

GROUP -B (23/9/21)

PHYSICS

- 1.(a) isochoric process.
- 2.(d) $20\pi \text{ m s}^{-1}$
- 3.(c) both torque & net force.
- 4.(b) 5
- 5.(b) 2
- 6.(a) energy.
7. (c) **zero**
- 8.(b) 2 : 1.
- 9.(d) 5.0 V
- 10.(c) resistance.
- 11.(d) microwaves.
- 12.(d) $4f$
- 13.(c) 24.
14. (a) $\frac{hc}{E}$
15. (d) it is based on experimental measurements.
16. (c) $\frac{1}{\sqrt{3}}$
17. (a) $\frac{2u\sin\theta}{g}$
18. (a) $\frac{u^2}{g}$
19. (c) 50kg m s^{-1}
20. (b) 10m s^{-1}
21. (b) $3 \times 10^8\text{m/s}$.
22. (b) 64J
23. (b) $[\text{ML}^2\text{T}^{-2}]$
24. (b) 22km/sec
25. (b) less than 1

CHEMISTRY GROUP -B (23/9/21)

26. (a) Zero order
27. (c) Mechanical
28. (b) Magnetite
29. (b) Cl
30. (c) Sc^{3+}
31. (c) $[\text{Cu}(\text{NH}_3)_4]^{2+}$
32. (d) CH_3F
33. (b) Salicylaldehyde
34. (d) CH_3COCl
35. (a) Benzylamine
36. (c) Adenine and thymine; guanine and cytosine
37. (b) Polytetrafluoroethylene



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38. (b) N_2
39. (d) Magnetic quantum number
40. (c) Metallic character
41. (b) Polar covalent
42. (a) Boyle's Law
43. (b) 5.26 cal/(mol K)
44. (d) Concentration of H^+ or OH^- are same
45. (c) +7
46. (c) Neutral
47. (a) CO
48. (c) 6
49. (b) Osmotic pressure
50. (d) 1.212V

BIOLOGY GROUP -B (23/9/21)

51. (d) LSD
52. (b) *Agrobacterium tumefaciens*
53. (c) separation of DNA fragments according to their size
54. (a) On inner membrane
55. (c) Phosphate fertilizer
56. (b) Auto-antigens
57. (d) Organic acids
58. (b) The wall of Bowman's capsule
59. (d) Function at its place of occurrence
60. (a) 0
61. (b) Stops the larva to feed further
62. (c) GEAC
63. (a) Ponds
64. (b) Habitat loss and fragmentation
65. (c) increases
66. (a) 95 decibels
67. (c) wheat
68. (b) Stenothermal
69. (d) -ve to +ve: then to -ve
70. (c) semicircular canals
71. (b) Diaphragm and external intercostal muscles
72. (c) Pyramid of energy
73. (a) N
74. (b) Zooplankton
75. (a) Duodenum
76. (c) Egg forming embryo without fertilization
77. (c) Metabolism

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21/9/21

78. (d) Archegonium megaspore mother cell megaspore embryo sac.
79. (a) Chiropterophilous flowers
80. (d) Ctenophora
81. (b) GIFT
82. (b) 50%
83. (c) 50% red flowers and 50% pink flowers
84. (a) Golgi body
85. (a) Smaller populations
86. (c) Killer T cells
87. (c) cristae
88. (c) Diploid sporophyte
89. (b) Palmately compound leaf
90. (c) Chromosomes move away towards the poles from the middle.
91. (d) Polygenic inheritance
92. (b) Chrysophytes
93. (b) Roundworm
94. (c) oxygen
95. (c) T:B lymphocytes
96. (b) Hydrogen bonds
97. (a) Diosgenin
98. (a) Intergeneric hybrid
99. (b) aerobic bacteria
100. (c) Barbiturates

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9/19/20