

SCIENCE Grade 6

National Level Examination
NLE 2024

Subject Code:

3 0 1

Total Questions: 40

Time: 1 hour

DO NOT OPEN THIS BOOKLET UNTIL INSTRUCTED TO DO SO

- > All questions are compulsory.
- > Read the instructions on the **ANSWER SHEET** and fill in your **NAME**, **CLASS** and **OTHER INFORMATION**.
- > To mark your choice of answer by darkening the circles in the **ANSWER SHEET**, use a **Blue/Black Ball Pen** only.
- > You **MUST** record your answers on the **ANSWER SHEET** only.
- There are 40 MULTIPLE CHOICE QUESTIONS.
 Use the information provided to choose the BEST answer among the four possible options.
 On your ANSWER SHEET fill in the circle that matches your answer.
- $\rightarrow \frac{1}{2}$ MARK will be deducted for every WRONG ANSWER.
- > Return the **ANSWER SHEET** to the invigilator at the end of the examination.
- You are **NOT** allowed to use a calculator.You may use a ruler and spare paper for rough work.



This question paper contains a total of 40 questions divided into three sections—A, B and C.

Read the instructions carefully before attempting these questions.

Section-A (Logical Reasoning)

- 1. If FRIEND is coded as HUMJTK, how can CANDLE be written in that code?
 - (A) DEQJQM

(B) DCQHQK

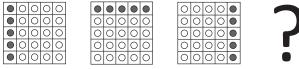
(C) EDRIRL

- (D) ESJFME
- 2. If 'eraser' is called 'box', 'box' is called 'pencil', 'pencil' is called 'sharpener' and 'sharpener' is called 'bag', what will a child write with?
 - (A) Eraser

(B) Bag

(C) Pencil

- (D) Sharpener
- 3. Which figure do you think logically belongs to the spot of the question mark?



(A) 00000 00000 00000 (B) 00000 00000 00000

(C) 00000 00000

- (D) 00000 00000 00000
- 4. A number series is given below with one term missing. Choose the correct option that will continue the same pattern.
 - 21, 9, 21, 11, 21, 13, 21, ?
 - (A) 15

(B) 17

(C) 23

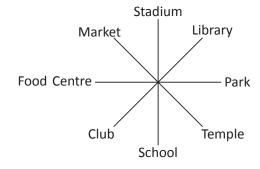
(D) 25

- 5. Find the odd one out.
 - (A) Flower: Petal

(B) Chair: Leg

(C) Circle: Arc

- (D) Cover : Page
- 6. Observe the figure given alongside. Jyoti is facing south-east. Which place does she face when she turns 3 right angles anticlockwise?
 - (A) Park
 - (B) Food centre
 - (C) Stadium
 - (D) Club





(C) Jute

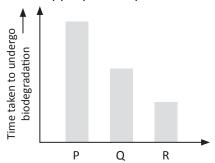
| 7. | In the given figure, triangle represents healthy people, rectangle represents old persons and circle represents men. What is the number of those men who are healthy but not old? | | | | | | | |
|-----|---|-------------------------|---------------|---------------------|--------------------------|--|--|--|
| | (A) 3 | | (B) | 4 | 5 7 | | | |
| | (C) 6 | | (D) | 2 | | | | |
| 8. | How many squares are | there in the following | figure? | | | | | |
| | (A) 21 | | (B) | 13 | | | | |
| | (C) 15 | | (D) | 11 | | | | |
| | | | | | | | | |
| | | Section-B (| Subject Spe | ecific) | | | | |
| 9. | In some submerged pla | | | | he hest reason for this? | | | |
| ٦. | In some submerged plants, leaves are often highly divided. What could be the best reason for this? (A) Water can easily flow without damaging them. | | | | | | | |
| | (B) Cell of the leaf divid | des smoothly | | | | | | |
| | (C) To conduct photosy | nthesis smoothly. | | | | | | |
| | (D) None of these | | | | | | | |
| 10. | These animals are similar | ar because they are | • | | | | | |
| | | | | | | | | |
| | Bear Crow | Cockroach | | | | | | |
| | (A) herbivores | | (B) | carnivores | | | | |
| | (C) scavengers | | (D) | omnivores | | | | |
| 11. | Which of the following | statements is true rega | arding defici | ency diseases? | | | | |
| | (i) They are caused due to lack of nutrients in the diet. | | | | | | | |
| | (ii) They cannot be trea | ated. | | | | | | |
| | (iii) They cannot be passed from one person to another through contact. | | | | | | | |
| | (iv) They can be prevented by taking a balanced diet. | | | | | | | |
| | (A) (i), (ii) and (iii) | | (B) | (i), (ii) and (iv) | | | | |
| | (C) (ii) and (iv) | | (D) | (i), (iii) and (iv) | | | | |
| 12. | Ramu is a cycle rickshaw puller and has to perform hard physical labour in hot and humid conditions Which of the following fabrics would he prefer to wear on such days? | | | | | | | |
| | (A) Wool | .as.ico would lie piele | | Cotton | | | | |
| | • • | | ` ' | | | | | |

(D) Coir

6



13. The following graph shows the time taken for biodegradation of 3 materials P, Q and R. Choose the most appropriate option.



- (A) P-Cotton, Q-Nylon, R-Plastic
- (C) P-Plastic, Q-Nylon, R-Cotton

- (B) P–Nylon, Q–Plastic, R–Cotton
- (D) P-Nylon, Q-Cotton, R-Plastic
- 14. Read the following statements and choose the option having all INCORRECT statements.
 - (i) Stones are translucent.
 - (iii) Metals are lustrous.
 - (A) (i), (ii) and (iii)
 - (C) (ii), (iii) and (iv)

- (ii) Oil dissolves in water.
- (iv) Gold lacks luster.
- (B) (ii) and (iv)
- (D) (i), (ii) and (iv)
- 15. Which of the following mixtures can be easily separated using filtration?
 - (A) Oil and water

(B) Sugar and water

(C) Sugar and milk

- (D) Corn flakes and milk
- 16. Rajesh bought an ice-cream and started eating it when suddenly his mother called him to another room. He left his ice-cream in a bowl. When he came back to the room after 10 minutes, he found that the bowl was filled with milk and his ice-cream had disappeared. What should he do in order to regain solid ice-cream again?
 - (A) Freeze the milk

(B) Boil the milk

(C) Filter the milk

- (D) Condense the milk
- 17. Identify the plants that show the given characteristics.
 - (i) Have fibrous roots

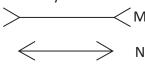
(ii) Have petals in multiples of three

- (iii) Bear leaves with parallel veins
- (A) Maize and balsam

(B) Balsam and hibiscus

(C) Paddy and maize

- (D) Sugarcane and hibiscus
- 18. Carefully observe the following lines and choose the correct statement.



(A) M is longer than N

(B) N is longer than M

(C) Both are of the same length

(D) None of these





| 19. | side. What inference does he make from the given experiment? | | | | | | |
|-----|---|-----|--|--|--|--|--|
| | (A) Light rays are very thin. | (B) | Light rays travel in straight lines. | | | | |
| | (C) The eye can only see a luminous body. | (D) | A beam of light is made up of a lot of light rays. | | | | |
| 20. | Most of the electricity-carrying wires along the roads do not have a plastic covering like the wires used at homes. But why is there no substantial loss of energy? | | | | | | |
| | (A) Air is not affected by gravity. | (B) | Air is a bad conductor of electricity. | | | | |
| | (C) Electricity flows very fast near highways. | (D) | Current rating is high near highways. | | | | |
| 21. | Which of the following adaptations is NOT seen in desert plants? (A) Leaves are modified in the form of spines. | | | | | | |
| | (B) The leaves are green and carry out photosynthesis. | | | | | | |
| | (C) The desert stem is fleshy and can store water. | | | | | | |
| | (D) The roots are extensively developed in order to absorb water. | | | | | | |
| 22. | Select the natural source of fresh water that also recharges the groundwater. | | | | | | |
| | (A) Well | (B) | River | | | | |
| | (C) Rain water | (D) | Ocean | | | | |
| 23. | Which of the following statements is not true regarding the properties of air? | | | | | | |
| | (A) Air occupies space. | (B) | Air cannot be compressed. | | | | |
| | (C) Air exerts pressure. | (D) | Air has weight. | | | | |
| 24. | Which of the following are the correct processes for the given conversion in the state of water? (i) From liquid to gaseous state | | | | | | |
| | (ii) From gaseous to liquid state | | | | | | |
| | (A) (i) Condensation, (ii) Freezing | (B) | (i) Evaporation, (ii) Condensation | | | | |
| | (C) (i) Sublimation, (ii) Freezing | (D) | (i) Evaporation, (ii) Melting | | | | |
| 25. | A freely–suspended bar magnet rests in | | | | | | |
| | (A) North – South direction | (B) | East – West direction | | | | |
| | (C) North – East direction | (D) | Any direction | | | | |
| 26. | Which of the following is the characteristic of herbs? | | | | | | |
| | (A) Their stems are green and tender. | (B) | They may or may not have many branches. | | | | |
| | (C) They are usually short. | (D) | All of these | | | | |
| 27. | What is the method of preparing compost with help of red worms known as? | | | | | | |
| | (A) Manure | | Decomposting | | | | |
| | (C) Landfill | (D) | Vermicomposting | | | | |
| | | | | | | | |



28. You may have noticed the given object at construction sites to separate pebbles and stones from sand.

Name the method that separates stones from sand by using this object.

(A) Threshing

(B) Winnowing

(C) Hand picking

(D) Sieving



Instruction: Q. 29 to 33 are two-key based questions having four options A, B, C and D out of which TWO are correct.

- 29. Read the following statements regarding muscles and select the correct ones.
 - (A) Muscles work in pairs.

- (B) The muscles get bulged due to contraction.
- (C) The muscle bulges due to relaxation.
- (D) A muscle cannot pull.
- 30. Which of the following wet food wastes should NOT be mixed with recyclable dry wastes?
 - (A) Egg shells

(B) Fruit peels

(C) Paper

- (D) Aluminum foil
- 31. Which among the following are magnetic by nature?
 - (A) Plastic scale

(B) Wooden almira

(C) Metal almira

- (D) Iron ball
- 32. What prevents the dust particles from getting into our respiratory system when we inhale air?
 - (A) Fine hair inside the nose

(B) Bone inside the nose

(C) Capillaries inside the nose

- (D) Mucus inside the nose
- 33. Which among the following objects shows circular motion?
 - (A) Blades of fan

(B) Hands of clock

(C) Strings of guitar

(D) Surface of table

Section—C (Competency Enhancement)

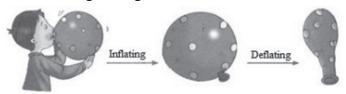
- 34. Besides important nutrients, our body needs dietary fibres and water also. Select the main source of dietary fibres.
 - (A) Whole grains and pulses

(B) Potatoes

(C) Fresh fruits and vegetables

(D) All of these

35. Look at the given figure.



Select the type of change you understand from the above activity.

(A) Irreversible change

(B) Reversible change

(C) Chemical change

(D) None of these



| 36. | Which of the following components of air does NOT support burning? | | | | | |
|-----|--|---------------------------|-----|------------------|--|--|
| | (A) | Oxygen | (B) | Carbon dioxide | | |
| | (C) | Nitrogen | (D) | Ozone | | |
| 37. | Some sea animals do not have gills for breathing. Instead, they have nostrils or blowholes located on the upper parts of their heads. Which of the following aquatic animals follows this statement? | | | | | |
| | (A) | Octopus | (B) | Frog | | |
| | (C) | Whale | (D) | Both (B) and (C) | | |
| 38. | Janvi learnt in her science class that plants can also be reproduced by stem cutting method. Which of the following cannot be reproduced by stem cutting method? | | | | | |
| | (A) | Wheat | (B) | Rose | | |
| | (C) | Money plant | (D) | Grapes | | |
| 39. | One component of the given sets has more nutrients. Choose the correct option. (p) Dalia or noodles | | | | | |
| | (q) | Fruit juice or cold drink | | | | |
| | (r) Vegetables and fruits with peels or without peels | | | | | |
| | (s) Chapattis of wheat or Maida | | | | | |
| | (A) Dalia, cold drink, vegetables and fruits with peels, chapattis of Maida | | | | | |
| | (B) Dalia, fruit juice, vegetables and fruit with peels, chapattis of wheat | | | | | |
| | (C) Noodles, fruit juice, vegetables and fruits with peels, chapattis of wheat | | | | | |
| | (D) Noodles, cold drink, vegetables and fruits without peels, chapattis of Maida | | | | | |
| 40. | Read the assertion (A) and reason (R) and choose the correct option. | | | | | |
| | Assertion (A): Wood is a good conductor of heat. | | | | | |
| | Reason (R): Substances which do not allow heat to pass through them are called poor conductors of heat. (A) Both (A) and (R) are correct and (R) is the correct explanation of (A). | | | | | |
| | (B) Both (A) and (R) are correct but (R) is the incorrect explanation of (A). | | | | | |
| | (C) (A) is correct, but (R) is incorrect. | | | | | |

(D) (A) is incorrect, but (R) is correct.

