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மேல் மாகாணக் கல்வித் திணைக்களம்
Department of Education - Western Province

වර්ෂ අවසාන ඇගයීම
ஆண்டிறுதி மதிப்பீடு - 2014
Year End Evaluation

ශ්‍රේණිය தரம் Grade	විෂයය பாடம் Subject	පත්‍රය வினாத்தாள் Paper	කාලය காலம் Time
08	Science	I, II	02Hours

Name :- ..... Index No :- .....

- Answer all the questions in part - I

Part - I

- **Underline the correct or most suitable answer.**

(01) A thick forest which shows distinct stratification, and large trees about 40m tall.
(1) Dry mixed evergreen forest.
(2) Thorny shrubs and wood.
(3) Montane forest.
(4) Tropical rain forest.

(02) A mineral which is composed of elements.
(1) limestone (2) Apatite (3) diamond (4) haematite

(03) The SI unit of measuring pressure is,
(1) Nm (2) Nm^{-1} (3) Nm^{-2} (4) Nm^{2}

(04) Energy consumed by using a device with a power of 5W for 30 seconds.
(1) 5×30J (2) 5×1/2 J (3) 5/30J (4) 30/5J

(05) What is **the** type of carbon that cannot be found naturally ?
(1) coal (2) diamond (3) Fullerin (4) Graphite

(06) Select the correct answer for the use of snake venom.
(1) to produce anti - venom, and medicine for wheeze.
(2) to produce food and medicine for Laprosy
(3) to produce insecticide and medicine for measles
(4) to produce weedicide and medicine for wheeze

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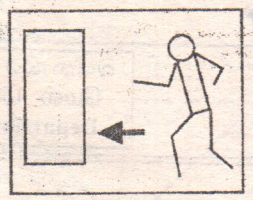
(07) The symbol shown in the picture gives a signal.



(1) The direction to travel during tsunami.
(2) A door to the entry.
(3) Exit for an immegency fire.
(4) No entry.

(08) According to the bonding arrangement of particles in the matter, if they are loosely packed, select the **incorrect** statement of the nature of the matter.
(1) The particles slip one over the other
(2) can be compressed easily
(3) has a flowing nature.
(4) Takes the shape of the vessel when inserted.

(09) An iron nail doesn't float in the water but a ship made of iron can float. In such a situation.
(1) The mass and the volume of the object that needs to float is increased.
(2) The mass and the volume of the object that needs to float is decreased.
(3) The mass is kept constant and the volume is increased.
(4) The volume is kept constant and the mass is increased.

(10) Select the answer which has only antiseptics
(1) Phenol, chloriene solution.
(2) surgical spirits and boric acid
(3) Phenol, surgical spirit
(4) Boric acid and chlorine solution.

(11) Expansion of Aluminium is greater than that of brass. Expansion of iron is less than that of brass. Select the correct statement of the expansion of bimetallic strip made out of Aluminium and brass.
(1) Aluminium and brass expand equally
(2) Iron expands greater than aluminium
(3) Aluminium expands greater than iron
(4) Can not say anything about expansions

(12) The correct statement which shows the disease, and the vector respectively.
(1) Malaria, Anopheles
(2) Dengue , Culex
(3) Chiken gunya, Culex
(4) Japanese encephalitis, Aedes

(13) The 'Aurora' flashes which give off light at midnight, originate at the
(1) Thermosphere
(2) Exosphere
(3) Mesosphere
(4) Trophosphere

(14) Compound leaves can be seen in

(1) Papaw, Manioc, Sesbenia
(2) Mara, Tamarind, Manioc
(3) Velkohila, Rubber, Câstor [Edaru]
(4) Rubber, Pea, Sesbenia

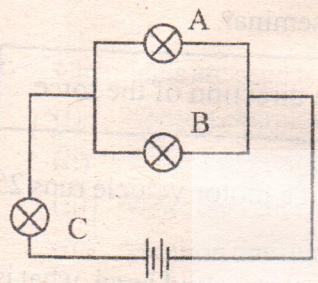
(15) What is the incorrect statement on sound?

(1) Can go through a vaccumes.
(2) transmit as waves
(3) the speed of wave in air is $340ms^{-1}$
(4) Can be reflected.

(16) A lighting flash which strikes a building through an antenna wire is called,

(1) Lateral lightning
(2) Contact lightning
(3) step lightning
(4) Direct lightning

(17) Given below is an electric circuit which has 3 bulbs and 2 cells. Select the correct statement.



(1) A,B,C bulbs are connected in parallel
(2) A,B,C bulbs are connected in series
(3) A,B bulbs are connected in parellel and C bulb is connected in series.
(4) A,B bulbs are connected in series and C bulb is connected in parellel

(18) "Buffer Zone" has been created out side the boundaries of reserved forests with the purpose of.

(1) Protecting the forest
(2) Protecting the animals
(3) Uplifting the financial capabilities of man
(4) Preventing the soil from erosion.

(19) What is the condition that you can see in the paddy field when the paddy bug attacks?

(1) Paddy seeds become empty and white in colour
(2) The leaves of paddy are pierced and damaged
(3) destruction of paddy plants then and there
(4) Paddy leaves are rolled to make their nests.

(20) Given below are few attitudes of students on environment. The statement which can be accepted most.

(1) Must give the capital punishment to the people who destroy environment.
(2) It is better not to harm the environment other than the protection.
(3) Environment is not important to man.
(4) We shouldn't do new creations as they are harmful to the environment.

Science - Part 2

- **First question is compulsory.**
- **Answer five questions including the first one.**

(01) Imagine that you and a group of students are given an opportunity to conduct a seminar on Energy, work and force, as an evaluation.

(i) State the theme your group worked out

(ii) Mention 2 sources your group used to get information relevent to the theme.

(iii) What are the visual aids that can be used when you are conducting a seminar?

(iv) As you are working as a resource person in the seminar, state 2 qualities you developed within yourself

(v) Before the presentation you should verify the accuracy of informations. What is the method you follow to get correct information?

(vi) Below given is a formula presented by a student at the seminar.

Work done = Force exerted × Distance moved in the direction of the force.

(a) Calculate the work done using above equation if a motor vehicle runs 250m in a linear path with a force of 1000N.

(b) To lift an object with a mass of 20 kg 10m above the ground level, what is the amount of work done?

Weight = mass × gravitational acceleration ($g = 10ms^{-2}$)

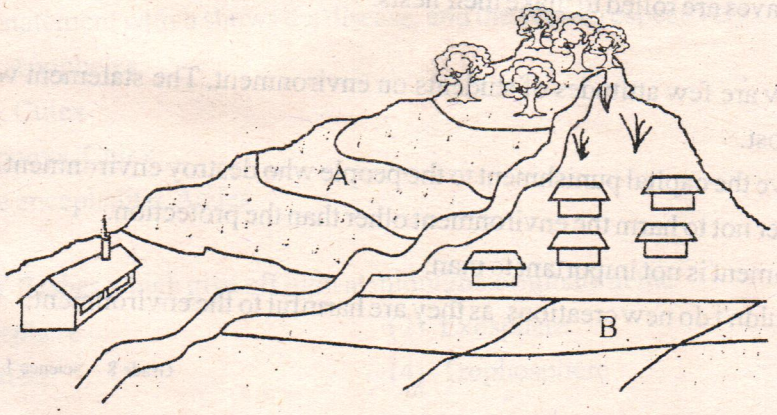
(02) Activities of organisms and their body structure is organized according to the habitat they live in.

(A) (i) Write one strategy used by plants to obtain light from an environment in which has low light intensity.

(ii) Mention a factor which affect the formation of grass lands.

(iii) Write 3 benititial characters of marshes.

(B) A man made environment is shown below.



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(i) Write 2 important characters of this environment.

(ii) Write a process which pollutes the river water shown in the diagram

(iii) Write 2 types of crops that can be cultivated in A and B places.

(iv) Name a natural disaster that can occur to damage houses in this area.

(v) Write 2 differences between a natural environment and an artificial environment.

03) Basic components of matter are known as elements.

(A) (i) Write the standard symbols for elements given below.

a. Silicon b. Sodium c. iron d. Mercury.

(ii) Name the most abundant element on the earth.

(iii) Write two common features of non metals.

(iv) Name the non-metal elements used for rubber vulcanizing

(B) Chemicals are used for different domestic purposes.

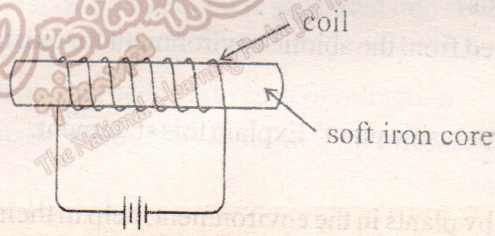
(i) Name a chemical used as detergents.

(ii) Write 2 natural flavoures used in food preparation.

(iii) Write the function of "preservatives".

(iv) Mention one quality that changes as a result of spoilage of food.

04) An electro magnet prepared by a student is given below.



(i) Write a difference between a permanent magnet and an electro magnet.

(ii) Mention one change that can be done to increase the power of the electro magnet.

(iii) Write one instance where electro magnets are used.

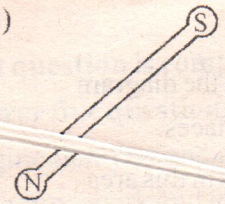
(iv) Say whether the magnetic poles repel or attract each other when the poles of the other magnet are brought near.

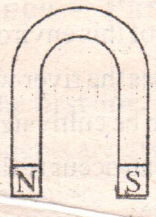
(a) When North poles of both magnets are brought near.

(b) When North pole of one magnet is brought near the south pole of the other magnet.

(c) When South poles of both magnets are brought near.

(v) Name the permanent magnets given below.

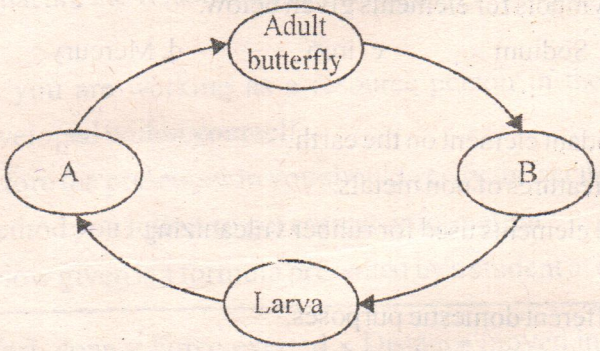
(A) 

(B) 

(C) 

(vi) Briefly explain how to find the direction using a bar magnet.

(05) The diagram shows a life cycle of a butterfly.



(i) Name A and B according to the life cycle of butterfly.

(ii) What are the uses of butterflies when cultivating crops?

(iii) Write two special features of butterfly larva.

(iv) What is the advantage gained by animals when consuming different food during different stages in their life cycle ?

(v) Who are named as pests?

(vi) Write 2 factors obtained from the abiotic environment for existance of organisms

(vii) "*Loranthus* is a semi-parasitic plant" Explain this statement.

(06) Enormous diversity shown by plants in the environment, help in their survival.

(i) Write 2 features of a plants that grow in xerophytic conditions.

(ii) The root system of the plant is responsible for absorbing water and minerals and to anchor the plant to the soil. But some roots have specific functions too. Write the functions of roots given below.

(a) adipose roots -

(b) Prop roots -

(c) stilt roots -

(d) aerial roots -

(iii) Write 2 examples that show plants with under ground stems.

(iv) Name 2 plants that provide plant fibres for plant products.

(v) Different plant parts can be used to make ornaments Write two facts that you should consider when making above ornaments.

(vi) Write one problem you face when making ornaments from plant parts.

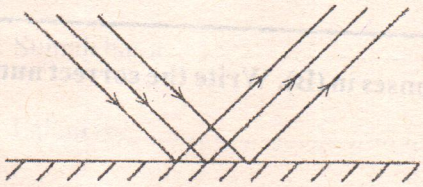
(vii) Write 2 ornaments you make using plant parts.

(07) Light is necessary for vission. Objects that give out light are called luminous objects.

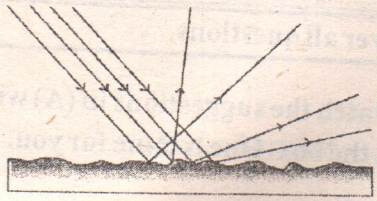
(i) Name a natural luminuos object and artificial luminous object.

(ii) Write 2 special characters of light rays.

(iii) Given below are two types of light reflection.



A



B

Name types of reflections that show in A and B

(iv) If a person is in front of a plain mirror.

(a) When he/ she walks towards the mirror; Explain what happens to the magnitude of the image.

(b) When he/she walks away from the mirror; explain what happens to the location of the image (image distance)

(v) As a result of refraction white light is separated into seven colours. Name the seven colours respectively.

(vi) Write two incidents that occur as a result of refraction.

(vii) If a hack saw blade vibrates 60 times in 2 minutes, calculate the frequency of the hack saw blade.