Assignment 8

The due date for submitting this assignment has passed.

As per our records you have not submitted this assignment.

Due on 2020-04-22, 23:59 IST.

1) 15 mm dia SS (Young's modulus = 200 Gpa) rod is coated with HA (Young’s modulus = 300 Gpa). What should be the coating thickness so that the Young’s modulus of the composite is 210 Gpa (use mixture rule)?

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 0.36,0.42

1 point

2) If the densities are 7.9 and 4.0 gm/cc, what is the average density?

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 7.40,7.55

1 point

3) When one billion implants were tested for sterility, 1100 implants were contaminated. Does it satisfy the Sterility Assurance Level?

- no
- yes
- cannot judge
- sometimes

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

1 point

4) The percentage of microorganisms remaining vs. exposure time to autoclave sterilization process follows % = 70 -t^2. The percentage of microorganisms remaining vs. exposure time to dry heat sterilization process follows % = 60 -t^2. At what time both the methods are equally efficient?

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 0,0.3,6

2 points

5) With ref to Q 4, After 6 mins of sterilization what will be the difference between the percentages of microorganisms remaining from both these methods, give the absolute number

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Numeric) 8

2 points

6) The % live bacteria due to sterilization follows an exponential relation such as % live = 30 exp (-0.01 T). T is the temperature in ºC. What should be the temperature to achieve just less than 5 % live bacteria?

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 178,181

2 points

7) contact angle and surface energy have

- direct relationship
- inverse relationship
- exponential relationship
- quadratic relationship

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

1 point