

FIRST YEAR BDS DEGREE EXAMINATION (RS & RS2) JANUARY 2023

Time: 3 Hours General Human Physiology & Biochemistry Nutrition & Dietics Q.P. Code: 2102
& 2103 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. (SECTION A PHYSIOLOGY) 10 X 1 = 10

- Major electrolyte present in extracellular fluid [ECF] is
 - Potassium
 - Magnesium
 - Sodium
 - Calcium
- Spontaneous release of acetylcholine at the neuromuscular junction produces:
 - Miniature end plate potential
 - Action potential
 - Post-tetanic potential
 - Resting membrane potential
- Clotting time is prolonged in all except
 - Haemophilia.
 - Thrombocytopenia
 - Vit K. Deficiency
 - Afibrinogenemia
- Most of the Co₂ transported in blood is
 - dissolved in plasma
 - bound to Chloride
 - in carbamino form
 - in bicarbonate form
- Which phase of the Deglutition is involuntary
 - Oral & oesophageal
 - Pharyngeal & Oesophageal
 - Only Oesophageal
 - Oral & Pharyngeal
- Most common type of Hypertension is
 - Secondary hypertension
 - Essential Hypertension
 - Hypertension due to renal disease
 - Hypertension due to thyrotoxicosis
- Patients with diabetes mellitus will have :
 - Water diuresis
 - No diuresis
 - Osmotic diuresis
 - Voluntary diuresis
- Circadian rhythm is controlled by which nuclei of hypothalamus:
 - Paraventricular
 - Ventromedial
 - Arcuate
 - Suprachiasmatic
- Short Sightedness is
 - Hypermetropia
 - Presbyopia
 - Myopia
 - Astigmatism
- Basal metabolic rate is increased by
 - Thyroxine
 - Antidiuretic hormone
 - Insulin
 - Oxytocin

LONG ESSAY QUESTIONS:(SECTION A PHYSIOLOGY) 1 X 10 = 10

- Describe the pathway for corticospinal tract with a neat diagram. Explain the differences between UMN & LMN lesions. [6+4]

SHORT ANSWER QUESTIONS: (SECTION A PHYSIOLOGY) 5 X 3 = 15

- Explain the hazards of mismatched blood transfusion.
- Explain the movements of small intestine.
- Explain the Conducting system of heart.
- Explain the functions of Juxta Glomerular Apparatus.
- List the female contraceptive methods. Explain anyone of them.

M.C.Q. (SECTION B: Biochemistry) 10 X 1 = 10

11. Immunoglobulins are classified on the basis of
 (A) Type of light chains (B) Type of heavy chains
 (c) Types of light and heavy chains (D) Molecular weight
12. Recommended Daily allowance (RDA) of iron for an adult Indian is
 (A) 5mg (B) 20mg
 (c) 200mg (D) 500mg
13. The following function is NOT performed by nucleotides
 (A) Structural units of DNA and RNA (B) Regulators of metabolic reactions
 (c) Components of certain coenzymes (D) Catalytic in nature
14. Bile salts help in absorption of dietary lipids by the following mechanism
 (A) Producing the micellar state of lipids (B) Incorporation of cholesterol into chylomicron
 (c) Converting triglyceride to 2- monoacyl glycerol (D) Providing optimum pH for lipase activity
15. The ketone bodies are synthesised mainly in the following organ
 (A) Liver (B) Adipose tissue
 (c) Brain (D) Skeletal muscle
16. Following is the optimum pH for action of pepsin in the stomach
 (A) 1 (B) 4
 (c) 6 (D) 11
17. Creatine kinase level in serum is increased in :
 (A) Myocardial Infarction (B) Infective hepatitis
 (c) Prostate cancer (D) Intravascular hemolysis
18. Casein, the milk protein is an example of
 (A) Nucleoprotein (B) Chromoprotein
 (c) Phosphoprotein (D) Lipoprotein
19. Following food stuff exerts maximum specific dynamic action.
 (A) Carbohydrate (B) Fat
 (c) Protein (D) Vitamin
20. The active form of the following Vitamin is considered as a hormone :
 (A) Vitamin B12 (B) Vitamin K
 (c) Vitamin D (D) Vitamin B1

LONG ESSAY QUESTIONS: (SECTION B BIOCHEMISTRY) 1 X 10 = 10

8. Define lipids. Classify lipids with suitable examples and discuss functions of each class

SHORT ANSWER QUESTIONS: (SECTION B BIOCHEMISTRY) 5 X 3 = 15

9. Explain the competitive inhibition with an example.
10. Discuss the alpha helix and beta pleated sheet arrangement in proteins
11. Define Transamination. Discuss the clinical significance of transaminases
12. Enumerate the Respiratory Quotient(RQ) values for Carbohydrates, Proteins and Lipids
13. Enumerate Normal serum levels of Total Protein and Albumin, and A:G ratio.

SECOND YEAR BDS DEGREE EXAMINATION (RS & RS2) JANUARY 2023

Time: 3 Hours

General Pathology Q.P. Code: 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. (SECTION A PATHOLOGY) 10 X 1 = 10

- Dry gangrene is a type of

(A) Caseation necrosis	(B) Coagulative necrosis
(c) Fat necrosis	(D) Liquefactive necrosis
- A clean incised wound heals by

(A) Primary intention	(B) Secondary intention
(c) Excessive scarring	(D) Excessive contraction
- Lepra cells are

(A) Neutrophils	(B) Plasma cells
(c) Histiocytes	(D) Lymphocytes
- Marker for Hepatitis B carrier state is

(A) HBsAg	(B) HBcAg
(c) HBe Ag	(D) HBd Ag
- Oedema is characteristically dependent in

(A) Cardiac oedema	(B) Nephrotic oedema
(c) Nephritic oedema	(D) Pulmonary oedema
- The commonest source of embolism is

(A) Air	(B) Fat
(c) Thrombus	(D) Amniotic fluid
- Reduction in number and size of parenchymal cells of an organ is

(A) Hyperplasia	(B) Metaplasia
(c) Atrophy	(D) Hypertrophy
- Malignant tumour arising from the lining epithelium is called

(A) Sarcoma	(B) Carcinoma
(c) Lymphoma	(D) Melanoma
- Which enzyme rises earliest in Myocardial infarction

(A) Creatine Kinase	(B) LDH1
(c) LDH2	(D) SGOT
- Megaloblastic anaemia in pregnancy is due to

(A) Deficiency of Vitamin B12	(B) Deficiency of folic acid
(c) Deficiency of iron	(D) Erythroblastosis fetalis

LONG ESSAY QUESTIONS: (SECTION A PATHOLOGY) 1X 10 = 10

- Define thrombosis. Describe the pathogenesis of thrombosis (2+8=10)

SHORT ANSWER QUESTIONS: (SECTION A PATHOLOGY) 5 X 3 = 15

- Mention six causes of fatty liver.
- Describe the Mechanism of wound healing by first intention.
- Discuss etiopathogenesis of Pyogenic osteomyelitis
- List the laboratory investigations for Diabetes Mellitus
- Describe the Peripheral blood smear findings in Iron deficiency anaemia.

SECOND YEAR BDS DEGREE EXAMINATION (RS & RS2) JANUARY 2023

Time: 3 Hours

Microbiology Q.P. Code: 2107

Max. Marks: 35

<u>Objective Instructions</u>	<u>Subjective Instructions</u>
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M.C.Q. 10 X 1 = 10

- Pathogen not satisfying Koch's postulate is

(A) B. anthracis	(B) M. tuberculosis
(c) Cl. tetani	(D) M.leprae
- Pasteurisation is an ideal method for sterilising milk as

(A) It kills all bacteria and spores	(B) It kills all bacteria except thermophilic bacteria
(c) It kills 95% of microorganisms	(D) All bacteria are destroyed
- Which Immunoglobulin is found in milk

(A) IgG	(B) IgM
(c) IgA	(D) IgD
- Staphylococcus aureus does not secrete the following

(A) Pyrogenic exotoxin	(B) coagulase
(c) DNase	(D) Hyaluronidase
- An example of anaerobic medium is

(A) Tetrathionate	(B) Muller Hilton
(c) Fluid thioglycollate	(D) Carry Blair
- Cholera toxin resembles

(A) Labile toxin of E. coli	(B) Tetanus toxin
(c) Diphtheria toxin	(D) Stable toxin of E. coli.
- Satellitism is characteristic feature of

(A) Hemophilus influenzae	(B) Streptococcus pneumoniae
(c) Bacillus anthracis	(D) Yersinia pestis
- Presence of nasal polyp is a feature of

(A) Rhinosporidiosis	(B) Chromoblastomycosis
(c) Sporotrichosis	(D) Eumycetoma
- The gene coding for core of HIV is

(A) gag	(B) env
(c) pol	(D) tat
- Salivary glands are affected in infection produced by

(A) Epstein Barr	(B) Varicella
(c) Cytomegalovirus	(D) Herpes simplex-I

LONG ESSAY QUESTIONS: 1 X 10 = 10

- Describe morphology, pathogenicity and clinical features of HIV virus infection. [3+3+4]

SHORT ANSWER QUESTIONS: 5 X 3 = 15

- Describe in brief the Germ Tube Test
- Write the laboratory diagnosis of Malaria.
- Describe Type IV hypersensitivity and give examples.
- Describe the Structure & functions of IgG.
- What is the Classification of streptococci?

THIRD YEAR BDS DEGREE EXAMINATION (RS & RS2) JANUARY 2023

Time: 3 Hours

General Surgery Q.P. Code: 2110

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

- Treatment of choice for mandibular fractures is
 - open reduction and internal fixation
 - intermaxillary fixation
 - conservative
 - none of the above
- Most common organism causing osteomyelitis of mandible is
 - Staphylococcus aureus
 - Salmonella typhi
 - Streptococcus pyogenes
 - Klebsiella
- Investigation of choice in discrete thyroid swellings is
 - USG neck
 - Fine needle aspiration cytology
 - Radio iodine scan
 - none of the above
- Select the correct statement for total thyroidectomy
 - 2xtotal lobectomy + isthmusectomy
 - 2 x subtotal lobectomy + isthmusectomy
 - total lobectomy + isthmusectomy
 - none of the above
- Tumour marker used in thyroid carcinoma is
 - thyroid autoantibodies
 - thyroglobulin
 - thyroid stimulating antibody
 - all of the above
- Medullary carcinoma is associated with which syndrome ?
 - MEN 1 syndrome
 - MEN2A syndrome
 - Marfan syndrome
 - CREST syndrome
- All are late complications of tracheostomy except
 - tracheo cutaneous fistula
 - haemorrhage
 - tracheeal stenosis
 - tracheo-oesophageal fistula
- All are causes of hypercalcemia except
 - Primary hyperparathyroidism
 - Primary hupoparathyroidism
 - Lithium induced
 - Milk alkali syndrome
- Causes of secondary hyperparathyroidism include all except
 - chronic kidney disease
 - gi malabsorption
 - vitamin D excess
 - vitamin D deficiency
- Which hormone is the physiological antagonist of parathyroid hormone
 - Vitamin D3
 - Calcitonin
 - Insulin
 - Somatostatin
- Causes of cardiogenic shock are all except?
 - Cardiomyopathy
 - Myocardial infarction
 - Cardiac tamponade
 - Valvular disease
- Systolic BP begins to fall in which stage of shock
 - Compensated
 - Mild
 - Moderate
 - Severe
- Which is the feature of occult hypoperfusion
 - Reduced Urine output
 - Tachycardia
 - Lactic acidosis
 - Hypotension
- Which blood product is used for emergency reversal of anticoagulant therapy?
 - Platelets
 - Cryoprecipitate
 - Prothrombin complex concentrates
 - FFP
- Goodsall's rule in fistula in ano is used to identify ?
 - Secondary tracts
 - external opening

- (c) internal opening (D) none
16. Which types of ulcers are painful?
 (A) Syphilitic ulcer (B) Trophic ulcer
 (c) Squamous cell ca (D) arterial ulcer
17. Wash leather slough is pathognomonic of
 (A) Syphilitic ulcer (B) Tuberculous ulcer
 (c) rodent ulcer (D) diabetic ulcer
18. What type of edges do healing ulcers have?
 (A) Undermined (B) sloping
 (c) rolled out (D) none
19. Needle-stick injuries are most common on the
 (A) non-dominant index finger (B) dominant index finger
 (c) non-dominant thumb (D) dominant ring finger
20. Gas gangrene is caused by
 (A) clostridium difficile (B) clostridium botulinum
 (c) clostridium perfringens (D) clostridium butyricum

LONG ESSAY QUESTIONS: 2 X 10 = 20

2. What are the surgical indications of blood transfusion? Enumerate the various blood products with 2 example each for their use.[5+5]
3. Describe anatomical sites of Fracture mandible. Write on mechanism of injury and the principles of treatment their management

SHORT ANSWER QUESTIONS: 10 X 3 = 30

4. Define and Classify Shock.
5. Phases of wound healing
6. Pathological classification of ulcers
7. Squamous cell carcinoma
8. Branchial Fistula
9. Define Sinus.give 2 examples for a sinus
10. Papillary Carcinoma of thyroid
11. Primary Hyperparathyroidism
12. Emergency Tracheostomy
13. Describe acute inflammation in short

FOURTH YEAR BDS DEGREE EXAMINATION JANUARY 2023

Time: 3 Hours

Orthodontics Q.P. Code: 2113

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. Resorption in case of ideal orthodontic tooth movement should be

(A) Undermining	(B) Frontal
(c) Indirect	(D) Necrotic
2. In orthodontic tooth movement which cells are involved

(A) Osteoblasts	(B) Osteoclasts
(c) Both A and B	(D) melanocytes
3. Tooth movement easily accompanied by use of removable orthodontic appliance is:

(A) Translation	(B) Tipping
(c) Rotation	(D) Extrusion
4. Heavy forces on periodontal ligament causes

(A) Hyalinisation	(B) Osteoclastic activity around tooth
(c) Osteoblastic activity around tooth	(D) Crest bone resorption
5. Frankfurt- Horizontal plane is formed by joining

(A) Nasion and sella	(B) Porion and orbitale
(c) Porion and sella	(D) Porion and nasion
6. X rays were discovered by

(A) Becquerel	(B) Madam Curie
(c) Roentgen	(D) Rutherford
7. If normal SNA = 82°. A patient having SNA = 90° would suggest:

(A) Maxillary teeth protrusion	(B) Maxillary Protrusion
(c) Mandibular Protrusion	(D) Mandibular retrusion
8. The appliance of choice for treatment for maxillary retrusion

(A) Activator	(B) Bionator
(c) Delaire's face mask	(D) Frankel regulator 3
9. In children median diastema between maxillary permanent centrals closes with the eruption of?

(A) Maxillary permanent first premolar	(B) Maxillary permanent first central incisor
(c) Maxillary permanent canine	(D) Maxillary permanent second molar
10. Ugly duckling stage affects

(A) Maxillary anterior teeth	(B) Mandibular anterior teeth
(c) Both maxillary and mandibular anterior teeth	(D) Decrease in vertical height
11. In new born child we generally see

(A) Maxillary Protrusion	(B) Maxillary retrusion
(c) Mandibular protrusion	(D) Mandibular retrusion
12. which of the following is self correcting anomaly?

(A) Ugly-duckling stage	(B) Deep bite
(c) Retrusion	(D) Protrusion
13. Retained mandibular deciduous central incisors will result in

(A) Lingual eruption of mandibular permanent incisors	(B) Labial eruption of mandibular permanent incisors
(c) Impaction of mandibular permanent incisors	(D) Ankylosis of mandibular permanent incisors
14. Acromegaly is associated with

(A) Class I malocclusion	(B) Class II malocclusion
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- (c) Class I cross bite (D) Class III malocclusion
15. In adenoid faces, the facial profile is
 (A) Long and wide (B) Long and narrow
 (c) Short and wide (D) Short and narrow
16. Which malocclusion will not lead to straining of lips?
 (A) Class II Div 1 (B) Class II div 2
 (c) Bimaxillary protrusion (D) None
17. Scissors bite is term used to describe
 (A) Anterior posterior crowding with deep bite (B) Posterior cross bite
 (c) The type of cross bite where maxillary segments contain full mandibular segments (D) A type of anterior cross bite
18. Which of the following procedure is best suited to correct bimaillary protrusion?
 (A) Extraction of four premolars and anterior alveolar repositioning (B) Mandibular body osteotomy and posterior maxillary osteotomy
 (c) Sub condylar osteotomy (D) None of the Above
19. Midline diastema should be corrected
 (A) As early as possible (B) Only if protrusion of teeth present
 (c) Only if patient wants it (D) After eruption of permanent canines
20. Prolonged retention is usually needed in
 (A) Diastema (B) Mild crowding
 (c) Anterior cross bite (D) Deep bite

LONG ESSAY QUESTIONS 2 X 10 = 20

2. List the various indications of space gaining. Explain in detail different methods of gaining space
3. Define removable orthodontic appliances. Explain in detail about clasps used in orthodontics?

SHORT ANSWER QUESTIONS 10 X 3 = 30

4. Describe the difference between frontal resorption and undermining resorption
5. Explain the differences between orthodontic and orthopaedic forces.
6. List the Ideal requirements of space maintainers
7. Describe Adams clasp in detail and list out the modifications.
8. List the passive parts of fixed appliances.
9. Explain the mode of action activator
10. Write about uses of posterior bite planes used in orthodontics.
11. Discuss the types of retention
12. What are the causes of relapse post orthodontic treatment.
13. Distinguish between Hawley's and Begg's retainers.