

Physics ECAT Pre Engineering MCQ's Test For Full Book

| Sr | Questions | Answers Choice |
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| 1 | Distance to nearest galaxy from earth is | A. 10^{10} m B. 10^{15} m C. 10^{40} m D. 10^{30} m |
| 2 | During the positive half-cycle in the half-wave rectification, the diode | A. does not conduct B. conducts C. either of these D. neither of these |
| 3 | Capacitance of two or more capacitors | A. Increases in series combination B. Increases in parallel combination C. Remains unchanged D. None of the above |
| 4 | One radian is: | A. Greater than one degree B. Less than one degree C. Equal to degree D. none of these |
| 5 | When a force is applied on a body, several effects are possible Which of the following effect could not occur? | A. the body rotates B. the body speeds up C. the mass of the body decreases D. the body changes its direction |
| 6 | The velocity of falling raindrops attains limited value because of | A. Up thrust of air B. Air currents of the earth atmosphere C. Surface tension effect D. Viscous force exerted by air |
| 7 | The closed loop gain of the non-inverting amplifier is given by | A. $G = \frac{R_2}{R_1}$ B. $G = -\frac{R_2}{R_1}$ C. $G = 1 + \frac{R_2}{R_1}$ D. $G = 1 + \frac{R_2}{R_1}$ |
| 8 | Taking the earth to be a spherical conductor of diameter 12.8×10^3 km. Its capacity will be | A. $711 \mu\text{F}$ B. $611 \mu\text{F}$ C. $811 \mu\text{F}$ D. $511 \mu\text{F}$ |
| 9 | A metastable state: | A. Is an excited state B. Is that in which excited electron is stable C. Is that in which excited electron is usually unstable D. Means a time interval of 10^{-8} second E. Both (A) and (C) |
| | | A. friction |

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| 10 | The efficiency of petrol engine is usually not more than 25% to 30% because of | B. heat losses C. both of them D. none of them |
| 11 | The SI units of momentum is | A. kg m s^{-2} B. kg ms C. kg m s^{-2} D. N-s |
| 12 | When a stress changes the shape, it is called the | A. compressional stress B. tensile stress C. shear stress D. any one of them |
| 13 | A second's pendulum is a pendulum whose time period is | A. 1 second B. 2 seconds C. 3 seconds D. 4 seconds |
| 14 | When a shell explodes in mid-air, its fragments fly off in | A. only one direction B. in two direction C. different directions D. a particular direction |
| 15 | The henry is the unit for | A. Resistance B. Magnetic flux C. Magnetic field D. Inductance |
| 16 | Plan of a coil makes an angle of 20° with the lines of magnetic field. The angle between B and vector area of plane of coil is: | A. Also 20° B. 70° C. 90° D. 180° E. None of these |
| 17 | The slopes of the tangent at any point on the curve gives the value of the | A. average velocity at that point B. instantaneous velocity at that point C. average acceleration at that point D. instantaneous acceleration at that point |
| 18 | Bodies falling freely under gravity provide good example of motion under | A. non-uniform acceleration B. uniform acceleration C. variable acceleration D. increasing acceleration |
| 19 | An intertial frame of reference is a frame of reference which is | A. at rest B. moving with uniform velocity C. either at rest or moving with uniform velocity D. none of these |

A. N/m^{-2}
B. N/m^2

- B. N/m^2
 - C. dynes/m
 - D. N
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