

# DISTINCTION NATIONAL EXAMINATION PANEL



007

007

## STANDARD SEVEN SEVENTH TRIAL - 2021



TIME: 1HR 40MINS

### SCIENCE

#### READ THESE INSTRUCTIONS CAREFULLY

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

#### HOW TO USE THE ANSWER SHEET

4. Use an ordinary pencil only.
5. Make sure 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 (i.e. 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 brackets [ ].
8. Keep the 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 the correct answer is to be shown by drawing a dark line inside the box in which the letter you have chosen is written.

**Example:-**

**In the question paper.**

4. Which group of crops are beverages only?  
A. Coffee, simsim, sunflower  
B. Coffee, tea, barley  
C. Oats, barley, cotton  
D. Orange, mango, coconut

The correct answer is **B. (Herdning)**.

**On the answer sheet**



**4.** [A] [B] [C] [D]

**14.** [A] [B] [C] [D]

**24.** [A] [B] [C] [D]

**34.** [A] [B] [C] [D]

In the first set, the box with the letter C printed in it is marked.

11. Your dark line **MUST** be within the brackets.

12. For each question **ONLY ONE** bracket is to be marked in each of four brackets.





1. The blood vessel through which deoxygenated blood flows from the heart is the
- aorta
  - venacava
  - pulmonary artery
  - pulmonary vein

2. Ferns grow well under the shade of the trees for
- protection
  - support
  - habitat
  - carbon dioxide

3. The following are characteristics of vertebrates

*i) Lay fertilized eggs*

*ii) Have scale*

*iii) Breath through lungs*

*iv) Have external fertilization*

*v) Constant body temperature*

Which characteristic above are for platypus?

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

4. Joys wrote the word KENYA and observed it in-front of a mirror. How did it appear?

- |                            |                             |
|----------------------------|-----------------------------|
| A. $\overleftarrow{KENYA}$ | B. $\overrightarrow{KENYA}$ |
| C. $\overleftarrow{AYNEK}$ | D. $\overrightarrow{AYNEK}$ |

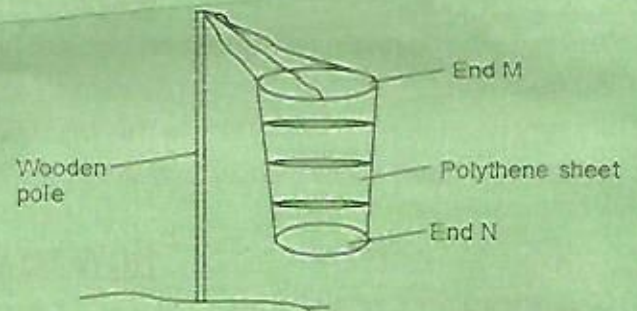
5. Which one of the following diseases can be protected by wearing gumboots and gloves?

- Bilharzia
- Malaria
- Cholera
- Typhoid

6. Which of the following is not true about the heat transfer through convection process?

- It takes place in gases
- It takes place in liquids
- It takes place in solids
- It is demonstrated in boiling water

7. The diagram below represents a windsock made by pupils.



The instrument failed to work properly. Which mistake did they make?

- The hole left at end N was larger than end M.
- They used a polythene sheet instead of net.
- They used a wooden pole.
- They used a wire on end M

8. Which one of the following conditions does not need to be the same when investigating capillarity in soils?

- The sizes of the tube
- Amount of cotton wool
- The time taken
- The type of soil

9. Which part of the human breathing system is kept open by the hard C- shaped rings?

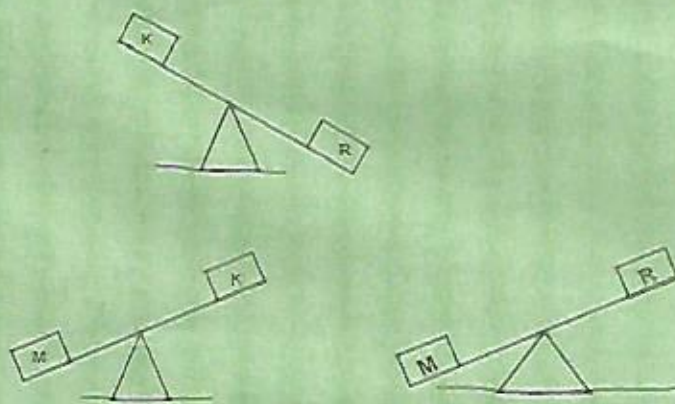
- Nose
- Air sacks
- Trachea
- Gullet.



10. Which one of the following pair of domestic animals consist of animals that produce dairy?

- A. Cows and sheep
- B. Cows and goats
- C. Goat and donkey
- D. Goats and sheep

11. Three weights were balanced in turns on a see-saw as shown below.



Which weight was the lightest?

- A. K
- B. M
- C. R
- D. None

12. In which state of HIV and AIDS infection does the person look healthy, test negative but can infect others?

- A. Incubation
- B. Window
- C. Asymptomatic
- D. Full blown

13. Which one of the following methods of food preservation is likely to pollute meat most when used?

- A. Sun-drying
- B. Canning
- C. Smoking
- D. Salting

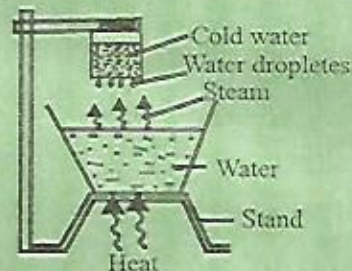
14. Vaccine given at birth protects infant against

- A. Tetanus and tuberculosis
- B. Tetanus and poliomyelitis
- C. Measles and yellow fever
- D. Tuberculosis and poliomyelitis

15. All the following are disadvantages of weeds **except**?

- A. Choke the crops
- B. Make harvesting difficult
- C. Checks on soil erosion
- D. Complete for soil nutrients and water.

16. Pupils at St. Mary's primary did the experiment below to demonstrate a certain process.



The two process demonstrated are;

- A. Convection and evaporation
- B. Evaporation and condensation
- C. Melting and evaporation
- D. Convection and boiling

17. Tools can be maintained in the following ways;

- i) *Cleaning after use*
- ii) *Proper storage*
- iii) *Oiling and greasing*
- iv) *Sharpening cutting edges*
- v) *Proper use of tools*

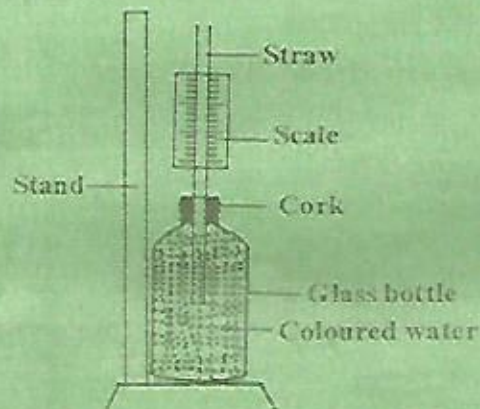
Which methods above helps in safety from accidents?

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



18. Which blood component transports oxygen in the body?
- Red blood cells
  - Platelets
  - White blood cells
  - Plasma

19. The diagram below shows a liquid thermometer.



Which one of the following would improve the efficiency of the instrument above?

- Using wide straw
  - Using a narrow straw
  - Removing the cork
  - Labelling the scale from top to bottom.
20. Study the food chain below.  
 Grass → grasshopper → frog → snake.  
 If all the frogs were killed what would happen?
- grasshopper would decrease
  - Grass would decrease
  - Snake would increase
  - Snake would eat grasshopper
21. Which one of the following animals below is warm blooded, lays fertilized eggs and is covered with scales?
- Duck billed platypus
  - Crocodile
  - Bat
  - Hawk

22. What is the purpose of the gaps left on railway line?
- Allow contraction
  - Allows contraction and expansion
  - Allow expansion
  - Reduce the cost of metals used.

23. Std 7 pupils did the experiment shown below.



After sometimes the dump white piece of cloth turned dark brown. This is due to presence of;

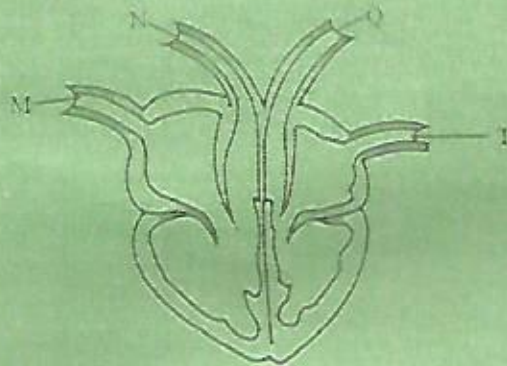
- carbon dioxide
  - tar
  - carbon monoxide
  - nicotine
24. Which one of the following is not a major component of the environment?
- Soil
  - Air
  - Plants
  - Factory
25. Which one of the following does not cause water pollution?
- Floods
  - Oil spoilage
  - Treated sewage
  - Acid rain



26. One of the following is not a good behaviour when eating food? Which one is it?
- Chewing with mouth closed
  - Licking fingers
  - Avoid leaning on the table
  - Not picking salt from far end of the table

27. The following are characteristics of wind pollinated flowers. Which one is **not**?
- Feathery stigma
  - Firmly attached anthers
  - Small in size
  - Dull in colour

28. The diagram below represent a mammalian heart.

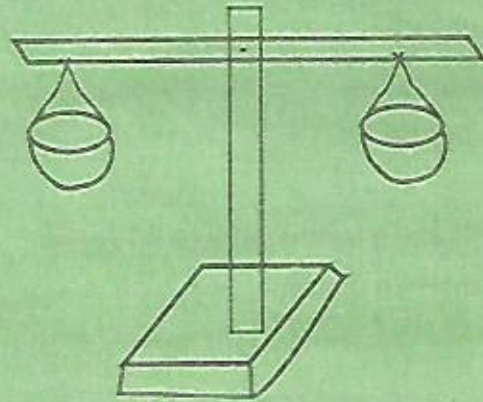


Which blood vessel shown above has valves and carried oxygenated blood?

- |      |      |
|------|------|
| A. M | B. Q |
| C. N | D. T |
29. Use of ship is a way of using water for;
- |              |               |
|--------------|---------------|
| A. domestic  | B. industries |
| C. transport | D. recreation |

30. Which one of the following is **not** a sign and symptom of marasmus?
- Wrinkled face
  - Pot bellied
  - hungry and crying a lot
  - Sores at the corner of mouth

31. The following are activities carried out when making the instrument drawn below.



- Suspend the arm to find the balancing point and mark.
- Make a base, a stand and the arm
- Fix the stand and arm to the base
- Suspend this on both sides of the arm.

Which one of the following is the correct order of the activities carried?

- iii, ii, iv, i
- ii, i, iii, iv
- ii, i, iv, iii
- iii, i, iv, iii

32. The following are uses of translucent materials. Which one is **not**?

- Making window curtains
- Making bathroom window panes
- Making ambulance window
- Making a tracing paper by oiling.

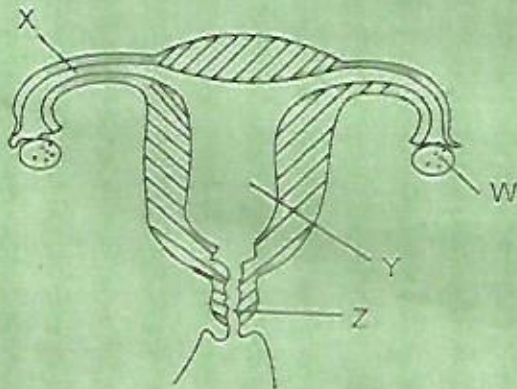
33. Which one of the following is **not** a protective food given to livestock?

- Fruits
- Green fodder
- Molasses
- Fish meal



34. The transfer of pollen grain from anthers to stigma of a flower is called
- conduction
  - fertilization
  - germination
  - pollination

35. The diagram below shows a female reproductive system.



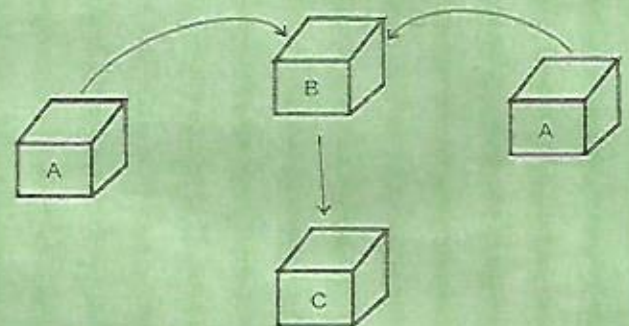
Which statement is **true** about the parts marked above?

- Fertilization takes place in part Z.
  - Ovulation takes place in X
  - Male sex cells are produced in W
  - Foetus grow in part Y
36. Which one of the following occurs when rays of light pass from air into the water?
- Absorbed
  - Refraction
  - Reflection
  - Dispersion
37. Digestion of food does not take place in the \_\_\_\_\_
- mouth
  - colon
  - duodenum
  - Ileum

38. Which one of the following shows field pests only?
- Aphids and rodents
  - Stalk-borers and weevils
  - Rats and weevils
  - Aphids and cutworms

39. Drugs given to protect the body against diseases are called.
- Stimulants
  - Narcotic
  - Antibiotics
  - Vaccines

40. The diagram below shows a certain method of making compost manure.

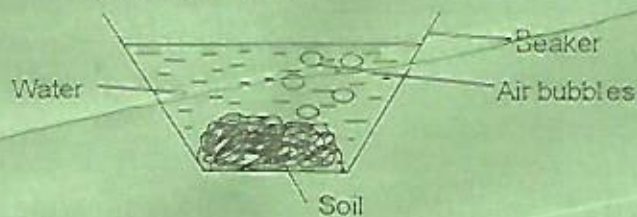


The process is called

- four-heap method
  - compost row method
  - simple compost heap
  - heap and pit method
41. Which one of the following is the furthest planet from the sun?
- Mercury
  - Earth
  - Jupiter
  - Neptune



42. Std 7 pupils of Raganga primary did the experiment below.



This experiment shows that

- A. air contain soil  
 B. water contain air  
 C. Soil contain water  
 D. Soil contain air
43. Which one of the following things is likely to affect your health when abused in your presence?  
 A. Tobacco  
 B. Khat  
 C. Alcohol  
 D. Cobbler's glue
44. Which one of the following is the **main** purpose of salt in food preservation?  
 A. Add flavour  
 B. Reduce the temperature  
 C. Remove moisture  
 D. Remove air
45. The chemical mixed with the dip wash is called  
 A. acaricides  
 B. insecticides  
 C. pesticides  
 D. fungicides
46. Human intestinal worms are best controlled through  
 A. eating balanced diet  
 B. washing all the foods properly  
 C. Proper sanitation

47. Which one of the following is **not** a healthy effect of drug abuse?

- A. confusion  
 B. depression  
 C. irritability  
 D. Truancy

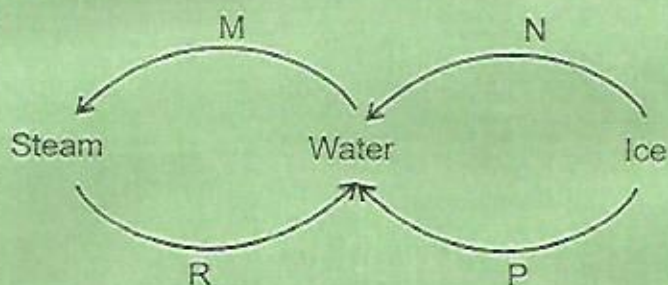
48. Germination of seeds and the process of breathing by human beings have one thing in common. Both

- A. use heat  
 B. require water  
 C. use oxygen  
 D. use carbon dioxide

49. Which types of soil erosion is **not** controlled can cause the formation of V-shaped channels?

- A. Gully erosion  
 B. Rill erosion  
 C. Sheet erosion  
 D. Splash erosion

50. Below are changes in the state of matter.



Which processes above requires increase in temperature?

- A. N and P  
 B. M and R  
 C. R and N  
 D. P and M