Which one of the following relationship regarding the typical linewidths (Δv) of an LED, a Fabry-Perot laser diode (FP) and a DFB laser is correct?

- Δv_{LED} < Δv_{FP} < Δv_{DFB}
- Δv_{FP} < Δv_{LED} < Δv_{DFB}
- Δv_{FP} < Δv_{DFB} < Δv_{LED}
- Δv_{DFB} < Δv_{FP} < Δv_{LED}

No, the answer is incorrect.

Score: 0
n_L and the period the same)

- Decreasing the number of layers in the Bragg stacks (keeping n_H, n_L and the period the same)
- By using materials with lower n_H and n_L in the Bragg stacks (keeping the period the same)
- Increasing the thickness of the layers in the Bragg stacks (keeping n_H and n_L the same)

No, the answer is incorrect.
Score: 0
Accepted Answers:
By using materials with lower n_H and n_L in the Bragg stacks (keeping the period the same)

3) Which one of the following statements related to handling of lasers is TRUE:

- Class IV lasers can be handled safely with minimum precautions.
- Proper handling of Class I lasers requires avoidance of direct exposure to any part of the body.
- ‘Eye-safe lasers’ have wavelength around 1.5 µm.
- Laser diodes are insensitive to Electro Static Discharge.

No, the answer is incorrect.
Score: 0
Accepted Answers:
‘Eye-safe lasers’ have wavelength around 1.5 µm.

4) State whether the following statement is TRUE or FALSE:

Quantum well lasers have lower threshold current as compared to that of double heterostructure lasers because quantum well lasers have higher values for the confinement factor.

- TRUE
- FALSE

No, the answer is incorrect.
Score: 0
Accepted Answers:
FALSE

5) A laser diode, which is operating just at the threshold, has a length of 1000 µm and cleaved end-facets of reflectivity 30% each. If the end facets are now coated with reflective films, so that the reflectivity is increased to 90% (each), the minimum length of the laser necessary in order to operate at the threshold is ______ µm.

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 85,90

1 point