

GROUP -C (23/9/21)

PHYSICS

1. (b)  $3 \times 10^8 \text{ m/s}$ .
2. (b) 64J
3. (b)  $[\text{ML}^2\text{T}^{-2}]$
4. (b) 22km/sec
5. (b) less than 1
6. (a) isochoric process.
7. (d)  $20\pi \text{ m s}^{-1}$
8. (c) both torque & net force.
9. (b) 5
10. (b) 2
11. (a) energy.
12. (d) it is based on experimental measurements.

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

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

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

16. (c)  $50 \text{ kg m s}^{-1}$

17. (b)  $10 \text{ m s}^{-1}$

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 -C (23/9/21)

26. (a) CO
27. (c) 6
28. (b) Osmotic pressure
29. (d) 1.212V
30. (a) Zero order
31. (c) Mechanical
32. (b) Magnetite
33. (b) Cl
34. (c)  $\text{Sc}^{3+}$
35. (c)  $[\text{Cu}(\text{NH}_3)_4]^{2+}$

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SPACE FOR ROUGH WORK

36. (b) N<sub>2</sub>  
37. (d) Magnetic quantum number  
38. (c) Metallic character  
39. (b) Polar covalent  
40. (a) Boyle's Law  
41. (b) 5.26 cal/(mol K)  
42. (d) Concentration of H<sup>+</sup> or OH<sup>-</sup> are same  
43. (c) +7  
44. (c) Neutral  
45. (d) CH<sub>3</sub>F  
46. (b) Salicylaldehyde  
47. (d) CH<sub>3</sub>COCl  
48. (a) Benzylamine  
49. (c) Adenine and thymine; guanine and cytosine  
50. (b) Polytetrafluoroethylene

BIOLOGY GROUP -C (23/9/21)

51. (b) Auto-antigens  
52. (d)  
53. (b) The wall of Bowman's capsule  
54. (d) Function at its place of occurrence  
55. (a) 0  
56. (b) Stops the larva to feed further  
57. (c) GEAC  
58. (a) Pons  
59. b) Habitat loss and fragmentation  
60. (c) increases  
61. (c) Egg forming embryo without fertilization  
62. (c) Metabolism  
63. (d) Archesporium megasporangium mother cell megasporangium embryo sac.  
64. (a) Chiropterophilous flowers  
65. (d) Ctenophora  
66. (b) GIFT  
67. (b) 50%  
68. (c) 50% red flowers and 50% pink flowers  
69. (a) Golgi body  
70. (a) Smaller populations  
71. (c) Killer T cells  
72. (c) cristae  
73. (c) Diploid sporophyte  
74. (b) Palmately compound leaf  
75. (a) 95 decibels  
76. Answer: (c) wheat  
77. (b) Stenothermal

78. (d) -ve to =ve: then to -ve  
79. (c) semicircular canals  
80. (b) Diaphragm and external intercostal muscles  
81. (c) Pyramid of energy  
82. (a) N  
83. (b) Zooplankton  
84. (a) Duodenum  
85. (c) Chromosomes move away towards the poles from the middle.  
86. (d) Polygenic inheritance  
87. (b) Chrysophytes  
88. (b) Roundworm  
89. (c) oxygen  
90. (c) T:B lymphocytes  
91. (b) Hydrogen bonds  
92. (a) Diosgenin  
93. (a) Intergeneric hybrid  
94. (b) aerobic bacteria  
95. (c) Barbiturates  
96. (d) LSD  
97. (b) Agrobacterium tumefaciens  
98. (c) separation of DNA fragments according to their size  
99. (a) On inner membrane  
100. (c) Phosphate fertilizer

