PART 'A'

ANTONYMS

Directions (For the following 10 items):
Each of the following ten items consists of a word in capital letters, followed by four words or groups of words. Select the word or group of words that is most nearly opposite in meaning to the word in capital letters.

1. CONSUMMATE
   (a) Sluggish
   (b) Imperfect
   (c) Melancholy
   (d) Dull

2. REPROOF
   (a) Brawl
   (b) Omission
   (c) Ambiguity
   (d) Approval

3. FELICITOUS
   (a) Jealous
   (b) Inapt
   (c) Demanding
   (d) Inaccessible

4. CHARLATAN
   (a) Knowledgeable doctor
   (b) Trickster
   (c) Comedian
   (d) Senior government official

5. FECUND
   (a) Underweight
   (b) Infidel
   (c) Infertile
   (d) Uncritical

6. OUTLANDISH
   (a) Migrant
   (b) Opulence
   (c) Boastful
   (d) Conventional

7. COMMOTION
   (a) Calm
   (b) Scarcity
   (c) Pungent
   (d) Motivation

8. CYNOUSURE
   (a) Abomination
   (b) Picturesque
   (c) Mundane
   (d) Fertile

9. PUEBRE
   (a) Upright
   (b) Peripheral
   (c) Matured
   (d) Steadfast

10. DECRIPT
    (a) Research-oriented
    (b) Sprawling
    (c) Intelligent
    (d) Energetic

ORDERING OF WORDS IN A SENTENCE

Directions (For the following 9 items):
In the following items, some parts of the sentence have been jumbled up. You are required to re-arrange these parts which are labelled as 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. It is well-known that the effect on children of cinema on children is very bad.
   (a) PSRQ
   (b) SPQR
   (c) SRPQ
   (d) QSPR

Explanation:
The 'proper way' of writing the sentence is 'It is well-known that the effect of cinema on children is very bad'. This is indicated by the sequence PSRQ. So (a) is the correct answer.

11. Polluted
    on aqua life while
    P
    Kerala rivers threatens the indigenous varieties
    Q
    rivers are wreaking havoc
    R
    the introduction of exotic fish in the
    S
    Which one of the following is the correct sequence?
    (a) RPSQ
    (b) QSPR
    (c) RSQP
    (d) QSPR

12. Typically, despite the overwhelming evidence of the negative role
    P
    or for the destruction of natural habitats,
    Q
    played by commercial logging and mining interests
    R
    it is local communities who are blamed for deforestation
    S
    Which one of the following is the correct sequence?
    (a) PRSQ
    (b) SQPR
    (c) PQSR
    (d) SRPQ
13. If the idyllic and rehabilitation work being carried out across several nations, only a cursory mention is the massive restoration of Car Nicobar has found part of the reason could be inaccessibility of these islands.

Which one of the following is the correct sequence?
(a) RQPS
(b) SPQR
(c) RPQS
(d) SQPR

14. The real founder and Humayun’s son Akbar, the greatest ruler of the Mughal Empire was Babar’s grandson Asoka a millennium and half earlier to sit on an Indian throne after.

Which one of the following is the correct sequence?
(a) SPQR
(b) CRSP
(c) SRQP
(d) QSPR

15. In the neighbourhood of the equator there is little need of clothes or fire, stretched out on the bare ground beneath the shade of a tree and no danger to health, to pass the livelong day and it is possible with perfect comfort.

Which one of the following is the correct sequence?
(a) PRSQ
(b) QSRP
(c) FSQP
(d) QPSR

16. Hospitality is a virtue for which the natives of the east and the people of Egypt are well entitled in general are highly and deservedly admired.

Which one of the following is the correct sequence?
(a) QSRP
(b) PRSQ
(c) QSPR
(d) PSQR

17. It is possible between Finland and Sweden, which was an international accord.

18. Once an obscure fishing town, Shanghai has metamorphosed into a major international city which is a key element in China’s economic development strategy.

Which one of the following is the correct sequence?
(a) RPSQ
(b) SQPR
(c) RGSP
(d) SPQR

19. When factors to the growth of biotechnology come together, it heralds the arrival of a new venture and a government that is dedicated like rich biodiversity, a conducive climate, a network of established research institutes, educated and skilled manpower.

Which one of the following is the correct sequence?
(a) QPRS
(b) SRPQ
(c) QRPS
(d) SPRQ

COMPREHENSION

Directions (For the following 7 items):
In this section you have two short passages. After each passage, you will find some questions based on the passage. First, read the passage 1 and then answer the questions based on it. You are required to select your answer based on the contents of the passage and opinion of the author only.
Example ‘T’ and ‘J’ have been solved for you.

PASSAGE-1
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
General Ability Test Question Paper of NDA & NA Exam II - 2005

Now, the Jam Sahib has the root of the master in him. His play is as sunny as his face. He is not a miser hoarding up runs, but a millionaire spending them, with a splendid yet judicious prodigality. It is as though his pockets are bursting with runs that he wants to shower with his blessings upon the expectant multitude. It is not difficult to believe that in his little kingdom Nawangar where he has power of life and death in his hands he is extremely popular for it is obvious that his pleasure is in giving pleasure.

20. Consider the following statements:
   1. Yorkshire did not have a potent bowling attack because the Jam Sahib was only a specialist batsman.
   2. Cricket loses its flamboyant spirit when players like Shrewsbury are at the batting crease.
   Which of the above statements is/are correct?
      (a) 1 only  (b) 2 only  (c) Both 1 and 2  (d) Neither 1 nor 2

21. Consider the following statements:
   1. It is statistics which matter most when true worth of a cricketer is estimated.
   2. Surfeit of runs scored in a cricket match may not always lend excitement to a cricket match.
   Which of the above statements is/are correct?
      (a) 1 only  (b) 2 only  (c) Both 1 and 2  (d) Neither 1 nor 2

22. Consider the following statements:
   1. Many cricketers suffer from paralysis in their old age because of excessive physical stress undergone during their cricketing careers.
   2. Boards of cricket of the cricket playing nations should consist of past cricketers.
   Which of the above statements is/are correct?
      (a) 1 only  (b) 2 only  (c) Both 1 and 2  (d) Neither 1 nor 2

23. Consider the following statements:
   1. While batting, the Jam Sahib was very unselfish since he ensured that his batting partner never got run-out.
   2. The Jam Sahib carried his magnanimity in his nature even while dealing with people in his kingdom.
   Which of the above statements is/are correct?
      (a) 1 only  (b) 2 only  (c) Both 1 and 2  (d) Neither 1 nor 2

PASSAGE - I

Yes, there were giants before the Jam Sahib (the great Indian cricketer, Kumar Shree Ranjit Singhji, better known to the world of cricket as Ranji). And yet I think it is undeniable that as a batsman the Indian will live as the supreme exponent of the Englishman's game. The claim does not rest simply on his achievements although, judged by them, the claim could be sustained. His season's average of 67 with a total of over 3,000 runs, is easily the high-water mark of English cricket. Trice he has totalled over 3,000 runs and no one else has equalled that record. And is not his astonishing achievement of scoring two double centuries in a single match on a single day - not against a feeble attack, but against Yorkshire, always the most resolute and resourceful of bowling teams?

But we do not judge a cricketer so much by the runs he gets as by the way he gets them. "In literature as in finance", says Washington Irving, "much paper and much poverty may co-exist." And in cricket too many runs and much dullness may be associated. If cricket is menaced with creeping paralysis, it is because it is losing the spirit of joyous adventure and becoming a mere instrument for compiling tables of averages. There are dull, mechanical fellows who turn out runs with as little emotion as a machine turns out pins. There is no colour, no enthusiasm, no character in their play. Cricket is not an adventure to them; it is a business. It was so with Shrewsbury. His technical perfection was astonishing; but the soul of the game was wanting in him. There was no sunshine in his play, no swift surprise or splendid unselloseness. And without these things, without gaiety, daring, and the spirit of sacrifice cricket is a dead thing.
books we read simply for pleasure and amusement—for example, good novels. And novels and books of imagination must have their place in everybody's reading. When we are tired, or the brain is weary with serious study, it is a healthy recreation to lose ourselves in some absorbing story written by a master hand.

But to read nothing but books of fiction is like eating nothing but cakes and sweets. As we need plain, wholesome food for the body, so we must have serious reading for the mind. And here we can choose according to our taste. There are many noble books on history, biography, philosophy, religion, travel and science which we ought to read, and which will give us not only pleasure but an education. And we can develop a taste for serious reading, so that in the end it will give us more solid pleasure than even novels and books of fiction. Nor should poetry be neglected, for the best poetry gives us noble thoughts and beautiful imaginings clothed in lovely and musical language.

Books are the most faithful of friends. Our friends may change, or die; but our books are always patiently waiting to talk to us. They are never cross, peevish, or unwilling to converse, as our friends sometimes are. No wonder a reader becomes a "book-lover".

24. Consider the following statements:
1. Books are far more pleasant than reticent friends.
2. To get maximum pleasure, one has to be very judicious in making a correct selection of books.
Which of the above statements is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

25. Consider the following statements:
1. Serious reading provides education, enhances intellect but hardly provides any pleasure which books of fiction can offer.
2. Book reading habit provides inspiration only during the formative years of the reader.
Which of the above statements is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

26. Consider the following statements:
1. Book reading helps a person to overcome solitude.
2. Since poetry is based on imagination, it need not find place in everybody's reading.
Which of the above statements is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

SYNONYMS
Directions (For the following 10 items):
Each of the following ten items consists of a word in capital letters, followed by four words or groups of words. Select the word or group of words that is most similar in meaning to the word in capital letters.

27. DESPOT
(a) Pragmatic person
(b) Cruel ruler
(c) Knowledgeable historian
(d) Leading industrialist

28. MUSTY
(a) Tiring
(b) Deserted
(c) Swanky
(d) Obsolete

29. PERNICKETY
(a) Highly talented
(b) Futuristic
(c) Pussy
(d) Extravagant

30. ROSETTE
(a) Badge
(b) Wild Jungle
(c) Exhibition
(d) Palatial building

31. ORNATE
(a) Dimension
(b) Ancient
(c) Richly decorated
(d) Vigour

32. DIAPHANOUS
(a) Cylindrical
(b) Almost transparent
(c) Complicated
(d) Deep climb

33. COME-UPPANCE
(a) Retribution
(b) Lenance
(c) Leisure
(d) Competitive nature

34. UNSCATHED
(a) Unstinting
(b) Unsoiled
(c) Unspeakable
(d) Unharmed

35. EPAULETTE
(a) Ammunition
(b) Shoulder ornament
(c) Equipment
(d) Cockpit

36. EXPATION
(a) Expansion
(b) Atonement
(c) Explanation
(d) Addition

SPOTTING ERRORS
Directions (For the following 7 items):
(i) In this section a number of sentences are given. The sentences are underlined in three separate parts and each one is labelled as (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.

Example: 'P' and 'Q' have been solved for you.

P. The young child (a) sang (b) a very sweet song (c) 

No error  (d)

Q. We worked (a) very hard (b) throughout the season (c) 

No error (d)
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.

37. It is shameful that hunting is still considered sport by some unscrupulous people in the civilized world.
   (a) hunting
   (b) sport
   (c) unscrupulous people
   (d) civilized world
   No error.

38. There's no evidence to show that information technology secrets are more vulnerable in India than Britain or the US.
   (a) information technology
   (b) secrets
   (c) India
   (d) Britain
   We've paid for our travel and accommodation so we need only to take some pocket money with us.
   (a) paid for
   (b) travel
   (c) need
   (d) pocket money
   No error.

39. It's arrogant for you to assume you'll win every time.
   (a) arrogant
   (b) win
   (c) assume
   (d) every time
   No error.

40. Since the two parties each won the same number of seats, the minority party holds the balance of power.
   (a) same number of seats
   (b) minority party
   (c) balance of power
   (d) party
   No error.

41. Pieces of rock plummeted down the mountainside in the ground below.
   (a) pieces of rock
   (b) mountainside
   (c) ground
   (d) fell
   No error.

42. If we really set cleaned in an afternoon, we can get the whole house
   (a) set cleaned
   (b) can get
   (c) afternoon
   (d) No error.

ORDERING OF SENTENCES

Directions (For the following 7 items):
In the following items, each passage consists of six sentences. The first sentence (S1) and the sixth sentence (S6) are given in the beginning. The middle four sentences in each have been removed and jumbled up. These are labelled as P, Q, R and S. You are required to find out the correct sequence of the four sentences and mark accordingly on the Answer-sheet.

Example 2: has been solved for you.

X. S1: There was a boy named Jack.
   S6: 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.
   Which one of the following is the correct sequence?
   (a) RQPS
   (b) SPQR
   (c) RPQS
   (d) SQPR
   Explanation:
The correct sequence in this example is RQPS which is marked by (a). Therefore, (a) is the correct answer.

44. S1: What was his great power over the mind and heart of man due to?
   S6: That truth made the service of the poor and the dispossessed passion of his life, for where there is inequality and discrimination and suppression there is injustice and evil and untruth.
   P: That truth led him to proclaim without ceasing that good ends can never be attained by evil methods, that the end itself is distorted if the method pursued is bad.
   Q: Even we realize that his dominating passion was truth.
   R: That truth led him to fight evil and untruth wherever he found them, regardless of the consequences.
   S: That truth led him to confess publicly whenever he thought he had made a mistake—Himalayan errors he called some of his own mistakes.
   Which one of the following is the correct sequence?
   (a) SRQP
   (b) QPSR
   (c) QRSP
   (d) SPQR

45. S1: The other day we heard someone smilingly refer to poets as dreamers.
   S6: Dreams are the sunrise streamers heralding a new day of scientific progress, another forward surge.
   P: We must not be so superficial that we fail to discern the practicableness of dreams.
   Q: Where they differ from the logician and the scientist is in the temporal sense alone; they are ahead of their time, where logicians and scientists are abreast of their time.
   R: The truth is that poets are just as practical as people who build bridges or look into microscopes; and just as close to reality and truth.
   S: Now, it is accurate to refer to poets as dreamers, but it is not discerning to infer, as this person did, that the dreams of poets have no practical value beyond the realm of literary diversion.
   Which one of the following is the correct sequence?
   (a) SPQR
   (b) QRSP
   (c) SRQP
   (d) QPSR
46. S1: Freedom and power bring responsibility.
S2: That future is not one of ease or resting but of incessant striving so that we may fulfill the pledges we have so often taken and the one we shall take today.
P: Some of these pains continue even now.
Q: Before the birth of freedom we have endured all the pains of labour and our hearts are heavy with the memory of this sorrow.
R: Nevertheless, the past is over and it is the future that beckons to us now.
S: That responsibility rests upon this assembly, a sovereign body representing sovereign people of India.
Which one of the following is the correct sequence?
(a) PRSQ  (b) SRPQ  (c) SQPR  (d) SPRQ

47. S1: And the biggest wonder about the Harappan cities is, simply put, their brick.
S2: In other words, the brick was just like the platinum rod kept in Paris to define the world standard of time.
P: Some archaeologists have ventured further.
Q: If at all the size varied in some sizes, it still retained the same length-breath-height proportion everywhere!
R: It had a standard size, be it in Mohenjodaro or Harappa, Kalibangan or Lothal.
S: They say that even the constructions — the houses and the cities — were built in the same proportion as the brick.
Which one of the following is the correct sequence?
(a) RQPS  (b) SPQR  (c) RPQS  (d) SQPR

48. S1: The British wanted it to be their answer to the American White House.
S2: In the end it earned him a place in the history books.
P: Today, the Head of the Indian Republic occupies just a handful of the 340 rooms.
Q: No wonder Edwin Lutyens didn’t mind that the 17-year assignments earned him just £ 5,000.
R: But the 354-acre complex is an apt example of the expertise of a man who wanted the Rashtrapati Bhavan to be an object of admiration forever.
S: Though the answer was good enough, the British didn’t anticipate that within 17-years of building the Viceroy House, they would have to leave the country and the architectural wonder would be renamed Rashtrapati Bhavan.
Which one of the following is the correct sequence?
(a) RQSP  (b) SRPQ  (c) SQRP  (d) RPSQ

49. S1: A stamp is, to many people, just a slip of paper that takes a letter from one town or country to another.
S2: An album, a packet of hinges, a new supply of stamps, and the time passes swiftly and pleasantly.
P: But they do not realise that there are many who do buy, many who find the effort worth-while and many who, if they did not spend their time collecting stamps, would spend it less profitably.
Q: They are unable to understand why do we stamp collectors find so much pleasure in collecting them.
R: To them it seems a waste of time, a waste of effort and a waste of money.
S: We all seek something to do in our leisure hours and what better occupation is there to keep us out of mischief than that of collecting stamps?
Which one of the following is the correct sequence?
(a) SPRQ  (b) QPSS  (c) SRPQ  (d) QRPS

50. S1: Now that I am getting old and stiff in the joints, I like to meditate, while grazing in the pasture, on my foal days.
S2: When I was old enough, the trainer came and, to my great indignation, fastened a long rope to my head, and then began driving me round and round in circles with his long whip.
P: I had no work to do, and could run about after my mother, who was a fine white Arab mare, without any restraint.
Q: I think that was the happiest part of my life,
R: But that could not last for ever.
S: Most of my time was spent in the fields, where I nibbled the tender grass and capered about, while my mother was steadily grazing.
Which one of the following is the correct sequence?
(a) SRQP  (b) QPSR  (c) QRSP  (d) SPQR

PART 'B'

1. Recently, from which one of the following countries did Syria pull out its forces after nearly three decades?
(a) Turkey  (b) Jordan  (c) Lebanon  (d) Palestine

2. In which century did French Revolution begin?
(a) 16th century  (b) 17th century  (c) 18th century  (d) 19th century

3. In December 2004, the former President of which one of the following countries received the Mahatma Gandhi International Peace Award?
(a) Norway  (b) Botswana  (c) South Korea  (d) Taiwan

54. India has signed an agreement to import 75 lakh tonnes of LNG from 2009 under an oilfield-for-LNG deal. Which country is this?
(a) Kuwait  (b) Indonesia  (c) Iran  (d) Saudi Arabia

55. In February 2005, who among the following was awarded the Dada Saheb Phalke Award?
(a) Girish Karnad  (b) Mital Sen  (c) K. Balachander  (d) Yash Chopra
56. Under whose patronage was the Khandariya Mahadeo Temple at Khajuraho built?
   (a) Solankis  
   (b) Rashtrakutas  
   (c) Tomaras  
   (d) Chandellas

57. During the period of which of the following was "Panchantra" written?
   (a) Nandas  
   (b) Mauryas  
   (c) Guptas  
   (d) Sungas

58. Who wrote the book called "Kitab-i-Nauras"?
   (a) Amu Khusr  
   (b) Badauni  
   (c) Ibrahim Adil Shah II  
   (d) Ala-ud-din Bahmani

59. Who among the following Mughal rulers granted the English Company "Deewani" over Bengal, Bihar and Orissa by the Treaty of Allahabad?
   (a) Ahmad Shah  
   (b) Alamgir II  
   (c) Shah Alam II  
   (d) Akbar Shah II

60. During the Indian Freedom struggle, what accusation was made against Master Amir Chand, Awadh Bihari, Bal Mukund and Basant Kumar Biswa?
   (a) Assassination of the Commissioner of Poonah  
   (b) Throwing a bomb on Viceroy's procession in Delhi  
   (c) Attempt to shoot the Governor of Punjab  
   (d) Lootin an armory in Bengal

61. Consider the following statements:
   1. India is a member of the Colombo Plan.
   2. Myanmar is a member of the SAARC.
   Which of the following statements given above is/are correct?
   (a) 1 only  
   (b) 2 only  
   (c) Both 1 and 2  
   (d) Neither 1 nor 2

62. Consider the following statements:
   1. To be eligible for election as President of India, the person must have completed the age of forty-five years.
   2. The Vice-President of India is elected by the electoral college consisting of Members of the Council of States only.
   Which of the statements given above is/are correct?
   (a) 1 only  
   (b) 2 only  
   (c) Both 1 and 2  
   (d) Neither 1 nor 2

63. Which one of the following statements is correct?
   Article 75 of the Constitution of India provides that the Council of Ministers of the Union shall be collectively responsible to
   (a) the House of the People  
   (b) both the Houses of Parliament  
   (c) the President only  
   (d) the President and both the Houses of the Parliament

64. Who was the Governor-General when the Revolt of 1857 started?
   (a) Lord Canning  
   (b) Lord Cornwallis  
   (c) Lord Dalhousie  
   (d) Lord Ellenborough

Directions (For the following 6 items):

65. Assertion (A) : One of the most important steps undertaken by Alauddin Khaliq was to initiate market reforms.
   Reason (R) : Alauddin Khaliq wanted to regulate the movement of foodgrains within the kingdom.

66. Assertion (A) : During winters, the continents tend to develop low pressure centres.
   Reason (R) : In winters, the continents are cooler than the oceans.

67. Assertion (A) : There are numerous icebergs in the North Atlantic Ocean, but these are rarely seen in the North Pacific Ocean.
   Reason (R) : In the North Pacific Ocean, the Bering Strait is narrow and shallow.

68. Assertion (A) : In the atmosphere, the air near the ground is warmer than in its upper layers.
   Reason (R) : The higher content of oxygen in the air near the ground absorbs a part of terrestrial radiation leading to higher temperature.

69. Assertion (A) : Water is a compound but not a mixture.
   Reason (R) : Water can be separated into its constituents hydrogen and oxygen by physical methods.

70. Assertion (A) : A domestic electric appliance working on a 3-pin plug will continue working even if the top pin is removed.
   Reason (R) : The top pin is used only as a safety device.

71. A magnetised steel wire of length 2l is bent at the middle to form an angle of 60°. It has a magnetic moment M. If it is bent at an angle of 120° at the middle, what will be its magnetic moment?
   (a) M  
   (b) 2M  
   (c) √3 M  
   (d) 2M

72. Length of train is l metre. Front of the train passes a pole with velocity v while its end passes the same pole at a velocity of v. What is the velocity at which the middle of the train passes the pole? (The train does not stop while its entire length crosses the pole.)
   (a) \( \frac{u+v}{2} \)  
   (b) \( \frac{\sqrt{u^2+v^2}}{2} \)  
   (c) \( \sqrt{\frac{u^2+v^2}{2}} \)  
   (d) \( \frac{\sqrt{u^2-u^2}}{2} \)
73. Two mirrors OM and ON are inclined at an angle of 72°. A, B and C are three points such that $\angle MOA = 18^\circ$, $\angle MOB = 36^\circ$, $\angle MOC = 54^\circ$. If $n_1$ is the number of images when an object is placed at A, $n_2$ is the number of images when an object is placed at B, $n_3$ is the number of images when an object is placed at C; then which one of the following is correct?
(a) $n_1 = n_2 = n_3$
(b) $n_1 < n_2 < n_3$
(c) $n_1 = n_3 < n_2$
(d) $n_1 < n_3 < n_2$

74. A boat is floating in a water reservoir up to level L₁. When the boat is loaded with heavy stones, the water level is L₂. When the stones are unloaded into the reservoir, the water level is L₃. Which one of the following is correct?
(a) $L_1 > L_2 > L_3$
(b) $L_1 > L_3 > L_2$
(c) $L_2 > L_1 > L_3$
(d) $L_2 > L_3 > L_1$

75. \[ \frac{3A}{2\Omega} \pm 4V \quad \frac{1\Omega}{Q} \]

A part of a closed circuit is shown above. What is the potential difference between points P and Q?
(a) 4 V
(b) 5 V
(c) 6 V
(d) 13 V

76. A flutist, while blowing a controlled stream of air at the blow hole of a flute, opens and closes different holes on the flute setting up vibrating air columns of different lengths. Which of the following regarding holes, lengths of air columns and the frequency of the sound produced is correct?
(a) All holes closed, longest air columns, highest frequency
(b) All holes closed, longest air column, lowest frequency
(c) All holes opened, shortest air column, lowest frequency
(d) All holes opened, longest air column, highest frequency

77. Which of the following processes result in cooling?
1. Evaporation of liquid
2. Compression of gas
3. Shaking a liquid in a vessel
4. Adiabatic expansion of a gas
Select the correct answer using the codes given below:
(a) 1 and 3
(b) 1 and 4
(c) 2 and 3
(d) 3 and 4

78. Which one of the following graphs gives the correct relationship between resistance $R$ and diameter $d$ of a given length of a nichrome wire?

79. Consider the following statements:
1. A wire carrying current is charged.
2. In a conductor carrying current, the electrons drift with a speed equal to that of light.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

80. A long wire can support a load $W$ without breaking. It is cut into four equal parts from its length. What is the maximum load that each part can support separately?
(a) $W/4$
(b) $W/2$
(c) $W/8$
(d) $W/16$

81. Consider one-dimensional motion of two bodies A and B having equal mass. The displacement-time plots are OA and OB for bodies A and B, respectively. What is the ratio of velocity of A to that of B?
(a) 3 : 1
(b) 2 : 2
(c) 1 : 2
(d) 1 : 3

82. What is the potential difference between the points A and B?
(a) zero
(b) $3E/2$
(c) $3E$
(d) $6E$
83. Which of the following are formed by hydrogen?
1. Covalent hydrides
2. Ionic hydrides
3. Metallic hydrides
Select the correct answer using the codes given below:
(a) 1 and 2
(b) 1 and 3
(c) 1, 2 and 3
(d) 2 and 3

84. The atomic number of an element X is 12. What is the formula of its oxide?
(a) $X_2N_2$
(b) $X(N_2)_2$
(c) $X_2N_2$
(d) $XO_3$

85. Which of the following states have oil refineries?
1. Andhra Pradesh
2. Haryana
3. Kerala
4. Tamil Nadu
Select the correct answer using the codes given below:
(a) 1 and 2
(b) 2 and 4
(c) 1, 3 and 4
(d) 1, 2, 3 and 4

86. Which of the following is carried by the waves from one place to another?
(a) Velocity
(b) Mass
(c) Energy
(d) Wavelength

87. Consider the following reactions:
1. $Cu + I_2 → CuI_2$
2. $Fe + S → FeS$
Which of the above reactions is a redox reaction?
(a) Only 1
(b) Only 2
(c) Both 1 and 2
(d) Neither 1 nor 2

88. Which one of the following substances is added to the glass during its manufacture to give it blue colour?
(a) Cuprous oxide
(b) Ferrous oxide
(c) Manganese oxide
(d) Cobalt oxide

89. How many milli equivalents of NaOH are required to neutralize 200 mL of 0.25 N HCl solution?
(a) 100
(b) 75
(c) 50
(d) Insufficient data, so it cannot be calculated

90. In alkaline conditions, KMnO₄ reacts as:
$2 KMnO_4 + 2 KOH → 2K_2MnO_4 + H_2O + O_2$
What is the equivalent weight of KMnO₄?
(Molecular weight of KMnO₄ = 158)
(a) 158
(b) 316
(c) 52.7
(d) 158

91. Which one of the following reactions yields hydrogen gas?
(a) NaCl + H₂SO₄ →
(b) Zn (s) + H₂SO₄ (aq) →
(c) CuSO₄ + HNO₃ →
(d) Na₂O₂ + H₂O →

92. Which one of the following statements is correct?
In the reaction
$2FeCl_3 + Cl_2 → 2FeCl_4$
(a) FeCl₃ is an oxidising agent
(b) Cl₂ is an oxidising agent
(c) FeCl₄ is an oxidising agent
(d) Cl₂ is a reducing agent

93. How many oxygen atoms are there in 63 g of HNO₃?
(a) 3
(b) 2.007 × 10²³
(c) 6.023 × 10²³
(d) 1.807 × 10²⁴

94. Consider the following statements:
1. All homogeneous mixtures are called solutions.
2. A suspension of chalk in water is a homogeneous mixture.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

95. Consider the following statements:
1. Urea readily dissolves in water.
2. Water is polar in nature.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

96. Consider the equation:
$MnO_4^- + 5 Fe^{3+} + 8H^+ → Mn^{2+} + 5 Fe^{3+} + 4 H_2O$
Which one of the following statements is correct?
The oxidation number of Mn
(a) decreases from +7 to +2
(b) decreases from +3 to +2
(c) decreases from +7 to +2
(d) increases from −7 to −2

97. Which one of the following is the correct sequence of basicity in AsH₃, NH₃, PH₃ and SbH₃?
(a) AsH₃ < NH₃ < PH₃ < SbH₃
(b) NH₃ < AsH₃ < SbH₃ < PH₃
(c) NH₃ < SbH₃ < AsH₃ < PH₃
(d) SbH₃ < AsH₃ < PH₃ < NH₃

98. Which one of the following pairs of compounds is an illustration of the law of multiple proportion?
(a) SO₂, SO₃
(b) H₂O, D₂O
(c) NaOH, KOH
(d) NaCl, KCl

99. Consider the following statements:
1. During December, January and February, the north-east trade wind prevail over India.
2. The only part of India benefiting from the north-east trade winds in the form of getting fair amount of rainfall comprises West Bengal, Orissa and Chhattisgarh.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

100. Consider the following statements:
1. Tropical deciduous forests are found only in India, Central America and Brazil.
2. Teak is the most important hardwood tree of tropical evergreen forests.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

101. When fine sand is carried by wind and deposited as wind-borne sedimentary rock, what is it called?
(a) Loess
(b) Dyke
(c) Shale
(d) Sill
102. Consider the following statements:
1. Cyclonic storms are produced in the sub-polar low pressure belt.
2. In the equatorial low pressure belt, the surface winds are generally absent.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

103. Which one of the following statements is correct?
(a) Gypsum is a sedimentary rock
(b) Deccan traps of peninsular India are formed of granite
(c) Laccoliths are the largest intrusive igneous rock bodies
(d) In India, gneiss is found only in the Himalayan region

104. Consider the following statements:
1. In Savannah climate, wet summers alternate with dry winters.
2. In China type of climate, winters are very severe and summers are mild and dry.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

105. Where is the ocean current called the 'Gulf Stream' found?
(a) Atlantic Ocean
(b) Indian Ocean
(c) North Pacific Ocean
(d) South Pacific Ocean

106. Which one of the following places has a nuclear power station?
(a) Koradi
(b) Rawatbhata
(c) Ramagundam
(d) Talcher

107. Where was the United Nations Charter signed in 1945 at a conference?
(a) Geneva
(b) New York
(c) San Francisco
(d) Paris

108. Which one of the following countries is not a permanent member of the Security Council of the UNO?
(a) China
(b) France
(c) Japan
(d) Russia

109. In which one of the following countries did the Industrial Revolution take place first?
(a) France
(b) Russia
(c) Japan
(d) Great Britain

110. What is the subject of the 73rd Amendment Act of the Constitution of India?
(a) Defection by the Members of Parliament and Members of Legislative Assemblies from their political parties
(b) Free and compulsory education for the children in the age group 6-14 years
(c) Strong Panchayati Raj institutions in the country
(d) Protection of wildlife

111. Consider the following statements:
1. Lord Cornwallis introduced the Permanent Land Settlement in Bengal.
2. Lord Wellesley introduced the Subsidiary Alliance system.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

112. Which among the following is referred to as the Montague-Chelmsford Reforms?
(a) Indian Council Act, 1909
(b) Government of India Act, 1919
(c) Rowlatt Act
(d) Government of India Act, 1935

113. Which of the following pairs is/are correctly matched?
1. Regulating Act : Hastings
2. Widow Remarriage Act : Bentinck
3. Vernacular Press Act : Lytton
Select the correct answer using the codes given below:
(a) 1 only
(b) 2 and 3
(c) 1 and 3
(d) 1, 2 and 3

114. Who among the following is the Chairperson of the National Commission for Women?
(a) Brinda Karat
(b) Girija Vyas
(c) Kapila Vatsayan
(d) Fatima Beevi

115. Which one of the following is not correctly matched?
(a) Pandit Krishna Mahara : Tabla
(b) Pandit Birju Mahara : Sarod
(c) Ustad Bismillah Khan : Shehnai
(d) Ustad Vilayat Khan : Sitar

116. Which of the following is/are the diseases of animals that are transmitted to the human beings?
1. Amoebiosis
2. Ascariosis
3. Tuberculosis
Select the correct answer using the codes given below:
(a) 1 and 2
(b) 2 only
(c) 3 only
(d) 1, 2 and 3

117. Which one of the following enzymes digests starch?
(a) Pylalin
(b) Pepsin
(c) Renin
(d) Trypsin

118. Which one of the following vitamins is required for the coagulation of blood?
(a) Vitamin A
(b) Vitamin C
(c) Vitamin E
(d) Vitamin K

119. Consider the following statements:
1. Brinjal is a good source of iron.
2. Pumpkin is a good source of vitamin A.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

120. With reference to normal human beings, on daily requirement basis, which one among the following is required in the least amount in comparison to the other three?
(a) Calcium
(b) Iron
(c) Potassium
(d) Sodium

121. Consider the following statements:
1. Mushroom is actually a fungus.
2. Moss plants do not have true leaves and roots.
3. Fern plants do not have true stems.
Which of the statements given above is/are correct?
(a) 1 only
(b) 1 and 2
(c) 2 and 3
(d) 1, 2 and 3
122. Which one of the following statements is correct?
   (a) Prokaryotic cells have single chromosome
   (b) Prokaryotic cells have nucleus attached to plasma membrane
   (c) Plastids of plant cells have single membrane
   (d) Animal cells have single large vacuole occupying most of the space.

123. Consider the following statements:
   1. Neurons are multinucleate cells.
   2. Platelets in blood are broken red blood cells.
   Which of the statements given above is/are correct?
   (a) 1 only
   (b) 2 only
   (c) Both 1 and 2
   (d) Neither 1 nor 2

124. Which one of the following is not a chordate?
   (a) Starfish
   (b) Dolphin
   (c) Shark
   (d) Snake

125. To which one of the classes of Arthropoda do lobsters belong?
   (a) Arachnida
   (b) Crustacea
   (c) Insecta
   (d) Myriapoda

126. Which one of the following is not a Kharif crop?
   (a) Cotton
   (b) Groundnut
   (c) Maize
   (d) Mustard

127. What is Roland-Garros stadium known for?
   (a) As the venue of the last Football World Cup final
   (b) As one of the stadia of the last Olympic events held in Greece
   (c) As the venue of the French International Tennis Open Tournament
   (d) As the venue of the Australian Open Tennis Tournament

128. Match List-I (Lawn Tennis Player) with List-II (Country) and select the correct answer using the codes given below the Lists:

<table>
<thead>
<tr>
<th>List-I (Lawn Tennis Player)</th>
<th>List-II (Country)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Rafael Nadal</td>
<td>1. Belgium</td>
</tr>
<tr>
<td>B. Mary Pierce</td>
<td>2. Argentina</td>
</tr>
<tr>
<td>C. Justine Henin-Hardenne</td>
<td>3. Spain</td>
</tr>
<tr>
<td>D. Mariano Puerta</td>
<td>4. France</td>
</tr>
<tr>
<td></td>
<td>5. U.S.A.</td>
</tr>
</tbody>
</table>

Codes:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
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</thead>
<tbody>
<tr>
<td>(a)</td>
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<td>4</td>
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<tr>
<td>(b)</td>
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<td>1</td>
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<tr>
<td>(c)</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

129. Which one of the following is not correctly matched?

<table>
<thead>
<tr>
<th>National Highway</th>
<th>Places Connected</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) NH 1</td>
<td>Delhi-Pakistan border (Near Amritsar)</td>
</tr>
<tr>
<td>(b) NH 2</td>
<td>Delhi-Kolkata</td>
</tr>
<tr>
<td>(c) NH 8</td>
<td>Delhi-Chennai</td>
</tr>
<tr>
<td>(d) NH 10</td>
<td>Delhi-Fazilka (Near Pakistan border)</td>
</tr>
</tbody>
</table>

130. Match List-I (Base of the Indian Navy) with List-II (State) and select the correct answer using the codes given below the Lists:

<table>
<thead>
<tr>
<th>List-I (Base of the Indian Navy)</th>
<th>List-II (State)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. INS Kadamba</td>
<td>1. Goa</td>
</tr>
<tr>
<td>B. INS Garuda</td>
<td>2. Karnataka</td>
</tr>
<tr>
<td>C. INS Agrani</td>
<td>3. Kerala</td>
</tr>
<tr>
<td>D. INS Kalyani</td>
<td>4. Andhra Pradesh</td>
</tr>
<tr>
<td></td>
<td>5. Tamil Nadu</td>
</tr>
</tbody>
</table>

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<tr>
<td>(d)</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

131. Match List-I (Air Command of the IAF) with List-II (Headquarters) and select the correct answer using the codes given below the Lists:

<table>
<thead>
<tr>
<th>List-I (Air Command of the IAF)</th>
<th>List-II (Headquarters)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Maintenance Command</td>
<td>1. Thiruvananthapuram</td>
</tr>
<tr>
<td>B. Central Air Command</td>
<td>2. Bangalore</td>
</tr>
<tr>
<td>C. Training Command</td>
<td>3. New Delhi</td>
</tr>
<tr>
<td>D. Southern Air Command</td>
<td>4. Nagpur</td>
</tr>
<tr>
<td></td>
<td>5. Allahabad</td>
</tr>
</tbody>
</table>

Codes:

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</tr>
<tr>
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<td>3</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>(d)</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

132. Consider the following statements:
   1. The period of the 10th Five Year Plan is 2003-2008.
   2. The 10th Five Year Plan approach towards tourism signifies a distinct shift from that adopted in previous plans.
   Which of the statements given above is/are correct?
   (a) 1 only
   (b) 2 only
   (c) Both 1 and 2
   (d) Neither 1 nor 2

133. Which among the following are the official languages of the United Nations Organisation?
   1. Arabic
   2. Chinese
   3. German
   4. Spanish
   Select the correct answer using the codes given below:
   (a) 1,2 and 3
   (b) 1,2 and 4
   (c) 2,3 and 4
   (d) 3 and 4

134. Who among the following is the first lady to become a Vice Admiral in the Indian Navy?
   (a) Kanwaljit Deol
   (b) Kanchan Choudhary Bhattacharya
   (c) Padmavathy Bandhopadyay
   (d) Punita Arora
135. Match List-I (Port) with List-II (State) and select the correct answer using the codes given below the Lists :

<table>
<thead>
<tr>
<th>List-I</th>
<th>List-II</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Port)</td>
<td>(State)</td>
</tr>
<tr>
<td>A. Ennore Port</td>
<td>1. Gujarat</td>
</tr>
<tr>
<td>B. Kandla Port</td>
<td>2. Tamil Nadu</td>
</tr>
<tr>
<td>C. Jawaharlal Nehru Port</td>
<td>3. Andhra Pradesh</td>
</tr>
<tr>
<td>D. Paradip Port</td>
<td>4. Maharashtra</td>
</tr>
<tr>
<td></td>
<td>5. Orissa</td>
</tr>
</tbody>
</table>

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<table>
<thead>
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<td>5</td>
<td>3</td>
<td>1</td>
<td>(d)</td>
<td>2</td>
<td>1</td>
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</tbody>
</table>

136. According to the Census 2001, which one of the following numbers is closest to the number of females to every 1000 males in India ?

(a) 875  
(b) 900  
(c) 930  
(d) 960

137. From north to south, which one of the following is the correct sequence of the given hills ?

(a) Kaimur Hills --- Mahadeo Hills --- Satmala Hills  
(b) Mahadeo Hills --- Kaimur Hills --- Satmala Hills  
(c) Kaimur Hills --- Satmala Hills --- Mahadeo Hills  
(d) Mahadeo Hills --- Satmala Hills --- Kaimur Hills

138. Ghasaprabha is a tributary of which one of the following rivers ?

(a) Ganga  
(b) Indus  
(c) Godavari  
(d) Krishna

139. Match List-I (City) with List-II (Industry) and select the correct answer using the codes given below the Lists :

<table>
<thead>
<tr>
<th>List-I</th>
<th>List-II</th>
</tr>
</thead>
<tbody>
<tr>
<td>(City)</td>
<td>(Industry)</td>
</tr>
<tr>
<td>A. Bhopal</td>
<td>1. Sports goods</td>
</tr>
<tr>
<td>B. Kapurthala</td>
<td>2. Heavy Electricals</td>
</tr>
<tr>
<td>C. Vadodara</td>
<td>3. Petro-chemicals</td>
</tr>
<tr>
<td>D. Vishakhapatnam</td>
<td>4. Rail coaches</td>
</tr>
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<td>5. Steel</td>
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Codes :

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<td>2</td>
<td>5</td>
<td>(d)</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

140. Two blocks A and B of mass $m_1$ and $m_2$ respectively, are accelerated up a smooth plane surface by applying a force of 30 N parallel to the surface. If the force on B is 25 N, what is the value of $\frac{m_1}{m_2}$ ?

141. Which one of the following is indicated by the graph given above in respect of an oscillating simple pendulum ?

(a) Variation of potential energy with displacement  
(b) Variation of kinetic energy with displacement  
(c) Variation of potential energy with kinetic energy  
(d) Variation of total energy with displacement

142. Each of two identical cylindrical vessels with their bases at the same level contains same liquid. The level of liquid in one vessel is twice that in the other. What happens to potential energy of the system if the vessels are interconnected by a pipe in order to equalise the levels ?

(a) There is no change in the potential energy  
(b) The potential energy decreases  
(c) The potential energy increases  
(d) The potential energy becomes zero

143. Consider the following statements :

1. 10 g of ice at 0°C and 10 g of water at 0°C contain same amount of heat.
2. The specific heat of ice at 0°C is equal to that of water at 0°C.

Which of the statements given above is/are correct ?

(a) Only 1  
(b) Only 2  
(c) Both 1 and 2  
(d) Neither 1 nor 2

144. Two identical conducting spheres carrying charges $q_1$ and $q_2$ attract each other with a force of $F$. If they are connected by a thin wire, they repel each other with a force $\frac{F}{3}$. What is the relationship between $q_1$ and $q_2$ ?

(a) $q_1 = 3q_2$  
(b) $q_2 = 3q_1$  
(c) Either $q_1 = -3q_2$ or $q_2 = -3q_1$  
(d) Either $q_1 = 2q_2$ or $q_2 = 2q_1$

145. Which of the following statements is correct ?

(a) Ultrasonic waves can travel in vacuum  
(b) Wavelength of ultrasonic waves is of the same order as that of microwaves  
(c) Frequency of ultrasonic waves is of the same order as that of X-rays  
(d) Speed of ultrasonic waves is of the same order as that of light
146. An electric bell is operated at line voltage having a frequency of \( f_0 \) per second. What is the frequency with which the hammer of the bell strikes the gong?

(a) \( f_0 \)
(b) \( 2f_0 \)
(c) \( f_0/2 \)
(d) Natural frequency of vibrations of the hammer

147. Let a particle A moves from \( s = 0 \) at \( t = 0 \) along a straight line with an initial velocity \( v_1 \) and with a steady acceleration \( a_1 \). Let a particle B moves from \( s = 0 \) at \( t = 0 \) along the same straight line with an initial velocity \( v_2 \) and a steady acceleration \( a_2 \). If \( v_1 < v_2 \) and \( a_1 > a_2 \), then which one of the following is correct?

(a) These particles never meet again
(b) These particles meet at \( t = \frac{2(a_1 - a_2)}{(a_1 - a_2)} \)
(c) These particles meet at \( t = \frac{2v_1}{(v_1 - v_2)} \)
(d) These particles meet at \( t = \frac{v_1 v_2}{(a_1 a_2)} \)

148. A motorcycle, initially at rest, is given a constant acceleration \( a \) for some time and then constant retardation \( b \), till it comes to rest. If the total time elapsed is \( t \) seconds, what is the maximum velocity acquired by the motorcycle?

(a) \( \frac{(a^2 + b^2)}{ab} t \)
(b) \( \frac{(a^2 - b^2)}{ab} t \)
(c) \( \frac{ab}{(a + b)} t \)
(d) \( \frac{(a + b)}{ab} t \)

149. The graph (velocity-time) shown above represents motion of a particle. What is the corresponding (acceleration-time) graph for this motion?

150. Ice (specific gravity = 0.92) floats on water but sinks in ethyl alcohol (specific gravity = 0.79). In what proportion (approx.) should these liquids be mixed so that an ice cube does not sink?

(a) 62% alcohol  (b) 57% alcohol  (c) 43% alcohol  (d) 38% alcohol
**Ans: General Ability Test**

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