

NATIONAL DEFENCE ACADEMY & NAVAL ACADEMY EXAMINATION  
PRACTICE TEST SERIES

**GENERAL ABILITY TEST (GAT)**

Time Allowed: Two Hours & Thirty Minutes

Maximum Marks: 600

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Roll Number:

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**\*\*INSTRUCTIONS\*\***

1. *IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET **DOES NOT** HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS, ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.*
2. **Please note that it is the candidate's responsibility to encode and fill in the Roll Number and Test Booklet Series Number (if required) carefully and without any omission or discrepancy at the appropriate places. Any omission/discrepancy will render the Answer Sheet liable for rejection.**
3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside. **DO NOT** write anything else on the Test Booklet except on the pages for Rough Work.
4. This Test Booklet contains [150] items (questions): PART -A and PART-B. Each item comprises four responses (answers). You will select the response which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each item.
5. All items carry equal marks.
6. Sheets for rough work are appended in the Test Booklet at the end.
7. Use only Blue/Black Ball Point Pen for marking answers. **DO NOT USE PENCIL FOR MARKING ANSWERS.**
8. **Penalty for wrong Answers:**  
THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY THE CANDIDATE IN THE OBJECTIVE TYPE QUESTION PAPERS.
  - (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, **one-third** of the marks assigned to that question will be deducted as penalty.
  - (ii) If a candidate give more more than one answer, it will be treated as a **wrong answer** even if one of the given answers happens to be correct and there will be same penalty as above to that question.
  - (iii) If a question is left blank, i.e. no answer is given by the candidate, there will be **no penalty** for that question.

### Part A: English (Questions 1-50)

**Directions (Questions 1-5):** In this section, each item consists of a sentence with an underlined word followed by four words or groups of words. Select the option that is **opposite in meaning** (antonym) to the underlined word and mark your response.

1. The politician's equivocal statements left the audience utterly confused about his actual stance.  
(A) Ambiguous  
(B) Nebulous  
(C) Unambiguous  
(D) Obscure
2. Despite the initial setbacks, her indomitable spirit eventually led her to success.  
(A) Invincible  
(B) Conquerable  
(C) Resolute  
(D) Adamant
3. The prodigal son returned home after squandering his inheritance on frivolous pursuits.  
(A) Extravagant  
(B) Wasteful  
(C) Lavish  
(D) Frugal
4. His obsequious behavior towards the manager was perceived as insincere by his colleagues.  
(A) Sycophantic  
(B) Servile  
(C) Domineering  
(D) Fawning
5. The evidence presented was tangential to the main point of the argument, confusing the jury.  
(A) Peripheral  
(B) Irrelevant  
(C) Digressive  
(D) Relevant

**Directions (Questions 6-10):** In this section, each item consists of a sentence with an underlined word followed by four words or groups of words. Select the option that is **nearest in meaning** (synonym) to the underlined word and mark your response.

6. The detective found the suspect's alibi entirely specious, despite its apparent logic.  
(A) Genuine  
(B) Plausible but false  
(C) Valid  
(D) Authentic
7. The old manuscript was filled with arcane symbols that only a few scholars could decipher.  
(A) Commonplace  
(B) Esoteric  
(C) Modern  
(D) Simple
8. His laconic reply suggested a lack of interest in the lengthy explanation provided.  
(A) Verbose  
(B) Garrulous  
(C) Terse  
(D) Loquacious
9. The treaty aimed to ameliorate the harsh living conditions in the war-torn region.  
(A) Worsen  
(B) Exacerbate  
(C) Aggravate  
(D) Improve
10. The ubiquitous nature of smartphones has fundamentally changed social interactions.  
(A) Rare  
(B) Scarce  
(C) Omnipresent  
(D) Uncommon

**Directions (Questions 11-15):** In the following sentences, some parts have been jumbled up. You are required to re-arrange these parts, which are labelled P, Q, R, and S, to produce the correct sentence. Choose the proper sequence.

11. The government announced  
(P) that aims to provide affordable housing  
(Q) a comprehensive new policy  
(R) for the urban poor  
(S) addressing the growing crisis  
The correct sequence should be:  
(A) QPSR  
(B) SQPR

- (C) QSPR
- (D) SPQR

12. Despite facing numerous challenges  
(P) the team demonstrated remarkable resilience  
(Q) throughout the tournament  
(R) and strategic acumen  
(S) eventually clinching the championship title  
The correct sequence should be:

- (A) PRQS
- (B) QPRS
- (C) PQRS
- (D) SPRQ

13. It is imperative  
(P) that we address the root causes  
(Q) of climate change  
(R) rather than merely treating the symptoms  
(S) if we hope to secure a sustainable future  
The correct sequence should be:

- (A) PQRS
- (B) PRQS
- (C) PSQR
- (D) PQSR

14. The discovery of penicillin  
(P) which revolutionized modern medicine  
(Q) by Alexander Fleming in 1928  
(R) was largely accidental  
(S) fundamentally altering the treatment of bacterial infections  
The correct sequence should be:

- (A) QPSR
- (B) QRPS
- (C) QSPR
- (D) QSRP

15. Historical analysis reveals  
(P) often driven by complex socio-economic factors  
(Q) that the rise and fall of empires  
(R) and geopolitical shifts  
(S) is a recurring pattern throughout human civilization  
The correct sequence should be:

- (A) QSPR
- (B) QPSR

- (C) SQPR
- (D) SPQR

**Directions (Questions 16-20):** Each of the following sentences in this section has a blank space and four words or group of words are given after the sentence. Select the word or group of words you consider most appropriate for the blank space.

16. The committee's report was criticized for its \_\_\_\_\_ analysis, lacking depth and failing to address the core issues adequately.

- (A) profound
- (B) superficial
- (C) exhaustive
- (D) meticulous

17. If I \_\_\_\_\_ known about the traffic jam, I would have taken an alternative route to avoid the delay.

- (A) had
- (B) have
- (C) would have
- (D) did

18. The ancient philosopher argued that true happiness stems not from external possessions but from inner \_\_\_\_\_.

- (A) turmoil
- (B) avarice
- (C) tranquillity
- (D) discord

19. Neither the students nor the teacher \_\_\_\_\_ satisfied with the ambiguous guidelines provided for the project.

- (A) were
- (B) was
- (C) are
- (D) have been

20. The rapid advancement of artificial intelligence necessitates a serious ethical discussion regarding its potential \_\_\_\_\_ on society.

- (A) insignificance
- (B) repercussions
- (C) benefits
- (D) triviality

**Directions (Questions 21-30):** Each item in this section consists of a sentence, parts of which have been jumbled. These parts have been labelled P, Q, R, and S. Given below each sentence are four sequences namely (A), (B), (C) and (D). You are required to re-arrange the jumbled parts of the sentence and mark your response accordingly.

21. (P) the intricate tapestry of global politics / (Q) requires a nuanced understanding / (R) of historical contexts and / (S) contemporary power dynamics  
(A) PQRS  
(B) QPRS  
(C) QPSR  
(D) PQSR
22. (P) by the relentless march of technology / (Q) traditional industries are being disrupted / (R) forcing companies to adapt / (S) or risk obsolescence  
(A) QPRS  
(B) QPSR  
(C) PQRS  
(D) PRQS
23. (P) a commitment to lifelong learning / (Q) in today's rapidly evolving world / (R) is not merely advantageous / (S) but absolutely essential for career growth  
(A) QPRS  
(B) QPSR  
(C) QRPS  
(D) QSPR
24. (P) the principles of democracy / (Q) though universally lauded / (R) are often challenging to implement effectively / (S) in diverse cultural contexts  
(A) PQRS  
(B) PRQS  
(C) QPSR  
(D) QPRS
25. (P) environmental conservation efforts / (Q) must involve collaborative action / (R) from governments, corporations, and individuals alike / (S) to achieve meaningful impact  
(A) PQRS  
(B) QPSR

- (C) PQSR  
(D) QSPR

26. (P) the study concluded that / (Q) regular physical exercise / (R) significantly reduces the risk / (S) of various chronic diseases  
(A) PQRS  
(B) PRQS  
(C) PSRQ  
(D) PSQR
27. (P) navigating the complexities / (Q) of international law / (R) demands expertise in multiple legal systems / (S) and cross-cultural communication skills  
(A) PQRS  
(B) PRQS  
(C) PQSR  
(D) PSQR
28. (P) despite its initial promise / (Q) the ambitious project encountered / (R) unforeseen logistical hurdles / (S) leading to significant delays  
(A) PQRS  
(B) PRQS  
(C) PQSR  
(D) PSQR
29. (P) the ancient ruins provided / (Q) invaluable insights into / (R) the daily lives and cultural practices / (S) of a long-lost civilization  
(A) PQRS  
(B) PRQS  
(C) PQSR  
(D) PSQR
30. (P) fostering innovation requires / (Q) an environment that encourages / (R) experimentation and tolerates failure / (S) as part of the learning process  
(A) PQRS  
(B) PRQS  
(C) PQSR  
(D) PSRQ

**Directions (Questions 31-40):** In this section, you are given a passage followed by ten questions. Read the passage carefully and choose the best answer to each question out of the four alternatives.

## Passage

The concept of "cognitive dissonance," first proposed by Leon Festinger in the 1950s, refers to the mental discomfort experienced by a person who holds two or more contradictory beliefs, ideas, or values, or performs an action that contradicts their beliefs. This discomfort motivates individuals to change one of their attitudes or behaviors to reduce the dissonance and restore internal consistency. For instance, a person who considers themselves environmentally conscious but drives a gas-guzzling SUV might experience cognitive dissonance. To alleviate this discomfort, they might either downplay the environmental impact of their vehicle ("It's not that bad compared to others"), enhance the perceived importance of their need for the SUV ("I need it for family safety"), or, less commonly, change their behavior by switching to a more fuel-efficient car.

This psychological phenomenon has profound implications across various domains, including decision-making, attitude formation, and social influence. When faced with a difficult choice between two attractive options, people often experience post-decisional dissonance. After making a choice, they tend to enhance the attractiveness of the chosen option and devalue the rejected one to justify their decision and reduce the feeling that they might have made the wrong choice. This "spreading of alternatives" helps solidify commitment to the decision.

Furthermore, cognitive dissonance plays a significant role in how people process information. Individuals are often motivated to seek out information that confirms their existing beliefs (confirmation bias) and avoid information that challenges them, as contradictory information can induce dissonance. This selective exposure can lead to the reinforcement of existing attitudes, even if they are based on flawed premises, and contributes to polarization in social and political contexts. Understanding cognitive dissonance is crucial not only for psychologists but also for educators, marketers, and policymakers who seek to understand and influence human behavior and attitude change. Recognizing its mechanisms can

help individuals become more aware of their own biases and inconsistencies, potentially leading to more rational decision-making and open-mindedness.

31. What is the primary definition of cognitive dissonance according to the passage?
  - (A) The state of holding multiple harmonious beliefs.
  - (B) The mental comfort derived from consistent actions and beliefs.
  - (C) The mental discomfort from holding contradictory beliefs or values, or acting against one's beliefs.
  - (D) The tendency to seek out challenging information.
32. According to Festinger's theory, what motivates individuals experiencing cognitive dissonance?
  - (A) A desire to embrace contradiction.
  - (B) A need to reduce discomfort and restore internal consistency.
  - (C) An urge to seek out more conflicting information.
  - (D) A motivation to maintain the status quo regardless of discomfort.
33. Which of the following is presented as a way an environmentally conscious SUV owner might reduce cognitive dissonance?
  - (A) Actively researching the negative environmental impact of SUVs.
  - (B) Joining an environmental activist group.
  - (C) Emphasizing the safety features or necessity of the SUV.
  - (D) Acknowledging the contradiction without changing behavior or attitude.
34. What is "post-decisional dissonance"?
  - (A) The comfort experienced after making an easy choice.
  - (B) The discomfort felt before making a difficult choice.
  - (C) The discomfort felt after choosing between attractive alternatives.
  - (D) The tendency to regret all decisions made.
35. How do people typically resolve post-decisional dissonance, according to the passage?
  - (A) By reversing their decision immediately.

- (B) By focusing on the negative aspects of the chosen option.
- (C) By enhancing the attractiveness of the chosen option and devaluing the rejected one.
- (D) By seeking opinions that contradict their choice.

36. The passage suggests that cognitive dissonance influences information processing primarily through:

- (A) Encouraging the objective evaluation of all available information.
- (B) Promoting the search for information that challenges existing beliefs.
- (C) Motivating selective exposure to confirming information and avoidance of contradictory information.
- (D) Leading to a complete rejection of all new information.

37. What potential negative societal consequence of cognitive dissonance is mentioned?

- (A) Increased social harmony and understanding.
- (B) Greater individual rationality and open-mindedness.
- (C) Reinforcement of flawed attitudes and increased polarization.
- (D) A reduction in confirmation bias.

38. The passage implies that understanding cognitive dissonance is valuable because it can:

- (A) Help manipulate people more effectively.
- (B) Increase individuals' awareness of their own biases and inconsistencies.
- (C) Eliminate all internal conflicts permanently.
- (D) Justify irrational behavior.

39. The term "spreading of alternatives" refers to:

- (A) Choosing multiple options simultaneously.
- (B) The process of making the chosen option seem better and the rejected one worse after a decision.
- (C) Seeking out diverse opinions before making a choice.
- (D) The initial difficulty in choosing between options.

40. What is the overall tone of the passage?

- (A) Skeptical and critical

- (B) Humorous and lighthearted
- (C) Informative and analytical
- (D) Emotional and persuasive

**Directions (Questions 41-50):** Each of the following sentences in this section has a blank space with four options. Select the most appropriate option to fill in the blank.

41. The negotiations reached an \_\_\_\_\_, with neither side willing to compromise further on the key issues.

- (A) accord
- (B) impasse
- (C) agreement
- (D) understanding

42. Despite the \_\_\_\_\_ evidence against him, the defendant maintained his innocence throughout the trial.

- (A) flimsy
- (B) tenuous
- (C) overwhelming
- (D) scarce

43. The professor's lecture on quantum physics was so \_\_\_\_\_ that many students struggled to grasp the fundamental concepts.

- (A) lucid
- (B) pellucid
- (C) abstruse
- (D) straightforward

44. Her \_\_\_\_\_ attention to detail ensured that the project was completed flawlessly and ahead of schedule.

- (A) cursory
- (B) perfunctory
- (C) meticulous
- (D) careless

45. The ancient artifact was handled with \_\_\_\_\_ care due to its extreme fragility and historical significance.

- (A) reckless
- (B) utmost
- (C) negligible
- (D) minimal



46. The discovery of new fossil evidence \_\_\_\_\_ the existing theory about the evolution of early hominids.  
(A) contradicts  
(B) refutes  
(C) corroborates  
(D) disproves

47. His attempt to \_\_\_\_\_ the angry crowd only seemed to exacerbate the situation further.  
(A) placate  
(B) incite  
(C) provoke  
(D) antagonize

48. The company's decision to downsize was met with considerable \_\_\_\_\_ from the employees and labor unions.  
(A) approbation  
(B) acclamation  
(C) consternation  
(D) commendation

49. The novel provides a \_\_\_\_\_ critique of modern society, exploring themes of alienation and consumerism.  
(A) flattering  
(B) laudatory  
(C) poignant  
(D) complimentary

50. Learning a new language requires not only memorization but also a willingness to \_\_\_\_\_ oneself in the culture.  
(A) isolate  
(B) detach  
(C) immerse  
(D) separate

## Part B: General Knowledge (Questions 51-150)

### Section I: Physics (Questions 51-75)

51. A body is thrown vertically upwards with an initial velocity  $u$ . If air resistance is considered, which of the following statements is most accurate regarding the time of ascent ( $t_a$ ) and time of descent ( $t_d$ )?  
(A)  $t_a = t_d$   
(B)  $t_a > t_d$

(C)  $t_a < t_d$   
(D) The relationship depends on the initial velocity  $u$ .

52. Two spheres, A and B, have radii  $R$  and  $2R$  respectively, and densities  $\rho$  and  $\rho/2$  respectively. If they are dropped from the same height in a vacuum, which one reaches the ground first?  
(A) Sphere A  
(B) Sphere B  
(C) Both reach simultaneously  
(D) Cannot be determined without knowing their masses.

53. A convex lens of focal length  $f_1$  is placed in contact with a concave lens of focal length  $f_2$ . If  $f_1 > f_2$ , the combination will behave as a:  
(A) Converging lens  
(B) Diverging lens  
(C) Plane glass slab  
(D) Converging mirror

54. When light travels from a rarer medium to a denser medium, which of the following properties decreases?  
(A) Frequency only  
(B) Wavelength only  
(C) Speed and Wavelength  
(D) Speed and Frequency

55. A person suffering from hypermetropia (long-sightedness) cannot see nearby objects clearly because:  
(A) The focal length of the eye lens is too long.  
(B) The image of nearby objects is formed behind the retina.  
(C) The eyeball has become too short.  
(D) All of the above contribute to the condition.

56. A wire of resistance  $R$  is stretched uniformly such that its length is doubled. Assuming the volume remains constant, what is the new resistance of the wire?  
(A)  $R$   
(B)  $2R$   
(C)  $4R$   
(D)  $R/4$

57. Lenz's law is a consequence of the law of conservation of:
- Charge
  - Mass
  - Momentum
  - Energy
58. In a step-down transformer, which of the following quantities increases in the secondary coil compared to the primary coil, assuming it's ideal?
- Voltage
  - Current
  - Power
  - Frequency
59. The phenomenon responsible for the blue color of the sky is:
- Reflection of light
  - Refraction of light
  - Dispersion of light
  - Scattering of light
60. A boat carrying large stones is floating in a water tank. If the stones are unloaded into the water, the water level in the tank will:
- Rise
  - Fall
  - Remain unchanged
  - Rise initially then fall
61. Consider two planets,  $P_1$  and  $P_2$ , with radii  $R_1$  and  $R_2=2R_1$ , and masses  $M_1$  and  $M_2=4M_1$ . What is the ratio of the acceleration due to gravity on the surface of  $P_1$  to that on  $P_2$  ( $g_1/g_2$ )?
- 1:1
  - 1:2
  - 2:1
  - 1:4
62. A simple pendulum is taken from the Earth's surface to the Moon. How will its time period change? (Acceleration due to gravity on the Moon is about  $1/6^{\text{th}}$  of that on Earth).
- It will decrease by a factor of 6.
  - It will increase by a factor of  $1/6$ .
  - It will decrease by a factor of  $1/6$ .
  - It will increase by a factor of 6.
63. Which of the following electromagnetic waves has the highest frequency?
- Radio waves
  - Microwaves
  - X-rays
  - Gamma rays
64. A Carnot engine operates between two reservoirs at temperatures  $T_1$  (source) and  $T_2$  (sink). Its efficiency is  $\eta$ . If both temperatures are increased by the same amount  $\Delta T$ , how will the new efficiency  $\eta'$  compare to  $\eta$ ?
- $\eta' > \eta$
  - $\eta' < \eta$
  - $\eta' = \eta$
  - The change depends on the ratio  $T_1/T_2$ .
65. When a sound wave travels from air into water, which property remains unchanged?
- Speed
  - Wavelength
  - Frequency
  - Amplitude
66. Two resistors  $R_1$  and  $R_2$  ( $R_1 < R_2$ ) are connected in parallel across a voltage source  $V$ . Which resistor dissipates more power?
- $R_1$
  - $R_2$
  - Both dissipate the same power.
  - Cannot be determined without knowing the values.
67. The working principle of a nuclear reactor is based on:
- Nuclear fusion
  - Controlled nuclear fission
  - Uncontrolled nuclear fission
  - Radioactive decay
68. Mirage is an optical phenomenon primarily caused by:
- Total internal reflection and refraction of light
  - Scattering of light by atmospheric particles
  - Dispersion of light through water droplets
  - Diffraction of light around obstacles
69. A force  $F$  acts on a body of mass  $m$  initially at rest. The work done by the force during a time interval  $t$  is proportional to:



- (A)  $t$
- (B)  $t^2$
- (C)  $1/t$
- (D)  $1/t^2$

70. If the kinetic energy of a body is increased by 300%, its momentum will increase by:

- (A) 50%
- (B) 100%
- (C) 150%
- (D) 200%

71. Why does a liquid drop tend to assume a spherical shape?

- (A) To minimize its volume
- (B) To maximize its surface area
- (C) To minimize its surface energy (due to surface tension)
- (D) Due to atmospheric pressure

72. An object is placed between two plane mirrors inclined at an angle of  $60^\circ$  to each other. How many images will be formed?

- (A) 4
- (B) 5
- (C) 6
- (D) Infinite

73. The specific heat capacity of water is high. This property is crucial because it helps:

- (A) Water freeze quickly
- (B) Water boil quickly
- (C) Moderate climate near large water bodies
- (D) Increase evaporation rates

74. In Young's double-slit experiment, if the distance between the slits is halved and the distance between the slits and the screen is doubled, the fringe width will:

- (A) Remain unchanged
- (B) Be halved
- (C) Be doubled
- (D) Become four times

75. A charged particle enters a uniform magnetic field perpendicular to its direction of motion. The path of the particle will be:

- (A) Straight line
- (B) Circle

- (C) Parabola
- (D) Helix

## Section II: Chemistry (Questions 76-90)

76. Which of the following represents a chemical change?

- (A) Melting of ice
- (B) Dissolving sugar in water
- (C) Rusting of iron
- (D) Boiling of water

77. According to the Law of Definite Proportions, the ratio by mass of elements in a chemical compound:

- (A) Varies depending on the source
- (B) Is always constant, regardless of the source or method of preparation
- (C) Depends on the temperature and pressure
- (D) Is always a simple whole number ratio, but can vary slightly

78. Which gas is produced when dilute hydrochloric acid reacts with zinc metal?

- (A) Oxygen ( $O_2$ )
- (B) Hydrogen ( $H_2$ )
- (C) Chlorine ( $Cl_2$ )
- (D) Carbon dioxide ( $CO_2$ )

79. Oxidation involves:

- (A) Gain of electrons or decrease in oxidation state
- (B) Loss of electrons or increase in oxidation state
- (C) Gain of hydrogen
- (D) Loss of oxygen

80. Which of the following is NOT a property of acids?

- (A) They turn blue litmus red.
- (B) They have a sour taste.
- (C) They react with bases to form salt and water.
- (D) They feel slippery to the touch.

81. Isotopes of an element have:

- (A) Same number of protons but different number of neutrons
- (B) Same number of neutrons but different number of protons

- (C) Same number of protons and neutrons  
(D) Different number of protons and neutrons
82. Which of the following elements exhibits the property of catenation to the maximum extent?  
(A) Silicon (Si)  
(B) Carbon (C)  
(C) Sulphur (S)  
(D) Phosphorus (P)
83. Hard water contains dissolved salts of which metals?  
(A) Sodium and Potassium  
(B) Calcium and Magnesium  
(C) Aluminium and Zinc  
(D) Iron and Copper
84. The process of coating iron with a layer of zinc to prevent rusting is called:  
(A) Electroplating  
(B) Galvanization  
(C) Annealing  
(D) Alloying
85. Which of the following represents the correct order of reactivity for the metals: Zinc (Zn), Iron (Fe), Copper (Cu), Magnesium (Mg)?  
(A)  $\text{Cu} > \text{Fe} > \text{Zn} > \text{Mg}$   
(B)  $\text{Mg} > \text{Zn} > \text{Fe} > \text{Cu}$   
(C)  $\text{Fe} > \text{Zn} > \text{Mg} > \text{Cu}$   
(D)  $\text{Zn} > \text{Mg} > \text{Fe} > \text{Cu}$
86. What is the main component of natural gas?  
(A) Ethane  
(B) Propane  
(C) Butane  
(D) Methane
87. The pH value of a neutral solution at  $25^{\circ}\text{C}$  is:  
(A) Less than 7  
(B) Equal to 7  
(C) Greater than 7  
(D) Equal to 0
88. Which type of chemical bond is formed by the sharing of electrons between atoms?  
(A) Ionic bond  
(B) Covalent bond  
(C) Metallic bond  
(D) Hydrogen bond

89. What happens to the atomic radius as we move from left to right across a period in the periodic table?  
(A) It increases  
(B) It decreases  
(C) It remains constant  
(D) It first increases then decreases
90. Which of the following is an example of an element?  
(A) Water ( $\text{H}_2\text{O}$ )  
(B) Salt ( $\text{NaCl}$ )  
(C) Air  
(D) Graphite (C)

### Section III: General Science (Questions 91-100)

91. Which cellular organelle is primarily responsible for generating energy (ATP) through cellular respiration?  
(A) Nucleus  
(B) Ribosome  
(C) Mitochondrion  
(D) Endoplasmic Reticulum
92. Which of the following distinguishes a plant cell from an animal cell?  
(A) Presence of mitochondria  
(B) Presence of a cell wall and chloroplasts  
(C) Presence of a cell membrane  
(D) Presence of ribosomes
93. Which human organ system is primarily responsible for transporting oxygen, nutrients, and hormones throughout the body?  
(A) Respiratory system  
(B) Digestive system  
(C) Nervous system  
(D) Circulatory system
94. Common cold is typically caused by which type of pathogen?  
(A) Bacteria  
(B) Virus  
(C) Fungus  
(D) Protozoa
95. Which process in plants involves the conversion of light energy into chemical energy stored in glucose?

- (A) Respiration
- (B) Transpiration
- (C) Photosynthesis
- (D) Germination

96. Which planet in our solar system is known for its prominent ring system, primarily composed of ice particles?

- (A) Jupiter
- (B) Saturn
- (C) Uranus
- (D) Neptune

97. What is the fundamental difference between tissues and organs?

- (A) Tissues are living, organs are non-living.
- (B) Tissues are made of organs, organs are made of cells.
- (C) Tissues are groups of similar cells performing a specific function; organs are structures composed of different tissues working together.
- (D) Organs are microscopic, tissues are macroscopic.

98. Which of the following planets is classified as a terrestrial (rocky) planet?

- (A) Jupiter
- (B) Saturn
- (C) Mars
- (D) Neptune

99. The "basis of life" is often considered to be the cell because:

- (A) All living things are composed of cells.
- (B) Cells carry out all essential life processes.
- (C) New cells arise from pre-existing cells.
- (D) All of the above.

100. What is the primary reason for seasons on Earth?

- (A) The Earth's distance from the Sun varies.
- (B) The tilt of the Earth's axis of rotation relative to its orbital plane.
- (C) Changes in the Sun's energy output.
- (D) The gravitational pull of the Moon.

#### Section IV: History, Freedom Movement, etc. (Questions 101-120)

101. The Indus Valley Civilization is primarily known for which of the following features, distinguishing it from contemporary civilizations?

- (A) Monumental temple architecture
- (B) Advanced urban planning and sanitation systems
- (C) Development of iron metallurgy
- (D) Establishment of a large, centralized empire under a single ruler

102. The teachings of Mahatma Gandhi emphasized Ahimsa (non-violence) and Satyagraha (truth force). Which event is considered a significant departure from the principle of Ahimsa during the Indian Freedom Struggle, leading Gandhi to temporarily suspend a major movement?

- (A) Jallianwala Bagh Massacre
- (B) Chauri Chaura incident
- (C) Dandi March
- (D) Quit India Movement

103. The concept of 'Panchsheel', or the Five Principles of Peaceful Coexistence, was formally articulated in an agreement between India and which other country in 1954?

- (A) Soviet Union
- (B) United States
- (C) People's Republic of China
- (D) Pakistan

104. The Renaissance period in Europe was characterized by a renewed interest in:

- (A) Feudalism and manorialism
- (B) Classical Greek and Roman art, literature, and philosophy
- (C) Religious orthodoxy and scholasticism
- (D) Isolationist policies and rejection of foreign ideas

105. The 'Doctrine of Lapse', a policy of annexation used by the British East India Company, is most closely associated with which Governor-General?

- (A) Lord Wellesley
- (B) Lord Dalhousie
- (C) Lord Curzon
- (D) Lord William Bentinck

106. Which of the following was a major economic consequence of the Industrial Revolution in Great Britain during the 18<sup>th</sup> and 19<sup>th</sup> centuries?
- (A) Decline in international trade
  - (B) Shift from an agrarian economy to an industrial, manufacturing-based economy
  - (C) Strengthening of the traditional guild system
  - (D) Decrease in urbanization
107. The fundamental rights guaranteed by the Indian Constitution are primarily enshrined in which Part?
- (A) Part I
  - (B) Part II
  - (C) Part III
  - (D) Part IV
108. The Bhoodan Movement, initiated by Vinoba Bhave, primarily aimed to:
- (A) Establish cooperative farming societies
  - (B) Persuade wealthy landowners to voluntarily donate land to the landless
  - (C) Promote industrial development in rural areas
  - (D) Advocate for the abolition of the Panchayati Raj system
109. The War of American Independence was significantly influenced by Enlightenment ideas, particularly the concept of:
- (A) Divine Right of Kings
  - (B) Natural Rights and Social Contract Theory
  - (C) Mercantilism
  - (D) Absolute Monarchy
110. Which event is widely considered the immediate trigger for the Russian Revolution of 1917?
- (A) Defeat in the Russo-Japanese War (1905)
  - (B) Bloody Sunday massacre (1905)
  - (C) Russia's heavy losses and economic hardship during World War I
  - (D) Assassination of Tsar Alexander II (1881)
111. The concept of a 'Welfare State' primarily implies that the state:
- (A) Minimizes its role in the economy and social life.
  - (B) Plays a key role in the protection and promotion of the economic and social well-being of its citizens.
  - (C) Focuses solely on military defence and foreign policy.
  - (D) Prioritizes the interests of the aristocracy and ruling class.
112. The establishment of the United Nations (UN) after World War II was primarily aimed at:
- (A) Promoting global trade agreements
  - (B) Maintaining international peace and security, and fostering cooperation
  - (C) Establishing a single world government
  - (D) Spreading communist ideology globally
113. The Swadeshi Movement, a key phase of the Indian Freedom Struggle, was launched in response to:
- (A) The Jallianwala Bagh Massacre
  - (B) The Partition of Bengal (1905)
  - (C) The Rowlatt Act
  - (D) The failure of the Cripps Mission
114. Which of the following Five Year Plans in India placed the strongest emphasis on heavy industrialization based on the Mahalanobis model?
- (A) First Five Year Plan
  - (B) Second Five Year Plan
  - (C) Fifth Five Year Plan
  - (D) Eighth Five Year Plan
115. The French Revolution (1789) proclaimed the ideals of:
- (A) Liberty, Equality, Fraternity
  - (B) Faith, Hope, Charity
  - (C) Duty, Honour, Country
  - (D) Order, Tradition, Authority
116. The system of Panchayati Raj in India, aimed at decentralized governance, was given constitutional status by which amendment?
- (A) 42<sup>nd</sup> Amendment
  - (B) 44<sup>th</sup> Amendment
  - (C) 73<sup>rd</sup> Amendment
  - (D) 86<sup>th</sup> Amendment
117. The exploration and discovery voyages of the 15<sup>th</sup> and 16<sup>th</sup> centuries were primarily motivated by a desire for:
- (A) Establishing democratic governments

globally

- (B) Finding new trade routes to Asia, acquiring wealth, and spreading Christianity
- (C) Promoting scientific research on climate change
- (D) Escaping religious persecution in Europe

118. What was the primary objective of the Non-Cooperation Movement launched by Mahatma Gandhi in 1920?
- (A) To achieve complete independence immediately through armed struggle.
  - (B) To protest against the Jallianwala Bagh massacre and the Rowlatt Act by withdrawing cooperation from the British government.
  - (C) To demand separate electorates for Muslims.
  - (D) To support Britain in World War I in exchange for dominion status.
119. The concept of 'Socialism' fundamentally advocates for:
- (A) Private ownership of the means of production and free markets.
  - (B) Social ownership or control of the means of production and distribution of goods.
  - (C) A hierarchical social structure based on birth.
  - (D) Minimal government intervention in all spheres of life.
120. Which ancient Indian text provides profound insights into statecraft, economic policy, and military strategy, attributed to Kautilya (Chanakya)?
- (A) Ramayana
  - (B) Mahabharata
  - (C) Arthashastra
  - (D) Manusmriti

#### Section V: Geography (Questions 121-140)

121. If it is 12:00 Noon GMT (Greenwich Mean Time), what would be the approximate local time in Mumbai, India (located near 73° E longitude)?
- (A) 5:30 AM
  - (B) 5:30 PM
  - (C) 6:30 AM
  - (D) 6:30 PM

122. The Coriolis effect, resulting from the Earth's rotation, causes moving objects (like wind and ocean currents) to be deflected in which direction in the Northern Hemisphere?
- (A) To the left
  - (B) To the right
  - (C) Towards the equator
  - (D) Towards the pole
123. Which type of rock is formed from the cooling and solidification of magma or lava?
- (A) Sedimentary rock
  - (B) Metamorphic rock
  - (C) Igneous rock
  - (D) Fossiliferous rock
124. The 'Ring of Fire' is a major area in the basin of the Pacific Ocean where a large number of earthquakes and volcanic eruptions occur. This intense activity is primarily associated with:
- (A) Deep ocean trenches
  - (B) Mid-ocean ridges
  - (C) Convergent plate boundaries and subduction zones
  - (D) Transform fault lines
125. Which atmospheric layer contains the ozone layer, responsible for absorbing most of the Sun's harmful ultraviolet (UV) radiation?
- (A) Troposphere
  - (B) Stratosphere
  - (C) Mesosphere
  - (D) Thermosphere
126. Which type of climate, characterized by hot, dry summers and mild, wet winters, is typically found along the western coasts of continents between 30° and 45° latitude (e.g., Mediterranean Basin, California)?
- (A) Tropical Rainforest Climate
  - (B) Desert Climate
  - (C) Mediterranean Climate
  - (D) Tundra Climate
127. The 'Westerlies' are prevailing winds that blow from west to east in which latitude belts?
- (A) Between the Equator and 30° N/S
  - (B) Between 30° and 60° N/S
  - (C) Between 60° and the Poles N/S
  - (D) Only along the Equator



128. Which Indian state is the leading producer of Bauxite, the primary ore for Aluminium?  
 (A) Jharkhand  
 (B) Odisha  
 (C) Chhattisgarh  
 (D) Madhya Pradesh
129. The 'Black Soil' region of India, also known as Regur soil, is particularly suitable for growing which major cash crop?  
 (A) Rice  
 (B) Wheat  
 (C) Cotton  
 (D) Tea
130. Which of the following is a warm ocean current?  
 (A) Labrador Current  
 (B) Benguela Current  
 (C) Gulf Stream  
 (D) Canary Current
131. The phenomenon of tides (the rise and fall of sea levels) is primarily caused by the gravitational pull of:  
 (A) The Sun only  
 (B) The Moon only  
 (C) Both the Moon and the Sun  
 (D) Jupiter and Saturn
132. Which major Indian river originates near Mansarovar Lake in Tibet and flows westward through Ladakh before entering Pakistan?  
 (A) Ganga  
 (B) Brahmaputra  
 (C) Indus  
 (D) Yamuna
133. What is the primary mechanism of chemical weathering?  
 (A) Frost wedging  
 (B) Abrasion by wind or water  
 (C) Breakdown of rocks through chemical reactions (e.g., oxidation, hydrolysis, carbonation)  
 (D) Root pry by plants
134. The International Date Line generally follows which line of longitude, but deviates to avoid dividing landmasses?  
 (A) 0° Longitude (Prime Meridian)  
 (B) 90° E Longitude  
 (C) 180° Longitude  
 (D) 90° W Longitude
135. Which type of rainfall is common in equatorial regions and occurs due to intense heating of the ground, causing air to rise, cool, and condense?  
 (A) Orographic rainfall  
 (B) Frontal rainfall  
 (C) Convectional rainfall  
 (D) Cyclonic rainfall
136. The Suez Canal connects which two major bodies of water, significantly shortening sea routes between Europe and Asia?  
 (A) Atlantic Ocean and Pacific Ocean  
 (B) Mediterranean Sea and Red Sea  
 (C) Black Sea and Mediterranean Sea  
 (D) Indian Ocean and Pacific Ocean
137. Which type of natural vegetation is characteristic of regions with very high rainfall and high temperatures throughout the year, like the Amazon Basin and parts of Southeast Asia?  
 (A) Temperate Grassland  
 (B) Tropical Rainforest  
 (C) Tundra  
 (D) Desert Scrub
138. India's primary imports often include which of the following categories?  
 (A) Textiles and handicrafts  
 (B) Spices and tea  
 (C) Crude oil and electronic goods  
 (D) Software services and agricultural products
139. The term 'Anticyclone' refers to a weather system characterized by:  
 (A) Low atmospheric pressure at the center and inward spiraling winds  
 (B) High atmospheric pressure at the center and outward spiraling winds  
 (C) Intense rainfall and thunderstorms  
 (D) A rapidly rotating storm system
140. Which major seaport on the west coast of India is known for handling a large volume of container traffic and is located near Mumbai?  
 (A) Kandla Port



- (B) Jawaharlal Nehru Port (Nhava Sheva)
- (C) Mormugao Port
- (D) Kochi Port

#### Section VI: Current Events (Questions 141-150)

141. In April 2025, a significant terrorist attack targeting tourists occurred in which location in Jammu and Kashmir, leading to multiple casualties and heightened security concerns?

- (A) Srinagar
- (B) Gulmarg
- (C) Pahalgam
- (D) Leh

142. Who won the 2024 Nobel Prize in Literature, announced in October 2024?

- (A) Jon Fosse
- (B) Han Kang
- (C) Annie Ernaux
- (D) Abdulrazak Gurnah

143. Samantha Harvey won the prestigious 2024 Booker Prize in November 2024 for which novel, noted for being the first set in space to win the award?

- (A) The Wilderness
- (B) Prophet Song
- (C) Kairos
- (D) Orbital

144. Which renowned Indian industrialist and philanthropist, former chairman of Tata Sons, passed away in October 2024, leading to widespread mourning in India and globally?

- (A) Mukesh Ambani
- (B) Gautam Adani
- (C) Ratan Tata
- (D) Azim Premji

145. The 2025 Australian Open tennis tournament concluded in January 2025. Who successfully defended the Men's Singles title?

- (A) Novak Djokovic
- (B) Carlos Alcaraz
- (C) Alexander Zverev
- (D) Jannik Sinner

146. Super Bowl LIX, the championship game of the NFL's 2024 season, was played in February 2025. Which team emerged victorious, defeating the Kansas City Chiefs?

- (A) San Francisco 49ers
- (B) Philadelphia Eagles
- (C) Detroit Lions
- (D) Baltimore Ravens

147. The 67th Annual Grammy Awards were held in February 2025. Which artist won the coveted Album of the Year award for "Cowboy Carter"?

- (A) Taylor Swift
- (B) Billie Eilish
- (C) Beyoncé
- (D) Kendrick Lamar

148. The 97th Academy Awards (Oscars) were presented in March 2025. Which film won the award for Best Picture?

- (A) The Brutalist
- (B) Wicked
- (C) Dune: Part Two
- (D) Anora

149. Pope Francis, the first Latin American pontiff, passed away in April 2025. He was known for his progressive stances on several issues. What was his birth name?

- (A) Joseph Ratzinger
- (B) Karol Wojtyła
- (C) Jorge Mario Bergoglio
- (D) Albino Luciani

150. In early 2025, concerns grew globally about a potential "China Shock 2.0". What economic strategy by China primarily fuelled these concerns?

- (A) Reducing exports to focus on the domestic market.
- (B) Increasing tariffs on imported goods.
- (C) Ramping up subsidies to domestic manufacturers, leading to a surge in exports.
- (D) Shifting focus from manufacturing to the service sector.

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