

SECOND YEAR BDS DEGREE EXAMINATION (RS & RS2) DECEMBER 2020

Time: 3 Hours

Dental Materials

Q.P. Code: 2008 & 2108

Max. Marks: 70

Objective Instructions	Subjective Instructions
<ul style="list-style-type: none"> • Each question is followed by four options. • Pick up single best option and darken appropriate circle in OMR Sheet • Each question carries one mark. No negative marking 	<ul style="list-style-type: none"> • Answers should be specific to the Questions asked. • Draw neat, labeled diagrams wherever necessary.

1) M.C.Q. 20 X 1 = 20

1. The term given to the phenomenon of moisture absorption by a alginate impression is

(A) Imbibition	(B) Syneresis
(c) Hysteresis	(D) Gelation
2. Agar syringe material can be used with/as

(A) Agar	(B) Alginate impression material
(c) Both of the above	(D) Primary impression
3. "Brush Heap" structure is found in

(A) Zinc oxide impression material	(B) Agar
(c) Condensation Silicon	(D) Polyether
4. The point at which a stress of a material exhibits a specific limited deviation P is called

(A) Proportional limit	(B) Tensile strength
(c) Ultimate strength	(D) Yield strength
5. Type I gypsum product is also called

(A) Impression plaster	(B) Class I stone
(c) Class II stone	(D) Model Plaster
6. Within practical limits , using less water in mixing plaster will result in a set product that

(A) Contracts	(B) IS stronger
(c) Is more porous	(D) Is less brittle
7. Which one of the following dental cement accelerates the formation of reparative dentin?

(A) Zinc oxide eugenol	(B) calcium hydroxide
(c) zinc phosphate	(D) silica
8. Which of the following hardness test is a micro hardness test

(A) Brinell	(B) knoop
(c) shore-A	(D) rockwell
9. Cobalt-Chromium alloys contains:

(A) 30% cobalt and 60% chromium	(B) 60% cobalt and 30% chromium
(c) 1% palladium	(D) 20% gold
10. Softening heat treatment of alloy increases:

(A) Tensile strength	(B) Proportional limit
(c) Ductility	(D) Hardness
11. Reduction in the fusion temperature of dental gold casting alloys is caused by presence of:

(A) Platinum	(B) copper oxide
(c) silver palladium	(D) gold foil
12. Implants are most often made of

(A) Titanium	(B) hydroxyapatite
(c) stainless steel	(D) gold foil
13. Which of the waxes is used for casting pattern fabrication

(A) Corrective wax	(B) boxing wax
(c) utility wax	(D) inlay wax
14. Which of the following helps in age hardening process

(A) silver	(B) copper
(c) platinum	(D) palladium
15. Advantage of titanium over other base metal alloys

(A) low weight	(B) low cost
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- (c) low strength (D) low melting point
16. An example of chemical erosion is
 (A) sand blasting (B) acid etching
 (c) buffing (D) grinding
17. Most retentive materials used in class V are
 (A) Composite (B) Glass inomer cement(expand)
 (c) Zinc Phosphate cement(expand) (D) Amalgam
18. Dental amalgam is most resistant to
 (A) compressive stress (B) impact stress
 (c) shear stress (D) tensile stress
19. Finishing and polishing of amalgam make the restoration
 (A) more resistant to tarnish and corrosion (B) increase the marginal strength
 (c) decrease the resistance to tarnish and corrosion (D) increases the compressive strength
20. Moisture contamination of zinc containing amalgam can lead to:
 (A) marginal breakdown (B) shrinkage
 (c) delayed expansion (D) increased stresses

LONG ESSAY QUESTIONS: 2 X 10 = 20

2. Write classification, composition and uses of Glass Inomer Cement?
3. Classify gypsum products. Write about setting reaction of gypsum products. Discuss properties of alpha and beta hemihydrates.

SHORT ANSWER QUESTIONS: 10 X 3 = 30

4. Enumerate uses of dentin bonding agents
5. Discuss role of primers in bonding
6. Explain in brief sandwich technique
7. Write a note on Gamma 2 Phase
8. Describe Compomer
9. Classify dental casting alloys
10. Write a note on heat sources used for soldering
11. Classify dental ceramics
12. Enumerate the methods of strengthening ceramics
13. Write a note on compaction of direct filling gold

SECOND YEAR BDS DEGREE EXAMINATION (RS & RS2)

Time: 3 Hours

General & Dental Pharmacology & Therapeutics

Q.P. Code: 2005 & 2105

Max. Marks: 70

Objective Instructions	Subjective Instructions
<ul style="list-style-type: none"> • Each question is followed by four options. • Pick up single best option and darken appropriate circle in OMR Sheet • Each question carries one mark. No negative marking 	<ul style="list-style-type: none"> • Answers should be specific to the Questions asked. • Draw neat, labeled diagrams wherever necessary.

1) M.C.Q. 20 X 1 = 20

1. Which of the following is always true:

- | | |
|---|---|
| (A) A more potent drug is more efficacious | (B) A more potent drug is safer |
| (c) A more potent drug is clinically superior | (D) A more potent drug can produce the same response at lower doses |

2. Dr Sunil used edrophonium for differentiating myasthenic crisis from cholinergic crisis. He preferred it over other anticholinesterase agents because of its:

- | | |
|---------------------------------------|---|
| (A) Shorter duration of action | (B) Longer duration of action |
| (c) Direct action on muscle end plate | (D) Selective inhibition of true cholinesterase |

3. Anticholinergic recommended for gastrointestinal hypermotility is

- | | |
|--------------------|------------------|
| (A) Atropine | (B) Benzhexol |
| (c) Gyco pyrrolate | (D) Oxyphenonium |

4. Guanethedine exerts all the following actions in sympathetic transmission EXCEPT:

- | | |
|--|---|
| (A) Blocks axonal uptake | (B) Blocks vesicular uptake |
| (c) Inhibits nerve impulse coupled release of nor-adrenaline | (D) Displacing vesicular nor-adrenaline |

5. All the following are known as eicosanoids except

- | | |
|------------------|--------------------|
| (A) Thromboxanes | (B) Leukotrienes |
| (c) Leucocytes | (D) Prostaglandins |

6. The NSAIDs aggravate the following diseases except

- | | |
|------------------|------------------------------|
| (A) Hypertension | (B) Congestive heart failure |
| (c) Peptic ulcer | (D) Chronic gout |

7. Which of the following drugs is the fastest acting inhaled bronchodilator?

- | | |
|-------------------------|----------------|
| (A) Ipratropium bromide | (B) Formoterol |
| (c) Salbutamol | (D) Salmeterol |

8. The skeletal muscle relaxant most commonly used in intensive care units is:

- | | |
|-----------------|----------------|
| (A) Atracurium | (B) Mivacurium |
| (c) Pancuronium | (D) Vecuronium |

9. Adrenaline added to local anaesthetic solution for infiltration anaesthesia affords the following EXCEPT:

- | | |
|---|--|
| (A) Provides a more bloodless field for surgery | (B) Prolongs the duration of local anaesthesia |
| (c) Makes the injection less painful | (D) Reduces systemic toxicity of the local anaesthetic |

10. All are true statements regarding phenytoin except:

- | | |
|--|--|
| (A) Potent microsomal enzyme inducer | (B) Highly plasma protein bound |
| (c) Follows zero order kinetics at low concentration | (D) Increasing dose increases t _{1/2} |

11. The following drug is effective in chlorpromazine induced parkinsonism:

- | | |
|---------------------|--------------------------|
| (A) Trihexyphenidyl | (B) Selegiline |
| (c) Bromocriptine | (D) Levodopa + Carbidopa |

12. Of the following, choose the antidepressant having both high sedative and high anticholinergic activity:

- | | |
|----------------|-------------------|
| (A) Imipramine | (B) Amitriptyline |
| (c) Fluoxetine | (D) Trazodone |

13. Select the opioid antagonist that is preferred for long term opioid blockade therapy of post addicts:

- | | |
|----------------|--------------|
| (A) Nalorphine | (B) Naloxone |
|----------------|--------------|

(c) Naltrexone

(D) Nalbuphine

14. Clinically, the angiotensin antagonists share the following features of angiotensin converting enzyme inhibitors except:

(A) Antihypertensive efficacy

(B) Potential to reverse left ventricular hypertrophy

(c) Lack of effect on carbohydrate tolerance

(D) Potential to induce cough in susceptible individuals

15. The following diuretic abolishes the corticomedullary osmotic gradient in the kidney:

(A) Acetazolamide

(B) Furosemide

(c) Hydrochlorothiazide

(D) Spironolactone

16. Select the fibrinolytic drug that is antigenic:

(A) Streptokinase

(B) Urokinase

(c) Alteplase

(D) Tenecteplase

17. Histamine H₂ blockers attenuate the gastric secretory response to acetylcholine and gastrin as well because For healing duodenal ulcer, the usual duration of H₂ blocker therapy is:

(A) 4 weeks

(B) 6 weeks

(c) 8 weeks

(D) 12 weeks

18. Super infections are more common with:

(A) Use of narrow spectrum antibiotics

(B) Short courses of antibiotics

(c) Use of antibiotics that are completely absorbed from the small intestines

(D) Use of antibiotic combinations covering both gram positive and gram negative bacteria

19. The following anticancer drug has high emetogenic potential:

(A) Vincristine

(B) Chlorambucil

(c) 6-Mercaptopurine

(D) Cisplatin

20. Which of the following antineoplastic and immunosuppressant drugs is a dihydrofolate reductase inhibitor?

(A) Methotrexate

(B) Adriamycin

(c) Vincristine

(D) Cyclophosphamide

LONG ESSAY QUESTIONS: 2 X 10 = 20

2. Classify NSAIDs. Write mechanism of action, therapeutic uses, adverse effects and contraindications? (3+1+4+2).

3. Classify antianginal drugs. Write mechanism of action, uses and adverse effects of Nitrates. Add a note on nitrate tolerance. (3+3+2+1+1)

SHORT ANSWER QUESTIONS: 10 X 3 = 30

4. Factors prolonging the action of drug

5. Enumerate Insulin preparations and write about newer insulin delivery system.

6. Write the general principles in the drug therapy of epilepsy

7. Write the differences between barbiturates and benzodiazepines

8. Potassium sparing diuretics.

9. Semisynthetic penicillins and their therapeutic uses.

10. Pharmacological actions and uses of H₂ antagonists

11. Name 3 prostaglandin analogues with their indications.

12. Comparative features of tetracyclines

13. Antimotility drugs

SECOND YEAR BDS DEGREE EXAMINATION (RS & RS2) DECEMBER 2020

Time: 90 Minutes

General Pathology

Q.P. Code: 2006 & 2106

Max. Marks: 35

Objective Instructions	Subjective Instructions
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1) M.C.Q. 10 X 1 = 10

- The main function of vitamin E is

(A) Immune regulation	(B) Hepatic microsomal carboxylation
(c) Antioxidant	(D) Maintenance of structure and function of epithelium
- Urinary neutrophil count indicative of acute infection is

(A) >5/ML	(B) >20/ML
(c) >30/ML	(D) >100/ML
- Inherited cancer syndrome include all EXCEPT

(A) Retinoblastoma	(B) Neurofibromatosis
(c) Xeroderma pigmentosa	(D) Adenomatous Polyposis
- All the following are oncogenic viruses, EXCEPT

(A) EBV	(B) HSV-I
(c) HTLV-I	(D) HPV-16
- Osteomalacia is

(A) Normal osteoid, Defective mineralization	(B) Abnormal osteoid, normal mineralization
(c) Abnormal osteoid, abnormal mineralization	(D) Abnormal osteoid, normal remodelling
- The earliest change seen in the bronchial epithelium of a chronic smoker will be

(A) Atrophy	(B) Hypertrophy
(c) Metaplasia	(D) Dysplasia
- Reduction in number and size of parenchymal cells of an organ is

(A) Hyperplasia	(B) Metaplasia
(c) Atrophy	(D) Hypertrophy
- Angiogenesis in cancer is brought about by

(A) Platelet derived growth factor	(B) Vascular endothelial growth factor
(c) Transfer factor	(D) ICAM - 1
- Sarcomas spread most commonly by which route

(A) Transcoelomic pathway	(B) Haematogenous
(c) Lymphatic	(D) None of the above
- Increased eosinophilia of necrotic cell is due to

(A) Protein denaturation	(B) Karyorrhexis
(c) Cellular swelling	(D) Ribosomal detachment

LONG ESSAY QUESTIONS: 1X 10 = 10

- Classify bone tumours and write the morphology of osteosarcoma

SHORT ANSWER QUESTIONS: 5 X 3 = 15

- Pathogenesis of Fatty change
- Rh blood group and its importance
- Enumerate the opportunistic infections in AIDS
- Squamous cell carcinoma-sites, gross & microscopy
- Name the tests done in a routine detailed examination of urine.

SECOND YEAR BDS DEGREE EXAMINATION (RS & RS2) DECEMBER 2020

Time: 90 Minutes

Microbiology Q.P. Code: 2007 & 2107

Max. Marks: 35

Objective Instructions	Subjective Instructions
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1) M.C.Q. 10 X 1 = 10

- An example for transport medium is

(A) Peptone water	(B) Chocolate agar
(c) Nutrient agar	(D) Amie's medium
- Polymerase chain reaction was discovered by

(A) Robbin Warren	(B) Salk
(c) Watson and Crick	(D) Kary Mullis
- Father of Microbiology is

(A) Robert Koch	(B) Louis Pasteur
(c) Antony Van Leeuwenhoek	(D) Edward Jenner
- Tubercle bacillus was discovered by

(A) Hansen	(B) Loeffler
(c) Robert Koch	(D) Bruce
- Chinese letter arrangement is characteristic of

(A) Mycobacterium tuberculosis	(B) Bacillus anthracis
(c) Corynebacterium diphtheriae	(D) Clostridium tetani
- Hot air oven is used to sterilise

(A) Pharmaceutical powders	(B) Oils
(c) Culture media	(D) Soiled dressings
- Postzone phenomenon is due to excess amount of

(A) Antigen	(B) Antibody
(c) Complement	(D) Electrolytes
- ASLO is an example of

(A) Precipitation test	(B) Neutralization test
(c) Agglutination Test	(D) Hemagglutination
- Which Immunoglobulin is found in milk

(A) IgG	(B) IgM
(c) IgA	(D) IgD
- Shape of Gonococcus is described as:

(A) Lanceolate	(B) Spherical
(c) Kidney shaped	(D) Safety pin

LONG ESSAY QUESTIONS: 1 X 10 = 10

- Discuss in Detail Pathogenesis and Laboratory Diagnosis of Oral Candidiasis (4+6=10)

SHORT ANSWER QUESTIONS: 5 X 3 = 15

- Describe the Morphological classification of fungi.
- Describe the laboratory diagnosis of Hepatitis B virus infection.
- Write the laboratory diagnosis of Malaria.
- Write 3 differences between active & passive immunity
- Write briefly the infections caused by staphylococcus.

