

# UPSC: NDA & NA Exam (II), 2013

## Held on: 11<sup>th</sup>, August

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

T.B.C. : B-OEBB-M-HBS,

Test Booklet Series

Serial

### 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. Please note that it is the candidate's responsibility to encode and fill in the Roll Number and Test Booklet Series Code A, B, C or D carefully and without any omission or discrepancy at the appropriate places in the OMR Answer Sheet. Any omission/discrepancy will render the Answer Sheet liable for rejection.
3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside. **DO NOT** write *anything else* on the Test Booklet.
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 THE CANDIDATE IN THE OBJECTIVE TYPE QUESTION PAPERS.
  - (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, one-third of the marks assigned to that question will be deducted as penalty.
  - (ii) If a candidate 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

**Directions (For the 10 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), (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 responses on the Answer Sheet at the appropriate space. You may feel that there is no error in a sentence. In that case, (d) will signify a 'No error' response.
- (ii) 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.

1. Suppose if you were left alone to live on a desert island what would you do? No error.  
(a) (b) (c) (d)
2. He wondered that what would be the next move of his opponents  
(a) (b)  
who had vowed to see him dislodged from power. No error.  
(c) (d)
3. The nation should be grateful to the armed forces for protecting them. No error.  
(a) (b) (c) ✓(d)
4. I do not know what is he doing to solve the problem. No error.  
(a) (b) (c) (d)
5. For so many years it is almost his habit to go to the bed at 10 p.m. daily. No error.  
(a) (b) (c) (d)
6. He took down after his father. No error.  
(a) (b) (c) (d)
7. His honesty has never been called to question. No error.  
(a) ✓(b) (c) (d)
8. I see her most weekends but not very often between. No error.  
(a) (b) ✓(c) (d)
9. The chancellor was present on both occasions. No error.  
↑ ✓(a) (b) (c) (d)
10. The deliberations by the committee are completely confidential. No error.  
(a) (b) (c) ✓(d)

**Directions (For the 10 items which follow) :**

Each of the following items consists of a sentence followed by four words or group of words. Select the **synonym** of the word (occurring in the sentence in capital letters ) as per the context.

11. A wise man puts past RANCOUR behind and moves ahead.  
(a) Dislike  
(b) Hatred  
(c) Division  
(d) Criticism
12. Many of the villagers were ISOLATED by heavy showers of rains.  
(a) Destroyed  
(b) Separated from others  
(c) Battered  
(d) Devasted
13. A series of COLUMNS supporting a large porch is typical of medieval architecture.  
(a) Statues  
(b) Arches  
(c) Pillars  
(d) Murals
14. Trees that BLOCK the view of oncoming traffic should be cut down.  
(a) Alter  
(b) Obstruct  
(c) Improve  
(d) Spoil
15. The landscape changed ABRUPTLY after the snowfall.  
(a) Suddenly  
(b) Sharply  
(c) Favourably  
(d) Slightly
16. We saw a SCINTILLATING fireworks display.  
(a) Fascinating  
(b) Unforgettable  
(c) Beautiful  
(d) Sparkling
17. The PACT has been in effect for twenty years.  
(a) Treaty  
(b) Monarchy  
(c) Lease  
(d) Trend
18. He had a reputation of being a PRUDENT businessman.  
(a) Skilful  
(b) Wealthy  
(c) Careful  
(d) Dishonest
19. There was a signpost where the two paths CONVERGE.  
(a) Separate  
(b) Intersect  
(c) Merge  
(d) Diverge
20. The violence erupted because of the ZEALOT.  
(a) Enthusiastic  
(b) Brave  
(c) Timid  
(d) Fanatic

**Directions (For the 10 items which follow) :**

Each of the following items consists of a sentence followed by four words or group of words. Select the **antonym** of the word (occurring in the sentence in capital letters) as per the context.

21. His CANDID remarks impressed the authorities.  
(a) Blunt  
(b) Guarded  
(c) Sincere  
(d) Unconventional
22. The guilty appealed to the jury to CONDONE his punishment.  
(a) Accept  
(b) Forgive  
(c) Condemn  
(d) Criticize
23. His family SEVERED ties with him for marrying inter-caste.  
(a) Joined  
(b) Included  
(c) Detached  
(d) Disrupted
24. It is easy to understand his FUZZY thoughts.  
(a) Misty  
(b) Vague  
(c) Clear  
(d) Useful
25. He drove his car through SLIMY road to reach your office.  
(a) Ugly  
(b) Clean  
(c) Beautiful  
(d) Slippery
26. We are ANXIOUS to avoid any problems with regard to this.  
(a) Cool  
(b) Composed  
(c) Careless  
(d) Worried
27. The railway lines are EXTENDED and we are quite happy about it.  
(a) Protracted  
(b) Widened  
(c) Curtailed  
(d) Elongated
28. There was a fire this morning. They were lucky to ESCAPE it.  
(a) Arrest  
(b) Elude  
(c) Evade  
(d) Conceive
29. Domestic violence is a very INHUMAN act.  
(a) Indifferent  
(b) Compassionate  
(c) Terrible  
(d) Ferocious
30. His ELOQUENT speech helped him bag the award.  
(a) Lucid  
(b) Vivid  
(c) Short  
(d) Inarticulate

**Directions (For the 10 items which follow) :**

Supply suitable preposition/phrasal verb in the blank of each item.

31. Universities in Germany and Denmark will have an input \_\_\_\_\_ the project.  
(a) for  
(b) into  
(c) about  
(d) at
32. He gave me a leg \_\_\_\_\_ when I was completely new to the business.  
(a) up  
(b) down  
(c) off  
(d) for
33. You should have nothing to do with those criminals; they all have violent attitudes and long records. They are men \_\_\_\_\_ the same kidney.  
(a) with  
(b) in  
(c) of  
(d) on
34. He didn't have the guts to stand \_\_\_\_\_ his friend when he was in trouble.  
(a) with  
(b) for  
(c) by  
(d) beside
35. He broke out of the prison \_\_\_\_\_ dressing as a woman.  
(a) in  
(b) as  
(c) by  
(d) with
36. When electricity failed, emergency generators \_\_\_\_\_.  
(a) cut out  
(b) cut off  
(c) cut on  
(d) cut in
37. We need two more hands to \_\_\_\_\_ the heavy rush of work.  
(a) cope up  
(b) cope with  
(c) cope to  
(d) cope in
38. Twenty-five candidates \_\_\_\_\_ each other for the first prize.  
(a) compete for  
(b) compete with  
(c) compete to  
(d) compete on
39. We must eliminate the \_\_\_\_\_ rich and poor.  
(a) disparity between  
(b) disparity for  
(c) disparity in  
(d) disparity from
40. As an innovator, he \_\_\_\_\_ the beaten track and explored new religions.  
(a) deviated from  
(b) deviated to  
(c) deviated in  
(d) deviated for

**Directions (For the next 04 items that follow) :**

*Read the passage and answer the questions that follow :*

It has often been said that the scale of natural phenomena in India and her total dependence on the monsoon, have helped to form the character of her people. Even today, major disasters, such as flood, famine and plague, are hard to check, and in older times, their control was almost impossible. Many other ancient civilizations, such as those of the Greeks, Romans and Chinese, had to contend with hard winters, which encouraged sturdiness and resourcefulness. India, on the other hand, was blessed by a bounteous nature, who demanded little of man in return for sustenance, but in her terrible anger could not be appeased by any human effort. Hence it has been suggested, the Indian character has tended to quietism, accepting fortune and misfortune alike without complaint.

- 
- |  |  |
|--|--|
| <p>41. The author's main argument is</p> <ul style="list-style-type: none"><li><input checked="" type="radio"/> (a) description of natural phenomena of India</li><li>(b) unpredictability of Indian monsoon</li><li>(c) correlation between the climate and the character of the inhabitants of a region</li><li>(d) hardships caused by natural calamities</li></ul> <p>42. Which one of the following civilizations did <i>not</i> have to face hardships due to bad winter ?</p> <ul style="list-style-type: none"><li><input checked="" type="radio"/> (a) Indian</li><li>(b) Greek</li><li>(c) Chinese</li><li>(d) Roman</li></ul> | <p>43. The expression "India, on the other hand, was blessed by a bounteous nature ..... " means</p> <ul style="list-style-type: none"><li>(a) Indian soil is fertile</li><li>(b) India is a land of flora and fauna</li><li><input checked="" type="radio"/> (c) Indian people have been rewarded more generously by nature in proportion to their efforts</li><li>(d) Indian soil is suited for growing a variety of crops</li></ul> <p>44. Which trait of Indian character has been formed by the monsoon ?</p> <ul style="list-style-type: none"><li>(a) Fatalism</li><li>(b) Sturdiness</li><li>(c) Asceticism</li><li>(d) Epicureanism</li></ul> |
|--|--|



**Directions (For the 06 items that follow) :**

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

45. she and neither have I the assignment yet

P                      Q                      R  
hasn't finished  
S

The correct sequence should be

- (a) QRSP  
(b) QPSR  
(c) PQSR  
(d) PSRQ

46. himself a child can usually feed

P                      Q                      R  
by the age of six months  
S

The correct sequence should be

- (a) QPRS  
(b) SRQP  
(c) PQRS  
(d) QRPS

47. Every experience in life makes  
on some of the cells or other nerve centres

P                      Q  
of the brain an impression  
R                      S

The correct sequence should be

- (a) SPRQ  
(b) QRSP  
(c) RSPQ  
(d) PSQR

48. You'll  
know how to do it have to  
P                      Q  
because she does not help her  
R                      S

The correct sequence should be

- (a) QSPR  
(b) SRPQ  
(c) QPRS  
(d) QSRP

49. Would you  
like to come on Saturday  
P                      Q  
at the International House to a concert  
R                      S

The correct sequence should be

- (a) PQRS  
(b) PSQR  
(c) RSPQ  
(d) PQSR

50. It is  
to be admitted not necessary that  
P                      Q  
to an engineering college  
R  
you qualify an entrance examination  
S

The correct sequence should be

- (a) SRQP  
(b) QSPR  
(c) QRPS  
(d) SRPQ

**PART B**

51. Consider the following statements about the National Cyber Security Policy, approved by the Union Cabinet in May 2013 :

1. The policy focuses on manpower training.
2. It aims to create a secured computing environment across the country.

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

52. Which of the following statements about Dr. Aparajita Datta is/are correct ?

1. She is a wildlife biologist.
2. She has been working for the conservation of hornbills in the dense tropical forests of Arunachal Pradesh.
3. She was honoured with the Whitley Award, also known as Green Oscar, in the year 2013 in London.

Select the correct answer using the code given below :

- (a) 1, 2 and 3
- (b) 2 and 3 only
- (c) 1 and 2 only
- (d) 3 only

53. Who among the following won the Men's Singles title of the Madrid Open Tennis Tournament, 2013 ?

- (a) Novak Djokovic
- (b) Rafael Nadal
- (c) Roger Federer
- (d) Stanislas Wawrinka

54. Which one among the following films was presented the Best Feature Film award in the 60<sup>th</sup> National Film Awards ?

- (a) *Dekh Indian Circus*
- (b) *Vicky Donor*
- (c) *Paan Singh Tomar*
- (d) *Chittagong*

55. Which one among the following is an indigenously built Weapon System Integrated helicopter handed over to the Indian Army in February 2013 by Hindustan Aeronautics Ltd. ?

- (a) Varun
- (b) Indra
- (c) Rudra
- (d) Shiva

56. Who among the following is the Chairman of the Fourteenth Finance Commission ?

- (a) Abhijit Sen
- (b) Y.V. Reddy
- (c) Amartya Sen
- (d) Montek Singh Ahluwalia

57. Which of the following statements about 'Chit Fund' in India is/are correct ?

1. It is a kind of savings scheme.
2. There are no Acts regulating the activities relating to Chit Funds in India.

Select the correct answer using the code given below :

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



58. Who among the following is the author of the book *Pax Indica : India and the World of the 21<sup>st</sup> Century* ?
- (a) Shashi Tharoor  
 (b) Salman Khurshid  
 (c) S.M. Krishna  
 (d) Pranab Mukherjee
59. Which one among the following about Prof. C.N.R. Rao is *not* correct ?
- (a) He worked mainly in solid-state and structural chemistry  
 (b) He is the head of the Scientific Advisory Council to the President of India  
 (c) He was conferred with China's top science award for the year 2013 for his contributions in boosting Sino-Indian scientific cooperation  
 (d) He is a member of the US National Academy of Sciences
60. Identify the person from the information given below :
- He was a popular Urdu poet and Hindi lyricist, who worked extensively in Hindi films. He was a Padma Shri and won two Filmfare awards. The President of India recently released a commemorative postage stamp on his birth anniversary at Rashtrapati Bhavan.
- (a) Khayyam  
 (b) Sahir Ludhianvi  
 (c) Ali Sardar Jafri  
 (d) Salik Lucknawi

**Directions :** The following 07 (Seven) items consist of two statements, statement I and statement II. You are to examine these two statements carefully and select the answers to these items using the code given below :

**Code :**

- (a) Both the statements are individually true and Statement II is the correct explanation of Statement I
- (b) Both the Statements are individually true but Statement II is *not* the correct explanation of Statement I
- (c) Statement I is true but Statement II is false
- (d) Statement I is false but Statement II is true

61. **Statement I :**

The process of decay and disintegration of rocks in situ is called weathering.

**Statement II :**

Weathering takes place both mechanically and chemically.

62. **Statement I :**

Doldrums is a calm belt between 5° N and 5° S of the equator.

**Statement II :**

The sun rays strike almost vertically over the equator throughout the year.

63. *Statement I:*  
In the 19<sup>th</sup> century, India was the largest British colony.

*Statement II:*

India became a big market for British manufactured goods and a field of investment for foreign capital in the 19<sup>th</sup> century.

64. *Statement I:*  
Glass is not considered as a true compound.

*Statement II:*

Glass does not have a definite melting point.

65. *Statement I:*  
Limestone decomposes when it is heated in air.

*Statement II:*

Increase in the content of CO<sub>2</sub> in the atmosphere in recent years is mainly due to the using of limestone in the manufacture of cement.

66. *Statement I:*  
Very little hydrogen is produced when sulphuric acid is added to calcium.

*Statement II:*

The salt that is produced, calcium sulphate, is insoluble.

67. *Statement I:*  
Zinc is used for galvanization to protect iron from rusting.

*Statement II:*

Zinc is more reactive towards oxygen than iron.

68. Which of the following are the results of El Nino ?

1. Reduction in the amount of planktons which further reduces the number of fish in the sea.
2. Irregularities in the evaporation of sea water.
3. Distortion of equatorial atmospheric circulation.

Select the correct answer using the code given below :

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

69. 'Esker' is a geomorphic feature developed by

- (a) mechanical weathering
- (b) river action
- (c) glaciofluvial deposits
- (d) aeolian deposits

70. It is known that the atmosphere is divided into some layers. In which one among the following layers, is the percentage composition of Helium gas maximum ?

- (a) Troposphere
- (b) Stratosphere
- (c) Exosphere
- (d) Ionosphere

71. The rigid lithospheric slabs are known as 'Plates'. What would be the result, if the oceanic plate collides with the continental plate ?

1. Oceanic plate is forced below the continental plate.
2. Continental plate is forced below the oceanic plate.
3. Continental and oceanic plates never collide.

Select the correct answer using the code given below :

- (a) 1 only
- (b) 2 only
- (c) 1 and 2 only
- (d) 1, 2 and 3

72. Consider the following layers of the atmosphere :

1. Troposphere
2. Stratosphere
3. Mesosphere
4. Thermosphere

Which one among the following is the correct sequence of the layers with increasing altitude from the Earth's surface ?

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

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

<i>List I</i> (Landform of peninsular India)	<i>List II</i> (Predominant rock)
A. Marwar upland	1. Quartzites, Shales, Schists
B. Bundelkhand upland	2. Sandstone, Shale, Limestone
C. Meghalaya upland	3. Granite and Gneiss
D. Maharashtra plateau	4. Basalt

Code :

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

74. Jawahar tunnel on Jammu-Srinagar highway passes through

- (a) Pir Panjal range
- (b) Karakoram range
- (c) Zaskar range
- (d) Dhauladhar range

75. What would be the date and local time of a place located at  $88^{\circ}30'$  E longitude when the local time at  $0^{\circ}$  longitude is 19-00 hrs. of 28<sup>th</sup> February 2013 ?

- (a) 23-54 hrs. of 28<sup>th</sup> February
- (b) 00-54 hrs. of 1<sup>st</sup> March
- (c) 23-30 hrs. of 28<sup>th</sup> February
- (d) 00-44 hrs. of 1<sup>st</sup> March

76. Which of the following statements about tornadoes are correct ?

Tornadoes usually spin

1. anticlockwise in the northern hemisphere.
2. clockwise in the southern hemisphere.
3. clockwise in the northern hemisphere.
4. anticlockwise in the southern hemisphere.

Select the correct answer using the code given below :

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

77. Which one among the following terms is used to describe a plant that grows only in a mountainous environment ?

- (a) Orophyte
- (b) Geophyte
- (c) Epiphyte
- (d) Bryophyte

78. Which of the following statements is/are correct ?

1. Air close to the Earth's surface is heavier.
2. Air close to the Earth's surface contains larger quantity of water vapour and dust particles.

Select the correct answer using the code given below :

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

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

List I  
(Mineral)

List II  
(Location in Map)

- A. Mica
- B. Chromite
- C. Magnesite
- D. Zinc



Code :

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

80. The term 'albedo' implies the

- (a) capacity to absorb solar radiation.
- (b) capacity to modify the path of solar radiation.
- (c) proportion of the shortwave solar radiation reflected by a surface.
- (d) amount of solar radiation returned to air by a surface.

81. Which of the following statements are correct ?

1. Assam produces nearly 80% of jute in India.
2. Jute grows well on loamy soil.
3. Hot and humid conditions are ideal for growing jute.
4. Jute is commonly cultivated with wheat in rotation.

Select the correct answer using the code given below :

- (a) 1, 2 and 3
- (b) 2, 3 and 4
- (c) 2 and 3 only
- (d) 1 and 4 only

82. The Indian Standard Time is ahead of Greenwich Mean Time by

- (a) 3 hrs and 30 minutes
- (b) 4 hrs and 30 minutes
- (c) 5 hrs and 30 minutes
- (d) 6 hrs and 30 minutes

83. Which of the following is the main characteristic of Mediterranean climate ?

- (a) High temperature throughout the year
- (b) Rainfall throughout the year
- (c) Rain in winter season
- (d) Convectonal rain

84. Which one, among the following atmospheric gases, filters out most of the ultraviolet radiation of the Sun ?

- (a) Oxygen
- (b) Nitrogen
- (c) Helium
- (d) Ozone

85. Which one among the following is *not* a factor that affects direction of wind ?
- Pressure gradient
  - Friction
  - Magnetism
  - Coriolis effect
86. Presbyopia is a visual defect caused by
- Elongation of the eye ball.
  - Shortened curvature of the eye lens.
  - Weakening of the ciliary muscles.
  - Gradually increasing flexibility of the eye lens.
87. Which one among the following animals does *not* undergo periodic moulting of their external body covering ?
- Cockroach
  - Cobra
  - Earthworm
  - Dragonfly
88. Which one among the following organs in humans is *not* involved in elicitation of immune response ?
- Thymus
  - Brain
  - Spleen
  - Lymph Nodes
89. From which part of turmeric, is the turmeric powder obtained ?
- Dried rhizome
  - Dried root
  - Dried fruit
  - Seed
90. Which one among the following substances is *never* excreted out through urine under normal circumstances in any healthy individual ?
- Urea
  - Sodium
  - Amino acid
  - Potassium
91. Which one among the following animals gives birth to the biggest baby ?
- Elephant
  - Rhinoceros
  - Blue whale
  - Hippopotamus
92. Muscles of which one among the following body parts contract slowly but can remain contracted for a longer time ?
- Face
  - Arms
  - Intestine
  - Legs
93. Solutions of three enzymes were prepared namely lipase, trypsin and amylase, in order to remove stains from a piece of cloth. Out of these three enzyme solutions, only lipase could completely remove the stain. This indicates that the stain was due to
- Oil
  - Protein
  - Mixture of protein and oil
  - Starch containing plant pigment
94. Which one among the following diseases is *not* caused by polluted water ?
- Dysentery
  - Jaundice
  - Typhoid
  - Tuberculosis
95. Which one among the following animals is a mammal ?
- Great Indian Bustard
  - Gharial
  - Platypus
  - Hornbill

96. Which of the following statements with regard to the 'Fifth Report' is/are correct ?

1. It was submitted to the British Parliament in 1813 for consideration.
2. It became the basis of intense parliamentary debates on the nature of the East India Company's rule in India.
3. It was primarily on the economic conditions of the urban and industrial centres of India.

Select the correct answer using the code given below :

- (a) 1 and 3 only
- (b) 1 and 2 only
- (c) 2 only
- (d) 1, 2 and 3

97. Consider the following statements about *Salt Satyagraha* :

1. It was a form of Civil Disobedience.
2. It was the first nationalist activity in which women participated in large numbers.
3. Gandhiji first experimented with *Salt Satyagraha* in South Africa.

Which of the statements given above is/are correct ?

- (a) 1 only
- (b) 2 only
- (c) 1 and 2 only
- (d) 1, 2 and 3

98. Which of the following statements about *Ryotwari* system is/are correct ?

1. The government collected the revenue directly from the individual cultivators.
2. The cultivators were not recognized in law as the owners of the land.

Select the correct answer using the code given below :

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

99. Which of the following statements about Russia is/are correct ?

1. Russia emerged as the first socialist state in the world.
2. Socialist state in Russia was established by Bolsheviks in 1917.

Select the correct answer using the code given below :

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

100. Consider the following statements :

1. Dadabhai Naoroji first put forward 'the theory of drain of wealth'.
2. The Indian National Congress adopted a resolution to criticize the drain of wealth in its annual session at Calcutta in 1896.

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.** Which of the following statements about Quit India Movement of 1942 is/are correct ?

1. The movement was massive in character.
2. One of the unique features of the movement was the participation of the communists at the local level defying the official stand of the Communist Party.
3. It was a completely non-violent movement.

Select the correct answer using the code given below :

- (a) 1 only  
 (b) 1 and 2  
 (c) 2 only  
 (d) 1 and 3

**102.** Consider the following statements :

1. Annie Besant was the first woman President of the Indian National Congress.
2. The historic Lucknow session of the Congress in 1916 was presided by Madan Mohan Malviya.
3. Mahatma Gandhi presided over the annual session of Congress only once at Belgaum in 1924.

Which of the statements given above is/are correct ?

- (a) 1, 2 and 3  
 (b) 2 and 3 only  
 (c) 1 and 3 only  
 (d) 1 only

**103.** Match List I with List II and select the correct answer using the code given below the Lists :

<i>List I</i> (Book/Journal)	<i>List II</i> (Author/Editor)
---------------------------------	-----------------------------------

- |                  |                      |
|------------------|----------------------|
| A. Bande Mataram | 1. Aurobindo Ghosh   |
| B. New India     | 2. Mahatma Gandhi    |
| C. India Today   | 3. Bipin Chandra Pal |
| D. Young India   | 4. R.P. Dutt         |

Code :

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

**104.** For Mahatma Gandhi, Satyagraha is

1. a political force.
2. a philosophy of life.
3. an ideology of action.

Select the correct answer using the code given below :

- (a) 1 and 2 only  
 (b) 2 and 3 only  
 (c) 1 and 3 only  
 (d) 1, 2 and 3

**105.** What was the common element among the following three newspapers ?

- (i) The Servant of India
- (ii) Dnyān Prakāsh
- (iii) Hitawad

- (a) They were newspapers brought out by the Indian National Congress  
 (b) They were newspapers under the influence of socialism  
 (c) They were newspapers of moderate views brought out by the Servants of India Society  
 (d) They represented the Trade Union Movement in India

106. "... it has reduced us politically to serfdom. It has sapped the foundations of our culture ... it has degraded us spiritually." This was Mahatma Gandhi complaining of the ill-effect on Indians of which action/policy of the colonial government ?
- (a) Salt tax  
 Inadequate franchise  
 (c) Press Act  
 (d) Rowlatt Act
107. The Indian National Congress was founded during the Viceroyalty of
- (a) Lord Lytton  
 Lord Ripon  
 (c) Lord Dufferin  
 (d) Lord Mayo
108. *Kandh* Revolt against the British was led by
- (a) Chakra Bishoyi  
 (b) Dandasena  
 (c) Tomma Dora  
 (d) Birsa Munda
109. The implementation of factory legislation in India in the nineteenth century was a result of the pressure on the Government of India from
- (a) the trade unionists in India  
 (b) the socialists in India  
 (c) the manufacturers from Lancashire and Manchester  
 (d) the Indian National Congress
110. Who among the following was the President of Indian National Congress when India attained independence ?
- (a) Jawaharlal Nehru  
 (b) Vallabhbhai Patel  
 (c) Maulana Azad  
 (d) Acharya Kripalani
111. Who among the following has described the uprising of 1857 as the First Indian War of Independence ?
- (a) S.N. Sen  
 (b) R.C. Majumdar  
 (c) B.G. Tilak  
 (d) V.D. Savarkar
112. Arrange the following events of Indian freedom movement in correct sequence beginning from the earliest :
- Second Round Table Conference
  - Communal Award
  - Poona Pact
  - Simon Commission
- Select the correct answer using the code given below :
- (a) 1-2-3-4  
 (b) 4-3-2-1  
 4-1-2-3  
 3-2-1-4
113. Consider the following statements :
- Morley - Minto reforms ended the official majority in state legislative assemblies.
  - Despite the Government of India Act, 1909 the non-officials were elected to local bodies indirectly.
- 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

114. No Indian "shall by reason only of his religion, place of birth, descent, colour or any of them be disabled from holding any office or employment under the company." This was a pledge first given by the

- (a) Charter Act of 1813
- (b) Charter Act of 1833
- (c) Queen's Proclamation of 1858
- (d) Indian Civil Service Act of 1861

115. A beautiful rainbow on the sky is due to the

- (a) dispersion of sunlight from a water droplet only.
- (b) reflection of sunlight from a water droplet only.
- (c) reflection and refraction of sunlight from a water droplet only.
- (d) refraction, dispersion and reflection of sunlight from a water droplet.

116. The weight of an object may be assigned by using Newton's

- (a) first law of motion.
- (b) second law of motion.
- (c) third law of motion.
- (d) laws of gravitation.

117. A current of 0.5 A is drawn by a filament of an electric bulb for 20 minutes. The amount of electric charge that flows through the circuit is

- (a) 1 C
- (b) 10 C
- (c) 600 C
- (d) 300 C

118. Which one among the following properties of a proton may change while it moves freely in a magnetic field ?

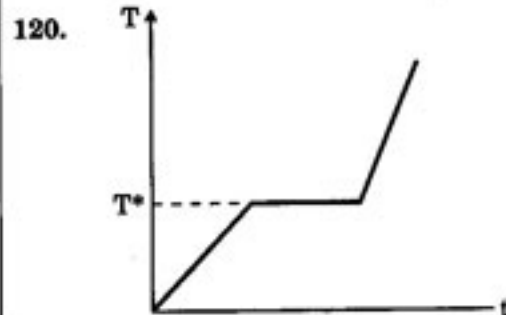
- (a) Speed
- (b) Charge
- (c) Mass
- (d) Velocity

119. Power required by a boy of mass 30 kg to run up a staircase of 40 steps in 10 seconds is

(Height of each step is 15 cm)

(Take  $g = 10 \text{ m/s}^2$ )

- (a) 1800 Watt
- (b) 180 Watt
- (c) 18000 Watt
- (d) 18 Watt



The figure given above shows the temperature (T) - time (t) plot when we start heating a piece of naphthalene. The temperature ( $T^*$ ) at the plateau of the curve signifies

- (a) boiling point of naphthalene.
- (b) freezing point of naphthalene.
- (c) melting point of naphthalene.
- (d) the temperature when naphthalene undergoes a chemical change upon heating.

121. A piece of paper and a coin both having the same mass are dropped from the 10<sup>th</sup> floor of a building. The piece of paper would take more time to reach the ground because

- (a)  gravitational pull on the paper is less than the coin.
- (b) buoyant force on the piece of paper is more than that on the coin.
- (c) buoyant force on the coin is more and acts in the downward direction.
- (d) the piece of paper takes a longer path to reach the ground.

122. During sunrise and sunset, sun appears reddish-orange because

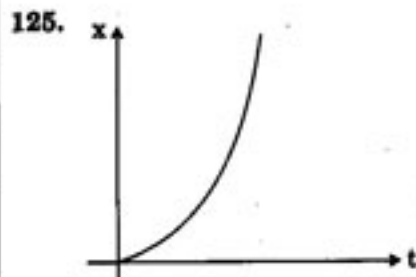
- (a) during that time sun emits only reddish-orange light.
- (b) all other colours are absorbed by the atmosphere.
- (c)  reddish-orange light is least scattered by the atmosphere.
- (d) all other colours apart from reddish-orange are reflected back by the atmosphere.

123. Ohm's law can also be taken as a statement for

- (a)  conservation of energy.
- (b) conservation of electric charge.
- (c) conservation of angular momentum.
- (d) non-conservation of momentum of the flowing charges.

124. Motion of a particle can be described in x-direction by  $x = a \sin \omega t$ , and y-direction by  $y = b \cos \omega t$ . The particle is moving on

- (a) a circular path of radius 'a'.
- (b) a circular path of radius 'b'.
- (c) an elliptical path.
- (d) a straight line.



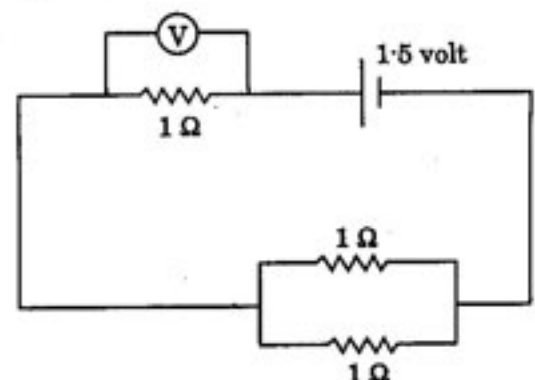
The plot given above represents displacement 'x' of a particle with time 't'. The particle is

- (a) moving with uniform velocity.
- (b) moving with acceleration.
- (c) moving with deceleration.
- (d) executing a periodic motion.

126. A bullet of mass 20 gm is fired in the horizontal direction with a velocity 150 m/s from a pistol of mass 1 kg. Recoil velocity of the pistol is

- (a) 3 m/s
- (b) 3 km/s
- (c) 300 m/s
- (d) 1/3 m/s

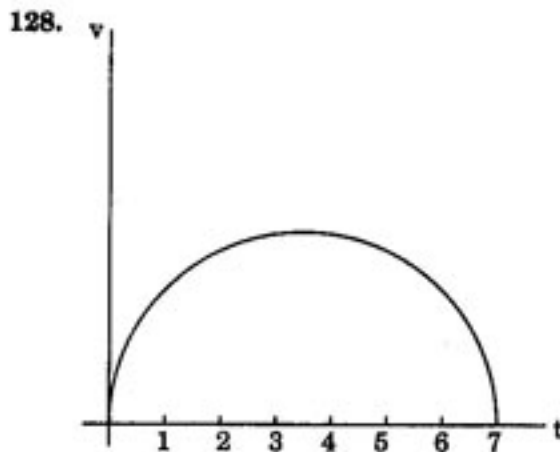
127.



What should be the reading of the voltmeter V in the circuit given above?

(All the resistances are equal to 1  $\Omega$  and the battery is of 1.5 volt)

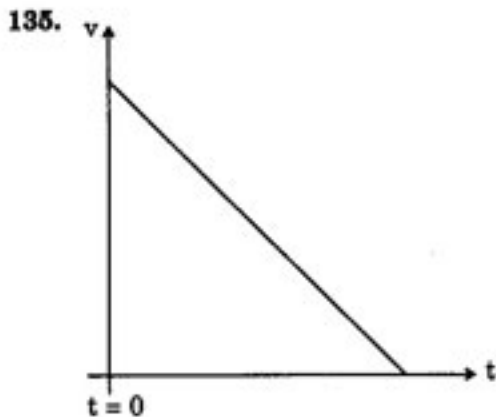
- (a) 1.5 volt
- (b) 0.66 volt
- (c) 1 volt
- (d) 2 volt



The plot given above represents the velocity of a particle (in m/s) with time (in seconds). Assuming that the plot represents a semi-circle, distance traversed by the particle at the end of 7 seconds is approximately

- (a) 19 m  
 (b) 7 m  
 (c) 3.2 m  
 (d) 4.75 m
129. Suppose we have an iron nail and an iron ball of same mass. When submerged in water, the iron ball may float but the nail always sinks. This is because
- (a) buoyant force on the ball is larger than that of the nail due to their shapes.  
 (b) viscous force on the ball is higher.  
 (c) viscous force on the nail is higher.  
 (d) gravitational force affects the ball differently from the nail.
130. An electric heater is rated 1500 watt. If electric power costs ₹ 2 per kilo-watt-hour, then the cost of power for 10 hours running of the heater is
- (a) ₹ 30  
 (b) ₹ 15  
 (c) ₹ 150  
 (d) ₹ 25

131. The ceilings of a concert hall are generally curved
- (a) because they reflect the sound to the audience.  
 (b) because they can absorb noise.  
 (c) to have better aeration in the hall.  
 (d) as any sound from outside cannot pass through a curved ceiling.
132. Bats can know about their prey at a distance even in the night by emitting
- (a) infra-red lights.  
 (b) ultraviolet lights.  
 (c) chemicals from their body.  
 (d) ultrasonic sounds.
133. Rays of light get refracted while passing from air to glass because
- (a) density of glass is higher than that of air.  
 (b) they cannot be reflected from a glass surface.  
 (c) glass absorbs energy from the light rays.  
 (d) speed of light in glass is less than the speed of light in air.
134. White light while passing through a glass prism breaks up into light of different colours because
- (a) refractive index of glass for different colours of light is different.  
 (b) glass prism absorbs white light and emits lights of several colours in different directions.  
 (c) of total internal reflection of white light on surfaces of the prism.  
 (d) of the interference of different colours inside the prism.



Which one among the following situations is best represented by the velocity - time plot shown above ?

- (a) Uniform motion of a particle on a circle  
 (b) Accelerated motion of a particle which has a non-zero initial velocity  
 (c) Decelerated motion of a particle which has an initial non-zero velocity  
 (d) Decelerated motion of a particle which has no initial velocity
136. When long dry hair is brushed the strands often move away from each other because while brushing
- (a) air is being blown through the strands.  
 (b) static electric charges are being induced on the hair.  
 (c) mechanical energy is being transferred into heat energy.  
 (d) the gravitational attraction among the strands becomes smaller.
137. If the length of a simple pendulum is being increased by 4-fold, time period of oscillation will be
- (a) decreased by 4-fold.  
 (b) increased by 4-fold.  
 (c) decreased to half of the initial value.  
 (d) increased by a factor of 2 of its initial value.

138. A pressure cooker works on the principle of
- (a) elevation of boiling point of water by application of pressure.  
 (b) making the food-grains softer by application of pressure.  
 (c) making the food-grains softer by application of pressure and temperature.  
 (d) keeping the food-grains inside steam for a longer time.
139. Pressure of a gas increases due to increase of its temperature because at higher temperature
- (a) gas molecules repel each other more.  
 (b) potential energy of the gas molecules is higher.  
 (c) kinetic energies of the gas molecules are higher.  
 (d) gas molecules attract each other more.
140. The presence of sulphur in gunpowder
- (a) decreases the ignition temperature.  
 (b) increases the final temperature.  
 (c) increases explosiveness of the gunpowder.  
 (d) makes the powder smokeless.
141. Calcium ammonium nitrate (CAN) is a popular nitrogen fertilizer because it is
- (a) slow supplier of nitrogen.  
 (b) having more percentage of nitrogen in it.  
 (c) fixing the nitrogen in the soil.  
 (d) capable of making the soil acidic.



142. Chromium oxide is used as an ingredient in paints to obtain
- green colour
  - blue colour
  - red colour
  - violet colour
143. A mixture of sodium chloride and naphthalene can be separated by
- extraction with hot water
  - extraction with cold water
  - sublimation
  - steam distillation
144. The pH of the solution obtained by dissolving pure sodium chloride in water is
- acidic
  - basic
  - neutral
  - dependent on the amount of sodium chloride dissolved in water
145. Oxygen on reaction with non-metals forms oxides, which are
- basic oxides
  - acidic oxides
  - amphoteric oxides
  - neutral oxides
146. Biogas consists of mainly
- Methane
  - Ethane
  - Butane
  - Carbon dioxide
147. A gas is evolved when a piece of zinc metal is placed in dilute sulphuric acid ( $H_2SO_4$ ). What is the gas?
- Hydrogen
  - Oxygen
  - Water vapour
  - Sulphur dioxide
148. Turmeric (*Haldi*) rapidly becomes colourless on addition of
- Baking soda
  - Vinegar
  - Lemon juice
  - Alcohol
149. Metalloids are
- alloys of alkali metals with other metals.
  - colloids of metals.
  - elements having some properties of both metals and non-metals.
  - metals heavier than lead.
150. Two reactants in a flask produce bubbles of gas; it turns lime water into milky. The reactants in the flask are
- Zinc and hydrochloric acid
  - Magnesium carbonate and hydrochloric acid
  - Magnesium nitrate and hydrochloric acid
  - Magnesium sulphate and hydrochloric acid