

N.D.M-I-2009

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE ASKED TO DO SO

T.B.C. : O-OEBA-J-HB

TEST BOOKLET SERIES

Serial

194605

TEST BOOKLET
GENERAL ABILITY TEST



Time Allowed : Two Hours and Thirty Minutes

Maximum Marks : 600

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. ENCODE CLEARLY THE TEST BOOKLET SERIES A, B, C OR D AS THE CASE MAY BE IN THE APPROPRIATE PLACE IN THE ANSWER SHEET.
 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.
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4. This Test Booklet contains 150 items (questions) in two parts : Part A and Part B. Each item in Part B is printed both in Hindi and English. 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. You have to mark all your responses **ONLY** on the separate Answer Sheet provided. See directions in the Answer Sheet.
 6. All items carry equal marks.
 7. Before you proceed to mark in the Answer Sheet the response to various items in the Test Booklet, you have to fill in some particulars in the Answer Sheet, as per instructions sent to you with your Admission Certificate.
 8. After you have completed filling in all your responses on the Answer Sheet and the examination has concluded, you should hand over to the Invigilator **only the Answer Sheet**. You are permitted to take away with you the Test Booklet.
 9. Sheets for rough work are appended in the Test Booklet at the end.
 10. **Penalty for wrong answers :**
THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY A 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 (0.33)** of the marks assigned to that question will be deducted as penalty.
 - (ii) If a candidate gives 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.

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ध्यान दें : अनुदेशों का हिन्दी रूपान्तर इस पुस्तिका के पिछले पृष्ठ पर छापा है ।

PART A SYNONYMS

Directions (For the 8 items which follow) :

Each of the following 8 items consists of a word or group of words in capital letters, followed by four words. Select the word that is most *similar* in meaning to the word or group of words in capital letters.

- | | |
|---|---|
| <p>1. ABSURD</p> <p>(a) Senseless</p> <p>(b) Clean</p> <p>(c) Abrupt</p> <p>(d) Candid</p> | <p>5. MUTUAL</p> <p>(a) Reciprocal</p> <p>(b) Agreed</p> <p>(c) Common</p> <p>(d) Conjugal</p> |
| <p>2. PHILANTHROPY</p> <p>(a) Generosity</p> <p>(b) Perversity</p> <p>(c) Perjury</p> <p>(d) Flaunting</p> | <p>6. IMBECILE</p> <p>(a) Astute</p> <p>(b) Cunning</p> <p>(c) Stupid</p> <p>(d) Ludicrous</p> |
| <p>3. INSCRUTABLE</p> <p>(a) Strange</p> <p>(b) Mysterious</p> <p>(c) Marvellous</p> <p>(d) Sublime</p> | <p>7. WEIRD</p> <p>(a) Beastly</p> <p>(b) Unpleasant</p> <p>(c) Frightening</p> <p>(d) Unnatural</p> |
| <p>4. EXACTLY ALIKE</p> <p>(a) United</p> <p>(b) Identical</p> <p>(c) Comparable</p> <p>(d) Regular</p> | <p>8. AVARICIOUS</p> <p>(a) Greedy</p> <p>(b) Jealous</p> <p>(c) Angry</p> <p>(d) Wicked</p> |

ANTONYMS

Directions (For the 8 items which follow) :

Each of the following 8 items consists of a word in capital letters, followed by four words. Select the word that is *furthest* in meaning to the word in capital letters.

9. EXPLOIT

- (a) Utilize
- (b) Alert
- (c) Support
- (d) Neglect

10. DETRIMENTAL

- (a) Demolition
- (b) Aversion
- (c) Beneficial
- (d) Bad

11. SHARP

- (a) Bleak
- (b) Blunt
- (c) Bright
- (d) Blond

12. CONDEMN

- (a) Censure
- (b) Approve
- (c) Recommend
- (d) Praise

13. RELUCTANT

- (a) Avoiding
- (b) Anxious
- (c) Refuse
- (d) Eager

14. INTRICATE

- (a) Complicated
- (b) Simple
- (c) Colourful
- (d) Good

15. PENURY

- (a) Pompous
- (b) Luxury
- (c) Poverty
- (d) Punitive

16. EXPOSTULATE

- (a) Protest
- (b) Agree
- (c) Follow
- (d) Argue

SPOTTING ERRORS

Directions (For the 11 items which follow) :

- (i) In this Section a number of sentences are given. The sentences are underlined in three separate parts and each one is labelled (a), (b) and (c). Read each sentence to find out whether there is an error in any underlined part. No sentence has more than one error. When you find an error in any one of the underlined parts (a), (b) or (c), indicate your response on the separate Answer Sheet at the appropriate space. You may feel that there is no error in a sentence. In that case letter (d) will signify a 'No error' response.
- (ii) You are to indicate only one response for each item in your Answer Sheet. (If you indicate more than one response, your answer will be considered wrong.) Errors may be in grammar, word usage or idioms. There may be a word missing or there may be a word which should be removed.
- (iii) You are **not** required to correct the error. You are required **only** to indicate your response on the Answer Sheet.

Examples 'P' and 'Q' have been solved for you.

P. The young child singed a very sweet song. No error.

(a) (b) (c) (d)

Q. We worked very hard throughout the season. No error.

(a) (b) (c) (d)

Explanation :

In item P, the word 'singed' is wrong. The letter under this part is (b); so (b) is the correct answer. Similarly, for item Q, (d) is the correct answer, as the sentence does not contain any error.

17. He hesitated to accept the post as he did not think

(a) (b)

that the salary would be enough for a man with a family of three. No error.

(c) (d)

18. Have you gone through either of these three chapters

(a) (b)

that have been included in this volume ? No error.

(c) (d)

19. I am learning English for ten years without much effect. No error.
 (a) (b) (c) (d)
20. Ramesh has agreed to marry with the girl of his parent's choice. No error.
 (a) (b) (c) (d)
21. The pity is that no sooner he had left the place than the fire broke out. No error.
 (a) (b) (c) (d)
22. When he was arriving the party was in full swing. No error.
 (a) (b) (c) (d)
23. The Dean wrote he constituted a committee of experts comprising of five members
 (a) (b)
before the next meeting took place. No error.
 (c) (d)
24. I can't help to sneeze I got drenched yesterday and have a bad cold. No error.
 (a) (b) (c) (d)
25. I have lived from the hand to the mouth
 (a) (b)
for all these fifty years though nobody knows it. No error.
 (c) (d)
26. Both he as well as his friend worked in close harmony
 (a) (b)
on the same project. No error.
 (c) (d)
27. The Monk loved riding and hunting and refused to conform by rules and regulations
 (a) (b)
of the ancient monastic order. No error.
 (c) (d)

COMPREHENSION

Directions (For the 9 items which follow) :

In this Section you have **three** short passages. After each passage, you will find several questions based on the passage. First, read a passage and then answer the questions based on it. You are required to select your answers based on the contents of the passage and opinion of the author only.

Examples 'T' and 'J' have been solved for you.

PASSAGE (EXAMPLE)

In our approach to life, be it pragmatic or otherwise, a basic fact that confronts us squarely and unmistakably is the desire for peace, security and happiness. Different forms of life at different levels of existence make up the teeming denizens of this earth of ours. And, no matter whether they belong to the higher groups such as human beings or to the lower groups such as animals, all beings primarily seek peace, comfort and security. Life is as dear to a mute creature as it is to a man. Even the lowliest insect strives for protection against dangers that threaten its life. Just as each one of us wants to live and not to die, so do all other creatures.

I. The author's main point is that

- (a) different forms of life are found on earth
- (b) different levels of existence are possible in nature
- (c) peace and security are the chief goals of all living beings
- (d) even the weakest creature struggles to preserve its life

J. Which one of the following assumptions or steps is essential in developing the author's position ?

- (a) All forms of life have a single overriding goal
- (b) The will to survive of a creature is identified with a desire for peace
- (c) All beings are divided into higher and lower groups
- (d) A parallel is drawn between happiness and life, and pain and death

Explanation :

I. The idea which represents the author's main point is "peace and security are the chief goals of all living beings", which is response (c). So (c) is the correct answer.

J. The best assumption underlying the passage is "The will to survive of a creature is identified with a desire for peace", which is response (b). So (b) is the correct answer.

PASSAGE I

There are eccentric people who enjoy saving money for no other reason than the pleasure of saving money. It is a passion like drinking, and a hobby like collecting of china. Does it usually begin with a money-box ? Imagine a painter drawing the Miser's Progress in a number of scenes, with the first scene showing a benevolent grandfather holding out a harmless looking tin money-box to an infant scarcely able to walk. The gift should always be accompanied by a box of tools. As a young man the infant has grown into a miser. By the age of forty he has a substantial bank account. But he persuades himself that he is so poor that he never goes to the theatre, never invites a friend to dinner. By sixty he is a rich man and is convinced that he is all but a pauper.

28. Some people enjoy saving money because
- (a) they are able to live a happy life
 - (b) saving is a passion with them
 - (c) they are able to enjoy the pleasures of life
 - (d) they can entertain others
29. If a money-box is given to a child, what should accompany it ?
- (a) Tips on the advantages of saving money
 - (b) Guidelines to preserve it
 - (c) Instructions on when and how to open it
 - (d) A box of tools to open it
30. A miserly man of forty does not go to the theatre because .
- (a) he has no liking for plays
 - (b) he does not want to waste his valuable time
 - (c) he persuades himself that he is very poor
 - (d) he is frightened by the darkness of the theatre hall

PASSAGE II

In the fete, for a ticket costing eight annas you stood a chance of acquiring a variety of articles — pin-cushions, sewing machines, cameras or even a road engine. One evening they drew ticket number 1005, and I happened to own the other half of the ticket. They declared that I became the owner of a road engine ! Don't ask me how a road engine came to be included among the prizes. It is more than I can tell you. I looked stunned. People gathered round and gazed at me as if I were some curious animal. 'Fancy anyone becoming the owner of a road engine !' some persons muttered and giggled.

31. The writer purchased a ticket
- (a) to win a prize
 - (b) to enter the fete
 - (c) to buy some eatables in the fete
 - (d) to play some games
32. 'they' in the paragraph stands for
- (a) the writer's friends
 - (b) the organisers of the fete
 - (c) the stall owners in the fete
 - (d) the onlookers
33. The writer was stunned because
- (a) he did not win a prize
 - (b) he was at a loss as to what to do with the prize
 - (c) people giggled
 - (d) the fete organisers were rude to him

PASSAGE III

A holiday in Uttarakhand is about supporting the economy and ecology of this fledgling state with your heart, mind and muscle. Being at the camp with your family is a great bonding experience combined with a grand taste of wild life and adventure.

First comes the walk from the lakeside to the camp. It's one of the best indicators here to 'figure' out how in or out of shape you are. Anything upwards of 15 minutes means it is time to start taking your body and fitness levels more seriously. To cool off there is always the lake where you can swim or learn how to kayak.

34. The word which is used with a double meaning is
- (a) figure
 - (b) fitness
 - (c) shape
 - (d) indicators
35. 'It' in the second paragraph refers to
- (a) camp
 - (b) lake
 - (c) holiday
 - (d) walk
36. If you take about twenty minutes to walk from the lakeside to the camp it means that you
- (a) are not healthy enough
 - (b) walk too slowly
 - (c) need practice in walking
 - (d) must get used to the exercise

ORDERING OF SENTENCES

Directions (For the 7 items which follow) :

In the following items, each passage consists of six sentences. The *first* sentence (S_1) and the *final* sentence (S_6) are given in the beginning. The middle four sentences in each have been removed and jumbled up. These are labelled P, Q, R and S. You are required to find out the proper sequence of the four sentences and mark accordingly on the Answer Sheet.

Example 'X' has been solved for you.

- X. S_1 : There was a boy named Jack.
 S_6 : At last she turned him out of the house.
P : So the mother asked him to find work.
Q : They were very poor.
R : He lived with his mother.
S : But Jack refused to work.

The proper sequence should be

- (a) R - Q - P - S
(b) P - Q - R - S
(c) Q - P - R - S
(d) R - P - S - Q

Explanation : The proper sequence in this example is R - Q - P - S which is marked by (a). Therefore, (a) is the correct answer.

37. S₁ : I last visited Kandy almost 10 years ago.

S₆ : Set around low, forested hills, with the Mahavelli river flowing nearby, the landscape has an intense yet tranquil beauty.

P : The bomb blasts and ugly face of ethnic conflict have not robbed the place of its gracious pace of life.

Q : The artificial lake, which dominates the landscape of the city, was built by its last king in 1806.

R : Located in central Sri Lanka, at an elevation of about 1,600 ft, Kandy was the last Sinhala outpost of autonomy, resisting both Portuguese and Dutch rule before it succumbed to the British in 1818.

S : Most famous for its Temple of the Tooth, a golden pagoda housing a sacred relic of the Buddha, Kandy is a gentle, elegant, and imperturbable city.

The proper sequence should be

- (a) R - P - Q - S
- (b) S - P - R - Q
- (c) Q - P - S - R
- (d) P - S - Q - R

38. S₁ : The status of women in our country is, on the whole, far from high.

S₆ : Education can lift these women out of the depths of misery and ignorance into which they have sunk.

P : But the plight of women in villages is still miserable.

Q : The educated women in cities enjoy equality with the men folk.

R : The Movement for the Freedom and Rights of Women has certainly been steadily gaining momentum.

S : Their education has been thoroughly neglected.

The proper sequence should be

- (a) R - P - Q - S
- (b) R - Q - P - S
- (c) S - Q - P - R
- (d) S - P - Q - R

39. S₁ : Edison was an inventor of great ability.

S₆ : In the other he pinned the bills owed to him.

P : But he had two big books in his office.

Q : In one of them he stuck the bills he owed.

R : He did not keep account books.

S : But he was not a very good businessman.

The proper sequence should be

- (a) P - Q - R - S
- (b) S - R - Q - P
- (c) S - R - P - Q
- (d) R - P - Q - S

40. S₁ : I never knew my father or my mother.
 S₆ : There were no children nearby, and so I wandered around in a lonely way.
 P : I was brought up by my sister, much older than I.
 Q : They died when I was very young.
 R : When Gul Mohammad was working at his forge, I used to spend as much time as possible out of doors.
 S : She married the village blacksmith, Gul Mohammad, and I must say that he was kinder to me than she was.

The proper sequence should be

- (a) Q - P - S - R
 (b) S - R - Q - P
 (c) Q - S - R - P
 (d) P - Q - R - S

41. S₁ : We voyaged for many months, stopping at islands to barter our goods.
 S₆ : Presently I rested under a shady tree, had my meal and fell asleep by a murmuring brook.
 P : My companions and I went ashore surprised by the abundance of fruit and water on the land.
 Q : But I strolled on leaving them behind.
 R : One day winds guided our ships to an uninhabited island.
 S : The men wandered around enjoying the delights of the place.

The proper sequence should be

- (a) P - R - S - Q
 (b) R - P - S - Q
 (c) P - R - Q - S
 (d) R - P - Q - S

42. S₁ : Ashoka became an ardent Buddhist and tried his utmost to spread the Dharma.
 S₆ : Buddhism thus introduced the elements of peace and tolerance in many societies.
 P : It was only by winning men's hearts that he sought to make converts.
 Q : The Buddhists attracted followers by their own example of peace and non-violence.
 R : But there was no force or compulsion.
 S : Thus Ashoka helped in spreading Buddhism far and wide in the world.

The proper sequence should be

- (a) R - P - Q - S
 (b) Q - P - R - S
 (c) R - P - S - Q
 (d) P - S - Q - R

43. S₁ : Some people prefer country life to city life.
 S₆ : For these reasons more and more people are leaving the country to live in the city.
 P : Country people live longer and generally seem to be healthier and happier.
 Q : And a chance to meet more and more people.
 R : Life in the country is quieter, cleaner and less hectic.
 S : However, the city offers more excitement and job opportunities.

The proper sequence should be

- (a) P - R - Q - S
 (b) R - P - Q - S
 (c) P - Q - R - S
 (d) R - P - S - Q

ORDERING OF WORDS IN A SENTENCE

Directions (For the 7 items which follow) :

In the following items, some parts of the sentence have been jumbled up. You are required to rearrange these parts which are labelled P, Q, R and S to produce the correct sentence. Choose the proper sequence and mark in your Answer Sheet accordingly.

Example 'Z' has been solved for you.

Z. Some people believe that the effect is very bad on children of cinema
 P Q R S

Which one of the following is the correct sequence ?

- (a) P - S - R - Q
- (b) S - P - Q - R
- (c) S - R - P - Q
- (d) Q - S - R - P

Explanation :

The proper way of writing the sentence is "Some people believe that the effect of cinema on children is very bad." This is indicated by the sequence P - S - R - Q and so (a) is the correct answer.

44. in estimating the size of the earth

P

but they were hampered by the lack of instruments of precision ancient astronomers

Q

R

used methods which were theoretically valid

S

Which one of the following is the correct sequence ?

- (a) R - P - Q - S
- (b) P - R - Q - S
- (c) R - S - Q - P
- (d) R - P - S - Q

48. was suspended the officer being corrupt before his dismissal from service
 P Q R S

Which one of the following is the correct sequence ?

- (a) Q - P - S - R
 (b) Q - P - R - S
 (c) R - S - Q - P
 (d) R - S - P - Q

49. With an unsteady hand on my desk from his pocket he took an envelope and threw it
 P Q R S

Which one of the following is the correct sequence ?

- (a) Q - R - P - S
 (b) Q - R - S - P
 (c) R - Q - P - S
 (d) R - Q - S - P

50. she gave her old coat to a beggar the one with the brown fur on it shivering with cold
 P Q R S

Which one of the following is the correct sequence ?

- (a) S - Q - R - P
 (b) S - P - R - Q
 (c) P - R - Q - S
 (d) P - S - Q - R

PART B

51. Crocodiles store fats in

- (a) head
 (b) stomach
 (c) tail
 (d) arteries

52. In which one of the following is a great dark plain called "Maria" found ?

- (a) Earth
 (b) Mars
 (c) Jupiter
 (d) Moon

53. Match List I with List II and select the correct answer using the code given below the lists :

<u>List I</u> (Winner of Booker Prize)	<u>List II</u> (Novel)
A. Arundhati Roy	1. <i>In a Free State</i>
B. Kiran Desai	2. <i>The God of Small Things</i>
C. Salman Rushdie	3. <i>The White Tiger</i>
D. V.S. Naipaul	4. <i>The Inheritance of Loss</i>
	5. <i>Midnight's Children</i>

Code :

	A	B	C	D
(a)	1	5	3	2
(b)	1	3	4	2
(c)	2	5	3	1
(d)	2	4	5	1

54. Match List I with List II and select the correct answer using the code given below the lists :

<u>List I</u> (Exponent)	<u>List II</u> (Dance form)
A. Surendranath Jena	1. Kathakali
B. Pushpa Bhuyan	2. Kathak
C. Birju Maharaj	3. Bharat Natyam
D. Sankaran Embranthiri	4. Odissi

Code :

	A	B	C	D
(a)	1	2	3	4
(b)	4	3	2	1
(c)	1	3	2	4
(d)	4	2	3	1

55. Match List I with List II and select the correct answer using the code given below the lists :

<u>List I</u> (Person)	<u>List II</u> (Industrial Unit)
A. Indira Nooyi	1. Airtel
B. Mukesh Ambani	2. Wipro
C. Sunil Mittal	3. Pepsi
D. Azim Premji	4. Reliance

Code :

	A	B	C	D
(a)	3	1	4	2
(b)	2	1	4	3
(c)	2	4	1	3
(d)	3	4	1	2

भाग B

51. मगरमच्छ वसा कहीं संग्रहित करते हैं ?

- (a) सिर में
(b) उदर में
(c) पुच्छ में
(d) धमनियों में

52. निम्नलिखित में से किस एक में "मारिया" नामक बृहद् अदीप्त मैदान पाया जाता है ?

- (a) पृथ्वी
(b) मंगल
(c) बृहस्पति
(d) चन्द्रमा

53. सूची I को सूची II से सुमेलित कीजिए और सूचियों के नीचे दिए गए कूट का प्रयोग कर सही उत्तर चुनिए :

सूची I (बुकर पुरस्कार के विजेता)	सूची II (उपन्यास)
A. अरुन्धती रॉय	1. इन ए प्री स्टेट
B. किरन देसाई	2. दि गॉड ऑफ स्मॉल थिंग्स
C. सलमान रश्दी	3. दि क्वाइट टाइगर
D. वी.एस. नायपॉल	4. दि इनहेरिटेन्स ऑफ लॉस
	5. मिडनाइट्स चिल्ड्रेन

कूट :

	A	B	C	D
(a)	1	5	3	2
(b)	1	3	4	2
(c)	2	5	3	1
(d)	2	4	5	1

54. सूची I को सूची II से सुमेलित कीजिए और सूचियों के नीचे दिए गए कूट का प्रयोग कर सही उत्तर चुनिए :

सूची I (प्रतिपादक)	सूची II (नृत्य रूप)
A. सुरेन्द्रनाथ जेना	1. कथकरी
B. पुष्पा भूयों	2. कथक
C. बिरजू महाराज	3. भरतनाट्यम
D. शंकरन इम्बान्थिरी	4. ओडिसी

कूट :

	A	B	C	D
(a)	1	2	3	4
(b)	4	3	2	1
(c)	1	3	2	4
(d)	4	2	3	1

55. सूची I को सूची II से सुमेलित कीजिए और सूचियों के नीचे दिए गए कूट का प्रयोग कर सही उत्तर चुनिए :

सूची I (व्यक्ति)	सूची II (औद्योगिक इकाई)
A. इन्दिरा न्यूी	1. एयरटेल
B. मुकेश अम्बानी	2. विप्रो
C. सुनील मि्तल	3. पेप्सी
D. अज़ीम प्रेमजी	4. रिलायन्स

कूट :

	A	B	C	D
(a)	3	1	4	2
(b)	2	1	4	3
(c)	2	4	1	3
(d)	3	4	1	2

56. Match List I with List II and select the correct answer using the code given below the lists :

<u>List I</u> <u>(Institute)</u>	<u>List II</u> <u>(Location)</u>
A. National Institute of Immunology	1. Pune
B. National Centre for Cell Science	2. Manesar
C. Centre for DNA Fingerprinting and Diagnostics	3. Hyderabad
D. National Brain Research Centre	4. New Delhi

Code :

	A	B	C	D
(a)	2	3	1	4
(b)	4	1	3	2
(c)	4	3	1	2
(d)	2	1	3	4

57. Who among the following is the winner of the Wimbledon Men's Singles title 2008 ?
- Roger Federer
 - Rafael Nadal
 - Novak Djokovic
 - Andy Roddick

58. Consider the following statements :

- Lamba in Gujarat is famous for wind power plant.
- Manikaran in Himachal Pradesh is famous for geothermal energy plant.

Which of the statements given above is/are correct ?

- 1 only
- 2 only
- Both 1, and 2
- Neither 1 nor 2

59. The metal compound commonly found in Sindhoor or Kumkum is based on

- Tin
- Lead
- Copper
- Zinc

60. Alum is used as

- an analgesic
- a fertilizer
- a disinfectant
- a purifier for water

61. Which among the following elements (metals) pollutes the air of a city having large number of automobiles ?

- Cadmium
- Lead
- Chromium
- Nickel

56. सूची I को सूची II से सुमेलित कीजिए और सूचियों के नीचे दिए गए कूट का प्रयोग कर सही उत्तर चुनिए :

<u>सूची I</u> (संस्थान)	<u>सूची II</u> (अवस्थिति)
A. नेशनल इन्स्टिट्यूट ऑफ इम्यूनोलोजी	1. पुणे
B. नेशनल सेंटर फॉर सेल साइन्स	2. मानेसर
C. सेंटर फॉर डी.एन.ए. रिफरप्रिंटिंग एण्ड डायग्नोस्टिक्स	3. हैदराबाद
D. नेशनल ब्रेन रिसर्च सेंटर	4. नई दिल्ली

कूट :

	A	B	C	D
(a)	2	3	1	4
(b)	4	1	3	2
(c)	4	3	1	2
(d)	2	1	3	4

57. निम्नलिखित में से कौन विम्बलडन पुरुष एकल टाइटल 2008 का विजेता है ?

- (a) रोजर फेडरर
(b) रैफेल नडाल
(c) नोवाक जोकोविच
(d) एन्डी रौडिक

58. निम्नलिखित कथनों पर विचार कीजिए :

1. गुजरात में लाम्बा पवन शक्ति संयंत्र के लिए प्रसिद्ध है ।
2. हिमाचल प्रदेश में मानीकरण भूतापीय ऊर्जा संयंत्र के लिए प्रसिद्ध है ।

उपर्युक्त में से कौन सा/से कथन सही है/हैं ?

- (a) केवल 1
(b) केवल 2
(c) 1 और 2 दोनों
(d) न तो 1 और न ही 2

59. सिंदूर या कुमकुम में सामान्यतया पाया जाने वाला धातु यौगिक किस पर आधारित है ?

- (a) टिन
(b) सीसा
(c) ताँबा
(d) जस्ता

60. फिटकरी का इस्तेमाल किस रूप में होता है ?

- (a) पीड़ाहारी
(b) उर्वरक
(c) रोगाणुनाशी
(d) जल शोधक

61. अत्यधिक वाहन संख्या वाले शहर की वायु को प्रदूषित करने वाला निम्नलिखित में से कौनसा तत्त्व (धातु) है ?

- (a) कैडमियम
(b) सीसा
(c) क्रोमियम
(d) निकैल

62. Oxygen and ozone are
 (a) allotropes
 (b) isomers
 (c) isotopes
 (d) isobars
63. When applied to the affected area, which one of the following will relieve the pain due to ant-bite or bee-sting?
 (a) Lemon juice
 (b) Vinegar
 (c) Baking soda
 (d) Caustic soda
64. Which among the following is a chemical change?
 (a) A wet towel dries in the sun
 (b) Lemon juice added to tea causing its colour to change
 (c) Hot air rises over a radiator
 (d) Coffee is brewed by passing steam through ground coffee
65. Which among the following is an element?
 (a) Alumina
 (b) Brass
 (c) Graphite
 (d) Silica
66. Consider the following equation for the formation of ammonia from nitrogen and hydrogen:

$$N_2 + 3H_2 = 2NH_3$$

 How many hydrogen molecules are required to react with 100 molecules of nitrogen?
 (a) 100
 (b) 200
 (c) 300
 (d) 400
67. Which one among the following is used as a moderator in nuclear reactors?
 (a) Ozone
 (b) Heavy hydrogen
 (c) Heavy water
 (d) Hydrogen peroxide
68. Which one of the following contains maximum percentage of nitrogen by mass?
 (a) Urea
 (b) Ammonium cyanide
 (c) Ammonium carbonate
 (d) Ammonium nitrate
69. Match List I with List II and select the correct answer using the code given below the lists:
- | <u>List I</u>
(Substance) | <u>List II</u>
(Raw Material) |
|------------------------------|---------------------------------------|
| A. Glass | 1. Fat and caustic alkali |
| B. Soap | 2. Cellulose fibre and gelatin |
| C. Paper | 3. Silicates of calcium and aluminium |
| D. Cement | 4. Silica |
- Code :**
- | | A | B | C | D |
|-----|---|---|---|---|
| (a) | 3 | 2 | 1 | 4 |
| (b) | 4 | 2 | 1 | 3 |
| (c) | 3 | 1 | 2 | 4 |
| (d) | 4 | 1 | 2 | 3 |

62. ऑक्सीजन व ओजोन निम्न में से क्या हैं ?
 (a) अपररूप
 (b) समावयवी
 (c) समस्थानिक
 (d) समभारिक परमाणु
63. चोंटी काटने या भ्रमर दंश से प्रभावित क्षेत्र में लगाने पर निम्नलिखित में से कौनसा एक, दर्द निवारण करेगा ?
 (a) नीबू का रस
 (b) सिरका
 (c) बेकिंग सोडा
 (d) कार्बिक सोडा
64. निम्नलिखित में से कौनसा रासायनिक बदलाव है ?
 (a) एक गीला तौलिया धूप में सूख जाता है
 (b) घास में नीबू रस डालने से इसका रंग बदल जाता है
 (c) रेडिएटर के ऊपर गरम वायु उठती है
 (d) घूरा कॉफी से वाष्प गुजारने से कॉफी निसवन होती है
65. निम्नलिखित में से कौनसा एक तत्त्व है ?
 (a) ऐलुमिना
 (b) पीतल
 (c) ग्रेफाइट
 (d) सिलिका
66. नाइट्रोजन व हाइड्रोजन से अमोनिया बनने के निम्नलिखित समीकरण पर विचार कीजिए :

$$N_2 + 3H_2 = 2NH_3$$
 नाइट्रोजन के 100 अणुओं से अभिक्रिया करने के लिए कितने हाइड्रोजन अणुओं की जरूरत होगी ?
 (a) 100
 (b) 200
 (c) 300
 (d) 400
67. नाभिकीय रिएक्टरों में निम्नलिखित में से कौनसा एक, विमंदक की तरह इस्तेमाल होता है ?
 (a) ओजोन
 (b) भारी हाइड्रोजन
 (c) भारी पानी
 (d) हाइड्रोजन परऑक्साइड
68. निम्नलिखित में से किसमें, द्रव्यमान की दृष्टि से अधिकतम प्रतिशत नाइट्रोजन पाया जाता है ?
 (a) यूरिया
 (b) अमोनियम साइनाइड
 (c) अमोनियम कार्बोनेट
 (d) अमोनियम नाइट्रेट
69. सूची I को सूची II से सुमेलित कीजिए और सूचियों के नीचे दिए गए कूट का प्रयोग कर सही उत्तर चुनिए :
- | सूची I
(द्रव्य) | सूची II
(कच्ची सामग्री) |
|--------------------|------------------------------------|
| A. कांच | 1. वसा व दाहक क्षार |
| B. साबुन | 2. सेलुलोज तन्तु व जिलेटिन |
| C. कागज़ | 3. कैल्सियम व ऐलुमिनियम के सिलिकेट |
| D. सीमेन्ट | 4. सिलिका |
- कूट :**
- | A | B | C | D |
|-------|---|---|---|
| (a) 3 | 2 | 1 | 4 |
| (b) 4 | 2 | 1 | 3 |
| (c) 3 | 1 | 2 | 4 |
| (d) 4 | 1 | 2 | 3 |

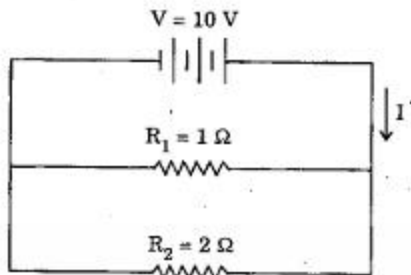
70. Two elements gallium and oxygen combine to form a compound Ga_2O_3 . Which among the following is the valency of gallium ?
- 1
 - 2
 - 3
 - 4
71. Vinegar is the trade name of
- Acetic acid
 - Chloroform
 - Carbon tetrachloride
 - Ethyl alcohol
72. Consider the following statements regarding diamond :
- It is an allotrope of silicon.
 - It is a bad conductor of heat and electricity.
 - It is the hardest substance.
 - It burns to produce carbon dioxide.
- Which of the statements given above are correct ?
- 1, 2, 3 and 4
 - 2, 3 and 4 only
 - 1 and 2 only
 - 1, 3 and 4 only
73. Which one of the following chemicals is used in Beauty Parlours for hair-setting ?
- Sulphur based
 - Phosphorus based
 - Silicon based
 - Iron based
74. Non-conductors, whose polarization is caused by an electric field, are known as
- Semi-conductors.
 - Super-conductors
 - Dielectrics
 - Resistive conductors
75. The resistance of a wire that must be placed parallel with a 12Ω resistance to obtain a combined resistance of 4Ω is
- 2Ω
 - 4Ω
 - 6Ω
 - 8Ω
76. One light year is equal to
- $9.46 \times 10^{-15} \text{ m}$
 - $9.46 \times 10^{15} \text{ m}$
 - $9.46 \times 10^{-13} \text{ m}$
 - $9.46 \times 10^{13} \text{ m}$
77. Which among the following thermometers is preferred for measuring temperature around 1250°C ?
- Mercury thermometer
 - Constant volume gas thermometer
 - Optical pyrometer
 - Platinum resistance thermometer

70. गैलियम व ऑक्सीजन दो तत्व मिलकर Ga_2O_3 यौगिक बनाते हैं। निम्नलिखित में से गैलियम की संयोजकता क्या है ?
- (a) 1
(b) 2
(c) 3
(d) 4
71. सिरका किसका व्यापारिक नाम है ?
- (a) ऐसीटिक अम्ल
(b) क्लोरोफॉर्म
(c) कार्बन टेट्राक्लोराइड
(d) एथिल ऐल्कोहॉल
72. हीरा के बारे में निम्नलिखित कथनों पर विचार कीजिए :
1. यह सिलिकन का अपरूप है।
 2. यह ताप व विद्युत् का कुचालक है।
 3. यह सबसे कठोर पदार्थ है।
 4. यह जलकर कार्बन डाइऑक्साइड उत्पादित करता है।
- उपर्युक्त कथनों में से कौनसे सही हैं ?
- (a) 1, 2, 3 और 4
(b) केवल 2, 3 और 4
(c) केवल 1 और 2
(d) केवल 1, 3 और 4
73. ब्यूटी पार्लरों में केश-विन्यास के लिए निम्नलिखित में से कौनसा रसायन इस्तेमाल होता है ?
- (a) सल्फर आधारित
(b) फॉस्फोरस आधारित
(c) सिलिकन आधारित
(d) लोह आधारित
74. वे अचालक, जिनका घुबण विद्युत्-क्षेत्र के कारण होता है, क्या कहलाते हैं ?
- (a) अर्धचालक
(b) अतिचालक
(c) परावैद्युत
(d) प्रतिरोधक चालक
75. संयुक्त प्रतिरोध 4Ω पाने के लिए कितने प्रतिरोध की तार एक 12Ω प्रतिरोधक के समानान्तर में लगानी चाहिए ?
- (a) 2Ω
(b) 4Ω
(c) 6Ω
(d) 8Ω
76. निम्नलिखित में से कौनसा एक प्रकाश वर्ष के बराबर है ?
- (a) $9.46 \times 10^{-16} \text{ m}$
(b) $9.46 \times 10^{15} \text{ m}$
(c) $9.46 \times 10^{-13} \text{ m}$
(d) $9.46 \times 10^{13} \text{ m}$
77. लगभग 1250°C तापमान नापने के लिए निम्नलिखित में से कौनसा तापमापी इस्तेमाल होता है ?
- (a) पारा तापमापी
(b) स्थिर आयतन गैस तापमापी
(c) प्रकाशीय उच्चापमापी
(d) प्लैटिनम प्रतिरोध तापमापी

78. What is the mass of one litre of cottonseed oil of density 926 kg/m^3 ?
- 926 kg
 - 92.6 kg
 - 0.926 kg
 - 9260 kg
79. The wavelength of X-rays is of the order of
- 1 mm
 - 1 cm
 - 1 micron
 - 1 angstrom
80. In vacuum, the speed of light
- depends on its wavelength
 - depends on its frequency
 - depends on its intensity
 - neither depends on its wavelength, frequency nor intensity
81. Which one of the following statements correctly defines power ?
- Energy supplied per unit time
 - Energy of an object due to its motion
 - Energy of an object due to its position
 - None of the above
82. The electric charge is stored in a device called
- Inductor
 - Capacitor
 - Resistor
 - Transformer
83. Consider the following parts of spectra :
- Visible
 - Infrared
 - Ultraviolet
 - Microwave
- Which one of the following is the correct sequence in which their wavelengths increase ?
- 4-3-1-2
 - 4-1-2-3
 - 3-2-1-4
 - 3-1-2-4
84. Propagation of light quanta may be described by
- Photons
 - Protons
 - Neutrons
 - Electrons
85. Which one of the following is *not* electromagnetic in nature ?
- Cathode-rays
 - X-rays
 - Gamma-rays
 - Infrared-rays

78. 926 kg/m^3 घनत्व वाले बिनौले तेल के एक लिटर का द्रव्यमान कितना होता है ?
- (a) 926 kg
(b) 92.6 kg
(c) 0.926 kg
(d) 9260 kg
79. X-किरणों की तरंगदैर्घ्य की कोटि क्या है ?
- (a) 1 mm
(b) 1 cm
(c) 1 माइक्रॉन
(d) 1 ऐंग्स्ट्रॉम
80. निर्वात में प्रकाश की चाल
- (a) इसकी तरंगदैर्घ्य पर निर्भर करती है
(b) इसकी आवृत्ति पर निर्भर करती है
(c) इसकी तीव्रता पर निर्भर करती है
(d) यह न तो तरंगदैर्घ्य, न आवृत्ति और न ही तीव्रता पर निर्भर करती है
81. निम्नलिखित में से कौनसा एक कथन शक्ति को सही-सही परिभाषित करता है ?
- (a) प्रदाय की गई ऊर्जा प्रति इकाई समय
(b) एक पिण्ड की उसकी गति के कारण ऊर्जा
(c) एक पिण्ड की उसके स्थान के कारण ऊर्जा
(d) उपर्युक्त में से कोई नहीं
82. जिस युक्ति में विद्युत् आवेश संग्रहित किया जाता है उसको क्या कहते हैं ?
- (a) प्रेरक
(b) संधारित्र
(c) प्रतिरोधक
(d) परिणामित्र
83. स्पेक्ट्रमों के निम्नलिखित भागों पर विचार कीजिए :
1. दृश्य
2. अवरक्त
3. पराबैंगनी
4. सूक्ष्म-तरंग
- उनके तरंगदैर्घ्य के बढ़ते हुए क्रम में निम्नलिखित में से कौन सा एक सही अनुक्रम है ?
- (a) 4 - 3 - 1 - 2
(b) 4 - 1 - 2 - 3
(c) 3 - 2 - 1 - 4
(d) 3 - 1 - 2 - 4
84. प्रकाश क्वाण्टा के संचरण की व्याख्या किसके द्वारा की जाती है ?
- (a) फोटॉन
(b) प्रोटॉन
(c) न्यूट्रॉन
(d) इलेक्ट्रॉन
85. निम्नलिखित में से कौनसी किरणें विद्युत्-चुम्बकीय प्रकृति को नहीं दर्शाती हैं ?
- (a) कैथोड-किरणें
(b) X-किरणें
(c) गामा-किरणें
(d) अवरक्त-किरणें

86.



Which one of the following is the value of current I in the circuit shown above ?

- (a) 5 A
- (b) 10 A
- (c) 15 A
- (d) 20 A

87. The force experienced by a unit positive test charge placed at a point is called

- (a) Magnetic field at that point
- (b) Gravitational field at that point
- (c) Electrical field at that point
- (d) Nuclear field at that point

88. A long jumper runs before jumping because he

- (a) covers a greater distance
- (b) maintains momentum conservation
- (c) gains energy by running
- (d) gains momentum

89. Which among the following is the necessary condition for simple harmonic motion ?

- (a) Constant period
- (b) Constant acceleration
- (c) Displacement and acceleration are proportional
- (d) Displacement and torque are proportional

90. Consider the following four particles :

1. Alpha particle
2. Proton
3. Electron
4. Neutron

Which of the following is the correct sequence in which their rest-masses increase ?

- (a) 3 - 4 - 2 - 1
- (b) 4 - 2 - 3 - 1
- (c) 3 - 2 - 4 - 1
- (d) 2 - 3 - 1 - 4

91. If an α -particle is projected normally through a uniform magnetic field, then the path of the α -particle inside the field will be

- (a) circular
- (b) parabolic
- (c) elliptic
- (d) a straight line