

JMI Class 11 Science - 2016

01. The teacher said to me, "You have not done your homework well"

- (a) The teacher told to me that I had not done my homework well.
- (b) The teacher told that you have not done your homework well.
- (c) The teacher told me that I had not done my homework well.
- (d) The teacher told me that I had not done homework well.

02. "Please sit down," he said.

- (a) He asked her to sit down.
- (b) He said that she could sit down.
- (c) He told her that sit down.
- (d) He said her to sit down.

03. He said to me you are wrong.

- (a) It is active voice
- (b) It is direct speech
- (c) It is passive voice
- (d) None of the above

04. It had not stopped raining before we went out.

- (a) It is past perfect and negative sentence.
- (b) It is past continuous and negative sentence.
- (c) Simple past and negative sentence.
- (d) Past perfect continuous and negative sentence.

How can you improve the underlined part of the following sentences? (5-7)

05. I didn't need to water the plants. Just after I finished it started raining.

- (a) I didn't water the plants
- (b) I needn't water the plants
- (c) I needn't have watered the plants
- (d) No improvement

06. being too costly for him. He could not buy the coat.

- (a) It being too costly for him
- (b) He being too costly
- (c) Being it too costly
- (d) No improvement

07. He should not had done it.

- (a) He should not have done it
- (b) Should being too costly
- (c) Should have
- (d) Should had

Read the extract given below and answer the question numbers 8-19:

It may be asked, "In what respect do speeches differ from pamphlet or magazine article?" There is an essential difference. Speech has a human element lacking in the written word. Because speech is communication between the speakers and his audience face to face. This fact should be ever present to the speakers mind both when preparing and delivering the speech. People addressed each other by word of mouth long before they wrote. Speech therefore is more primitive and human than written matter. Public speaking not only admits but demands characteristics which would be blemishes in compositions intended to be read. The attention of the audience must be held, arguments repeated, and free use made of analogies and illustrations. For this reason good speakers are often bad writers, while good writers are rarely effective speakers. A speech is transitory, evanescent, episodic production depending for its immediate effect not only upon the matter but upon the delivery which enables the great speaker to sway his hearers. From their point of view personality is the thing that counts the most. In written compositions it stands for little or nothing. The quality of the written word is the only thing that matters. The author may be repulsive but he is invisible. He looks at you only through the printed page. The speaker is judged by what he is or what he appears to be. No man can achieve wide distinction as a speakers unless he can impress an audience face to face. That is the acid test of oratory, high or low This is how the speakers makes the reputation.

08. Which part of speech is the underlined word acid in "That is the acid test of oratory?"

- (a) Adverb
- (b) Verb
- (c) Noun
- (d) Adjective

09. According to the author of the passage, how did primitive people communicate with each other?

- (a) Sign language
- (b) By word of mouth
- (c) By gestures
- (d) By writing letters

10. Which of the following is the essential characteristic of public speaking?

- (a) Repetition of arguments
- (b) Giving analogies
- (c) Holding the attention of the listeners
- (d) All the above

11. Choose the most suitable title for the passage:

- (a) Face to face communication
- (b) Oratory
- (c) Speech versus writing
- (d) The invisible author

12. What according to the author, is the difference between speech and written communication?

- (a) Speech came much later than written communication.
- (b) Speech is more personalized and human than written communication.
- (c) Speech is more persuasive.
- (d) Written communication is less powerful than

13. In the printed page, the author remains:

- (a) Interactive
- (b) Persuasive
- (c) Invisible
- (d) All pervasive

14. In the content of the passage, what is more important for a successful speech?

- (a) Articulation
- (b) Fluency
- (c) Oratory
- (d) Personality

15. Which of the following statement is not a characteristic of a speech?

- (a) Speech has more long lasting impact than writing
- (b) Speech is transient
- (c) Speech has a human element
- (d) All of the above

16. Which word is closest to the word repulsive and used in the passage?

- (a) Distractful
- (b) Friendly
- (c) Immaculate
- (d) Abused

17. In written communication, what matters most is:

- (a) Vocabulary used
- (b) Personality of the writer
- (c) Style
- (d) Quality of writing

18. The sentence "Please wait for me." Is:

- (a) Declarative
- (b) Imperative
- (c) Exclamatory
- (d) Interrogative

19. The sentence "She studies in the library in the evening" is:

- (a) Declarative
- (b) Imperative
- (c) Exclamatory
- (d) Interrogative

20. He is absent from the school _____ Monday.

- (a) From
- (b) Since
- (c) For
- (d) The

21. The players will be playing then.

- (a) Present Perfect
- (b) Past Continuous
- (c) Future Continuous
- (d) Future Perfect Continuous

22. Did you _____ your lunch?

- (a) Taken
- (b) Took
- (c) Take
- (d) Taking

23. Fill in the blanks with suitable form of verbs given in brackets: He was tired andasleep immediately

- (a) Fall
- (b) Fell
- (c) Falling
- (d) Fallen

Choose the best alternative for the given blanks. (24-25)

24. Every table in my hostel.....with a CFL.

- (a) Has
- (b) fit
- (c) Is fitted
- (d) Have

25. All the news channels.....The Prime Minister address

- (a) Telecasted
- (b) Telecasting
- (c) Will telecast
- (d) Will have telecast

26. Which of these pairs has almost similar masses ?

- (a) proton-electron
- (b) neutron-electron
- (c) electron - ${}_1\text{H}^1$
- (d) neutron- ${}_1\text{H}^1$

27. Which of the following statements is not a correct statement about the trends when going from left to right across the period of the periodic table?

- (a) The elements become less metallic in nature
- (b) The number of valence electrons increases
- (c) The atom lose their electrons more easily
- (d) The oxidation become more acidic

SSF JAMIA MILLIA ISLAMIA
New Delhi

28. In stainless steel alloy, iron metal is mixed with:
- (a) Cu and Cr (b) Cr and Ni
(c) Cr and Sa (d) Cu and Ni
29. The elements A, B, C, D and E have atomic numbers 9, 11, 17, 12, and 13 respectively. The pair of elements which belongs to some group of the periodic table is:
- (a) A and C (b) B and D
(c) A and B (d) D and E
30. Aqua Regia is a mixture of:
- (a) HNO_3 & HCl in the ratio of 1:3 Volume
(b) HNO_3 & HCl in the ratio of 3:1 Volume
(c) HNO_3 & H_2SO_4 in the ratio of 1:1 Volume
(d) H_2SO_4 & HCl in the ratio of 1:3 Volume
31. Which chemical absorbs carbon-di-oxide ?
- (a) Sodium Chloride (b) Potassium hydroxide
(c) Silver nitrate (d) Sodium bi carbonate
32. which hormone is responsible for wilting of leaves in plants.
- (a) Auxin (b) Cytokinins
(c) Absicic acid (d) Gibberellins
33. The Cardio vascular system of the human body consist of:
- (a) Artery & Veins
(b) Only Artery
(c) Artery Veins and Nerves
(d) Veins and Nerves
34. The areas of smell, sight and hearing are present in:
- (a) Fore brain (b) Mid Brain
(c) Hind brain (d) Hypothalamus
35. Which of the following is correct for vegetative propagation?
- (a) Roots only (b) Stem only
(c) Both (a) and (b) (d) Root, stem and leaves
36. "The origin of Species by natural selection" book was written by:
- (a) Hugo de Vrics (b) Gregor Mendel
(c) Charles Darwin (d) Betist lamarck
37. The wings of bat and wings of birds are:
- (a) Analogous organs
(b) Homologous organs
(c) Vestigial organs
(d) Connecting link
38. The United nations Environment Programme (UNEP) succeeded in forging an agreement to freeze CFC production at
- (a) 1985 level (b) 1982 level
(c) 1986 level (d) 1987 level
39. Arabari forest of Bengal is dominated by :
- (a) Mangrove (b) Bamboo
(c) Teak (d) Sal
40. Khejrli village where a movements to save Khejri trees took place is situated in which district of Rajasthan?
- (a) Jaipur (b) Jodhpur
(c) Bikaner (d) Jaisalmer
41. The surgical method of contraception in male is.
- (a) Copper-T (b) Vasectomy
(c) Tubectomy (d) None of the above
42. How many pairs of sex chromosomes are present in human Zygote?
- (a) Four (b) Three
(c) One (d) Two
43. The Result of Mendel's Independent inheritance of two different traits are:
- (a) 9:3:1:3 (b) 9:1:3:3
(c) 9:1:3:1 (d) 9:3:3:1
44. Which enzyme is responsible for breaking down of starch?
- (a) Trypsin (b) Pepsin
(c) Mucus (d) Salivary Amylase
45. The oxygenated blood from lungs is carried out by.
- (a) Pulmonary vein (b) Renal vein
(c) Pulmonary Artery (d) Renal Artery
46. From a point P outside a circle, tangent PT to the circle and a line PB intersecting the circle at two points A & B are drawn. If PA is 8 cm, and PT is 12 cm then length of PB is:
- (a) 20 cm (b) 4 cm
(c) 15 cm (d) 18 cm
47. The number of equivalents of $\text{Na}_2\text{S}_2\text{O}_3$, required for the volumetric estimation of an equivalent of Cu^{2+} is.
- (a) 1 (b) 2
(c) $\frac{1}{2}$ (d) 3

48. In hemoglobin the iron is in bind Oxygen are?

- (a) + 2 oxidation state
- (b) + 1 oxidation state
- (c) +3 oxidation state
- (d) +4 oxidation state

49. Which of the following involves both physical and chemical change?

- (a) Burning candle
- (b) Rusting of iron
- (c) Cooking of food
- (d) Boiling of water

50. Which of the following pairs does not contain both elements?

- (a) Carbon, Silicon
- (b) Helium, Nitrogen
- (c) Bronze, Zinc
- (d) Copper, Silver

51. Which of the following represents an associated colloid?

- (a) Proteins
- (b) Starch
- (c) Soaps
- (d) Solution Of gold

52. How many moles of NaOH are Present in 27mL of 0.015 M NaOH?

- (a) 4.05×10^{-3}
- (b) 4.05×10^{-4}
- (c) 4.05
- (d) 0.0405

53. The electronic configuration for Ca^{2+} ion is?

- (a) $[Ne] 3s^2 3p^6$
- (b) $[Ne] 3s^3 3p^4$
- (c) $[Ar] 4s^2$
- (d) $[Ar] 3s^2 3p^6$

54. The ratio in which the line is $3x + 4y = 9$ divides the line segment joining the points (1,3) and (2,7) is:

- (a) 3:4
- (b) 6:25
- (c) 2:3
- (d) 3:2

55. An ace of spade and a king of heart are missing from the deck of cards. Out of the remaining, a card is taken out. What is the probability that the card is an ace or a king of red colour?

- (a) $\frac{1}{52}$
- (b) $\frac{2}{52}$
- (c) $\frac{3}{52}$
- (d) $\frac{\alpha}{\beta} + \frac{\beta}{\alpha}$ is :

56. If α & β are zeroes of the quadratic polynomial $p(x) = \frac{37}{7}x^2 + 5x - 3$, then the value of $\frac{25}{6} -$

- (a) —
- (b) —
- (c) —
- (d) —

57. If A(2,2), B(-4,4) and C(6,-8) are the vertex of a triangle, then the length of the median through the vertex B is:

- (a) $\sqrt{113}$
- (b) $\sqrt{85}$
- (c) $\sqrt{65}$
- (d) $\sqrt{75}$

58. The length of shadow of a tower standing on level ground is found to be 2a meters longer when the sun's elevation is 30° , then when it was 45° . The height of the tower in meters is:

- (a) $(\sqrt{3}+1)a$
- (b) $a(\sqrt{3}-1)$
- (c) $2\sqrt{3}$
- (d) $\frac{2a}{3+1}$

59. The common difference of an A.P., The sum of whose n terms is S_n is:

- (a) $S_n - S_{n-1}$
- (b) $S_n - 2S_{n-1} - S_{n-2}$
- (c) $S_{n-1} - S_{n-3}$
- (d) $S_n - 2S_{n-1} + S_{n-2}$

60. If $\tan^2 \theta + \sec^2 \theta = p$, then $\sec \theta =$

- (a) $\frac{2}{p^2 + 1}$
- (b) $\frac{1 + 2p}{p^2 + 1}$
- (c) $\frac{p}{2p}$
- (d) $\frac{1 + 2p}{2p}$

61. What is the probability that a leap year has 53 Sunday?

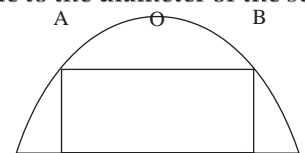
- (a) $\frac{6}{7}$
- (b) $\frac{1}{7}$
- (c) —
- (d) —

62. The curved surface area of a right circular cylinder of height 14 cm is 88 cm^2 . The diameter of the base of the cylinder is.

- (a) 2 cm
- (b) 3 cm
- (c) 4 cm
- (d) 6 cm

63. In the figure, ABCD is a rectangle inscribed in a semicircle. If the length and the breadth of the rectangle are in the ratio 2:1. Then the ratio of the perimeter of the rectangle to the diameter of the semi circle is.

- (a) $3:\sqrt{2}$
- (b) $2:\sqrt{3}$
- (c) $2:\sqrt{5}$
- (d) $3:\sqrt{5}$



64. Which of the following is true?

- (a) Mean = 3median - 2mode
- (b) Median = 3 mode - 2 mean
- (c) Mode = 3 median - 2 mean
- (d) Mode = mean + median

65. Given that $2^x = 8^{y+1}$, $9^y = 3^{x-9}$ the value of $x + y$ is:

- (a) 18 (b) 21
(c) 24 (d) 27

66. The 103rd Indian science Congress January 3 to 7, 2016 was held at:

- (a) Mumbai (b) Jammu
(c) Mysore (d) Kolkata

67. Who is the chancellor of Jamia Millia Islamia?

- (a) Prof Talat Ahmad
(b) Prof Mushirul Hassan
(c) Lt Gen M.A Zaki
(d) Lt. Gen Najib Jung

68. What is true about E-Pathshala?

- (a) Enables students to download and read NCERT books
(b) Enables students to attend school online
(c) Enables students to take examination online
(d) None of these

69. Alibaba one of the world's largest online commerce company is from:

- (a) USA (b) China
(c) Saudi Arabia (d) India

70. Provision of free and compulsory education to children between the ages of six and fourteen years comes under which part of the Indian Constitution?

- (a) Fundamental Rights
(b) Directive Principles of State Policy
(c) Fundamental Duties
(d) Both Fundamental Rights & Directive Principles of State Policy

71. The currency of Malaysia is:

- (a) Ringgit (b) Dinar
(c) Ruble (d) Riyal

72. Dhyan Chand tournament is associate with:

- (a) Hockey (b) Cricket
(c) Football (d) Badminton

73. Ishwar Chand Vidya Sagar fought for:

- (a) Widow Marriage (b) Women freedom
(c) Child Marriage (d) Free Education

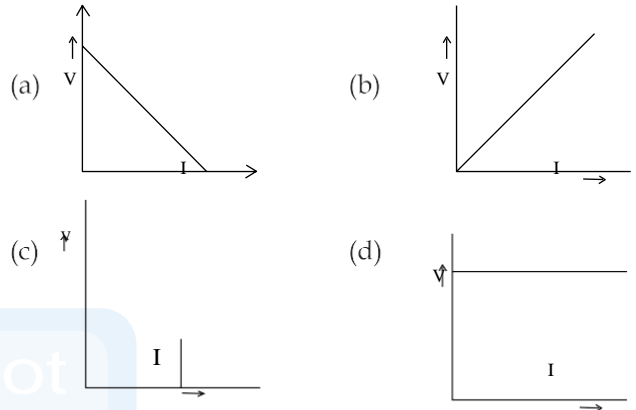
74. Dronacharya award is given in which field?

- (a) Sports
(b) Journalism
(c) Social Service
(d) Community Leadership

75. "Token Currency" was introduced by:

- (a) Alauddin Khilji
(b) Feroz Shah Tuglaq
(c) Mohammad Bin Tuglaq
(d) Bahlol lodi

76. The graph between current (I) & potential difference (V) in the experimental verification of Ohms law drawn by four students. Which one is the correct graph?



77. Three students A, B and C measured the focal length of a concave mirror using parallel rays from a distant object. All of them measured the distance between the mirror and the inverted image on a white screen. Students A, B & C saw the image and called the distance as f_1 , f_2 and f_3 respectively. If the students A, B & C observed the sharp image, blurred image and more blurred image on the screen respectively then the relation between the three measurements will

- (a) $f_1 = f_2 = f_3$
(b) $f_1 < f_2 < f_3$
(c) $f_1 > f_2 > f_3$
(d) Length



78. Asha immersed an object in a fluid, in order that the object becomes invisible, the object should:

- (a) Behave as a perfect reflector
(b) Absorb all light falling on it
(c) Have refractive index one
(d) Have reflective index making exactly with that of surrounding fluid

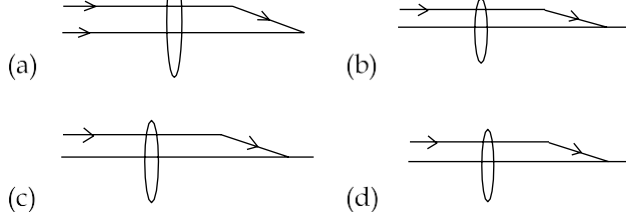
79. In domestic electric circuits the colour of insulation covers of wires in the supply line is generally:

- (a) Red for live wire and green for neutral wire
(b) Red for live wire and black for neutral wire
(c) Green for live wire and red for neutral wire
(d) Green for live wire and black for neutral wire

80. N resistors, each of resistance R, are first connected in series so as to give an effective R^3 . Subsequently these resistors are connected in parallel so as to give an effective resistance R^2 . Then the ratio R^3/R^2 will

- (a) N:1 (b) $N^2:1$
 (c) $1:N^2$ (d) 1:N

81. If a ray of light comes parallel to the principal axis it will travel in a direction shown by the figure:



82. Fuse wire should be prepared from a material having.

- (a) High resistivity and high melting point
 (b) High resistivity and low melting point
 (c) Low resistivity and high melting point
 (d) Low resistivity and low melting point

83. Match the Column (a) with Column (b)

Column(Physical Quantity)	Column(Units)
(A) Electric Current	(I) Degree
(B) Powers of lens	(ii) Ampere
(C) Magnetic field	(iii) Ohm
(D) Resistor	(iv) Tesla

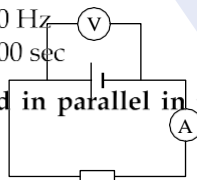
- (a) A-(ii), B-(i), C-(iv), D-(iii)
 (b) A-(iii), B-(ii), C-(iv), D-(i)
 (c) A-(ii), B-(iv), C-(i), D-(iii)
 (d) A-(iii), B-(iv), C-(i), D-(ii)

84. The frequency of AC supply in India is:

- (a) 100 Hz (b) 50 Hz
 (c) 50 sec (d) 100 sec

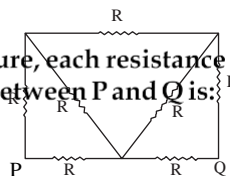
85. Name the components connected in parallel in the given figure:

- (a) Rheostat and voltmeter
 (b) Voltmeter and ammeter
 (c) Voltmeter and ammeter
 (d) Ammeter and resistor



86. In the network shown in the figure, each resistance is R ohm. The effective resistance between P and Q is:

- (a) $\frac{3}{2}R$
 (b) $\frac{8}{7}R$
 (c)
 (d)



87. Electric pulse from retina to brain is conveyed via:

- (a) Ciliary muscles (b) Blind spots
 (c) Optic nerve (d) Pupil

88. The resistance of 20 cm wire is 5Ω. If it is stretched to 40 cm length the new resistance ohm is.

- (a) 5 (b) 20
 (c) 10 (d) 40

89. In Fleming's left-hand rule the thumb indicates the direction of:

- (a) Magnetic self-applied
 (b) Current flow in the conductor
 (c) Induced current
 (d) Mechanical force on the conductor

90. Find out current in 2Ω resistance when potential is 0 volt

- (a) 0 (b) 2A
 (c) 3A (d) 5A

91. An example of soap is:

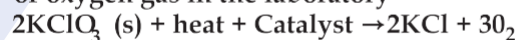
- (a) CH_3COONa (b) CH_3ONa
 (c) $C_{17}H_{33}COONa$ (d) $C_{17}H_{23}COOC_2H_3$

92. Which of the following are exothermic processes?

- (i) Reaction of water with quick lime
 (ii) Dilution of an acid
 (iii) Evaporation of water
 (iv) Sublimation of camphor (crystals)

- (a) (i) and (ii) (b) (ii) and (iii)
 (c) (i) and (iv) (d) (iii) and (iv)

93. The following reaction is used for the preparation of oxygen gas in the laboratory



which of the following statement (s) is (are) correct about the reaction?

- (a) It is a combination reaction
 (b) It is a decomposition reaction and endothermic in nature
 (c) It is a decomposition reaction and accompanied by release of heat
 (d) It is a photochemical decomposition reaction and exothermic in nature

94. Which acid is used as Ink-Stain remover?

- (a) Boric Acid (b) Citric Acid
 (c) Hydrochloric Acid (d) Acetic Acid

95. Which of the following element act as the best reducing agent?

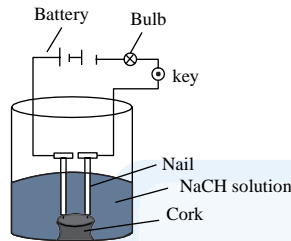
- (a) Na (b) Cl
 (c) Mg (d) Ft

96. Chlorine gas is used for the manufacturing of which product?

- (a) Baking soda
- (b) Bleaching powder
- (c) Washing soda
- (d) Plaster of Paris

97. In an attempt to demonstrate electrical conductivity through an electrolyte, the following apparatus (Given Figure) was set up which among the following statement (s) is (are) correct?

- (i) Bulb will not glow because electrolyte is not acidic
- (ii) Bulb will glow because NaOH is a strong base and furnishes ions for conduction
- (iii) Bulb will not glow because circuit is incomplete
- (iv) Bulb not glow because it depends upon the type of electrolytic solution



- (a) (i) and (ii)
- (b) (ii) and (iv)
- (c) (iv) only
- (d) (ii) only

98. The indicators which turn red in acid solution are:

- (a) Turmeric and litmus
- (b) Phenolphthalein and model orange
- (c) Louis and methyl Orange
- (d) Phenolphthalein and litmus

99. What is the pH of the blood in our body?

- (a) 5.5
- (b) 7.4
- (c) 7
- (d) 6.5

100. Which among the following is a method of metallurgy?

- (a) Magnetic Separation
- (b) Froth Flotation
- (c) Hydraulic washing
- (d) All of the above

Answer Key

1	2	3	4	5	6	7	8	9	10
c	a	d	d	c	a	a	d	b	d
11	12	13	14	15	16	17	18	19	20
c	d	c	c	b	c	d	b	a	b
21	22	23	24	25	26	27	28	29	30
a	c	b	c	a	d	c	b	a	a
31	32	33	34	35	36	37	38	39	40
b	c	a	a	d	c	a	c	d	b
41	42	43	44	45	46	47	48	49	50
b	c	d	d	a	d	c	a	a	c
51	52	53	54	55	56	57	58	59	60
c	d	a	b	b	c	a	a	d	d
61	62	63	64	65	66	67	68	69	70
b	a	a	c	d	c	c	a	b	a
71	72	73	74	75	76	77	78	79	80
a	a	a	a	c	b	b	d	b	b
81	82	83	84	85	86	87	88	89	90
c	d	a	b	b	b	c	b	d	a
91	92	93	94	95	96	97	98	99	100
a	a	c	d	a	b	d	a	b	d

