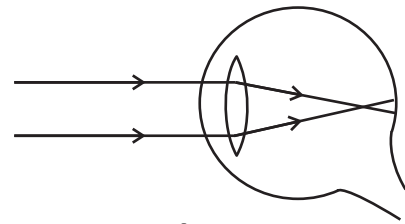


- 04 A (i) Complete the following diagrams. (04m.)

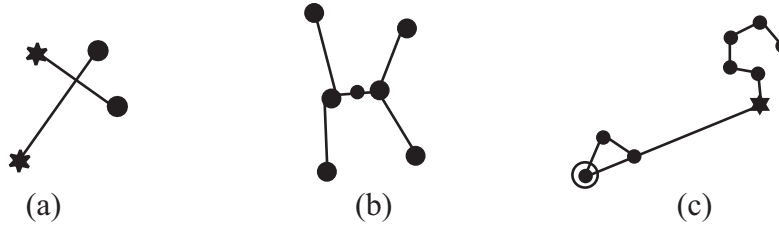


- (ii) Give the two laws about reflection. (02m.)
 (iii) Give two uses of reflection. (01m.)

- B (i) What is the eye defect shown in this diagram? (01m.)
- (ii) Draw a diagram to show the correction of this eye defect. What is the lens used here? (03m.)



05 A



- (i) Identify the star patterns given in above. (03m.)
- (ii) What is "ecliptic"? (01m.)
- (iii) Name the zodiacs in order. (03m.)
- (iv) Give two uses of star patterns. (01m.)
- B (i) Write two things that Gallelio observed through his telescope. (02m.)
- (ii) What is the name given for a star when it's life span is over? (01m.)

06 A Nano technology is considered as the 5th industrial revolution dawning on the world.

- (i) who is the father of Nano technology? (01m.)
- (ii) What is the approach found in nano technology. (01m.)
- (iii) Give an example for a natural nano system. (01m.)
- (iv) Name two carbon nano structures. (02m.)
- (v) Give two disadvantages of nano technology. (02m.)

B There are lot of animals with wonderful characteristics, answer the questions by considering the given names of animals.

(sea horse / vampire bat / planaria / arrow frog / Bufo Kotagamii)

- (i) Name the animal which is a fish but having an elongated nose like a horse. (01m.)
- (ii) Who is the highly poisonous amphibian recorded so far? (01m.)
- (iii) Name the mammal feed on blood of mammals and birds. (01m.)
- (iv) Mention the amphibian endemic to Sri Lanka. (1 x 4 = 04m.)

07 Droughts occur frequently across the earth. But difference could be seen from place to place and region to region.

- (i) Name two regions in Sri Lanka which consider. (01m.)
- (ii) Give two behaviour of animals which give us a message about droughts. (02m.)
- (iii) State two human activities which help in the occurrence of droughts. (02m.)
- (iv) Name two natural phenomenon which cause tsunami. (02m.)
- (v) Write down two things you should do during a tsunami. (02m.)
- (vi) If you are live in a tsunami vulnerable area give 2 things you should concern most. (02m.)