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UPSC NDA Exam 2009-I General Studies
Solved Paper

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 strikes 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

Explanations :

- 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 theater, never invites a friend to dinner. But sixty he is a rich man and is convinced that he is all but a pauper.

8. 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
9. 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
10. 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.

11. 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
12. '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
13. 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.

14. The word which is used with a double meaning is
 - (a) figure
 - (b) fitness
 - (c) shape
 - (d) indicators
15. 'It' in the second paragraph refers to
 - (a) camp
 - (b) lake
 - (c) holiday
 - (d) walk
16. 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

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 one of the underlined parts. 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 not be enough for a man with a
 (c)
family of three. No error.
 (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
 (a) (b)
without much effect. No error.
 (c) (d)
20. Ramesh has agreed to marry with the girl
 (a) (b)
of his parent's choice. No error.
 (c) (d)
21. The pity is that no sooner he had left the place
 (a) (b)
than the fire broke out. No error.
 (c) (d)
22. when he was arriving the party was
 (a) (b)
in full swing. No error.
 (c) (d)
23. The Dean wrote that he constituted a committee of experts
 (a)
comprising five members
 (b)
before the next meeting took place. No error.
 (c) (d)
24. I can't help to sneeze I got drenched yesterday
 (a) (b)
and have a bad cold. No error.
 (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 this same project. No error.
 (c) (d)

27. The Monk loved riding and hunting
 (a)
and refused to conform by rules and regulations
 (b)
of the ancient monastic order. No error.
 (c) (d)

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.

28. ABSURD
 (a) Senseless (b) Clean
 (c) Abrupt (d) Candid
29. PHILANTHROPY
 (a) Generosity (b) Perversity
 (c) Perjury (d) Flaunting
30. INSCRUTABLE
 (a) Strange (b) Mysterious
 (c) Marvellous (d) Sublime
31. EXACTLY ALIKE
 (a) United (b) Identical
 (c) Comparable (d) Regular
32. MUTUAL
 (a) Reciprocal (b) Agreed
 (c) Common (d) Conjugal
33. IMBECILE
 (a) Astute (b) Cunning
 (c) Stupid (d) Ludicrous
34. WEIRD
 (a) Beastly (b) Unpleasant
 (c) Frightening (d) Unnatural
35. AVARICIOUS
 (a) Greedy (b) Jealous
 (c) Angry (d) Wicked

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.

36. EXPLOIT
 (a) Utilize (b) Alert
 (c) Support (d) Neglect
37. DETRIMENTAL
 (a) Demolition (b) Aversion
 (c) Beneficial (d) Bad
38. SHARP
 (a) Bleak (b) Blunt
 (c) Bright (d) Blond
39. CONDEMN
 (a) Censure (b) Approve
 (c) Recommend (d) Praise

40. RELUCTANT
 (a) Avoiding (b) Anxious
 (c) Refuse (d) Eager
41. INTRICATE
 (a) Complicated (b) Simple
 (c) Colourful (d) Good
42. PENURY
 (a) Pompous (b) Luxury
 (c) Poverty (d) Punitive
43. EXPOSTULATE
 (a) Protest (b) Agree
 (c) Follow (d) Argue

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) ZQ-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.

44. S_1 : I last visited Kandy almost 10 years ago.
 S_6 : Set around low, forested hills, with the Mahavelli river flowing nearby, the landscape has an instance 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
45. S_1 : The status of women in our country is, on the whole, far from high.
 S_6 : 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

46. S_1 : Edison was an inventor of great ability.
 S_6 : 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 a not a very good businessman.
- (a) P-Q-R-S (b) S-R-Q-P
 (c) S-R-P-Q (d) R-P-Q-S

47. S_1 : I never knew my father or my mother.
 S_6 : 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

48. S_1 : We voyaged for many months, stopping at islands to barter our goods.
 S_6 : 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 and 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

49. S_1 : Ashoka became an ardent Buddhist and tried his utmost to spread the Dharma.
 S_6 : 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

50. S_1 : Some people prefer country life to city life.
 S_2 : 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) $R - P - S - Q$

PART-B

51. Which of the following are the possible blood groups of the offspring of the parents with blood group O and A B ?
 (a) O, A, B and A B (b) A and B
 (c) A, B and A B (d) O and AB
52. Who among the following was the author of *Tarikh-i-Alai*, which contains the details of the first few years of Sultan Alauddin Khilji ?
 (a) Ziauddin Barani (b) Shams Siraj Afif
 (c) Amir Khusrau (d) Yahya bin Ahmad
53. Who among the following was a contemporary of Gautam Buddha ?
 (a) Nagarjuna (b) Kanishka
 (c) Kautila (d) Mahavir
54. Sati was declared illegal and punishable by the Regulation XVII during the Governor Generalship of
 (a) Lord William Bentinck
 (b) Lord Canning
 (c) Lord Ripon
 (d) Lord Dalhousie
55. Match List I with List II and select the correct answer using the codes given below the lists :

	List I (Battle)		List II (Year)
A.	1 st Battle of Panipat	1.	1565
B.	Battle of Plassey	2.	1526
C.	Battle of Haldighati	3.	1757
D.	Battle of Thlikota	4.	1576

Codes :

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

56. Which one of the following slogans is attributed of Subhash Chandra Bose ?
 (a) Jai Jawan Jai Kisan (b) Bande Mataram
 (c) Jai Hind (d) Inqilab Zindabad
57. Where did Buddha attain Parinirvana ?
 (a) Both Gaya (b) Kushinagara
 (c) Rajgriha (d) Vaisali
58. Bande Mataram, the nationalist song, was a part of
 (a) Durgesh Nandini (b) Saraswati Chandra
 (c) Grihadaha (d) Anand Math
59. Who among the following has authored the book *Hind Swaraj* ?
 (a) Bal Gangadhar Tilak
 (b) Mahatma Gandhi
 (c) Gopal Krishna Gokhale
 (d) M.G. Ranade

60. The entry "Public health and Sanitation" is included in the Constitution of India in
 (a) Union List (b) State List
 (c) Concurrent List (d) None of these
61. The Instrument of Instructions on the Government of India Act 1935 has been incorporated in the Constitution of India in the year 1950 as
 (a) Fundamental Rights
 (b) Directive Principles of State Policy
 (c) Fundamental Duties
 (d) Emergency Provisions
62. Who among the following was the advisor of the Drafting Committee of the Constituent Assembly ?
 (a) B. Shiva Rao
 (b) Dr. B.R. Ambedkar
 (c) Sachidananda Sinha
 (d) B.N. Rao
63. On which of the following grounds can a Judge of the Supreme Court or a High Court be impeached ?
 1. Violation of the Constitution
 2. Proved misbehaviour
 3. Incapacity
 Select the correct answer using the codes given below :
 (a) 1 only (b) 2 only
 (c) 1, 2 and 3 (d) 2 and 3
64. Which of the following is/are the function/functions of the Finance Commission of India ?
 1. Making recommendations as to the principles governing grant-in-aid of the revenues of the States.
 2. To suggest measures to augment Consolidated Fund of India ?
 Select the correct answer using the codes given below :
 (a) 1 only (b) 2 only
 (c) Both 1 and 2 (d) Neither 1 nor 2
65. Which of the following Constitutional Amendments have added Article 15 (5) in the Constitution of India providing for reservation in educational institutions in the private sector also ?
 (a) 81st Amendment (b) 86th Amendment
 (c) 91st Amendment (d) 93rd Amendment
66. If any question arises whether a Bill is a Money Bill or not, whose decision shall be final ?
 (a) The Supreme Court of India
 (b) The President of India
 (c) The Speaker of the Lok Sabha
 (d) Joint Parliamentary Committee
67. The current Economic Census of India, the fifth in the series, was conducted in the year
 (a) 2005 (b) 2006
 (c) 2007 (d) 2008

68. Which among the following States/UT is the latest to introduce VAT (Value Added Tax) in India ?

- (a) Gujarat (b) Puducherry
(c) Uttar Pradesh (d) Tamil Nadu

69. Who among the following was the Chairman of the High Level Committee on Competition Policy and Law ?

- (a) Bimal Jalan (b) C. Rangarajan
(c) Y.V. Reddy (d) S.V.S. Raghavan

70. The idea of including the Emergency provisions in the Constitution of India has been borrowed from the

- (a) Constitution of Canada
(b) Weimar Constitution of Germany
(c) Constitution of Ireland
(d) Constitution of the USA

71. In India, public expenditure on education (Centre and States) as a percentage of GDP at present is between

- (a) 2 to 3 per cent (b) 3 to 4 per cent
(c) 4 to 5 per cent (d) 5 to 6 per cent

Directions : Each of the next four items consists of two statements, one labelled as the 'Assertion (A)' and the other as 'Reason (R)'. You are to examine these two statements carefully and select the answers to these items using the codes given below :

Codes :

- (a) Both A and R are individually true and R is the correct explanation of A
(b) Both A and R are individually true but R is not the correct explanation of A
(c) A is true but R is false
(d) A is false but R is true

72. Assertion (A) : Carbon can form more compounds than any other element.

Reason (R) : Carbon can exist in various allotropes.

73. Assertion (A) : In summer a block of iron is hotter than a block of wood.

Reason (R) : The relative density of iron is more than the relative density of wood.

74. Assertion (A) : Two artificial satellites having different masses and revolving around the Earth in the same circular orbit have same speed.

Reason (R) : The speed of a satellite is directly proportional to the radius of its orbit.

75. Assertion (A) : The Equator is a great circle.

Reason (R) : The Equator encircles the whole Earth and its plane divides the Earth into two equal halves.

76. Which one of the following sets of States does not receive most of its rainfall from SW monsoon during the months of June to September ?

- (a) Arunachal Pradesh and Gujarat
(b) Assam and Karnataka
(c) Himachal Pradesh and Rajasthan
(d) Tamil Nadu and Jammu & Kashmir

77. In which one among the following States is the percentage of Scheduled Tribes population to its total population highest ?

- (a) Chhattisgarh
(b) Madhya Pradesh
(c) Mizoram
(d) Rajasthan

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

	List I (Peak)		List II (State)
A.	Dodabetta	1.	Maharashtra
B.	Guru Shikhar	2.	Madhya Pradesh
C.	Kalsubai	3.	Tamil Nadu
D.	Dhupgarh	4.	Rajasthan

Codes :

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

79. The mass of water vapour per unit volume of air is known as

- (a) relative humidity
(b) specific humidity
(c) absolute humidity
(d) variable humidity

80. What is the term used to denote the critical temperature at which the air becomes saturated with vapor and below which the condensation is likely to begin ?

- (a) Condensation point
(b) Evaporation point
(c) Dew point
(d) Point of critical temperature

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

	List I (Fishing Bank)		List II (Coast)
A.	Dogger Bank	1.	Newfoundland Coast
B.	Grand Bank	2.	Australia Coast
C.	Great Barrier Reef	3.	North Sea
D.	Tonga Trench	4.	East of Fiji Island

Codes :

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

82. Dry point settlements are common in

- (a) Deserts (b) Plateaus
(c) Mountain regions (d) Deltas

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

	List I (Himalayan Peaks)		List II (States)
A.	Nanga Parbat	1.	Jammu & Kashmir
B.	Nanda Devi	2.	Sikkim
C.	Kanchanjunga	3.	Uttarakhand

Codes :

- | | | | |
|-----|---|---|---|
| | A | B | C |
| (a) | 1 | 2 | 3 |
| (b) | 1 | 3 | 2 |
| (c) | 2 | 3 | 1 |
| (d) | 3 | 1 | 2 |

84. Which one of the following instruments is used for measuring the humidity of the air ?
 (a) Wind vane
 (b) Aneroid barometer
 (c) Wet and dry bulb thermometer
 (d) Maximum and minimum thermometer
85. Which among the following is the correct sequence of rivers starting from North to South ?
 (a) Bhima – Godavari – Penganga – Tungabhadra
 (b) Godavari – Penganga – Tungabhadra – Bhima
 (c) Penganga – Godavari – Bhima – Tungabhadra
 (d) Penganga – Bhima – Godavari – Tungabhadra
86. Which one of the following is the international aircraft identification mark (registration prefix) for India ?
 (a) AT (b) VT
 (c) IX (d) VX
87. Match List I with List II and select the correct answer using the codes given below the lists :

	List I (Volcano)		List II (Country)
A.	Mount Etna	1.	India
B.	Kilimanjaro	2.	U S A
C.	Katmai	3.	Tanzania
D.	Barren Island	4.	Italy

Codes :

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

88. Shimsha, Hemavati, Arkavati are the tributaries of which one of the following rivers ?
 (a) Tapi (b) Tungabhadra
 (c) Cauvery (d) Krishna
89. Which among the following planets is smaller in size than the earth ?
 (a) Neptune (b) Venus
 (c) Saturn (d) Uranus
90. Which of the following is *not* correctly matched ?
 (a) Prime Meridian : 0°
 (b) International Date Line : 180°
 (c) Arctic Circle : $66\frac{1}{2}^\circ \text{N}$
 (d) Tropic of Cancer : $23\frac{1}{2}^\circ \text{S}$
91. Which one of the following is different in local time between the places located at 165°East and 165°West ?
 (a) 0 hours (b) 12 hours
 (c) 22 hours (d) 24 hours
92. The natural dye present in turmeric is known as
 (a) Cinnamin
 (b) Phenolphthalein
 (c) Methyl orange
 (d) Curcumin
93. Which one of the following is not an enzyme ?
 (a) Amylase (b) Pepsin
 (c) Somatotrophin (d) Trypsin

94. Which one of the following processes takes place in lakes during eutrophication ?
 (a) Rapid destruction of algal growth
 (b) Excessive availability of dissolved oxygen
 (c) Loss of dissolved nutrients from water
 (d) Excessive entry of nutrient into water
95. Among the given nutrients, milk is a poor source of
 (a) Calcium (b) Protein
 (c) Carbohydrate (d) Vitamin C
96. Which one of the following is not a mammal ?
 (a) Dolphin (b) Shark
 (c) Seal (d) Whale
97. Which of the following organelles of a cell is/are involved in photosynthesis ?
 (a) Chloroplast
 (b) Mitochondrion
 (c) Endoplasmic reticulum
 (d) Golgi bodies
98. The wounds of face bleed profusely because
 (a) of its rich vascularity
 (b) it is close to the heart
 (c) its skin is soft
 (d) of fast contraction of facial muscle
99. Oral Rehydration Therapy is recommended for patients suffering from
 (a) tuberculosis (b) typhoid
 (c) tetanus (d) cholera

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

	List I (Disease)		List II (Diagnosis)
A.	AIDS	1.	Widal Test
B.	Plague	2.	Wayson Stain Test
C.	Typhoid	3.	ELISA Test
		4.	Mantoux Test

Codes :

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

101. One light year is equal to
 (a) $9.46 \times 10^{-15} \text{m}$ (b) $9.46 \times 10^{15} \text{m}$
 (c) $9.46 \times 10^{-13} \text{m}$ (d) $9.46 \times 10^{13} \text{m}$
102. Which among the following thermometers is preferred for measuring temperature around 1250°C ?
 (a) Mercury thermometer
 (b) Constant volume gas thermometer
 (c) Optical pyrometer
 (d) Platinum resistance thermometer
103. What is the mass of one litre of cottonseed oil of density 926kg/m^3
 (a) 926 kg (b) 926 g
 (c) 0.926 kg (d) 9260 kg
104. The wavelength of X-rays is of the order of
 (a) 1mm (b) 1cm
 (c) 1micron (d) 1 angstrom

105. In vacuum, the speed of light
 (a) depends on its wavelength
 (b) depend on its frequency
 (c) depend on its intensity
 (d) neither depend on its wavelength, frequency nor intensity

106. Which one of the following statements correctly defines power ?
 (a) Energy supplied per unit time
 (b) Energy of an object due to its motion
 (c) Energy of an object due to its position
 (d) None of the above

107. The electric charge is stored in a device called
 (a) Inductor (b) Capacitor
 (c) Resister (d) Transformer

108. Consider the following parts of spectra

1. Visible
 2. Infrared
 3. Ultraviolet
 4. Microwave

Which one of the following is the correct sequence in which their wavelengths increase ?

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

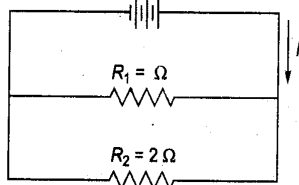
109. Propagation of light quanta may be described by

- (a) Photons (b) Protons
 (c) Neutrons (d) Electrons

110. Which one of the following is not electromagnetic in nature ?

- (a) Cathode-rays (b) X-rays
 (c) Gamma-rays (d) Infrared-rays

111. $V = 10 \text{ V}$



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

112. 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

113. 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

114. 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

115. 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

116. 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

117. How far must a girl stand in front of a concave spherical mirror of radius 120 cm to see an erect image of her face four times its natural size ?

- (a) 40 cm from the mirror
 (b) 45 cm from the mirror
 (c) 50 cm from the mirror
 (d) 55 cm from the mirror

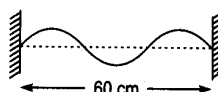
118. Match List I with List II and select the correct answer using the codes given below the lists :

	List I (Type of Electromagnetic Radiation)		List II (Approximate Wavelength in Metre)
A.	Infrared radiation	1.	10^{-12}
B.	X-rays	2.	10^{-5}
C.	Ultraviolet radiation	3.	10^{-10}
D.	Gamma rays	4.	10^{-8}

Codes :

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

- 119.



The standing wave pattern along a string of length 60 cm is shown in the above diagram. If the speed of the transverse waves on this string is 300 m/s, in which one of the following modes is the string vibrating ?

- (a) Fundamental (b) First overtone
 (c) Second overtone (d) Third overtone

120. A sonometer wire having a length of 50 cm is vibrating in the fundamental mode with a frequency of 100 Hz. Which of the following is the type of propagating wave and its speed ?

- (a) Longitudinal, 50 m/s
 (b) Transverse, 50 m/s
 (c) Longitudinal, 100 m/s
 (d) Transverse, 100 m/s

121. Which one of the following is the amount of heat given up when 20 g of steam at 100°C is condensed and cooled to 20°C ?

- (a) 10000 cal (b) 11400 cal
 (c) 12400 cal (d) 13600 cal

122. Which one of the following is the mode of heat transfer in which warm material is transported so as to displace a cooler material ?

(a) Conduction only
 (b) Convection only
 (c) Radiation
 (d) Both conduction and convection

123. Consider the following statements :

1. Different plant species grow together.
2. Light cannot penetrate into the lower strata full of undergrowth.

Which of the following types of vegetation is characterised by the above ?

(a) Equatorial moist evergreen
 (b) Tropical deciduous
 (c) Mediterranean
 (d) Warm temperate broad leaved deciduous

124. From which one of the following is the percentage of reflected amount of radiation highest ?

(a) Wet ground (b) Thick cloud
 (c) Forest (d) Snow cover

125. On planet Earth, there is no centrifugal force at the

(a) Equator (b) Tropic of Cancer
 (c) Tropic of Capricorn (d) Poles

126. Crocodiles store fats in

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

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

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

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

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

Codes :

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

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

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

Codes :

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

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

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

Codes :

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

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

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

Codes :

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

132. Who among the following is the winner of the Wimbledon Men's Singles title 2008 ?

(a) Roger Federer (b) Rafael Nadal
 (c) Novak Djokovic (d) Andy Roddick

133. Consider the following statements :

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

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

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

(a) tin (b) lead
 (c) copper (d) zinc

135. Alum is used as

(a) an analgesic
 (b) a fertilizer
 (c) a disinfectant
 (d) a purifier for water

136. Which among the following elements (metals) pollutes the air of a city having large number of automobiles ?
 (a) Cadmium (b) Lead
 (c) Chromium (d) Nickel
137. Oxygen and ozone are
 (a) allotropes (b) isomers
 (c) isotopes (d) isobars
138. 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
139. 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
140. Which among the following is an element ?
 (a) Alumina (b) Brass
 (c) Graphite (d) Silica
141. Consider the following equation for the formation of ammonia from nitrogen and hydrogen :

$$\text{N}_2 + 3\text{H}_2 = 2\text{NH}_3$$

 How many hydrogen molecules are required to react with 100 molecules of nitrogen ?
 (a) 100 (b) 200
 (c) 300 (d) 400
142. Which one among the following is used as a moderator in nuclear reactors ?
 (a) Ozone (b) Heavy hydrogen
 (c) Heavy water (d) Hydrogen peroxide
143. Which one of the following contains maximum percentage of nitrogen by mass ?
 (a) Urea
 (b) Ammonium cyanide
 (c) Ammonium carbonate
 (d) Ammonium nitrate
144. Match List I with List II and select the correct answer using the codes given below the lists

	List I (Substance)	List II (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

Codes :

- | | | | | |
|-----|---|---|---|---|
| | A | B | C | D |
| (a) | 3 | 2 | 1 | 4 |
| (b) | 4 | 2 | 1 | 3 |
| (c) | 3 | 1 | 2 | 4 |
| (d) | 4 | 1 | 2 | 3 |
145. Two elements gallium and oxygen combine to form a compound Ga_2O_3 . Which among the following is the valency of gallium ?
 (a) 1 (b) 2 (c) 3 (d) 4
146. Vinegar is the trade name of
 (a) acetic acid (b) chloroform
 (c) carbon tetrachloride (d) ethyl alcohol
147. Consider the following statements regarding diamond :
 1. It is an allotrope of silicon.
 2. It is a bad conductor of heat and electricity.
 3. It is the hardest substance.
 4. It burns to produce carbon dioxide.
 Which of the statements given above are correct ?
 (a) 1, 2, 3 and 4 (b) 2, 3, and 4
 (c) 1 and 2 (d) 1, 3 and 4
148. Which one of the following chemicals is used in beauty parlours for hair-setting ?
 (a) Sulphur based (b) Phosphorus based
 (c) Silicon based (d) Iron based
149. Non-conductors, whose polarization is caused by an electric field, are known as
 (a) Semi-conductors (b) Super-conductors
 (c) Dielectrics (d) Resistive conductors
150. The resistance of a wire that must be placed parallel with a 12Ω resistance to obtain a combined resistance of 4Ω is
 (a) 2Ω (b) 4Ω (c) 6Ω (d) 8Ω

Answers : General Studies

1	(c)	51	(b)	101	(b)
2	(b)	52	(c)	102	(c)
3	(b)	53	(d)	103	(c)
4	(d)	54	(a)	104	(d)
5	(a)	55	(a)	105	(d)
6	(d)	56	(c)	106	(a)
7	(c)	57	(b)	107	(b)
8	(b)	58	(d)	108	(d)
9	(d)	59	(b)	109	(a)
10	(c)	60	(b)	110	(a)
11	(a)	61	(d)	111	(c)
12	(b)	62	(d)	112	(c)
13	(b)	63	(d)	113	(b)
14	(a)	64	(c)	114	(c)
15	(d)	65	(d)	115	(c)
16	(a)	66	(c)	116	(a)
17	(b)	67	(a)	117	(b)
18	(b)	68	(c)	118	(c)
19	(a)	69	(d)	119	(c)
20	(b)	70	(b)	120	(d)
21	(b)	71	(c)	121	(c)
22	(a)	72	(b)	122	(b)
23	(a)	73	(b)	123	(c)
24	(c)	74	(c)	124	(d)
25	(b)	75	(a)	125	(d)
26	(a)	76	(d)	126	(c)
27	(b)	77	(c)	127	(d)
28	(a)	78	(c)	128	(d)
29	(a)	79	(c)	129	(b)
30	(b)	80	(c)	130	(d)
31	(b)	81	(a)	131	(b)
32	(a)	82	(d)	132	(c)
33	(c)	83	(c)	133	(c)
34	(c)	84	(b)	134	(b)
35	(a)	85	(c)	135	(d)
36	(c)	86	(b)	136	(b)
37	(c)	87	(d)	137	(a)
38	(b)	88	(c)	138	(c)

39	(b)	89	(b)	139	(d)
40	(d)	90	(d)	140	(c)
41	(b)	91	(b)	141	(c)
42	(b)	92	(d)	142	(c)
43	(b)	93	(c)	143	(b)
44	(d)	94	(d)	144	(d)
45	(b)	95	(d)	145	(c)
46	(c)	96	(b)	146	(b)
47	(a)	97	(a)	147	(b)
48	(b)	98	(a)	148	(c)
49	(c)	99	(d)	149	(c)
50	(d)	100	(b)	150	(c)