

## ECAT Pre General Science MCQ's Test For Physics Full Book

| Sr | Questions   | Answers Choice  |
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| 1  | The velocity of sound at same temperature is maximum in   | A. $H^{2/3}$<br>B. $N^{2/3}$<br>C. $O^{2/3}$<br>D. $NH^{3/4}$   |
| 2  | The instantaneous acceleration of a body moving with constant speed in a circle:  | A. Remains constant<br>B. Is called centripetal acceleration<br>C. Tangential acceleration<br>D. None of these                |
| 3  | A stone tied to the end of a 20 cm long string is whirled in a horizontal circle. If centripetal acceleration is $9.8 \text{ m/sec}^2$ , then its angular velocity is rad/sec is: | A. 22/7<br>B. 7<br>C. 14<br>D. 21   |
| 4  | Speed of Sound in vacuum is.  | A. 332 m sec <sup>-1</sup><br>B. 0. m sec <sup>-1</sup><br>C. 340 m sec <sup>-1</sup><br>D. 350 m sec <sup>-1</sup>           |
| 5  | Example of progressive wave is  | A. transverse waves<br>B. longitudinal waves<br>C. both of them<br>D. none of them  |
| 6  | Which one of the following elasticities is possessed by fluids:   | A. Young's elastic modulus (length)<br>B. Bulk elastic modulus (volume)<br>C. Modulus of rigidity (shape)<br>D. None of these |
| 7  | The distance covered by the wave in one second is:  | A. Wave number<br>B. Wave length<br>C. Frequency<br>D. Wave speed   |
| 8  | The relation between charge 'Q' and current 'I' is given by   | A. $Q = I/t$<br>B. $Q = It$<br>C. $Q = I \times t^2$<br>D. $Q = I \times t^2$   |
| 9  | Significant figures in 0.2020 are:  | A. Two<br>B. Three<br>C. Four<br>D. Five  |
| 10 | The maximum displacement of a body on either side of its equilibrium position is called   | A. frequency<br>B. amplitude<br>C. displacement<br>D. time period   |
| 11 | If two forces of magnitudes 3.5 and 2.5 N act on a body such that the angle between the forces is zero, then magnitude of the resultant will be:                                  | A. 1.0 N<br>B. 6 N<br>C. 3.5 N<br>D. 12 N   |
| 12 | The work done moving a body between two points in a conservation field is independent of the:   | A. Direction<br>B. Force applied<br>C. Path followed by the body<br>D. Power  |
| 13 | A photon is considered to have  | A. Momentum<br>B. Energy<br>C. Wavelength<br>D. All of the above  |
| 14 | The field in which work done in moving a body between two points depends upon the path followed is called:  | A. Conservative field<br>B. Non-conservative field<br>C. Electric field<br>D. None of these                                   |
| 15 | In case of a parallel plate capacitor if the plate separation is doubled and plate area is halved, the capacitance becomes  | A. Four-fold<br>B. One-half<br>C. One-fourth<br>D. Zero   |

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| 16 | The process which is carried out at constant temperature is known as   | A. adiabatic process<br>B. isothermal process<br>C. isochoric process<br>D. none of them  |
| 17 | Wavelength of light, on the average, is given by   | A. $10^{14}$ m<br>B. $10^{10}$ m<br>C. $10^6$ m<br>D. $10^4$ m  |
| 18 | Range of a projectile is R, when the angle of projection is $30^\circ$ . Then, the value of the other angle of projection for the same range, is | A. $45^\circ$<br>B. $60^\circ$<br>C. $50^\circ$<br>D. $40^\circ$  |
| 19 | Two copper balls of 1 cm and 2 cm in diameter are simultaneously dropped in the same viscous medium. The terminal velocity of bigger ball is:    | A. Not affected due to its size<br>B. Twice that of small size ball<br>C. Four times that of small size ball<br>D. 1/4th of that of small size ball |
| 20 | When certain nucleus emits an $\alpha$ particle, its mass number:  | A. Increases by one<br>B. Decreases by one<br>C. Remain same<br>D. Decreases by four<br>E. None of these  |