No. of Printed Pages : 07 **BDS 203**

Following Paper ID and Roll No. to be filled in your Answer Book.

PAPER ID : 2106 Roll No. | | | | | | | | | | |

BDS Examination Dec. 2016

(Second Professional)

DENTAL MATERIALS

Time : 3 Hours] *[Maximum Marks : 70*

Note :–(i) Attempt all questions.

(ii) All questions are to be answered in the same serial order.

(iii) Make neat well labelled diagram where necessary.

1. Choose the correct answers : 5

(a) What are the ways to decrease setting time of alginate impression materials :

(i) Increase water temperature

(ii) Rapid mixing

[P. T. O.

(iii) Slow mixing

(iv) Both (i) and (ii)

(b) For Master Cast for die fabrication which of the following material is used :

(i) Impression plaster

(ii) Model plaster

(iii) Dental stone

(iv) High strength dental stone

(c) An elastomeric impression material that has an exothermic setting reaction with water as a by product is :

(i) Poly Ether

(ii) Poly Sulphide

(iii) Addition silicon

(iv) Alginate

(d) Maximum stress before fracturing is known as :

(i) Strength

(ii) Ultimate tensile strength

(iii) Yield strength

(iv) Hardness

(e) The first reaction after mixing of water with Alginate is reaction of sodium phosphate with :

(i) Insoluble Ca ions

(ii) Soluble Ca ions

(iii) Soluble K ions

(iv) Insoluble K ions

(f) Type of calcium hemiydrate in dental stone is :

(i) Alpha

(ii) Beta

(iii) Delta

(iv) None of the above

[P. T. O.

(g) Auto polymerized poly Methyl Methacrylate shows how much shrinkage during polymeritzation:

(i) 0.2%

(ii) 0.5%

(iii) 1.0 %

(iv) 2%

(h) Resistance to permanent deformation is known as?

(i) Stregth

(ii) Moclulus

(iii) Yield strength

(iv) Hardness

(i) Such Back perosity can occur during which of the following :

(i) Processing of heat curved aclytics

(ii) Casting of alloys

(iii) Processing of Porcelain

(iv) All of the above

(j) Strength of porcelain decreases due to :

(i) over fining

(ii) Entrapped air bubbles

(iii) Sudden cooling

(iv) All of the above

(b) Fill in the blanks : 5

(i) ZnO igenal is not used for permanent cementation of crown and bridges because of .....

(ii) Elastomeric impression material which has the highest tear strength is .....

(iii) .....defines Young's modulus .

(iv) Zine is added to amalgam alloys because it makes the amalgam more .....

(v) Ideal dental stone for models is .....

(c) Select True/False

(i) Dentine base resin can be used by Heating over flame

(ii) Alginate is a example of rigid impression material .

(iii) Galvanic stock can be exprieveed if two disimilar metal fillings (Restoration) are done.

(iv) Zinc Polycarboxy late cement is biocompatible with the pulp.

(v) Irrevrsible hydro colloid impression should be poised within one hour.

2. (a) Describe physical and mechanical properties of dental materials. 5

(b) Describe mercury toxicity in detail. 5

3. (a) Write in brief about glass ionomer cement with indications. 5

(b) Write in brief about different duplicating materials. 5

4. Write short notes on :

(a) Annealing 5

(b) Calcination 5

5. Write short notes on :

(a) Tanish and eorrossion 5

(b) Anterior tooth restorative materials. 5

6. Classify Investment Materials? Discuss in dentail phosphate bonded Investment. 10

7. Define Waxes with its classification and write in detail about inlay waxes. 10

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