

ACE OF PACE CLASS 10th MEDICAL

(ANSWER KEY)

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

ACE OF PACE CLASS 10th MEDICAL

(SOLUTION)

1. (A) Theory
2. (B) $\mu_g \sin i = \mu_{\text{air}} \sin 90^\circ$
3. (D) $m = \frac{-v}{u} = -2$

$$\frac{1}{v} + \frac{1}{u} = \frac{1}{f}$$
4. (C) When light goes from rarer medium to denser medium, it bends towards the normal. The velocity decreases but the frequency remains unchanged.
5. (C) Theory
6. (A) Object is placed on center of curvature.
7. (A) $m = \frac{-v}{u} = -5$
8. (A) $P = P_1 + P_2$
9. (B) Theory
10. (D) $\frac{1}{R_{\text{eq}}} = 3 + 5 + 7 \dots + 31 = 255$
11. (A) Energy = Power \times Time
12. (B) Theory
13. (C) Parallel circuits do not affect each other.
14. (C) Complimentary angles
15. (D) $P_1 t_1 = P_2 t_2 = E$
 $(P_1 + P_2) T = E$

$$T = \frac{t_1 t_2}{t_1 + t_2}$$
16. (B) $E = \frac{V^2}{R} \cdot t$
17. (D) $P = \frac{V^2}{R}$

$$\frac{P_1}{P_2} = \frac{R_2}{R_1} = \frac{R_{\text{parallel}}}{R_{\text{series}}} = \frac{R/2}{2R}$$
18. (C) One inverted battery cancels another also
19. (A) $\frac{V_1}{V_2} = \frac{R_1}{R_2}$
 $V_1 + V_2 = E$
20. (A) A negative charged body has extra electrons on it.
21. (D) Perpendicular distance of all three points is equal from the wire
22. (B) Theory
23. (A) Theory
24. (C) Theory
25. (C) Theory

26. (D) H₂ gets oxidized in a reaction so it is an reducing agent.
27. (B) NO₂ is formed , rest is balancing
28. (C) Amino acids are organic compounds made of carbon, hydrogen, oxygen, nitrogen, and (in some cases) sulfur bonded in characteristic formations. Strings of amino acids make up proteins, of which there are countless varieties.
29. (B) Oxidation No of Cr changes from +6 to +3, therefore it is reduction.
30. (A) Oxidation No of Fe changes from +2 to +3, and it is due to Cl₂ so it is an oxidizing agent.
31. (A) Formic acid (Methanoic acid) is present in ant sting.
32. (A) Arrhenius gave this theory
33. (B) Mg(OH)₂ is an example of antacid
34. (D) Universal indicator gives very wide range of color to determine exact nature of acid or base.
35. (C) Higher the ph , higher the basic character
36. (A) Silver is the best conductor of both heat and electricity among metals.Copper and gold are used more often in electrical applications because copper is less expensive and gold has a much higher corrosion resistance
37. (D) Sn and Pb are the constituent of solder.
38. (A) Hematite(Fe₂O₃) is an ore of Iron.
39. (B) Bauxite (Al(OH)₃) is an ore of Al.
40. (C) Bromine is the only non-metal that exist as liquid at room temp.
41. (B) Between two Homologous series there is a difference of CH₂.
42. (A) Ethyne is used for cutting and weldings.
43. (B) Most of the part is butane then we have propane.
44. (A) H₂N—CO--NH₂ is formula of Urea.
45. (B) C_xH_y → CO₂ + H₂O
46. (B)
- $$3\text{Fe}_2\text{O}_3 + \text{CO} \rightarrow 3\text{Fe}_3\text{O}_4 + \text{CO}_2$$
- $$\text{Fe}_3\text{O}_4 + \text{CO} \rightarrow 3\text{FeO} + \text{CO}_2$$
- $$\text{FeO} + \text{CO} \rightarrow \text{Fe} + \text{CO}_2$$
- At last Fe₂O₃ + CO → Fe + CO₂
- Removal of oxygen is reduction.
47. (B) As the shell no increases, Atomic size increases
48. (A) Butane is
- $$\begin{array}{cccc} \text{H} & \text{H} & \text{H} & \text{H} \\ | & | & | & | \\ \text{H}-\text{C} & -\text{C} & -\text{C} & -\text{C}-\text{H} \\ | & | & | & | \\ \text{H} & \text{H} & \text{H} & \text{H} \end{array}$$
- ∴ 10C – H Bonds are there.
49. (A) Metal + Oxygen is generally metal oxide which are either
50. (D) Ionic bond is formed between metals and non-meta is which metal loses full electron and non-metals accept full electron. Large difference in Electronegativity causes this effect.
51. (D)
52. (B)
53. (B)
54. (B)
55. (B)
56. (D)
57. (A)
58. (A)

59. (B)
60. (A)
61. (C)
62. (A)
63. (A)
64. (B)
65. (C)
66. (D)
67. (C)
68. (B)
69. (C)
70. (D)
71. (D)
72. (A)
73. (B)
74. (A)
75. (B)
76. (A) At pH of 1.5 to 2.5 in stomach microbes cannot survive.
77. (A)
78. (D)
79. (A) Osmoregulation is done to kidney.
80. (C)
81. (B)
82. (A)
83. (D) Members of species interbreed amongst themselves and hence cause gene flow.
84. (D)
85. (B) Bicuspid valve is an AV valve present in the left side of heart.
86. (A)
87. (A) Sperms in humans are stored in epididymis.
88. (B) Cerebrum is largest and most developed part of brain.
89. (D)
90. (A)
91. (A)
92. (D) Aldosterone is a minerolocorticoid.
93. (A) Medulla has cardiac centre.
94. (B)
95. (C) Thinking part of brain is forebrain and cerebellum maintain body posture and balance.
96. (A) Adrenaline is secreted by adrenal medulla.
97. (C)
98. (A)
99. (D)
100. (D)