

BITSAT 2024 May 22

Memory-Based Question Paper

Ques 1. What is the salt which is used in permanent hardness

Ques 2. Choose the correct figure of SO₂ and SO₃

Ques 3. SF₃ and SF₄ lone pairs

Ques 4. Where kinetic energy $h\nu/ka$ is $3/2$ then find DE Broglie wavelength

Ques 5. Sum of the series of 10 terms $1/2+3/4+7/8+\dots$

Ques 6. Sucrose contains

Options:-

Alpha fructose beta glucose ... like that they asked

Ques 7. Alkali stability order of NaCl, KCl, CsCl, LiCl

Ques 8. ONE MOLAR=

Ques 9. MONDAY so that vowels can't come adjacently

Ques 10. In time 48 min the concentration is 0.02 and in 98 min conc. is 0.04 what is the order

Ques 11. Gravitational force on an object at some distance from a black hole,

Ques 12. is H_2O_2 a redox agent,

Ques 13. Structure of PF_5 in gaseous state

Ques 14. nomenclature of compounds

Ques 15. $\text{Ti}(\text{H}_2\text{O})_6$ absorbs wavelength of light, find which ligand can make it absorb light at certain wavelength and absorb light beyond a certain wavelength

Ques 16. Which of the following compounds will give the same amount of CO_2 on combustion a) Benzene Toluene

b) Benzene 1,3,5 Hexatriene

c) Toluene Xylene

d) Nitrobenzene Toluene

Ques 17. A bag contains 16 balls (4 red balls and others) The probability of getting at least 3 red balls

Ques 18. 10 Coins are simultaneously tossed find the probability of finding at most one head

Ques 19. A ball is given velocity V so that it reaches 1000m above earth's surface. Find the velocity V' so that the ball reaches 2000m above earth's surface (Radius of earth is 6000m)

Ques 20. Which type of hydrides do most of d and f block elements form

Ques 21. Two balls one is thrown up and the second ball is thrown down with same velocity When the balls reach with V_a and V_b on the ground what is the Relation between V_a and V_b

Ques 22. There was a question about finding nth term and the term and ap was given

Ques 23. Integral $x^e - 1 + e^x - 1/x^e + e^x$

Ques 24. $\sin^4 x/3 + \cos^4 x/3 > 1/2$ find the interval where this inequality holds

Ques 25. There is a first order reaction the rate constant is 2×10^{-2} the initial concentration is 2×10^{-2} then what is the final concentration after 100s
