## Primrose Schools

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## NATIONAL PRIMTALENT OLYMPIAD EXAMINATIONS SCIENCE



| Guidelines for the Candidates |  |
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| 1 | Please check your Name, Class and Section on the OMR sheet provided to <br> you. |
| 2 | In case, OMR sheet with your name is missing, please fill in information <br> about yourself in the blank sheet provided before start of exam. |
| 3 | All questions are compulsory. There is no negative marking. Use of <br> calculator is not permitted. |
| 4 | There is only ONE correct answer. Choose only ONE option for an answer. <br> 5 |
| 6 | To mark your choice of answers by darkening the circles in OMR sheet, use <br> HB Pencil or Blue/Black ball point pen only. |
| 7 | Return the OMR sheet to the invigilator at the end of the exam |
| 8 | Please fill in your personal details in space on the top of this page before <br> attempting the paper |
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## Section-A Logical reasoning

1. Count the number of squares in the figure.

A) 6
B) 10
C) 8
D) 5
2. Which is the next figure in the given pattern?

A)

B)

C)

D)

3. The figures below show the roots of some plants. Which of the following will hold the plant most firmly to the soil?
A

B

C

D.

A. A
B. C
C. B
D. D

4 Sanjay took two frogs and kept one in closed container A and other in container B which has some holes. On the other day, he observed the frog in container $B$ survived. What is the reason?
A
B

A. Container $A$ is poisonous but container $B$ is good.
$B$. To live, frogs need to breathe in air which is available in container $B$ but not in container A.
$C$. The frog in the container $A$ is weak and the frog in the container $B$ is strong.
D. The frog in container was not getting enough food.
5. Raju's doctor checked him using the instrument shown in the figure.


What did the doctor check?
A) His temperature
B) His heartbeat
C) His weight
D) His height.
6. A bucket of ice was left outside to melt on a warm day. The picture given below shows the time at when the experiment was started and the time when the ice finally melted. At what time did the ice melt?

A) $1: 37 \mathrm{pm}$
B) $2: 34 \mathrm{pm}$
C) $3: 07 \mathrm{Pm}$
D) $2: 06 \mathrm{pm}$
7. Three potted plants were left in the field for 5 days as shown in the given figure. Which one will be able to make food for 5 days?

a. Leaves covered with white paper

b.
.
C) a and c
D) a and b
A) Only a
B) only b
8. Toffee $\qquad$ is the fourth toffee from the last

E
F
E
C
G
H
D
M
(first)
A) C
B) $G$
C) H
D) D
9. Ant Gable has to reach the sweets. She is looking for the shortest road. Can you tell her which is the shortest?

A) Road H
B) Road E
C) Road F
D) Road G
10. Which of the following options will complete the pattern in fig (x) ?

(X)

(a)

(b)

(c)

(d)
A) $a$
B) c
C) $b$
D) $d$

## SECTION - B EVERYDAY SCIENCE

11. The organ system in your body that is responsible for changing the balloon from ' $a$ ' to ' $b$ ' as shown in the given figure is $\qquad$ .
A) Digestive system
B) Circulatory system
C) Respiratory system
D) Skeletal system
12. Which of the following organs is/are completely protected inside the structure shown in the given figure?

1.Stomach
13. Lungs
14. Liver
15. Heart
A) 1 and 2
B) 2 only
C) 2 and 3
D) 2 and 4
16. "Living things can move on their own."

Which of the following is not a demonstration of the above statement?
A)

B)

C)

D)

14. For a vegetarian person, a good source of protein is
A) Spinach
B) fish
C) pulses
D) none of these.
15. Amit likes to eat food from roadside vendors. He should not do this everyday because $\qquad$

A) It will eventually lead to health problems.
B) such food lacks nutrient values.
C) Such food is a rich source of protein.
D) Both A and B
16. Look at the animals given below and select the one that does not belong to the group.
A)

B)

C)

D)

17. Which of the following birds has a hooked beak?
A) Parrot
B) Penguin
C) Eagle
D) Duck
18. Which of the following sets make up a bird's body?
A) Head, trunk, wings and tail
B) Head, body, legs and tail
C) Head, trunk, wings, legs and tail
D) Head, neck, wings and legs.
19. Refer the given figures showing bird's feet and select the incorrect match between bird and its feet.

d

e

f

g
A) D-Eagle
B) e-Parakeet
C) f-Crow
D) g-Woodpecker
20. Refer the given figures. Pick the correct statement.

a

b
A) a - climber b-creeper
B) a- creeper b-climber
C) both a and b are creepers
D) both $a$ and $b$ are climbers.
21.Leaves are green in colour due to the presence of $\qquad$ .
A) Carotene
B) salts
C) Chlorophyll
D) All of these
22. Which part of a potato grows into a new plant?
A) Root
B) stem
C) Flower
D) Seed
23. Which one of the following has a different eating habit compared to the other?
A)

B)

C)

D)

24. Pooja is blindfolded and is playing with her friends in a playground. She has to touch her friends who are moving around her clapping their hands. Which of the following senses help her to move?
A) Sense of touch
B) Sense of hearing
C) Sense of speech
D) Sense of smell
25. I'm a part of insect's body. I help the insect to find food. Who am I?
A) Thorax
B) Feelers
C) abdomen
D) Spiracles
26. The different stages in the life cycle of honeybee are given below. Pick the correct sequence from stage 1 to 4 .
A) Egg, larva, pupa, adult honeybee
B) Larva, pupa, adult honeybee, egg
C) Adult honeybee, pupa, larva, egg
D) pupa, larva, egg, adult honey bee
27. How are forelimbs modified in the birds?
A) Wings
B) Feet
C) Claws
D) None of the above
28. Which part of the seed does $\mathbf{P}$ denote?

A) Embryo
B) Seed coat
C) Seed leaves
D) Radical
29. Which boy needs to wear protective glasses the most?
A)

B)

C)

D

30. Which of the following is the largest sense organ of our body?
A) Skin
B) Eyes
C) Ears
D) Tongue.

## SECTION C - HIGHER ORDER THINKING

31. Study the given diagram and select the correct option.

A) $X$ is penguin
$B) Z$ is duck.
C) Y is ostrich
D) Both A and B
32. Look at the given classification table. Which of the following can ' $X$ ' be?

A) Blood vessels
B) Brain
C) Small intestine
D) Backbone
33. The Mushroom gets its food:
A) From dead and decaying plants
B) From photosynthesis
C) By eating small insects which come near it
D) From the water we pour near it.
34. A torch is shone on a wooden prism and a beach ball as shown below. Select the formation of shadow on the screen.

35. Study the given diagram. Which of the following represents the small intestine?

Organs for breaking food into smaller pieces


Organs for absorbing food
A) W
B) $X$
C) $Y$
D) $Z$
36. Pick the activities your brain and nervous system are in charge of?
A) Walking and running
B) Thinking and talking
C) Feeling and sleeping
D) All of the above
37. Many birds fly south in winter. This phenomenon is called $\qquad$
A) Hibernation
B) Germination
C) Migration
D) Communication
38. Identify the organ ' $\mathbf{Q}$ 'and select to which system it belongs to?

P

Q

R

A) Digestive
B) Respiratory
C) Circulatory
D) Excretory
39. Which part of the insect has most of its internal organs?

A) Thorax
B) Abdomen
C) Antenna
D) Legs
40. Choose the food rich in iron.
A)

B)

B)

D)


