



PRECIOUS STAR EXAM SERIES

STANDARD EIGHT - YEAR 2022

{003}

SCIENCE

{8}

TIME: 1 HRS 40 MIN

READ THESE INSTRUCTIONS CAREFULLY

1. You have been given this question paper and a separate answer sheet. The question paper contains 50 questions
2. Do any necessary rough work in this paper.
3. When you have chosen your answer, mark it on the **ANSWER SHEET**, not in this question paper.

HOW TO USE THE ANSWER SHEET

4. Use an ordinary pencil only.
5. Make sure that you have written on the answer sheet

YOUR INDEX NUMBER

YOUR NAME

NAME OF YOUR SCHOOL

6. By drawing a **dark line** inside the correct numbered boxes mark your full Index Number (ie. School Code Number and the three-figure Candidate's Number) in the grid near the top of the answer sheet.
7. Do not make any marks outside the boxes.
8. Keep your answer sheet as clean as possible and **DO NOT FOLD IT**.
9. For each of the Questions 1-50 four answers are given. The answers are lettered A, B, C, D in each case only **ONE** of the four answers is correct. Choose the correct answer.
10. On the answer sheet show the correct answer by drawing a dark line inside the box in which the letter you have chosen is written.

Example

In the question booklet

22. Which of the following ways cannot make water safe for drinking?

A. Boiling

B. Filtering

C. Distilling

D. Treating with chloride.

The correct answer is B

5. [A] [B] [C] [D]

10. [A] [B] [C] [D]

17. [A] [B] [C] [D]

22. [A] [B] [C] [D]

In the set of boxes numbered 17, the box with letter C printed in it is marked

11. Your dark line **MUST BE** within the box.
12. For each question **ONLY ONE** box is to be marked in each set of four boxes.

This question paper consists 6 pages

TURN OVER

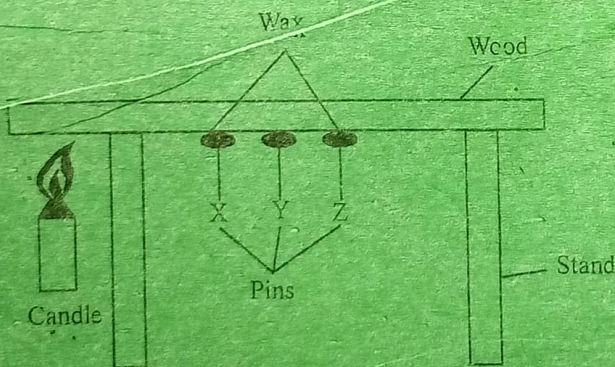
1. Which of the weather instruments in the table below is not matched to the principle behind its working?

<u>Instrument</u>	<u>Principle used</u>
A. Thermometer	- Expansion and contraction of matter
B. Windsock	- Air in motion
C. Rain gauge	- Liquids occupy space
D. Windvane	- Air expands

2. Which of the following is **not** a function of placenta in a human being? Allows

- A. passing of nutrients from the child to the mother
- B. gaseous exchange between the child and the mother
- C. removal of waste products from foetus to the mother
- D. exchange of oxygen from the mother to the foetus

3. Grade 5 learners set up the experiment below to test which pin will fall first.



Which pin was the last to fall?

- A. X
 - B. Y
 - C. Z
 - D. None
4. Which of the following is **not** an interdependence between plants?
- A. Shade
 - B. Pollination
 - C. Habitat
 - D. Support

5. A person was observed with the following signs and symptoms in hospital;

- Blockage of bile and pancreatic duct
- Holes on the intestine
- Loss of body weight

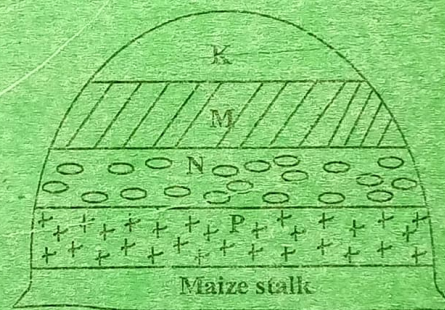
Which parasite caused these symptoms?

- A. Liverfluke
- B. Tapeworm
- C. Hookworm
- D. Roundworm

6. Which of the following is **correctly** matched with the part of crop it attacks?

- A. Stalkborer - Cut the stem of seedlings
- B. Cutworm - Makes holes on stem
- C. Aphids - Suck plant sap
- D. Termites - Bore holes on grains

7. The diagram below shows the layers of a compost heap. In which layer is farmyard manure likely to be found?



- A. P
- B. M
- C. K
- D. N

8. The following are functions of the roots;

- (i) Storage of food
- (ii) Absorption of mineral salts and water
- (iii) Breathing
- (iv) Holding plants firmly in the soil

Which of the functions are performed by all roots?

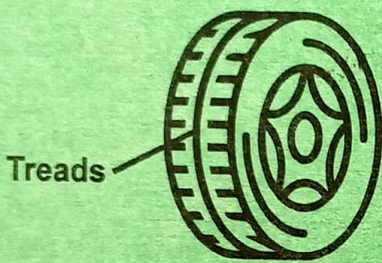
- A. iv and i
- B. ii and i
- C. iii and i
- D. ii and iv

9. Which of the following diseases is a sexually transmitted infection?

- A. Measles
- B. Common cold
- C. Malaria
- D. Syphilis

10. Which of the following statements explains how plants help to control soil erosion?
- Their leaves prevent rainwater from reaching the ground
 - Their leaves prevent water run-off from passing between the plants
 - Their leaves check the force of the falling drops of rain
 - The leaves prevent the sun's heat from loosening the soil

11. The diagram below shows a vehicle tyre. Which is the use of the treads on the tyre?



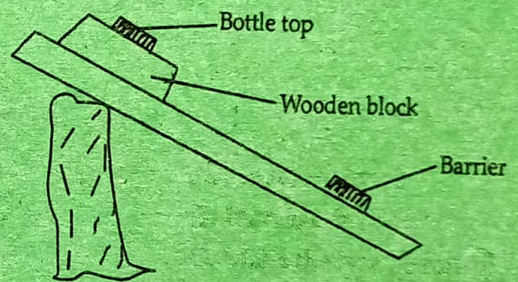
- Reduce friction
 - Increase friction
 - Make the tyre beautiful
 - Make the tyre hold air
12. Which of the following is **not** an immunisable disease?
- Malaria
 - Diphtheria
 - Yellow fever
 - Tetanus
13. Which of the following shows the **correct** stage of foetal development?
- Zygote → Embryo → Foetus
 - Embryo → Foetus → Zygote
 - Foetus → Embryo → Zygote
 - Zygote → Foetus → Embryo
14. Which of the following drugs gives a feeling of drunkenness and high sensation?
- Glue
 - Cocaine
 - Bhang
 - Tobacco

15. Which of the following activities will produce a loud sound?
- Dropping a textbook 1m from the ground
 - Dropping a textbook 10cm from the ground
 - Dropping a textbook 15cm from the ground
 - Dropping a textbook 10m from the ground

16. The following are examples of invertebrates **except**;
- snail
 - seal
 - earthworm
 - squids

17. Which of these activities will not produce convectional current?
- Boiling porridge
 - Heating of smoke
 - Heating of steam
 - Spraying water in the air

18. The diagram below illustrates a certain force. Which one is it?

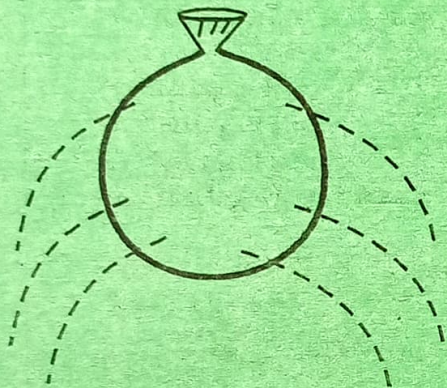


- Inertia of rest
 - Weight
 - Friction
 - Inertia of motion
19. A small iron nail will sink in water while a large log of wood will float. This is as a result of difference in _____.
- mass
 - material
 - size
 - weight
20. A nurse met with a five years old boy who had the following signs and symptoms;
- Weak
 - Wasted muscles
 - Had wrinkled face
 - Was crying a lot
- She advised her mother to feed him on
- enough balanced diet
 - enough carbohydrates
 - a lot of vitamins
 - enough proteins

21. Which of the following materials allow some light to pass through but one cannot see through clearly?

- A. Window pane, oiled paper
- B. Air, kerosene, oiled paper
- C. Oiled paper, frosted glass
- D. Wood, piece of glass

22. Std 7 boys put some water in balloon and made several holes. Water sprouted as shown below;



The experiment shows that pressure in liquids

- A. increases with depth
- B. decreases with depth
- C. is exerted in all sides
- D. is the same at the same level

23. Which of the following components of soil can be investigated through burning?

- A. Mineral particles
- B. Living organisms
- C. Air
- D. Humus

24. Which of the following statements is false about sound?

- A. Sound travels best in solids
- B. A whisper is a soft sound
- C. Sound travels poorest in liquids
- D. Ears of some animals make sound loud

25. Which component of environment is found everywhere?

- A. Plants
- B. Soil
- C. Water
- D. Air

26. Which one is not a source of light?

- A. Matches
- B. Sun
- C. Stars
- D. Venus

27. Which pair is made up of electrical appliances only?

- A. Dynamo and bulb
- B. Television and iron box
- C. Generator and solar panel
- D. Torch and dry cells

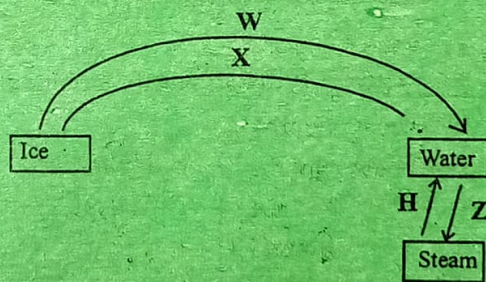
28. When breathing in the

- A. lungs shrink
- B. diaphragm acquires dome shape
- C. diaphragm flattens
- D. volume of the chest decreases

29. The gas that is produced by plants during photosynthesis can also be used for

- A. germination in seeds
- B. extinguishing fire
- C. making electric bulbs
- D. making proteins by legumes

30. The diagram below shows changes in states of matter



Which letters represent condensation and freezing respectively?

- A. H and X
- B. W and Z
- C. H and Z
- D. X and W

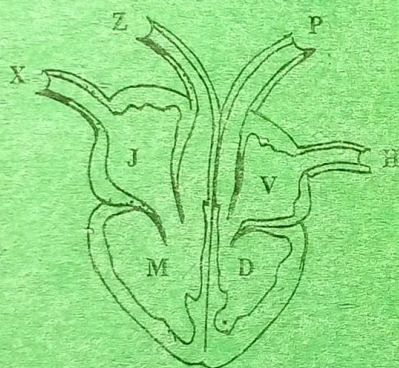
31. Which of the following does not use the principle of reflection of light?

- A. Making a periscope
- B. Formation of a rainbow
- C. Formation of images in a plane mirror
- D. Side mirrors of cars

32. Organic matter in the soil comprises of three of the following except one. Which one?
- Waste from animals
 - Dead rotting plants
 - Broken pieces of glass
 - Dead parts of plants

33. Which of the following statements is **not** correct according to the immunization schedule of infants?
- The first dose of polio is given at birth
 - The second DPT vaccine is given at 10 weeks
 - Polio and BCG vaccine are not given at birth
 - Antimeasles and yellow fever vaccines are given at the 9th month

The diagram below represents a mammalian human heart. Use it to answer questions 34 and 35.



34. Which labelled blood vessels represent pulmonary artery and aorta respectively?
- X and Z
 - X and P
 - P and X
 - Z and P

35. Among the 4 blood chambers labelled J, V, M and D, which is the strongest chamber?
- D
 - M
 - J
 - V

36. The **main** reason why Mexican marigold weed should be uprooted from a vegetable farm when they are still young is
- to control the spread of the weed
 - to avoid loss of soil nutrients
 - to reduce loss of water
 - because it is easy to uproot the weed

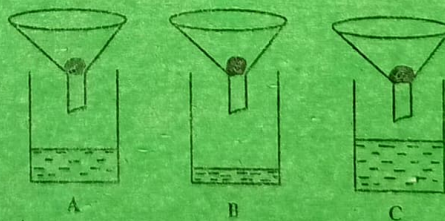
37. Which statements is **true** about ostriches, bats and hawks?
- They can fly
 - Their body temperature is constant
 - They are birds
 - They cannot fly

38. The following are effects of soil erosion:
- Small holes in the ground
 - Top layer of soil missing
 - Small and shallow channels in the ground
 - V-shaped trenches in the ground
- Which ones are for sheet erosion?
- i only
 - ii only
 - ii, iii
 - i, iv

39. Heat reaches the feet of a person seated near a charcoal jiko by
- conduction and convection
 - radiation and convection
 - radiation only
 - convection only

40. The following are effects of drug abuse
- Domestic violence
 - Addiction
 - Lack of concentration
 - Truancy
 - Impaired judgement
- Which of them are all social effects?
- i, iv
 - i, v
 - i, ii, iii
 - iii, iv, v

41. Std 8 pupils set the experiment below to test on drainage. They observed the results after 25 minutes and they were like this;



- Which type of soil is likely to have the best capillarity?
- Soil C
 - Soil B
 - Soil A
 - None

42. Which of the following plant uses its leaves in order to get proteins from the insects?

- A. Water lily B. Butterwort
C. Butter cup D. Wandering jew

43. The following were reasons given by pupils to explain why smoke rises. It

- (i) *Has hot air in it*
(ii) *Is less dense*
(iii) *Has particles suspended in air*
(iv) *Is cloudy*

Which two reasons are correct?

- A. i, ii B. ii, iii
C. iii, iv D. i, iv

44. Which of the following components of the environment is the most abundant on the earth surface?

- A. Water B. Soil
C. Air D. Plants

45. Which of the following animals may not be classified together with turtles?

- A. Gecko B. Snake
C. Chameleon D. Salamander

46. Which of the following foods is correctly matched to its group?

<u>Food</u>	<u>Food crops</u>
A. Termites	- Energy giving
B. Beans	- Protective
C. Tomatoes	- Energy giving
D. Groundnuts	- Energy giving

47. The presence of thick white and mountain shaped clouds is a sign of

- A. heavy rain falling soon
B. low temperature
C. fine weather
D. strong wind blowing

48. In which of the following activities is water used in industries?

- A. Cooking B. Fountain
C. Watering plants D. Surfing

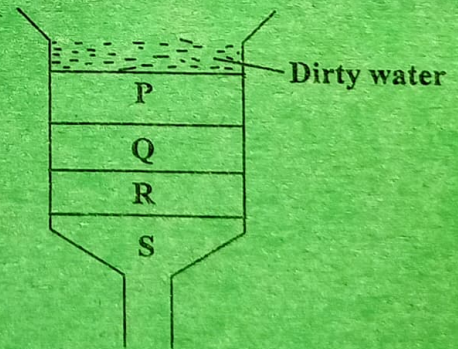
49. The following are some characteristics of flowers;

- (i) *Brightly coloured petals*
(ii) *Long feathery stigma*
(iii) *Produce fewer and large sticky pollen grains*
(iv) *Have no scent*

Which of the following pairs of characteristics is for wind pollinated flowers?

- A. i and iv B. ii and iv
C. i and iii D. ii and iii

50. In the diagram below P, Q, R and S represent different layers of materials in a water filter?



Which materials are represented by P, Q, R and S?

- | <u>P</u> | <u>Q</u> | <u>R</u> | <u>S</u> |
|----------------|-------------|-------------|-------------|
| A. Pebbles | Coarse sand | Charcoal | Fine sand |
| B. Charcoal | Fine sand | Pebbles | Coarse sand |
| C. Coarse sand | Charcoal | Fine sand | Pebbles |
| D. Fine sand | Charcoal | Coarse sand | Pebbles |