SCIENCE
Grade 8

National Level Examination

NLE 2025

Subject Code: 3 0 1

Total Questions: 40 **Total Marks:** 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-POINT PEN** only.
- You **MUST** record your answers on the **ANSWER SHEET** only.
- There are **40 MULTIPLE CHOICE QUESTIONS**. Each question carries one mark. Use the information provided to choose the **BEST** possible answer among the four options. On your **ANSWER SHEET** darken 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)

1. Complete the given pattern.

   B_2CD, _____, BCD_4, B_5CD, BC_6D

   (A) B_2C_2D (B) BC_3D

   (C) B_2C_3D (D) BCD_7

2. In a certain code, if PAINTER is written as NCGPRGP, then REASON would be written as _____.

   (A) PCYQMN (B) PGYQMN

   (C) PGYUPM (D) PGYUMP

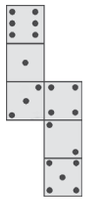
3. Find the odd one out.

   1, 4, 9, 16, 22, 25, 36

   (A) 1 (B) 9

   (C) 22 (D) 36

4. Select the number of dots that will lie opposite to the face having three dots, when the given figure is folded to form a cube.



   (A) 2 (B) 4

   (C) 5 (D) 6

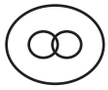
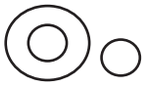
5. Rahul's mother is the only daughter of Monika's father. How is Monika's husband related to Rahul?

   (A) Uncle (B) Father

   (C) Grandfather (D) Brother

6. Which of the following figures correctly represents the relation between Doctors, Lawyers and Professionals?

   (A)  (B) 

   (C)  (D) 

7. Aruna ranks twelfth in a class of forty-six. What is her rank from the last?

   (A) 33 (B) 34

   (C) 35 (D) 37

8. In a certain code language, 'RAJ' is coded as 29 and 'GITA' is coded as 37. How will 'VARUN' be coded in that language?

   (A) 30 (B) 32

   (C) 40 (D) 76

Section B (Subject Specific)

9. Which of the following statements are correct?

   (i) The Pole star always remains in the same position in the sky.

   (ii) The Sun is the star nearest to the Earth.

(iii) We cannot see stars during daytime due to the Sun's bright light.
(iv) Many stars in the sky are bigger than the Sun.
(A) (i) and (ii) only
(B) (ii) and (iii) only
(C) (i) and (iv) only
(D) (i), (ii), (iii) and (iv)

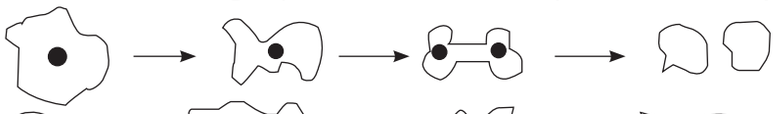
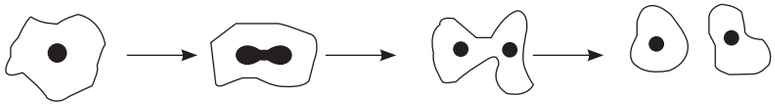
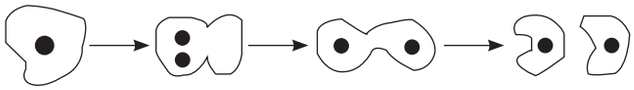
10. Read the following statements and select the correct option.
Statement 1: CNG is a good and clean fuel.
Statement 2: CNG produces a lot of heat and causes less air pollution.
(A) Both statements 1 and 2 are correct.
(B) Both statements 1 and 2 are incorrect.
(C) Statement 1 is correct but statement 2 is incorrect.
(D) Statement 1 is incorrect but statement 2 is correct.

11. The property of metals by which they can be beaten into thin sheets is called_____.
(A) Malleability
(B) Ductility
(C) Sonority
(D) Lustre

12. Select the item incorrectly placed in group A or group B.

Group A (Flora)	Group B (Fauna)
Cheetal	Chinkara
Sal	Blue bull
Teak	Barking deer
Arjun	Leopard

(A) Chinkara
(B) Sal
(C) Cheetal
(D) Arjun

13. Which of the following represents the correct pattern of binary fission in an *Amoeba*?
(A) 
(B) 
(C) 
(D) 

14. The main component of wood pulp is cellulose. Which of the following synthetic fibres have cellulose as a monomer?
(A) Nylon
(B) Rayon
(C) Silk
(D) Polyester

15. We have often seen that goldsmiths blow the outermost zone of a flame with a metallic blow-pipe for melting gold and silver. Select the correct reason for this from the given options.
(A) This zone burns without the supply of air.
(B) This zone has a very high temperature making metals melt easily.
(C) This is luminous zone of a flame.
(D) This is zone of incomplete combustion.

16. Which of the following diseases is caused by a virus in plants?
    (A) Rust of wheat
    (B) Yellow vein mosaic
    (C) Citrus canker
    (D) Late blight of potato

17. This is a figure of a tool used to remove weeds and loosen the soil. It is a _____.

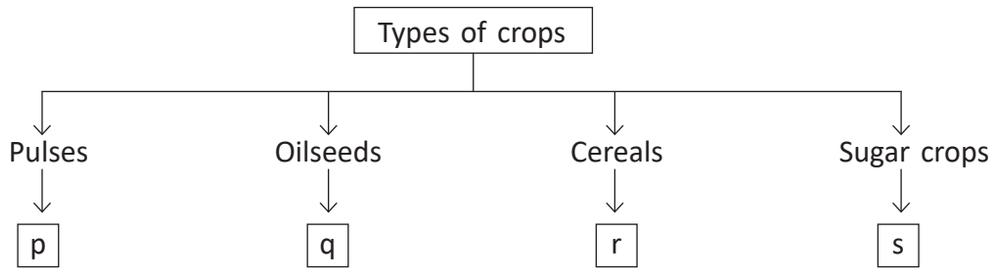
    (A) Plough
    (B) Hoe
    (C) Cultivator
    (D) Seed drill

18. In the figure given below, three forces are acting on a box of 4 kg. The box _____.

    (A) Will remain stationary
    (B) Will move towards right side
    (C) Will move towards left side
    (D) Cannot be determined

19. If a piece of paper is wrapped around an aluminium pipe, it does not catch fire as quickly as a piece of paper by itself. What can be the reason for paper wrapped around an aluminium pipe does not catch fire easily?
    (A) Aluminium being a metal is a good conductor of heat.
    (B) Heat is transferred from the paper to the metal.
    (C) Paper wrapped around the metal pipe does not attain its ignition temperature.
    (D) All of these

20. In the given flowchart, identify p, q, r and s.



    (A) p- Paddy, q- Barley, r- Maize, s- Groundnut
    (B) p- Wheat, q- Groundnut, r- Barley, s- Sugarcane
    (C) p- Gram, q- Mustard, r- Maize, s- Sugarcane
    (D) p- Sunflower, q- Mustard, r- Groundnut, s- Beans

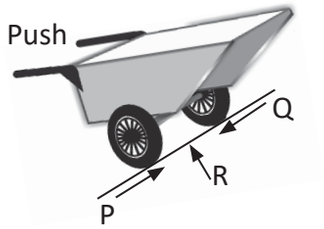
21. Which of the following substances is used in food preservation to inhibit the growth of bacteria?
    (A) Vinegar
    (B) Sugar
    (C) Salt
    (D) All of these

22. Identical blocks of iron, plastic, wood and rubber are placed in sunlight on a hot sunny day for some time. Which of the given blocks will become the hottest after the given time?

(A) Iron (B) Plastic

(C) Wood (D) Rubber

23. Rita is pushing a trolley in a market. Which arrow shows the frictional force acting on the wheels?



(A) P (B) Q

(C) R (D) None of these

24. Match the terms given in Column I with the appropriate answers given in Column II.

	Column I		Column II
(p)	Electroscope	(i)	Repel each other
(q)	Like charges	(ii)	Weak zone in the Earth's crust
(r)	Unlike charges	(iii)	Measures the power of an earthquake
(s)	Fault zone	(iv)	Detects electric charge
(t)	Richter scale	(v)	Attract each other

(A) (p) – (ii), (q) – (iii), (r) – (iv), (s) – (v), (t) – (i) (B) (p) – (iv), (q) – (i), (r) – (ii), (s) – (v), (t) – (iii)

(C) (p) – (iv), (q) – (i), (r) – (v), (s) – (ii), (t) – (iii) (D) (p) – (v), (q) – (iv), (r) – (i), (s) – (iii), (t) – (ii)

25. At the individual level to reduce pollution, we should _____.

(i) Avoid using cars and use public transport only (ii) Use clean fuels like LPG and CNG
(iii) Get pollution checks regularly (iv) Walk short distances and do not use vehicles
(v) Do not burn garbage

(A) (i), (ii) and (iii) only (B) (ii), (iii) and (iv) only

(C) (iii), (iv) and (v) only (D) (i), (ii), (iii), (iv) and (v)

26. The electrode which is connected to the negative terminal of a battery is called _____.

(A) Anode (B) Cathode

(C) Anion (D) Cation

27. Raj accidentally placed his hand over a burning candle on Diwali but immediately pulled his hand back. He felt the sensation of heat due to _____.

(A) Plastids (B) Nerve cells

(C) WBCs (D) RBCs

28. Which of the following is essential to grow maize?

(A) Very low temperature (B) Humidity

(C) Rainfall (D) Both (B) and (C)

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

29. We have often seen advertisements on TV and in newspapers regarding protecting children against polio under the Pulse Polio Programme. Which of the following options are the correct modes of transmission for polio?
    (A) Mosquito
    (B) Air
    (C) Water
    (D) Blood transfusion

30. Migratory birds fly to far away areas during a particular time of year. Which of the following conditions present in their habitat during that time are responsible for this behaviour?
    (A) Unavailability of food
    (B) Extreme weather conditions
    (C) Over crowding
    (D) Lack of nesting areas

31. Select the correct statements among the following.
    (A) Teflon is used for non-stick coating on cookwares.
    (B) Plastics are good conductors of heat and electricity.
    (C) Melamine is a fire-proof plastic.
    (D) Polycot is a mixture of polythene and cotton.

32. Which of the following will increase the friction?
    (A) Lubricating the surface
    (B) Treading of vehicle tyres
    (C) Grooving of shoe soles
    (D) Use of ball bearings

33. Which of the following are produced using paraffin wax?
    (A) Coal tar
    (B) Greases
    (C) Ointments
    (D) CNG

Section C (Competency Enhancement)

34. Consider the given diseases.
    (i) Cold
    (ii) Typhoid
    (iii) Tuberculosis
    (iv) Chickenpox
    (v) Amoebiasis
    (vi) Malaria
    (vii) Flu
    (viii) Ringworm

    Select the option that correctly identifies bacterial diseases (W), viral diseases (X), protozoan diseases (Y) and fungal diseases (Z).

	W	X	Y	Z
(A)	(ii), (iii)	(i), (iv), (vii)	(v), (vi)	(viii)
(B)	(i), (iii)	(ii), (iv), (vii)	(v)	(vi), (viii)
(C)	(viii)	(ii), (vii)	(i), (iii)	(iv), (v), (vi)
(D)	(v), (vi)	(i), (iv), (vii)	(ii), (iii)	(viii)

35. Select the correct statement among the following.
    (A) Ignition temperature is the highest temperature at which a substance catches fire.
    (B) A combustible substance cannot catch fire as long as its temperature is lower than its ignition temperature.
    (C) The substance which has very low ignition temperature and can easily catch fire with flame is called non-flammable substance.
    (D) LPG and petrol are non-combustible substances.

36. Coal is processed in the industry to get three useful products X, Y and Z. 'X' is used as a fuel in many industries, 'Y' is an almost pure form of carbon and is used in the manufacture of steel and 'Z' is a black, thick liquid and is used for manufacturing synthetic dyes, drugs, explosives, perfumes, etc. What are X, Y and Z respectively?

(A) Coke, Coal gas, Coal tar
(B) Coal gas, Coke, Coal tar
(C) Coal tar, Coal gas, Coke
(D) Coal gas, Coal tar, Coke

37. Manu took three substances P, Q and R and burnt them one by one. He noted that–

(i) Substance P burns quickly producing heat and light.
(ii) Substance Q burns at room temperature on its own.
(iii) Substance R burns by producing sound, light and heat with large amount of gas.

What types of combustion took place in these substances?

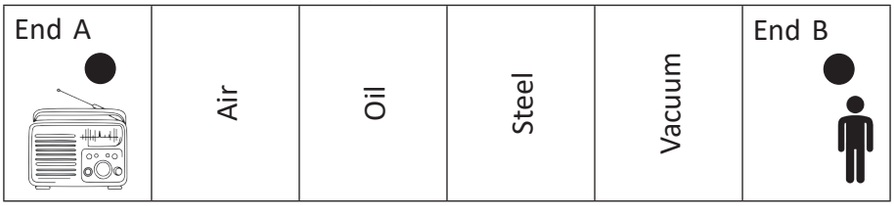
(A) (i) Spontaneous combustion, (ii) Rapid combustion, (iii) Explosion
(B) (i) Explosion, (ii) Spontaneous combustion, (iii) Rapid combustion
(C) (i) Rapid combustion, (ii) Spontaneous combustion, (iii) Explosion
(D) (i) Spontaneous combustion, (ii) Explosion, (iii) Rapid combustion

38. Divya and Naman are good friends and they like watching cookery shows together. One day, while watching the show, they decided to make lemon pickle. After making lemon pickle, Divya kept it in an aluminium container and Naman kept it in a glass container. After a month, pickle of one of them got spoiled. Whose pickle got spoiled and why?

(A) Naman's, because glass reacts with acids present in pickles.
(B) Divya's, because aluminium reacts with acids present in pickle.
(C) Both Divya's and Naman's pickles got spoiled, as they might have made a mistake in preparation.
(D) Divya's, because aluminium container would not get sunlight.

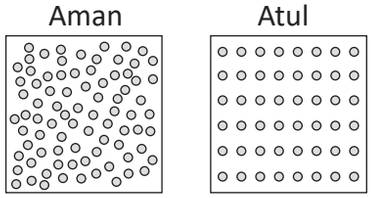
39. Four systems of oil, air, steel and vacuum are arranged in the order as shown in the given figure. A stereo is placed at end A and a person, standing at end B, is unable to hear the sound.

Which layer is to be removed so that the person can hear the sound?



(A) Air
(B) Oil
(C) Steel
(D) Vacuum

40. A farmer divided his field into two equal parts. He gave each part to his sons, Aman and Atul. Aman sowed seeds by spraying them manually, while Atul used a seed drill. The figure illustrates the position of seeds in both fields. Rest of the treatment given was the same for both fields. Which of the following statements is true in this situation?



(A) Both fields will give the same crop production.
(B) Aman's field will give more crop production.
(C) Atul's field will give more crop production.
(D) Crop production has nothing to do with arrangement of sowing of seeds.