

SECOND YEAR BDS DEGREE EXAMINATION (RS & RS2) 2021 FEBRUARY

Time: 3 Hours

General & Dental Pharmacology & Therapeutics

Q.P. Code: 2005 & 2105

Max. Marks: 70

<u>Objective Instructions</u>	<u>Subjective Instructions</u>
<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. Essential drugs are:

- | | |
|---|--|
| (A) Life saving drugs | (B) Drugs that meet the priority health care needs of the population |
| (c) Drugs that must be present in the emergency bag of a doctor | (D) Drugs that are listed in the pharmacopoeia of a country |

2. The therapeutic index of a drug is a measure of its:

- | | |
|--------------|----------------------|
| (A) Safety | (B) Potency |
| (c) Efficacy | (D) Dose variability |

3. Mechanism of action of pralidoxime is

- | | |
|----------------------------------|------------------------------------|
| (A) Stimulation of ACh receptors | (B) Inhibition of breakdown of ACh |
| (c) Blockade of ACh receptors | (D) Reactivation of AChE enzyme |

4. The Mydriatic anticholinergic is:

- | | |
|-----------------|-----------------|
| (A) Clidinium | (B) Tiotropium |
| (c) Tropicamide | (D) Dicyclomine |

5. Low doses of adrenaline dilate the following vascular bed

- | | |
|---------------|---------------------|
| (A) Cutaneous | (B) Mucosal |
| (c) Renal | (D) Skeletal muscle |

6. The first choice drugs in the treatment of open glaucoma are

- | | |
|-------------------------------|------------------------------|
| (A) Alpha adrenergic blockers | (B) Beta adrenergic blockers |
| (c) Miotics | (D) Prostaglandin analogues |

7. Drug used for acute paracetamol poisoning is

- | | |
|------------------------|------------------------|
| (A) Ketotifen | (B) Benzoyl salicylate |
| (c) Protamine sulphate | (D) N-acetylcysteine |

8. Tamoxifen is useful in:

- | | |
|---|---------------------|
| (A) Carcinoma prostate | (B) Carcinoma ovary |
| (c) Estrogen receptor positive breast carcinoma | (D) Seminoma |

9. Which of the following is a depolarising neuromuscular blockade:

- | | |
|---------------------|----------------|
| (A) Mivacurium | (B) Dantrolene |
| (c) Succinylcholine | (D) Quinine |

10. Which sensation is blocked first by low concentrations of a local anaesthetic :

- | | |
|-----------------|-------------------|
| (A) Pain | (B) Touch |
| (c) Temperature | (D) Deep pressure |

11. Clobazam is a benzodiazepine used as

- | | |
|-----------------|---------------------|
| (A) Hypnotic | (B) Muscle relaxant |
| (c) Anaesthetic | (D) Antiepileptic |

12. True statement about drugs used in Parkinsonism is:

- | | |
|--|---|
| (A) Amantadine is a cholinergic drug | (B) Vitamin B6 enhances the L-Dopa action |
| (c) COMT inhibitors prolong the action of L-dopa | (D) None |

13. Select the psychotropic drug having a narrow safety margin:

- | | |
|-----------------------|----------------|
| (A) Chlorpromazine | (B) Buspirone |
| (c) Lithium carbonate | (D) Fluoxetine |

14. Actions of morphine include the following except:
 (A) Vagal stimulation (B) Miosis
 (c) Antiemetic (D) Postural hypotension
15. Ventricular remodelling after myocardial infarction involves the mediation of:
 (A) Angiotensin II (B) Prostaglandin
 (c) Bradykinin (D) Thromboxane A2
16. The primary site of action of thiazide diuretics is:
 (A) Proximal tubule (B) Ascending limb of loop of Henle
 (c) Cortical diluting segment (D) Collecting ducts
17. Hydroxyethyl starch is a:
 (A) Plasma expander (B) Haemostatic
 (c) Heparin substitute (D) Bile acid sequestrant
18. Gynaecomastia can occur as a side effect of:
 (A) Bromocriptine (B) Cimetidine
 (c) Famotidine (D) Omeprazole
19. Superinfection is common in:
 (A) Narrow spectrum antibiotics (B) Immunocompromised host
 (c) Low spectrum antibiotics (D) Nutritional deficiency
20. Most commonly used immunosuppressants are:
 (A) Glucocorticoids (B) Cyclosporine
 (c) Tacrolimus (D) Methotrexate

LONG ESSAY QUESTIONS: 2 X 10 = 20

2. Enumerate various routes of drugs with suitable examples. Add a note on redistribution phenomenon? (8+2)
3. Classify the bronchodilators used in asthma. Write the MOA, therapeutic uses and adverse effects of salbutamol in asthma. (2+2+2+2+2)

SHORT ANSWER QUESTIONS: 10 X 3 = 30

4. Sources of drugs
5. Enumerate Atropine substitutes. Mention their uses
6. Drugs used for Migraine.
7. Explain the MOA and therapeutic use of Sulfonylurea.
8. Define preanesthetic medication. Write its aims and various classes of drugs used with rationale.
9. Write about the management of parkinsonism
10. Write uses and adverse effects of Digoxin.
11. Beta lactamase inhibitors
12. Proton pump inhibitors
13. Drug synergism

SECOND YEAR BDS DEGREE EXAMINATION (RS & RS2) FEBRUARY 2021

Time: 2 Hours

General Pathology Q.P. Code: 2006 & 2106

Max. Marks: 35

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. 10 X 1 = 10

1. A state of hypervitaminosis occurs in

(A) Vit A & Vit B	(B) Vit B & Vit C
(c) Vit C & Vit D	(D) Vit A & Vit D
2. Presence of needle shaped strongly birefringent crystals in synovial fluid indicate

(A) Gouty arthritis	(B) Osteoarthritis
(c) Rheumatoid arthritis	(D) Suppurative arthritis
3. All the following are oncogenic viruses, EXCEPT

(A) EBV	(B) HSV-I
(c) HTLV-I	(D) HPV-16
4. Which of the following statements about metaplasia is FALSE

(A) It is reversible	(B) In squamous metaplasia the columnar cell changes to a squamous cell
(c) It is not a precancerous condition	(D) Barrett oesophagus is squamous to columnar metaplasia
5. The normal nuclear to cytoplasmic ratio is

(A) 1:01	(B) 1:02
(c) 1:03	(D) 1:04
6. Features of anaplasia are all EXCEPT:

(A) Bizarre atypical mitosis	(B) Marked cellular pleomorphism
(c) Loss of polarity	(D) Well differentiated tumour
7. Chemically diagnostic useful laboratory sign of cell injury is

(A) Increased Creatinine Kinase (Muscle cell injury)	(B) Reduced Transaminase levels
(c) LDH is normal	(D) Serum creatinine is zero
8. Coagulative necrosis is seen in

(A) Tuberculosis of the lung	(B) Syphilis
(c) Myocardial infarction	(D) Bone marrow necrosis
9. Clostridium perfringens is

(A) Gram positive cocci	(B) Gram positive bacilli
(c) Gram negative cocci	(D) Gram negative bacilli
10. Massive Blood transfusion results in

(A) Air Embolism	(B) Citrate toxicity
(c) Thrombocytopenia	(D) DIC

LONG ESSAY QUESTIONS: 1X 10 = 10

2. Discuss the healing of fractured bone and its complications. (7+3=10)

SHORT ANSWER QUESTIONS: 5 X 3 = 15

3. Discuss Pathogenesis of acquired-Immuno deficiency syndrome [AIDS].
4. Differences between Tuberculoid and Lepromatous leprosy
5. Actinomycosis -Gross & Microscopy
6. Laboratory findings in chronic Myeloid leukaemia.
7. Etiology of squamous cell carcinoma of skin.

SECOND YEAR BDS DEGREE EXAMINATION (RS & RS2) FEBRUARY 2021

Time: 1 Hours

Microbiology Q.P. Code: 2007 & 2107

Max. Marks: 35

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. 10 X 1 = 10

- An example for enriched medium is

(A) Nutrient agar	(B) MacConkey agar
(C) Stuart's medium	(D) Chocolate agar
- 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
- ELISA is used for the detection of

(A) Antigen	(B) Antibody
(C) Complement	(D) All of the above
- Confirmatory test for syphilis is

(A) VDRL test	(B) RPR test
(C) TPHA test	(D) Wassermann's CFT
- Whooping cough is caused by

(A) <i>Cardiobacterium hominis</i>	(B) <i>Bordetella pertussis</i>
(C) <i>Francisella tularensis</i>	(D) <i>Yersinia pseudotuberculosis</i>
- Presence of nasal polyp is a feature of

(A) Rhinosporidiosis	(B) Chromoblastomycosis
(C) Sporotrichosis	(D) Eumycetoma
- Acute gastroenteritis in children is caused by

(A) Norwalk virus	(B) Rota virus
(C) Adeno virus	(D) Calci virus
- Subacute Sclerosing Panencephalitis is a complication of

(A) Mumps	(B) Measles
(C) Chicken pox	(D) Polio
- Most common route of spread of Hepatitis E is

(A) Sexual	(B) Fecooral
(C) Blood transfusion	(D) IV injection

LONG ESSAY QUESTIONS: 1 X 10 = 10

- Define and classify Hypersensitivity. Describe Type IV hypersensitivity with example. (2+3+5=10)

SHORT ANSWER QUESTIONS: 5 X 3 = 15

- Discuss in detail the lesions caused by *Candida* species.
- Describe viral inclusion bodies
- Draw neat labelled diagram of HIV virus.
- Describe the laboratory diagnosis of Hepatitis B virus infection.
- Write a note on complications of malaria

SECOND YEAR BDS DEGREE EXAMINATION (RS & RS2) FEBRUARY 2021

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

- Hysteresis in a hydrocolloid gel is
 - Moisture absorption
 - Temperature lag between gelation and liquefaction
 - Phenomenon of conversion of gel into sol
 - All the above
- Elastomers are
 - Alginate
 - Agar
 - Polyethers
 - Impression compound
- Trisodium phosphate in alginate acts as
 - Retarder
 - Reacter
 - Accelerator
 - Plasticizer
- Ductility of a material is a measure of its :
 - Grain elongation
 - Annealing
 - Cold working
 - Work hardening
- Green strength with reference to plaster means
 - Dry strength
 - Compressive strength
 - Strength of dental stone due to green colour
 - The wet strength
- Water : powder ratio for class IV stone is:
 - 0.22-0.24
 - 0.24-0.28
 - 0.65-0.70
 - 0.45-0.28
- Teralba Is
 - Pieces of gypsum added to plaster of paris
 - Metal containing titanium and aluminium
 - A constituent of modeling wax
 - Allergic reaction to orthodontic wires
- In heat cure acrylic resins the monomer is
 - Methacrylate
 - ethylmethacrylate
 - methyl ethyl methacrylate
 - polymethyl methacrylate
- Boiling point of methyl acrylate is
 - Greater than boiling point of water
 - lesser than boiling point of water
 - equal to boiling point of water
 - at room temperature
- Stress is defined as
 - An applied load or force
 - a deformation resulting from an applied load
 - an external force opposing an applied load
 - an internal force opposing an applied load
- Which of the following hardness test is a micro hardness test
 - Brinell
 - knoop
 - shore-A
 - rockwell
- Phenomenon in which porcelain appears different under varying light condition is:
 - Ranslucency
 - refractive optics
 - metamarism
 - opacification
- Stainless steel orthodontic wire can be hardened by:
 - Tempering
 - work hardening
 - age hardening
 - precipitation hardening
- Density of gold is
 - 17g/cm³
 - 19.3g/cm³
 - 15.9g/cm³
 - 16g/cm³
- The function of sprue is to

- (A) form an opening for molten metal to enter the mould
(B) help in polishing of castings
(c) eliminates air bubbles on wax pattern
(D) reproduce fine details
16. Solubility in oral fluids is the least for
(A) Glass Ionomer cement
(B) Zinc Phosphate cement
(c) Silicophosphate cement
(D) Resin cement
17. Pit and Fissure sealants should be
(A) highly adaptive
(B) Have low viscosity
(c) transparent
(D) highly viscous
18. Major components of the dental amalgam alloys are
(A) silver and tin
(B) silver and copper
(c) copper and zinc
(D) silver and copper
19. Dental amalgam is most resistant to
(A) compressive stress
(B) impact stress
(c) shear stress
(D) tensile stress
20. What is Cermet cement
(A) GIC with porcelain ceramic fillers
(B) GIC with silver amalgam alloy sintered in glass particles
(c) A mixture of glass ionomer and resin cement
(D) Cermet cement is light curable glass ionomer cement

LONG ESSAY QUESTIONS: 2 X 10 = 20

2. Write in detail about composition, classification and properties of dental amalgam along with methods of manipulation
3. Classify impression materials. Write the advantages and disadvantages of irreversible hydrocolloids? add a note on laminate technique?

SHORT ANSWER QUESTIONS: 10 X 3 = 30

4. Define smear layer?
5. List indications of pit and fissure sealant and materials used in it?
6. Write a note on Gamma 2 Phase
7. Write a note on the advantages of Zinc free alloy
8. Classify Direct filling gold
9. Write a note on internal porosity of dental base resins
10. Write a note on resin teeth used for prosthetic application
11. Write a note on ductility and malleability
12. Write a note on suck-back porosity in dental casting alloys
13. Discuss in brief dentrifices used in dentistry