

NTS Educators SSE (Science) Jobs Test

Sr	Questions	Answers Choice
1	When we apply reverse bias to a junction diode it	A. Lowers the potential barrier B. Raises the potential barrier C. Increase the majority carrier current D. Decrease the majority carrier current
2	In a common base transistor circuit the current gain is 0.98. On changing the emitter current by 5.00 mA, the change in collector current is:	A. 0.196 mA B. 2.45 mA C. 4.9 mA D. 5.1 mA
3	In case of p-n junction diode at high value of reverse bias the current rises sharply. The value of reverse bias is known as	A. Cut off voltage B. Zener voltage C. Inverse voltage D. Critical voltage
4	A cable breaks if stretched by more than 2 mm it is cut into two equal parts. How much either part can be stretched without breaking?	A. 0.25 m B. 0.5 m C. 1 mm D. 2 mm
5	For obtaining appreciable extension the wire should be	A. Short and thin B. Long and thin C. Short and thick D. Long and thick
6	According to Hooke's law the force required to change the length of a wire by '1' is proportional to	A. 1^{-2} B. 1^{-1} C. 1 D. 1^{+2}
7	A wire is stretched to double of its length. The strain is	A. 2 B. 1 C. Zero D. 0.5
8	How does the Young's modulus vary with the increase of temperature?	A. Decrease B. Increase C. Remains constant D. First increases and then decreases
9	The modulus of rigidity of a liquid is	A. Zero B. 1 C. Infinity D. A value not one of those mentioned above
10	Steel is preferred for making springs over copper. Why?	A. Steel is cheaper B. Young's modulus of steel is more than that of copper C. Young's modulus of copper is more than that of steel D. Steel is less likely to be oxidized
11	Which of the modulus of elasticity is involved in compressing a rod to decrease its length?	A. Young's modulus B. Bulk modulus C. Modulus of rigidity D. None of the above
12	The dimensional formula for the modulus of elasticity is same as that for.	A. Stress B. Strain C. Velocity D. Surface tension
13	The henry is the unit for	A. Resistance B. Magnetic flux C. Magnetic field D. Inductance
14	Energy is stored in the choke coil in the form of	A. Heat B. Magnetic energy C. Electric energy D. None of these

15 In a capacitive circuit

- A. Current leads voltage by phase of $\pi/2$
- B. Voltage leads current by phase of $\pi/2$
- C. Current and voltage are in same phase
- D. Sometime current and sometime voltage leads