

GROUP -A 23/9/21)

PHYSICS

1. (d) it is based on experimental measurements.

2. (c) $\frac{1}{\sqrt{3}}$

3. (a) $\frac{2u\sin\theta}{g}$

4. (a) $\frac{u^2}{g}$

5. (c) 50kg m s^{-1}

6. (b) 10m s^{-1}

7. (b) $3 \times 10^8\text{m/s}$.

8. (b) 64J

9. (b) $[\text{ML}^2\text{T}^{-2}]$

10. (b) 22km/sec

11. (b) less than 1

12. (a) isochoric process.

13. (d) $20\pi\text{ m s}^{-1}$

14. (c) both torque & net force.

15. (b) 5

16. (b) 2

17. (a) energy.

18. (c) zero

19. (b) 2 : 1

20. (d) 5.0 V

21. (c) resistance.

22. (d) microwaves.

23. (d) $4f$

24. (c) 24.

25. (a) $\frac{hc}{E}$

CHEMISTRY GROUP -A 23/9/21)

26. (b) N_2

27. (d) Magnetic quantum number

28. (c) Metallic character

29. (b) Polar covalent

30. (a) Boyle's Law

31. (b) $5.26\text{ cal}/(\text{mol K})$

32. (d) Concentration of H^+ or OH^- are same

33. (c) +7

34. (c) Neutral

35. (a) CO

36. (c) 6

37. (b) Osmotic pressure

38. (d) 1.212V

39. (a) Zero order

40. (c) Mechanical

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23/9/21

SPACE FOR ROUGH WORK

41. (b) Magnetite
42. (b) Cl
43. (c) Sc^{3+}
44. (c) $[\text{Cu}(\text{NH}_3)_4]^{2+}$
45. (d) CH_3F
46. (b) Salicylaldehyde
47. (d) CH_3COCl
48. (a) Benzylamine
49. (c) Adenine and thymine; guanine and cytosine
50. (b) Polytetrafluoroethylene

BIOLOGY GROUP -A 23/9/21)

51. (c) Egg forming embryo without fertilization
52. (c) Metabolism
53. (d) Archegonium megaspore mother cell megaspore embryo sac.
54. (a)
55. (d) Ctenophora
56. (b) GIFT
57. (b) 50%
58. (c) 50% red flowers and 50% pink flowers
59. (a) Golgi body
60. (a) smaller populations
61. (c) Killer T cells
62. (c) cristae
63. (c) Diploid sporophyte
64. (b) Palmately compound leaf 5
65. (c) Chromosomes move away towards the poles from the middle.
66. (d) Polygenic inheritance
67. (b) Chrysophytes
68. (b) Roundworm
69. (c) oxygen
70. (c) T:B lymphocytes
71. (b) Hydrogen bonds
72. (a) Diosgenin
73. (a) Intergeneric hybrid
74. (b) aerobic bacteria
75. (c) Barbiturates
76. (d) LSD
77. (b) Agrobacterium tumefaciens
78. (c) separation of DNA fragments according to their size
79. (a) On inner membrane
80. (c) Phosphate fertilizer
81. (b) Auto-antigens
82. (d) Organic acids
83. (b) The wall of Bowman's capsule
84. (d) Function at its place of occurrence
85. (a) 0
86. (b) Stops the larva to feed further

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 21/9/21

- 87. (c) GEAC
- 88. (a) Pons
- 89. (b) Habitat loss and fragmentation
- 90. (c) increases
- 91. (a) 95 decibels
- 92. (c) wheat
- 93. (b) Stenothermal
- 94. (d) -ve to =ve: then to -ve
- 95. (c) semicircular canals
- 96. (b) Diaphragm and external intercostal muscles
- 97. (c) Pyramid of energy
- 98. (a) N
- 99. (b) Zooplanktttoons
- 100. (a) Duodenum

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2/10/21