



SCIENCE

Grade 7

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.
- **$\frac{1}{2}$ 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.

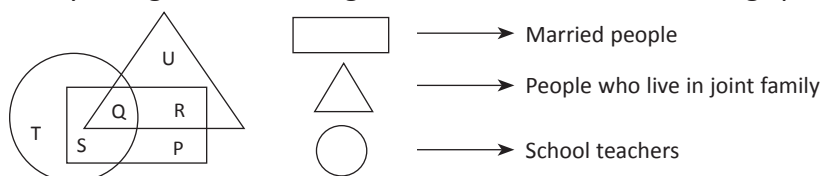


This question paper contains a total of 40 questions divided into three sections—A, B and C.

Read the instructions carefully before attempting these questions.

Section–A (Logical Reasoning)

- Abhishek puts his timepiece on the table in such a way that at 6 p.m., hour hand points to North. In which direction will the minute hand point at 9.15 p.m.?
(A) South-east (B) South
(C) North (D) West
- How many 4's are there in the following number series which are preceded by 5 but not followed by 7?
2 3 4 2 3 4 2 5 4 7 3 2 4 3 1 9 2 5 4 7 5 4 7 2 3 4 5 2 9 5 4 6
(A) One (B) Two
(C) Three (D) Four
- Study the given Venn diagram and answer the following question:



Which letter represents the married teachers who live in a joint family as well?

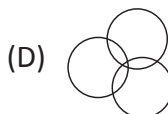
- (A) R (B) Q
(C) S (D) P
- Choose the next term of the series.

(A) (B)
 (C) (D)
 - If the code of 'NUMBER' is 'MVLCD'S' then what is the code of 'SECOND'?

- (A) CTQDRB (B) GRQDRB
(C) RFBPME (D) RFANMD
- Introducing a man, Payal said, "He is the only son of the mother of my mother." How is Payal related to man?
(A) Mother (B) Sister
(C) Niece (D) Maternal aunt



7. In the word 'DISTURBANCE' the first letter is interchanged with the last letter, the second letter is interchanged with the tenth letter and so on. Which letter would come after the letter 'T' in the newly formed word?
- (A) I (B) N
(C) S (D) U
8. Some of the football players are badminton players, some badminton players are basketball players and no football player is a basketball player. Which of the following diagrams correctly represents the given statements?



Section-B (Subject Specific)

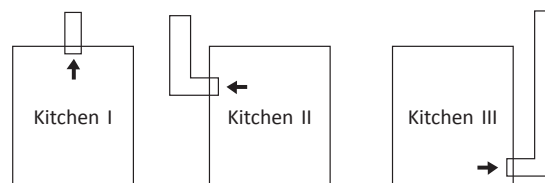
9. A simple pendulum takes 45 s to complete 15 oscillations. What is the time period of the pendulum?
- (A) 3 s (B) 3.5s
(C) 1 s (D) 2 s
10. Why do we prefer to wear light-coloured clothes in summers as compared to dark-coloured clothes?
- (A) Dark-coloured clothes emit more radiant heat energy.
(B) Light-coloured clothes absorb less heat energy as compared to dark-coloured clothes.
(C) Dark-coloured clothes are considered as evil by the society.
(D) Dark-coloured clothes are more expensive as compared to light-coloured clothes.
11. Keshav performed an experiment to study neutralisation. He added hydrochloric acid to ammonia to obtain a salt. This salt was then mixed in water to obtain a solution. When tested with addition of China rose, this solution will _____.
- (A) remain light pink (B) turn dark pink
(C) turn green (D) any of the above depending on the temperature
12. The maximum and minimum temperatures displayed daily in the weather bulletin refer to the _____.
- (A) highest day temperature and lowest night temperature of that date
(B) highest day temperature and highest night temperature of the month
(C) temperature recorded at noon and at midnight
(D) average highest temperature of day and average lowest temperature of night
13. Choose the odd one out.
- (A) Burning of match-stick (B) Rusting of iron
(C) Germination of seed (D) Dissolution of salt in water



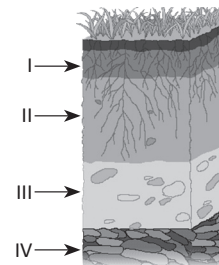
14. The food moves along the digestive system with the help of rhythmic contractions known as _____.
 (A) peristalsis (B) periventricular
 (C) primary fibrosis (D) assimilation

15. If current is passed through a coil wrapped around an iron nail, the nail behaves like a magnet. Which type of magnet is it?
 (A) Permanent magnet (B) Magnetite
 (C) Electromagnet (D) Temporary magnet

16. The following diagram shows the positions of the chimneys in 3 kitchens. Which of the following statements regarding the efficiency of chimneys in removing smoke is correct?
 (A) $I > II > III$
 (B) $III > II > I$
 (C) $I = II = III$
 (D) None of these



17. The adjacent figure shows the soil profile of a land. Which of the following layers contains the subsoil containing weathered rock materials, i.e., sand, silt and clay?
 (A) I (B) II
 (C) III (D) IV



18. Which of the following is the major waste product in humans?
 (A) Ammonia (B) Urea
 (C) Uric acid (D) All of these
19. Workers who are employed in the wool industry are at risk of developing a disease called 'anthrax'. This disease can be acquired by handling of an infected animal. This disease may be prevented by _____.
 (A) vaccinating the cattle against anthrax (B) wearing masks while handling sheep
 (C) using selectively bred sheep (D) using only imported breeds of sheep

20. A person ate stale food and started vomiting the next day. If we add phenolphthalein to the contents that came out, what will be observed?
 (A) Colour of phenolphthalein changes to purple. (B) No colour change is observed.
 (C) Colour changes to orange. (D) Colour changes to yellow.

21. Read the following statements with reference to soil and choose the correct statements.
 (A) Weathering is a fast process of soil formation. (B) Percolation of water is fast in sandy soil.
 (C) Bedrock contains harmful chemicals. (D) Loamy soil contains only sand and clay.

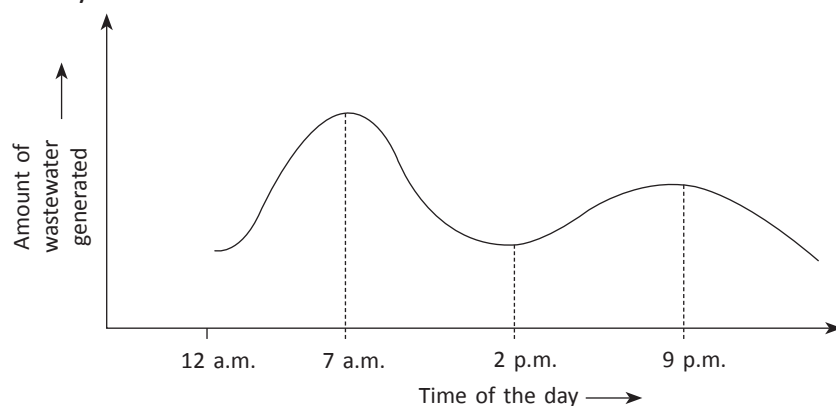
22. Which of the following best describes the process of galvanisation?
 (A) It is the process of depositing a layer of copper on iron.
 (B) It is done to prevent crystallisation of iron.
 (C) It is the process of depositing a layer of zinc on iron.
 (D) None of these




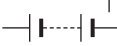
23. Amit is standing in front of a mirror. When he raises his left hand, which side of the image raises its hand, as seen from Amit's perspective?
- (A) Right side
(B) Left side
(C) Depends on the distance between the mirror and Amit
(D) Both (A) and (B)

24. Read the following statements and choose the correct option.
Statement-1: Respiratory rate increases during physical activity and illness.

Statement-2: The body's demand for oxygen increases in such cases.

- (A) Statement-1 is correct and statement-2 is incorrect.
(B) Statement-1 is incorrect and statement-2 is correct.
(C) Both the statements are correct and statement-2 is the correct explanation of statement-1.
(D) Both the statements are correct and statement-2 is not the correct explanation of statement-1.
25. The following figure shows the amount of wastewater generated during a typical weekday for a family which consists of four individuals. Both the parents work in offices and have to reach their respective offices by 9 a.m. Their two children study in classes 9th and 7th and have to reach their respective schools by 8 a.m. Which of the following activities contributes the most to the wastewater generation for this family?



- (A) Washing clothes
(B) Bathing
(C) Cooking
(D) Watering plants
26. The symbol used for representing an electric component in Switch OFF position is shown _____.
(A) 
(B) 
(C) 
(D) 
27. Read the following statements and select the correct option.
(A) Rose plant has both the male and the female reproductive parts.
(B) In a flower, stamens are the female reproductive part and pistil is the male reproductive part.
(C) Spores are sexual reproductive bodies.
(D) Both (B) and (C)



28. Which of the following is secreted by the inner lining of the stomach?
- (A) Mucous (B) Hydrochloric acid
(C) Digestive juices (D) All of these

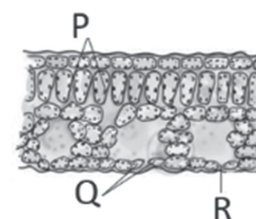
Instruction: Q. 29 to 33 are two-key based questions having four options A, B, C and D out of which TWO are correct.

29. Which of the following materials allow heat to pass through them easily?
- (A) Aluminum (B) Iron
(C) Plastic (D) Wood
30. Which of the following plants have bisexual flowers?
- (A) Corn (B) Cucumber
(C) Rose (D) Petunia
31. The odometer of a car reads 2750 km when the clock shows time 5.00 A.M. What is the distance moved by car when at 6.00 A.M. odometer reads 2830 km?
- (A) 50 km (B) 80 km
(C) 50000 m (D) 80000 m
32. Which of the following products are NOT obtained from a forest?
- (A) Bucket (B) Catechu
(C) Gum (D) Thermocol
33. Which factors contribute to the development of cyclone?
- (A) Wind speed and direction (B) Temperature and humidity
(C) Cloud and rain (D) Humidity and pressure

Section-C (Competency Enhancement)

34. Look at the given figure and identify the correct labelling.

- (A) P- Guard Cells; Q- Chlorophyll; R- Stoma
(B) P- Chlorophyll; Q- Stoma; R- Guard Cells
(C) P- Stoma; Q- Guard Cells; R- Chlorophyll
(D) P- Chlorophyll; Q- Guard Cells; R- Stoma



35. Teacher divided the class into four groups (P, Q, R and S) and asked them to give correct adaptations about polar bear. Which of these groups gave correct statement?

P: The white fur is not easily visible in the snowy white background.

Q: It has a layer of fat that insulates its body from cold and keeps it warm.

R: It has very strong sense of smell that helps the bear locate and catch its prey.


S: It has small curved and sharp claws that help it walk on ice.

- (A) Groups P and Q only (B) Group S only
(C) Groups P, Q and R only (D) Groups R and S only

36. Select the correct order of urine movement by arranging the parts of excretory system.

- (i) Bladder (ii) Kidney
(iii) Ureter (iv) Urethra
(A) (ii) → (iii) → (i) → (iv) (B) (i) → (iii) → (iv) → (ii)
(C) (ii) → (iv) → (i) → (iii) (D) (iv) → (iii) → (i) → (ii)

37. Identify the correct match with respect to the given symbols.

- (i)  (ii) 
(iii)  (iv) 
(A) (i)-Electric bulb (B) (ii)-Electric bulb
(C) (iii)-Switch in off mode (D) (iv) -Battery

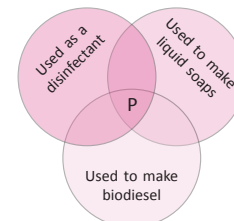
38. Select the correctly matched pair.

(i)	Carding	The process in which wool is passed through rollers that have thin wired teeth
(ii)	Shearing	Removal of fleece along with a thin layer of skin from sheep
(iii)	Bailing	Reeled filament is made into skeins which are packed in small bundles called books
(iv)	Weaving	The process of making fabric from yarn



- (A) (i) and (iii) only (B) (ii) and (iii) only
(C) (i) and (iv) only (D) All of these

39. Refer to the given Venn diagram and select the correct option that will be replaced by P:

- (A) Calcium hydroxide
(B) Sodium hydroxide
(C) Magnesium hydroxide
(D) Potassium hydroxide



40. What do the two types of arrows in the picture show?

		
(P)	Movement of air	Movement of water
(Q)	Movement of food	Movement of air
(R)	Movement of water	Movement of food
(S)	Movement of air	Movement of minerals

- (A) P (B) Q
(C) R (D) S

