

**SAMPLE TEST PAPER (CDS WING)**

**Nishan-E-Sikhi Institute of Science and Training (CDS Wing)**

**Time 90 Minutes**

**Maximum Marks :65**

**SECTION -A Subjective (Writing Skills )**

**( 5 Marks)**

Write an essay on any one of the following topics in about 150 words

- The Impact of Artificial Intelligence on Employment and Human Creativity.
- Climate Change and its Effects.
- The Rise of Mental Health Awareness in Modern Society.
- A Day without the Internet.
- Digital Currency: A Boon or a Threat.

**SECTION-B OBJECTIVE TYPE**

**(MCQ -60 Marks)**

**GENERAL KNOWLEDGE**

**1. What is the maximum age of a girl child eligible for opening an account in the Sukanya Samriddhi Yojana?**

- a. 7 years
- b. 8 years
- c. 9 years
- d. **10 years**

**2.The Mid-Day Meal Scheme comes under the purview of which ministry?**

- a. Ministry of Education
- b. Ministry of Women and Child Development
- c. Ministry of Social Justice and Empowerment
- d. Ministry of Health and Family Welfare

**3.Bhakra-Nangal Dam is built on which river?**

- a. Beas
- b. Ravi
- c. Godavari
- d. Sutlej

**4.Which is the second-highest mountain on Earth?**

- a. Mount Everest
- b. K2
- c. Gurushikhar
- d. Anaimudi

**5. Which of the following is/are *not* freshwater lakes?**

- a) Wular lake
- b) Dal lake

- c) Sambar lake and Lonar lake
- d) Wular lake and Dal lake

**6. What are the rocky bodies found between the orbits of Mars and Jupiter?**

- a) Moon
- b) Venus
- c) Earth
- d) Asteroids

**7. During the time of which Viceroy did the Simon Commission visit India?**

- a) Lord Irwin
- b) Lord Chelmsford
- c) Lord Willingdon
- d) Lord Wood

**8. Who is credited with coining the slogan "Quit India" in 1942?**

- a) Mahatma Gandhi
- b) Bhagat Singh
- c) Yusuf Meherally
- d) Dada Bhai Naoroji

**9. What is the full form of UGC?**

- a) Universal Grant Commission
- b) Unique Grant Commission
- c) University Grant Committee
- d) University Grants Commission

**10. Mohun Bagan club is primarily associated with which sport?**

- (a) Cricket
- (b) Hockey
- (c) Football
- (d) Polo

**11. Who is the current Union Minister of Education in India?**

- (a) Ashwini Vaishnaw
- (b) Dharmendra Pradhan
- (c) S.S. Chauhan
- (d) Praveen Kumar

**12. How many individuals were honored with the Padma Vibhushan Award in 2025?**

- (a) Five
- (b) Six
- (c) Seven
- (d) Nine

## **ENGLISH**

13. Synonym: Choose the word closest in meaning to "abundant."  
(a) scant (b) plentiful (c) meagre (d) rare
14. Antonym: Choose the word opposite in meaning to "meticulous."  
(a) precise (b) careful (c) careless (d) thorough
15. Tenses: Fill the blank — "By next month she \_\_\_ her project."  
(a) will finish (b) will have finished (c) finishes (d) has finished
16. Prepositions: Choose the correct preposition — "He is good \_\_\_ mathematics."  
(a) at (b) in (c) on (d) for
17. Active → Passive: Choose the correct passive form of "People believe him to be honest."  
(a) He believed to be honest.  
(b) He was believed to be honest.  
(c) He is believed to be honest.  
(d) He has been believed to be honest.
18. Direct → Indirect Speech: Choose the correct indirect form of He said, "I am leaving tomorrow."  
(a) He said that he is leaving tomorrow.  
(b) He said that he was leaving the next day.  
(c) He said he will be leaving tomorrow.  
(d) He said that he had left tomorrow.
19. Idiom: What does "spill the beans" mean?  
(a) to cook quickly (b) to reveal a secret (c) to make a mistake (d) to clean up
20. Modals: Choose the best option — "You.....complete the assignment by Friday; it's compulsory."  
(a) must (b) may (c) might (d) could
21. Spot the error: "Neither the manager nor the employees was ready for the meeting." — pick the part that contains the error.  
(a) Neither (b) the manager (c) nor the employees (d) was ready for the meeting
22. Comprehension: Read the short passage and answer the question.  
Passage: "*Urban gardens improve neighbourhoods by providing fresh vegetables and a green space for residents. They also create a sense of community and teach children about nature.*"  
Question: The passage mainly suggests that urban gardens —  
(a) are expensive to maintain.  
(b) help both people and the environment.  
(c) discourage community activities.  
(d) are only for teaching children.
23. Tense: Choose the correct form — "She \_\_\_ in Mumbai since 2012."  
(a) lives (b) has lived (c) lived (d) had lived
24. Preposition / Collocation: Choose the correct option — "He depends \_\_\_ his sister for advice."  
(a) to (b) in (c) on (d) with

## **CHEMISTRY**

**25.** When Ag is exposed to air it gets a black coating of

- (a)  $\text{AgNO}_3$
- (b)  $\text{Ag}_2\text{S}$
- (c)  $\text{Ag}_2\text{O}$
- (d)  $\text{Ag}_2\text{CO}_3$

**26.** Which of the following is an endothermic process?

- (a) Dilution of sulphuric acid
- (b) Sublimation of dry ice
- (c) Condensation of water vapours
- (d) Respiration in human beings

**27.** In terms of acidic strength, which one of the following is in the correct increasing order?

- (a) Water < Acetic acid < Hydrochloric acid
- (b) Water < Hydrochloric acid < Acetic acid
- (c) Acetic acid < Water < Hydrochloric acid
- (d) Hydrochloric acid < Water < Acetic acid

**28.** Sodium carbonate is a basic salt because it is a salt of a

- (a) strong acid and strong base
- (b) weak acid and weak base
- (c) strong acid and weak base
- (d) weak acid and strong base

**29.** Non-metals form covalent chlorides because

- (a) they can give electrons to chlorine
- (b) they can share electrons with chlorine
- (c) they can give electrons to chlorine atoms to form chloride ions
- (d) they cannot share electrons with chlorine atoms

**30.** Which of the following are not ionic compounds?

- (i) KCl
  - (ii) HCl
  - (iii)  $\text{CCl}_4$
  - (iv) NaCl
- (a) (i) and (ii)
  - (b) (ii) and (iii)
  - (c) (iii) and (iv)
  - (d) (i) and (iii)

**31.** Which of the following is the formula of Butanoic acid?

- (a)  $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{COOH}$
- (b)  $\text{COOH}-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_3$
- (c)  $\text{CH}_3-\underset{\text{COOH}}{\text{CH}}-\text{CH}_2-\text{CH}_3$
- (d)  $\text{CH}_2-\underset{\text{COOH}}{\text{CH}_2}-\text{CH}_2-\text{COOH}$

**32.** In diamond, each carbon atom is bonded to four other carbon atoms to form

- (a) a hexagonal array
- (b) a rigid three-dimensional structure

- (c) a structure in the shape of a football  
(d) a structure of a ring
- 33.** Carbon belongs to the second period and Group 14. Silicon belongs to the third period and Group 14. If atomic number of carbon is 6, the atomic number of silicon is  
(a) 7  
(b) 14  
(c) 24  
(d) 16
- 34.** A metal 'M' is in the first group of the Periodic Table. What will be the formula of its oxide?  
(a) MO  
(b) M<sub>2</sub>O  
(c) M<sub>2</sub>O<sub>3</sub>  
(d) MO<sub>2</sub>
- 35.** Which of the following will give a pleasant smell of ester when heated with ethanol and a small quantity of sulphuric acid?  
(a) CH<sub>3</sub>COOH  
(b) CH<sub>3</sub>CH<sub>2</sub>OH  
(c) CH<sub>3</sub>OH  
(d) CH<sub>3</sub>CHO
- 36.** Oxidation is a process which involves  
(a) addition of oxygen  
(b) addition of hydrogen  
(c) removal of oxygen  
(d) removal of hydrogen

### **PHYSICS**

- 37.** The unit of angular velocity is:-  
(a) rad  
(b) ms<sup>-1</sup>  
(c) rad s<sup>-1</sup>  
(d) rad s<sup>-2</sup>
- 38.** Value of universal gravitational constant G depends upon:-  
(a) nature of material  
(b) temperature and pressure  
(c) acceleration due to gravity  
(d) none of these.
- 39.** A stone is dropped from the edge of a roof of tower 4.9m tall. Time taken by the stone to strike the ground is:-  
(a) 1sec  
(b) 0.5 sec  
(c) 2 sec  
(d) none of these.

**40.** when the speed of moving object is doubled, its:

- (a) acceleration is doubled
- (b) weight is doubled
- (c) Kinetic Energy is doubled
- (d) Kinetic energy increases four times.

**41.** Echo is due to reflection of

- (a) Light waves
- (b) Radio waves
- (c) Sound waves
- (d) Infrasonic waves

**42.** No matter how far you stand from a mirror, your image appears erect. The mirror is likely to be

- (a) Plane
- (b) Concave
- (c) Convex
- (d) Either plane or convex

**43.** A 10 mm long pin is placed vertically in front of a concave mirror. A 5 mm long image of pin is formed at 30 cm in front of the mirror. The focal length of this mirror is:

- (a) -30cm
- (b) -20 cm
- (c) -40 cm
- (d) -60 cm

**44.** For which defect of vision is a convex lens used to correct it?

- (a) Myopia
- (b) Hypermetropia
- (c) Cataract
- (d) Presbyopia

**45.** In an electrical circuit, two resistors of 2 ohm and 4 ohm respectively are connected in series to a 6 Volt battery. The heat dissipated by the 4 ohm resistor in 5 sec will be:

- (a) 5 J
- (b) 10 J
- (c) 20 J
- (d) 30 J

**46.** A cylindrical conductor of length 'l' and uniform area of cross – section A has resistance R. Another conductor of length 2 l and resistance R of the same material has area of cross – section

- (a)  $A/2$
- (b)  $3 A/2$
- (c) 2A
- (d) 3A

**47.** Magnetic effect of current was discovered by:

- (a) Oersted
- (b) Faraday
- (c) Bohr
- (d) Ampere

**48.** Why is wind energy considered a conventional source of energy?

- (a) as it can rotate a wind mill
- (b) as it can help in lifting water
- (c) as it is readily available and can be used for a long time
- (d) as it is produced due to uneven heating of the Earth

### **MATHEMATICS**

**49.** Which of the following is an irrational number?

- a.  $22/7$
- b. 3.1416
- c.  $\sqrt{2}$
- d. 0.25

**50-** If sum of roots of a quadratic is 7 and product is 10, the equation is;

- a.  $x^2 + 7x + 10 = 0$
- b.  $x^2 - 7x + 10 = 0$
- c.  $x^2 - 10x + 7 = 0$
- d.  $x^2 + 10x + 7 = 0$

**51:-** Midpoint of (2,3) and (4,7) is

- a. (3,5)
- b. (2,5)
- c. (3,7)
- d. (2,4)

**52.** Equation of x-axis is

- a.  $y = 0$
- b.  $x = 0$
- c.  $y = 1$
- d.  $x = 1$

**53.** If a quadrilateral is a parallelogram, then opposite angles are;

- a. equal
- b. Unequal
- c. Right angles
- d. None

**54.** Curved Surface Area of cone of slant height  $l$  and radius  $r$  is;

- a.  $\pi r^2$
- b.  $\pi r l$
- c.  $2\pi r l$
- d.  $\pi r^2 l$

**55.** Median of 7,8,5,9,10 is

- a. 7
- b. 8
- c. 9
- d. 10

**56.** If mean of 10 members is 12, then sum of the numbers is;

- a. 10
- b. 12
- c. 120
- d. 100

**57.** Probability of impossible event is

- (a) 0
- (b) 1
- (c) -1
- (d) none

**58.** In a  $\triangle ABC$ , right angled at B, If  $AB = 6$  cm and  $BC = 8$  cm, then  $\sin A = ?$

- (a)  $\frac{3}{5}$
- (b)  $\frac{4}{5}$
- (c)  $\frac{5}{3}$
- (d)  $\frac{5}{4}$

**59.** The angle of elevation of the top of a tower 50m high from a point on the ground is  $30^\circ$ . The distance of the point from the tower is;

- a)  $25\sqrt{3}$ m
- (b)  $50\sqrt{3}$ m
- (c) 75 m
- (d) 100 m

**60.** The perimeter of a Square inscribed in circle of radius  $r$  is

- (a)  $4r$
- (b)  $8r$
- (c)  $2\pi r$
- (d)  $2\sqrt{2}r$



### ANSWER KEY Sample Paper -1

1	d. 10 years	31	a. $\text{CH}_3\text{CH}_2\text{CH}_2\text{COOH}$ (Butanoic acid)
2	a. Ministry of Education	32	b. a rigid three-dimensional structure
3	d. Sutlej	33	b. 14
4	b. K2	34	b. $\text{M}_2\text{O}$
5	c. Sambar lake and Lonar lake	35	a. $\text{CH}_3\text{COOH}$
6	d. Asteroids	36	a. addition of oxygen
7	a. Lord Irwin	37	c. rad/s (radians per second)
8	c. Yusuf Meherally	38	d. none of these
9	d. University Grants Commission	39	a. 1 sec
10	c. Football	40	d. Kinetic energy increases four times.
11	b. Dharmendra Pradhan	41	c. Sound waves
12	c	42	d. either Plane mirror or convex
13	b. plentiful	43	b. -20 cm
14	c. careless	44	b. Hypermetropia
15	b. will have finished	45	c. 20 J
16	a. at	46	c. 2A
17	c. He is believed to be honest.	47	a. Oersted
18	b. He said that he was leaving the next day.	48	c. Readily available for long time
19	b. to reveal a secret	49	c. $\sqrt{2}$ (irrational number)
20	a. must	50	b. $x^2 - 7x + 10 = 0$
21	d. was ready for the meeting ( <i>Correct verb: were</i> )	51	a. (3,5)
22	b. help both people and the environment.	52	a. $y = 0$
23	b. has lived	53	a. opposite angles are equal
24	c. on	54	b. $\pi r l$ (curved surface area of cone)
25	b. $\text{Ag}_2\text{S}$	55	b. 8 (median)
26	b. Sublimation of dry ice	56	c. 120 (sum of numbers)
27	a. Water < Acetic acid < Hydrochloric acid	57	a. 0 (impossible event)
28	d. weak acid and strong base	58	b. $\frac{3}{5}$ ( $\sin a$ )
29	b. they can share electrons with chlorine	59	b. $50\sqrt{3}$ m

<b>30</b>	<b>b.</b> (ii) and (iii)	<b>60</b>	<b>b.</b> 8r (perimeter of square.
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