

Course No: DMTT 1202  
Course Title: DENTAL MATERIALS  
Date: 31/03/2015  
No. of Questions: (3)  
Time: 1 hours  
Using Calculator (No)

University of Palestine



Midterm Exam  
2015/2016  
Total Grade:(20)

Instructor Name: Dr. Nagi M. Shaat  
Student No.: \_\_\_\_\_  
Student Name: \_\_\_\_\_  
College Name: \_\_\_\_\_  
Dep. / Specialist: \_\_\_\_\_  
Using Dictionary (No)

**Question One: Choose the correct answer:**

**1. Stiffness refers to:**

- a. Resistance to elastic deformation
- b. Degree of elastic deformation
- c. Expandability on heating
- d. Shrinkage on cooling

**2. Amount of energy absorbed by a body it is when stressed not to exceed its proportional limit is called:**

- a. Modulus of elasticity
- b. Flexibility
- c. Resilience
- d. Toughness

**3. Hardness for rubber and plastics is measured from:**

- a. Knoop hardness test
- b. Rockwell hardness test
- c. Shore A hardness test
- d. Brinell hardness test

**4. Time dependent flow is known as:**

- a. Viscosity
- b. Resilience
- c. Creep
- d. Toughness

**5. The ability of materials to withstand rupture under compression is known as:**

- a. Ductility

Course No: DMTT 1202  
Course Title: DENTAL MATERIALS  
Date: 31/03/2015  
No. of Questions: (3)  
Time: 1 hours  
Using Calculator (No)

University of Palestine



Midterm Exam  
2015/2016  
Total Grade:(20)

Instructor Name: Dr. Nagi M. Shaat  
Student No.: \_\_\_\_\_  
Student Name: \_\_\_\_\_  
College Name: \_\_\_\_\_  
Dep. / Specialist: \_\_\_\_\_  
Using Dictionary (No)

- b. Hardness
- c. Malleability
- d. None of the above

**6. Energy required to fracture a material is known as:**

- a. Resilience
- b. Malleability
- c. Ductility
- d. Toughness

**7. Transverse strength is used to test:**

- a. Long span bridges
- b. Single crowns
- c. Both of the above
- d. None of the above.

**8. The change in color matching of two objects under different light sources is called :**

- a. Polymorphism.
- b. Isomerism.
- c. Metamerism.
- d. Isomorphism.

**9. Constant stimulus by one color decreases the response of the eye to that color. This called:**

- a. Color fatigue.
- b. Optical illusion.
- c. Optical response.

**10. Marginal gaps between resin composite restoration and teeth may be opened during the ingestion of food and beverage due to:**

Course No: DMTT 1202  
Course Title: DENTAL MATERIALS  
Date: 31/03/2015  
No. of Questions: (3)  
Time: 1 hour  
Using Calculator (No)

University of Palestine



Midterm Exam  
2015/2016  
Total Grade: (20)

Instructor Name: Dr. Nagi M. Shaat  
Student No.: \_\_\_\_\_  
Student Name: \_\_\_\_\_  
College Name: \_\_\_\_\_  
Dep. / Specialist: \_\_\_\_\_  
Using Dictionary (No)

- a. Difference in thermal conductivity.
- b. The presence of pulpal pressure.
- c. Difference in thermal expansion coefficients.
- d. Differences in thermal diffusivity.

**11. Metals usually have:**

- a. Low surface energy.
- b. High surface energy.
- c. Low surface tension.

**12. Thermal stress may cause failure of the adhesive junction when:**

- a. There are thermal fluctuation, but there is no or slight difference in the coefficient of thermal expansion between the joined materials.
- b. There is large difference in the coefficient of thermal expansion, and the adhesive junction is subjected to thermal fluctuations.
- c. When the adhesive junction is not subjected to thermal fluctuations.
- d. None of the above.

**13. More natural appearance is achieved if aesthetic restorative materials are:**

- a. Wet by thick film of saliva.
- b. Wet by thin film of saliva.
- c. Not wet.

**14. Which of the following factors decrease the surface tension of a liquid:**

- a. Addition of detergents.
- b. Increase in temperature.
- c. Presence of impurities.
- d. A and B.
- e. All of the above.

Course No: DMTT 1202  
Course Title: DENTAL MATERIALS  
Date: 31/03/2015  
No. of Questions: (3)  
Time: 1 hours  
Using Calculator (No)

University of Palestine



Midterm Exam  
2015/2016  
Total Grade:(20)

Instructor Name: Dr. Nagi M. Shaat  
Student No.: \_\_\_\_\_  
Student Name: \_\_\_\_\_  
College Name: \_\_\_\_\_  
Dep. / Specialist: \_\_\_\_\_  
Using Dictionary (No)

**15. The tendency of a liquid to spread over a solid surface is called:**

- a. Cohesion.
- b. Absorption.
- c. Surface tension.
- d. Wetting.

**16. Which of the following factors presents a difficulty to produce adhesion in the oral cavity:**

- a. Smear layer.
- b. Heterogeneous composition of enamel and dentine.
- c. Smooth surface of the prepared cavity.
- d. A and B.
- e. All of the above.

**17. Which of the following is not desirable in a dental adhesive:**

- a. Low viscosity.
- b. Low surface tension.
- c. Many air bubbles.
- d. High strength in very thin film.

**18. Spread of a liquid on a solid surface indicates that:**

- a. The surface has been poorly wet by the liquid.
- b. The surface energy of the solid is probably quite high and / or the surface tension of the liquid is quite low.
- c. The surface energy of the solid is probably quite low and / or the surface tension of the liquid is quite high.

**19. In galvanic cell :**

- a. Anode has higher electrode potential.
- b. Cathode has higher dissolution tendency.

Course No: DMTT 1202  
 Course Title: DENTAL MATERIALS  
 Date: 31/03/2015  
 No. of Questions: (3)  
 Time: 1 hours  
 Using Calculator (No)

University of Palestine



Midterm Exam  
 2015/2016  
 Total Grade:(20)

Instructor Name: Dr. Nagi M. Shaat  
 Student No.: \_\_\_\_\_  
 Student Name: \_\_\_\_\_  
 College Name: \_\_\_\_\_  
 Dep. / Specialist: \_\_\_\_\_  
 Using Dictionary (No)

c. Cathode has higher electrode potential.

**20. Due to the difference in composition of the parent alloy and solder alloy in patients mouth, the following may occur:**

- a. Concentration cell corrosion.
- b. Galvanic cell corrosion.
- c. Dry corrosion.

**21. If consumption of the electrons at the cathode is higher than the production of electrons at the anode:**

- a. The corrosion rate will be higher.
- b. The corrosion rate will be lower.
- c. The corrosion rate will not be affected.

Question	1	2	3	4	5	6	7	8	9	10
answer										
11	12	13	14	15	16	17	18	19	20	21

**Question Two: Give reasons(s):**

1. The better cast ability of gold alloys compared to base metal alloys.

-----  
 -----

2. Placing metallic filling materials in a deep cavity should be preceded by application of an insulating base.

-----  
 -----

3. Value is the most important color parameter in dentistry.

-----  
 -----

Course No: DMTT 1202  
Course Title: DENTAL MATERIALS  
Date: 31/03/2015  
No. of Questions: (3)  
Time: 1 hours  
Using Calculator (No)

University of Palestine



Midterm Exam  
2015/2016  
Total Grade:(20)

Instructor Name: Dr. Nagi M. Shaat  
Student No.: \_\_\_\_\_  
Student Name: \_\_\_\_\_  
College Name: \_\_\_\_\_  
Dep. / Specialist: \_\_\_\_\_  
Using Dictionary (No)

4. Opacifiers are added to resin composite restorative materials.

-----  
-----

5. Waxes are not easily wet by water.

-----  
-----

6. Bonding by true adhesion is more preferred than bonding by mechanical interlocking.

-----  
-----

7. Corrosion of amalgam restoration is unavoidable.

-----  
-----

8. Good oral hygiene is essential especially for patient having class II amalgam restoration.

-----  
-----

**Question Three: Short answer:**

**1- GENERAL REQUIREMENTS OF MATERIALS USED IN DENTISTRY.**

**Course No: DMTT 1202**  
**CourseTitle: DENTAL MATERIALS**  
**Date: 31/03/2015**  
**No. of Questions: (3)**  
**Time: 1hours**  
**Using Calculator (No)**

**University of Palestine**



**Midterm Exam**  
**2015/2016**  
**Total Grade:(20)**

**Instructor Name:Dr. Nagi M. Shaat**  
**Student No.:** \_\_\_\_\_  
**Student Name:** \_\_\_\_\_  
**College Name:** \_\_\_\_\_  
**Dep. / Specialist:** \_\_\_\_\_  
**Using Dictionary (No)**

---

**2- Factors affecting color appearance?**

End of Questions  
*Good Luck*