AP POLYCET 2025 Question Paper

Time Allowed :120 Minutes	**Maximum Marks :**120	**Total questions :**120

General Instructions

Read the following instructions very carefully and strictly follow them:

1. **Total Marks:** The AP POLYCET exam is worth 120 marks.
2. **Question Types:** The exam consists of 120 questions, divided into:
   - Mathematics: 60 marks
   - Physics: 30 marks
   - Chemistry: 30 marks
3. **Marking for Correct Answers:**
   - Each question carries 1 mark for a correct answer.
4. **Negative Marking for Incorrect Answers:**
   - There is no negative marking for incorrect answers.
5. **No Negative Marking:** There is no negative marking for any type of question.
6. **No Partial Marking:** There is no partial marking in any of the questions.

Section-I : Mathematics

1. The points $(1, 5), (2, 3)$ **and** $(-2, -11)$ **form a:**

(1) triangle

(2) parallelogram

(3) square

(4) They are collinear

---

2. If $15 \cot A = 8$**, then** $\sin A = ?$

(1) $\frac{8}{15}$

(2) $\frac{15}{17}$

(3) $\frac{17}{15}$

(4) $\frac{8}{17}$

---

3. Evaluate $\frac{2 \tan 30^\circ}{1 + \tan^2 30^\circ}$

(1) $\sin 60^\circ$

(2) $\tan 60^\circ$

(3) $\sin 30^\circ$

(4) $\cot 60^\circ$

---

4. Evaluate $(\sec A + \tan A)(1 - \sin A) = ?$

(1) $\sin A$

(2) $\cos A$

(3) $\csc A$

(4) $\sec A$

---

5. Which of the following is true?

(1) $\sin(A+B) = \sin A + \sin B$

(2) The value of $\sin\theta$ increases as θ increases, $0^\circ \leq \theta \leq 90^\circ$

(3) The value of $\cos\theta$ increases as θ increases, $0^\circ \leq \theta \leq 90^\circ$

(4) $\sin\theta = \cos\theta$ for all values of θ

---

6. The angle formed by the line of sight with the horizontal when it is above the horizontal level is:

(1) angle of elevation

(2) angle of depression

(3) right angle

(4) none of these

---

7. A ladder is leaned against a wall with angle of 60° with the ground and its foot is 6 feet away from the wall. Then the length of the ladder is:

(1) 12 feet

(2) 36 feet

(3) 6 feet

(4) 24 feet

---

8. Two cars are seen from the top of a tower of height 75 m with angles of depression 30° and 45°. If the cars are on opposite sides of the tower along the same line, the distance between them is:

(1) $75(\sqrt{3}+1)$ m

(2) $75(\sqrt{3}-1)$ m

(3) $75(\sqrt{3}+1)$ m

(4) $75(\sqrt{3}-1)$ m

---

9. The number of tangents a circle can have from a point outside the circle is:

(1) one

(2) two

(3) three

(4) four

---

10. The angle made by the tangent at any point of the circle with the radius at the point of contact is:

(1) 0°

(2) 45°

(3) 60°

(4) 90°

---

11. A tangent PQ at a point P of a circle of radius 9 cm meets a line through the center O at a point Q such that $OQ = 15$ cm. The length of PQ is:

(1) $12\,\text{cm}$

(2) $13\,\text{cm}$

(3) $24\,\text{cm}$

(4) $25\,\text{cm}$

---

12. Area of a sector of a circle with radius 4 cm and angle 30° is (use $\pi = 3.14$):

(1) $4.08\,\text{cm}^2$

(2) $4\,\text{cm}^2$

(3) $4.18\,\text{cm}^2$

(4) $41.8\,\text{cm}^2$

13. Length of an arc of a sector of angle 45° when the radius of the circle is 3 cm, is:

(1) $\frac{5\pi}{4}$ cm

(2) $\frac{3\pi}{4}$ cm

(3) $\frac{\pi}{4}$ cm

(4) $\frac{\pi}{2}$ cm

---

14. Area of minor segment if a chord of a circle of radius 10 cm subtends a right angle at the centre is (use $\pi = 3.14$):

(1) 28 cm^2

(2) 28.5 cm^2

(3) 27 cm^2

(4) 27.5 cm^2

---

15. A toy is in the form of a cone of radius r and lateral height l mounted on a hemisphere of the same radius, and the total height of the toy is h, then the total surface area of the toy is:

(1) $\pi r(2r + l)$

(2) $2\pi r + l$

(3) $\pi r^2 l$

(4) $\pi r^2 h$

---

16. A model is made with two cones each of height 2 cm attached to the two ends of a cylinder. The diameter of the model is 3 cm and its length is 12 cm. Then the volume of the model is (use $\pi = \frac{22}{7}$):

(1) 24 cm^3

(2) 36 cm^3

(3) 72 cm^3

(4) 66 cm^3

---

17. The mode and mean of a data are 7 and 5 respectively, then median is:

(1) 12

(2) $\frac{17}{3}$

(3) 4

(4) $\frac{2}{3}$

---

18. If assumed mean of a data is 47.5, $\sum f_i d_i = 435$ and $\sum f_i = 30$, then mean of that data is:

(1) 42

(2) 52

(3) 62

(4) 72

---

19. The cumulative frequency of a class is the frequency obtained by:

(1) adding the frequencies of all the classes preceding the given class

(2) adding the frequencies of all the classes succeeding the given class

(3) subtracting the frequencies of all the preceding classes from one another

(4) None of the above

---

20. Formula for finding mode for grouped data is:

(1) $l + \left[\frac{f_1 - f_0}{2f_1 - f_0 - f_2}\right] \times h$

(2) $l - \left[\frac{f_1 - f_0}{2f_1 - f_0 - f_2}\right] \times h$

(3) $l - \left[\frac{f_1 - f_0}{2f_1 - f_0 - f_2}\right] - h$

(4) None of these

---

21. Which of the following cannot be a probability?

(1) $\frac{2}{3}$

(2) 15%

(3) 0.7

(4) -1.5

---

22. If $P(E) =$, then:

(1) $1 - P(E)$

(2) $1 + P(E)$

(3) $P(E) - 1$

(4) None of these

---

23. Which of the following has equally likely outcomes?

(1) Tossing a coin

(2) Tossing two coins simultaneously

(3) Rolling two dice

(4) All of the above

---

24. A card is drawn from a set of 52 cards. The probability of getting a queen card is:

(1) $\frac{4}{53}$

(2) $\frac{1}{26}$

(3) $\frac{1}{13}$

(4) $\frac{4}{13}$

---

25. Ram and Syam are friends. Probability that both will have same birthday is:

(1) $\frac{364}{365}$

(2) $\frac{1}{365}$

(3) $\frac{1}{364}$

(4) $\frac{363}{365}$

---

26. 491400 =

(1) $2^3 \times 3^3 \times 5^3 \times 7 \times 13$

(2) $2^3 \times 3^3 \times 5^2 \times 7 \times 13$

(3) $2^3 \times 3^2 \times 5^2 \times 7 \times 13$

(4) $2^2 \times 3^2 \times 5^2 \times 7 \times 13$

---

27. Which of the following is not irrational?

(1) $5 - \sqrt{3}$

(2) $7 - \sqrt{4}$

(3) $\sqrt{2} + \sqrt{3}$

(4) $\sqrt{2} - \sqrt{3}$

---

28. Which of the following is true?

(1) $\text{HCF}(p \times q \times r) \times \text{LCM}(p \times q \times r) = p \times q \times r$

(2) $\text{HCF}(p \times q \times r) + \text{LCM}(p \times q \times r) = p \times q \times r$

(3) $\text{HCF}(p \times q \times r) \times \text{LCM}(p \times q \times r) \neq p \times q \times r$

(4) $\text{HCF}(p \times q \times r) - \text{LCM}(p \times q \times r) = p \times q \times r$

---

29. A prime number p divides a^2 where a is a positive integer, then

(1) p divides a

(2) p does not divide a

(3) p is equal to a

(4) All of these

---

30. The zero of linear polynomial $ax + b$ is:

(1) $\frac{a}{b}$

(2) $\frac{-a}{b}$

(3) $\frac{b}{a}$

(4) $\frac{-b}{a}$

---

31. If the graph of $y = p(x)$ does not intersect the X-axis at all, then the zeroes of $p(x)$ are:

(1) are equal

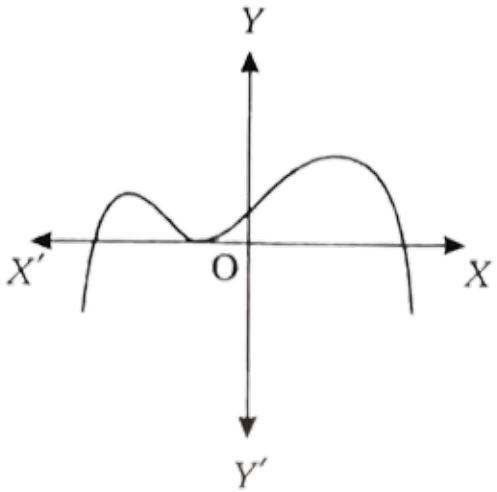
(2) are unequal

(3) don't exist

(4) All of these

---

32. The number of zeroes of a polynomial $y = p(x)$ as shown below is:



(1) 0

(2) 1

(3) 2

(4) 3

---

33. A pair of linear equations $a_1x + b_1y + c_1 = 0$ and $a_2x + b_2y + c_2 = 0$ is such that $\frac{a_1}{a_2} \neq \frac{b_1}{b_2}$, then they are:

(1) consistent

(2) inconsistent

(3) dependent and consistent

(4) None of these

---

34. The lines $2x + 3y - 9 = 0$ and $4x + 6y - 18 = 0$ are:

(1) intersecting lines

(2) coinciding lines

(3) parallel lines

(4) All of these

---

35. If $x - 4y - 14 = 0$ and $5x - y - 13 = 0$ will have:

(1) unique solution

(2) no solution

(3) infinite number of solutions

(4) None of these

---

36. The solution of $x - 2y = 0$ and $3x + 4y - 20 = 0$ is:

(1) $x = 2, y = 4$

(2) $x = 4, y = 2$

(3) $x = -2, y = 4$

(4) $x = 2, y = -4$

---

37. The product of Karan's age five years ago and his age after 9 years from now is 32. This is represented by the quadratic equation:

(1) $x^2 + 4x + 77 = 0$

(2) $x^2 - 4x + 77 = 0$

(3) $x^2 + 4x - 77 = 0$

(4) $x^2 - 4x - 77 = 0$

---

38. The roots of the equation $6x^2 - x - 2 = 0$ are

(1) $\frac{2}{3}, -\frac{1}{2}$

(2) $-\frac{2}{3}, \frac{1}{2}$

(3) $-\frac{2}{3}, -\frac{1}{2}$

(4) $\frac{2}{3}, \frac{1}{2}$

---

39. The equation $3x^2 - 5x + 2 = 0$ has

(1) two real and unequal roots

(2) two real and equal roots

(3) no real roots

(4) None of these

---

40. Find two numbers whose sum is 27 and product is 182.

(1) $13, 12$

(2) $13, 14$

(3) $15, 12$

(4) $11, 16$

---

41. Each one of 100 boxes is filled with 50 one-rupee coins on the first day and 25 more coins are added every next day. The Arithmetic Progression (AP) representing this situation is

(1) $100, 50, 25, 10, \ldots$

(2) $50, 25, 25, 25, \ldots$

(3) $50, 75, 100, 125, \ldots$

(4) $50, 25, 75, 100, \ldots$

---

42. Common difference of the AP $3, 1, -1, -3, \ldots$ is

(1) 1

(2) -2

(3) -1

(4) 2

---

43. Tenth term of the AP $1, -1, -3, -5, \ldots$ is

(1) -15

(2) -17

(3) -13

(4) -10

---

44. The sum of the first 22 terms of the AP $8, 3, -2, \ldots$ is

(1) -979

(2) 979

(3) 1028

(4) -1028

45. D **and** E **are the midpoints of sides** AB **and** AC **of a triangle** ABC **respectively and** $BC = 10$ **cm. If** $DE \parallel BC$**, then the length of** DE **is**

(1) 3 cm

(2) 5 cm

(3) 4 cm

(4) 6 cm

---

46. Which of the following are not similar figures?

(1) Circles

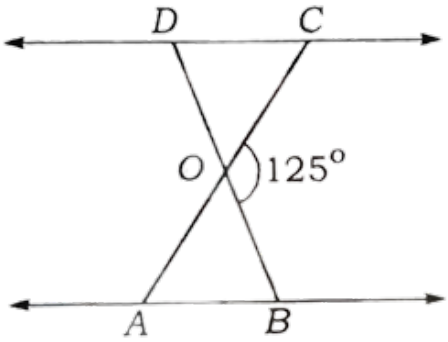
(2) Squares

(3) Isosceles triangles

(4) Equilateral triangles

---

47. If $\triangle ODC \sim \triangle OBA$ **and** $\angle BOC = 125°$**, then** $\angle DOC = ?$



(1) $60°$

(2) $55°$

(3) $50°$

(4) $65°$

---

48. If $M\left(\frac{p}{3}, 4\right)$ is the midpoint of the line segment joining $A(-6, 5)$ and $B(-4, 3)$, then $p =?$

(1) -10

(2) -8

(3) -9

(4) -15

---

49. The distance between the points $(2, 3)$ and $(4, 1)$ is

(1) $2\sqrt{2}$

(2) 2

(3) $\sqrt{2}$

(4) $2\sqrt{3}$

---

50. The coordinates of the point $P(x, y)$ which divides the line segment joining the points $A(x_1, y_1)$ and $B(x_2, y_2)$ internally in the ratio $m_1 : m_2$ are

(1) $\left(\frac{m_1x_1+m_2x_2}{m_1+m_2}, \frac{m_1y_1+m_2y_2}{m_1+m_2}\right)$

(2) $\left(\frac{m_1x_2+m_2x_1}{m_1+m_2}, \frac{m_1y_2+m_2y_1}{m_1+m_2}\right)$

(3) $\left(\frac{m_1x_2-m_2x_1}{m_1+m_2}, \frac{m_1y_2-m_2y_1}{m_1+m_2}\right)$

(4) $\left(\frac{m_1x_2-m_2x_1}{m_1-m_2}, \frac{m_1y_2-m_2y_1}{m_1-m_2}\right)$

Section-II:Physics

51. A continuous and closed path of an electric current is called an

(1) electric charge

(2) electric conduction

(3) electric potential

(4) electric circuit

52. If a net charge Q flows across any cross-section of a conductor in time t, then the current I through the cross-section is

(1) $I = \frac{Q}{t}$

(2) $I = \frac{t}{Q}$

(3) $I = \frac{t^2}{Q}$

(4) $I = \frac{Q^2}{t}$

---

53. One coulomb is equivalent to the charge contained in nearly

(1) 0.6×10^{18} electrons

(2) 1.6×10^{18} electrons

(3) 6.25×10^{18} electrons

(4) 16×10^{18} electrons

---

54. Work done to move a unit charge from one point to the other in an electric circuit is called

(1) electric potential difference

(2) electric current

(3) electric resistance

(4) electric power

55. SI unit of electrical potential difference is

(1) watt

(2) volt

(3) ampere

(4) ohm

---

56. The device used to measure electric current in a circuit is called:

(1) wattmeter

(2) voltmeter

(3) ammeter

(4) resistor

---

57. In an electric circuit, three resistors $5\,\Omega$, $10\,\Omega$ and $15\,\Omega$ are connected in series across a $60\,V$ battery. Then the current flowing in the circuit is:

(1) $0.5\,A$

(2) $2\,A$

(3) $90\,A$

(4) $30\,A$

---

58. The heat produced in a $4\,\Omega$ resistor when an electric current of $5\,A$ flows in it for 2 seconds is

(1) $200\,J$

(2) $40\,J$

(3) $50\,J$

(4) $80\,J$

---

59. One kilowatt hour is equal to

(1) $36 \times 10^6\,J$

(2) $0.36 \times 10^6\,J$

(3) $3.6 \times 10^{10}\,J$

(4) $3.6 \times 10^6\,J$

---

60. The power of an electric motor that takes $5\,A$ electric current from a $220\,V$ transmission line is:

(1) $215\,W$

(2) $44\,W$

(3) $225\,W$

(4) $1100\,W$

---

61. The region surrounding a magnet in which the influence of that magnet can be detected is called

(1) magnetic length

(2) magnetic dipole

(3) magnetic field

(4) magnetic pole strength

---

62. If the electric current through a copper wire increases, the magnitude of the magnetic field produced at a given point:

(1) decreases

(2) remains the same

(3) increases

(4) becomes equal to zero

---

63. The magnetic field at all points inside a solenoid carrying electric current:

(1) is non-uniform

(2) is uniform

(3) does not exist

(4) is always zero

---

64. The direction of force on a current carrying conductor in a magnetic field is given by

(1) Fleming's left-hand rule

(2) Newton's laws of motion

(3) Ohm's law

(4) Joule's law of heating

---

65. The magnetic field produced by a current carrying circular loop is strongest at

(1) the center of the loop

(2) a point outside the loop

(3) the outer surface of the loop

(4) every point inside the loop

---

66. In an electric circuit, the device used to prevent damage to the electrical appliances due to overloading is:

(1) electromagnet

(2) electric fuse

(3) battery

(4) electric cell

---

67. Which of the following is not an alloy?

(1) Constantan

(2) Manganin

(3) Nichrome

(4) Iron

---

68. Identify the wrong statement among the following:

(1) Magnetic field lines are closed curves

(2) Inside the magnet, the direction of field lines is from north pole to south pole

(3) The magnetic field is stronger where the magnetic field lines are crowded

(4) Magnetic field lines do not intersect with each other

---

69. SI unit of electrical resistivity is

(1) $\Omega\, m$

(2) Ω/m

(3) m/Ω

(4) $\Omega\, m^2$

---

70. Which of the following is an insulator?

(1) Copper

(2) Silver

(3) Aluminium

(4) Rubber

---

71. The image formed by a plane mirror is always:

(1) virtual and erect

(2) virtual and inverted

(3) real and erect

(4) real and inverted

---

72. The distance between the pole and the principal focus of a spherical mirror is called:

(1) image distance

(2) object distance

(3) focal length

(4) radius of curvature

---

73. A diminished, virtual and erect image is formed by a

(1) concave mirror

(2) convex mirror

(3) plane mirror

(4) planoconcave mirror

---

74. The mirror used by a dentist to see a large image of the teeth of the patients is

(1) concave mirror

(2) convex mirror

(3) plane mirror

(4) plano-convex mirror

---

75. A ray of light travelling in air enters obliquely into water. This light ray

(1) bends away from the normal

(2) passes through the normal at the surface of separation

(3) bends towards the normal

(4) travels straight without bending

---

76. The focal length of a spherical mirror is $10\,cm$. Its radius of curvature is:

(1) $10\,cm$

(2) $5\,cm$

(3) $20\,cm$

(4) $0.2\,cm$

---

77. An object placed between the principal focus and center of curvature of a convex lens forms an image:

(1) beyond the center of curvature

(2) at infinity

(3) at the principal focus

(4) between principal focus and center of curvature

---

78. The power of a lens is $4\,D$. Its focal length is

(1) $0.25\,cm$

(2) $2.5\,cm$

(3) $25\,cm$

(4) $0.025\,cm$

---

79. If the height of the image is equal to the height of an object placed near a spherical lens, then the magnification m is

(1) less than 1

(2) greater than 1

(3) equal to 1

(4) equal to zero

---

80. An object is placed at a distance of $30\,cm$ from a concave lens of focal length $20\,cm$. The image distance is:

(1) $75\,cm$

(2) $60\,cm$

(3) $12\,cm$

(4) $50\,cm$

---

81. The delicate membrane having enormous number of light sensitive cells is:

(1) optic nerve

(2) retina

(3) pupil

(4) cornea

---

82. The amount of light entering the eye is regulated and controlled by the

(1) pupil

(2) optical nerve

(3) retina

(4) ciliary muscles

---

83. The minimum distance at which the objects can be seen most distinctly without strain is called

(1) far point of the eye

(2) near point of the eye

(3) range of accommodation

(4) power of accommodation

---

84. A person can see distant objects clearly but cannot see nearby objects distinctly. The person is suffering from:

(1) hypermetropia

(2) myopia

(3) presbyopia

(4) cataract

---

85. The defect myopia can be corrected by using a:

(1) convex lens

(2) concave lens

(3) bifocal lens

(4) plano convex lens

---

86. The band of the coloured components of a light beam is called its

(1) refraction

(2) dispersion

(3) scattering

(4) spectrum

---

87. The formation of a rainbow in the sky involves:

(1) reflection, refraction, scattering

(2) refraction, dispersion, reflection

(3) refraction, scattering, dispersion

(4) dispersion, total internal reflection, scattering

---

88. Advance sunrise and delayed sunset are due to

(1) atmospheric refraction

(2) atmospheric scattering

(3) atmospheric dispersion

(4) atmospheric reflection

---

89. The blue colour of clear sky is due to

(1) dispersion of light

(2) refraction of light

(3) scattering of light

(4) reflection of light

---

90. If the speed of light in glass is $2 \times 10^8\, m/s$ and the speed of light in air is $3 \times 10^8\, m/s$, the refractive index of glass with respect to air is:

(1) 6

(2) 1

(3) 1.5

(4) 5

Section-III:Chemistry

91. Why are cooking vessels made up of metals like copper and aluminium?

(1) Because they are malleable

(2) Because they are shiny

(3) Because they are sonorous

(4) Because they are good conductors of heat

---

92. Why are metals like potassium and sodium stored in kerosene oil?

(1) To prevent oxidation

(2) To avoid rusting

(3) To prevent accidental fires due to their vigorous reaction with oxygen

(4) To preserve their shiny surface

---

93. What is the process of forming a thick oxide layer on aluminium called?

(1) Galvanisation

(2) Anodising

(3) Electrolysis

(4) Oxidation

---

94. What happens when zinc is added to a solution of iron (II) sulfate?

(1) No reaction takes place

(2) Both metals react with each other to form an alloy

(3) Iron displaces zinc and forms iron sulfate

(4) Zinc displaces iron and forms zinc sulfate

---

95. What type of bond is formed when a metal transfers electrons to a non-metal?

(1) Covalent bond

(2) Metallic bond

(3) Ionic bond

(4) Hydrogen bond

---

96. What is the name of the process where carbonate ores are converted to oxides by heating in limited air?

(1) Calcination

(2) Electrolysis

(3) Roasting

(4) Smelting

---

97. Which of the following is an ore of mercury?

(1) Hematite

(2) Cinnabar

(3) Galena

(4) Bauxite

---

98. What kind of bond exists in a molecule of nitrogen (N_2)?

(1) Single bond

(2) Double bond

(3) Triple bond

(4) Ionic bond

---

99. What makes graphite a good conductor of electricity?

(1) Presence of strong covalent bonds

(2) Free electrons in its layered structure

(3) Its rigid three-dimensional structure

(4) Its slippery texture

---

100. What property allows carbon to form large molecules by bonding with itself?

(1) Valency

(2) Electronegativity

(3) Catenation

(4) Ionization

101. Compounds with the same molecular formula but different structures are called

(1) isotopes

(2) homologous compounds

(3) functional groups

(4) isomers

---

102. Which series contains compounds differing by a $-CH_2-$ unit?

(1) Homologous series

(2) Isomeric series

(3) Saturated series

(4) Ionic series

---

103. Which functional group is present in carboxylic acids?

(1) $-CHO$

(2) $-COOH$

(3) $-C=O$

(4) $-OH$

---

104. Which substance can oxidize ethanol to ethanoic acid?

(1) Alkaline potassium permanganate

(2) Sodium hydroxide

(3) Dilute hydrochloric acid

(4) Sodium ethoxide

---

105. What is the product formed when magnesium ribbon is burnt in oxygen?

(1) Magnesium chloride

(2) Magnesium oxide

(3) Magnesium carbonate

(4) Magnesium hydroxide

---

106. What is the law of conservation of mass?

(1) Energy can be created in a reaction

(2) The number of reactants must always equal the number of products

(3) Mass and energy are interchangeable during reactions

(4) Mass can neither be created nor destroyed in a chemical reaction

---

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---

107. What is the significance of writing physical states in a chemical equation?

(1) To provide information about the physical form of substances

(2) To show the mass of reactants and products

(3) To balance the equation more accurately

(4) To indicate the catalyst used in the reaction

---

108. What is the product formed when slaked lime reacts with carbon dioxide during whitewashing?

(1) Calcium hydroxide

(2) Calcium carbonate

(3) Calcium oxide

(4) Calcium chloride

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109. Why does the iron nail become brownish when dipped in copper sulfate solution?

(1) Copper gets deposited on the nail

(2) Iron reacts with oxygen

(3) The nail rusts

(4) The nail undergoes thermal decomposition

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110. What causes corrosion of iron?

(1) Exposure to sunlight

(2) Reaction with oxygen and moisture

(3) Contact with acids

(4) Both (2) and (3)

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111. What is the process called when fats and oils are oxidised and their smell and taste change?

(1) Corrosion

(2) Rancidity

(3) Combustion

(4) Oxidation

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112. If someone in your family is suffering from acidity after overeating, which of the following would you suggest as a remedy?

(1) Lemon juice

(2) Vinegar

(3) Baking soda solution

(4) Saltwater

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113. Which of the following can be used as olfactory indicators?

(1) Vanilla essence, turmeric and clove oil

(2) Red cabbage, vanilla essence and onion

(3) Turmeric, onion and litmus

(4) Vanilla essence, onion and clove oil

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114. Phenolphthalein is used as an indicator in the reaction between

(1) acid and base

(2) acid and metal

(3) base and metal oxide

(4) acid and non-metallic oxide

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115. Which of the following is a synthetic indicator?

(1) Turmeric

(2) Methyl orange

(3) Litmus solution

(4) Red cabbage extract

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116. Why do acidic solutions conduct electricity?

(1) Due to the presence of water molecules

(2) Due to the presence of free electrons

(3) Due to the presence of ions in the solution

(4) Because acids are solid conductors

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117. Tooth decay begins when the pH of the mouth drops below:

(1) 6.5

(2) 5.5

(3) 4.5

(4) 7.0

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118. What chemical is responsible for the pain caused by a bee sting?

(1) Methanoic acid

(2) Hydrochloric acid

(3) Acetic acid

(4) Sulphuric acid

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119. What is the chemical formula of Plaster of Paris?

(1) $CaSO_4 \cdot 2H_2O$

(2) $CaSO_4 \cdot \frac{1}{2}H_2O$

(3) $CaCO_3$

(4) $CaOCl_2$

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120. Which property of metals describes their shiny surface?

(1) Malleability

(2) Ductility

(3) Metallic luster

(4) Conductivity