

# *Madhya Pradesh Medical Science University, Jabalpur*

## *Scheme of Examination of Dental First Year (BDS)*

### **I. Subjects of Study: First Year**

- i) General Human Anatomy including Embryology and Histology (Examination at the end of first academic year)
- ii) General Human Physiology and Biochemistry, Nutrition and Dietics (Examination at the end of first academic year)
- iii) Dental Anatomy, Embryology and Oral Histology (Examination at the end of first academic year)
- iv) Dental Materials: (Examination at the end of second academic year)
- v) Pre-clinical Prosthodontics and Crown & Bridge (Examination at the end of second academic year)

### **II. Scheme of Examination**

The Scheme of examination of B.D.S. course shall be divided into **5 professional examinations**, viz., I.B.D.S. Examination at the end of first academic year, II B.D.S. at the end of second academic year, III B.D.S. at the end of third academic year and IV B.D.S. examination at the end of fourth academic year and V B.D.S. examination at the end of fifth academic year.

### **BDS I EXAMINATION SHALL HAVE FOLLOWING SUBJECTS AND MARKS**

<b>Subjects</b>	<b>Theory Paper</b>	<b>Viva voce</b>	<b>Internal Assessment</b>	<b>Practical examination</b>	<b>Internal Assessment</b>	<b>Grand Total</b>
I BDS 1. General Anatomy including Embryology and Histology	70	20	10	90	10	200
2. Section-A General Human Physiology And Section-B Biochemistry Nutrition and Dietics	35	10	05	45	05	200
	35	10	05	45	05	
3. Dental Anatomy, Embryology and Oral Histology.	70	20	10	90	10	200

### **III. i. Internal Assessment**

The internal assessment need not be limited to written tests. It should relate to other items such as maintenance of records, participation in seminars and group discussions, clinical case study, proficiency in carrying out practical or clinical skill or participation in projects and assignments (even) during vacation. These be evaluated objectively and recorded. The weightage given to practical/clinical examinations.

A minimum of three internal assessments to be held in an academic year and the average of best two of these tests shall be sent to the university.

#### **INTERNAL ASSESSMENT FOR SUBJECTS (i-iii) which are to be examined in First year.**

Total Marks : 40- Theory 20 and Practical 20

#### **THEORY : 20 Marks**

Minimum of three examinations are recommended. The sessional examination preceding the university examination may be similar to the pattern of university examination. Average of any two best marks obtained in the notified internal examinations may be taken into consideration for calculating internal assessment. The total marks be reduced to 20 and sent to the university.

#### **PRACTICALS : 20 Marks**

There will be two terminal practical examinations. 5 marks will be for records and 15 marks for terminal tests. Average marks of the two terminal examinations shall be reduced to 15 marks and added to the marks obtained for records and sum of the two shall be sent to the university.

The internal assessment marks both theory and practical obtained by the candidates should be sent to the university as per academic calendar of MPMSU and notifications.

**IV. ii. University Examination:**

There shall be two examinations annually (Main and Supplementary) conducted at an interval of not less than four to six months. The written examination in each subject shall consist of one paper of three hours duration and shall have maximum of 70 marks.

**V. Type of questions and distribution of marks:**

Each question paper shall be of 3 hours duration, carrying maximum marks of 70. There shall be three types of questions with distribution of marks as shown in Table I:

**Table – I**

Type of Questions	No. of Questions	Marks of Questions	Total Marks
Long Essay Type (One of them may be case scenario on Applied aspect)	2	10	20
Short Essay Type	10	3	30
Short Answer Type	10	2	20
<b>GRAND TOTAL</b>			<b>70</b>

**Note: In case of Physiology & Biochemistry**

The distribution of marks and types of questions will be as shown in Table-II and III.

**Table – II**

	Type of Questions	No. of Questions	Marks of Questions	Total Marks
Physiology	Long Essay Type	01	10	10
	Short Essay Type	05	03	15
	Short Answer Type	05	02	10
	<b>GRAND TOTAL</b>			<b>35</b>

**Table – III**

	Type of Questions	No. of Questions	Marks of Questions	Total Marks
Biochemistry Nutrition and Dietics	Long Essay Type	01	10	10
	Short Essay Type	05	03	15
	Short Answer Type	05	02	10
	<b>GRAND TOTAL</b>			<b>35</b>

**Note: One Long Essay type in either of the two sections can be a case scenario based on applied aspects.**

**VI. Distribution of Marks in University Examination and Internal Assessment for various subjects is shown in Table IV:**

**Table – IV**

**Distribution of Marks in University Examination and Internal Assessment for various subjects of First year:**

**Scheme of Examination: General Anatomy including Embryology and Histology**

**A. Theory : 70 Marks**

**Distribution of Topics and Type of Questions;**

<b>Contents</b>	<b>Type of Questions and Marks</b>	<b>Marks</b>
<b>Gross Anatomy of Head and Neck</b> – Scalp, face, Triangles of Neck, Dural folds and Venous sinuses, contents of the Orbit excluding Eyeball, Parotid Gland, Infratemporal fossa, Temporo mandibular joint, Submandibular region, Thyroid gland, Pharynx, tongue, Nasal Cavity and paranasal air sinuses. <b>Cranial nerves</b> – V, VII, IX and XII Development of Branchial arches pharyngeal pouches apparatus, Face. Systemic Embryology and Systemic Histology.	Long Essays	<b>20</b>
<b>Gross Anatomy of Head and Neck</b> – Scalp, Face, Cervical fascia, Midline structures of the neck, Vertebral Joints of Neck, Contents of the Orbit excluding Eyeball, Vessels of Head and Neck, Infratemporal fossa, Mouth, Palate, Pharynx, Nasal Cavity, Cervical Part of Trachea and Oesophagus, Lymphatic drainage of Hand and Neck  <b>Cranial nerves</b> – V, VII, IX, XI and XII and Cervical Plexus General and Systemic embryology and Histology, Osteology of Head and Neck	Short Essays Short Answers	<b>50</b>
	Total	<b>70</b>

**B. Viva Voce : 20 Marks**

**(All four examiners examine the student separately, 5 marks each)**

- a. Osteology of Head and neck : 05 marks
- b. Soft part from Head and Neck : 05 marks
- c. Embryology Models : 05 marks
- d. Radiological Anatomy : 05 marks

**C. Internal Assessment – Theory: 10 Marks, Practical: 10 Marks**

**D. Practicals : 90 Marks**

**Gross Anatomy**

- a. Spotters carrying 2 marks each 2 x 10 = 20 marks
- b. Discussion on Two given dissected specimens 2 x 10 = 20 marks
- c. Surface Anatomy 10 x 1 = 10 marks

**Histology**

- a. Identification of 10 Slides of 02 mark each 02 x 10 = 20 marks
- b. Discussion on TWO given slides 10 x 2 = 20 marks

**Scheme of Examination: Section-A General Human Physiology****A. Theory :****35 Marks**

Distribution of Topics and Types of Questions

<b>Contents</b>	<b>Type of Questions and Marks</b>	<b>Marks</b>
Long Essay Questions preferably from 1. Blood 2. Gastro intestinal tract 3. Cardio Vascular System 4. Respiratory System 5. Endocrines 6. Reproductive System	Long Essays	10
Short Essay Questions should be set from all the chapters. (Except the chapter on which a Long Essay Question has been set)	Short Essay	15
Short Answer Questions should be set from all the chapters. (Except the chapter on which a Long Essay Question has been set)	Short Answers	10
	Total	35 marks

**B. Viva Voce : 10 Marks****Note: In Viva-voce (All four examiners examine the student separately)****C. Internal Assessment – Theory :05 marks, Practicals : 05 marks****D. Practicals : 45 Marks**

Major Experiments – 30 Marks

Any one of the Major Experiments

1. R.B.C. Count
2. W.B.C. Count
3. Differential Count
4. Blood Pressure Recording

Minor Experiments – 15 Marks

Any one of the minor Experiments

1. Determination of Blood Groups
2. Determination of Bleeding & Clotting time
3. Haemoglobin Estimation
4. Calculation of absolute Haematological Indices –MCH, MCV, MCHC

**Scheme of Examination: Section-B Biochemistry Nutrition and Dietics****A. Theory****35 Marks**

Distribution of Topics and Types of Questions

Contents	Type of Questions and Marks	Marks
Chemistry of Carbohydrates, proteins, lipids and amino acids, Fat soluble and water soluble vitamins. Enzymes. Metabolism of carbohydrates, proteins, lipids and minerals	Long Essays	10
Chemistry and metabolism of : Carbohydrates, lipids, proteins, nucleic acids, minerals. Fats soluble and water soluble vitamins, Nutrition and dietetics, Liver function tests, pH and its biological importance, Renal function tests, Blood constituents, Biological oxidation.	Short Essay	15
Chemistry and metabolism of: Carbohydrates, lipids, proteins, nucleic acids, Minerals. Fats soluble and water soluble vitamins, Nutrition and dietetics, Liver function tests, pH and its biological importance, Renal function tests, Blood constituents, Biological oxidation.	Short Essay	15
Chemistry and metabolism of: Carbohydrates, lipids, proteins, nucleic acids, minerals. Fats soluble and water soluble vitamins, Nutrition and dietetics, Liver function tests, pH And its biological importance, Renal function tests, Blood constituents.	Short Answers	10
	<b>Total</b>	<b>35 marks</b>

**B. Viva-Voce:****10 Marks****Note: In Viva-voce (All four examiners examine the student separately)****C. Internal Assessment –****Theory: 05 Marks, Practicals : 05 Marks****D. Practicals:****45 Marks**

- |  |                 |
|--|-----------------|
| 1. One procedure for quantitative estimation           | 20 marks        |
| 2. One procedure for qualitative analysis              | 15 marks        |
| 3. Interpretation of Laboratory results in given chart | 10 marks        |
| <b>Total</b>   | <b>45 marks</b> |

**The following are suggested:****Quantitative Estimation (Any ONE estimation to be done)**

1. Estimation of Blood Glucose – using Folin-wu method, using deproteinized blood.
2. Determination of Creatinine in Urine – using Jaffes's method
3. Determination of Titrable acidity and Ammonia content of Urine – using Malfatti's Method

**Qualitative Analysis (Any ONE analysis to be done)**

1. Identification of Carbohydrates – glucose, fructose, sucrose, lactose, maltose, starch.
2. Colour Reactions – albumin
3. Precipitation Reactions – albumin
4. Identification of Proteins – albumin, gelatin, casein, peptone
5. Urine Analysis – normal constituents
6. Urine Analysis – pathological constituents

**Chart Interpretation (Interpretation of ONE Clinical chart)**

1. Glucose tolerance Test
2. Values of Blood Constituents and their clinical variation:- urea, cholesterol, calcium, phosphorus, bilirubin

**Scheme of Examination: Dental Anatomy, Embryology and Oral Histology.**

**A. Theory : 70 Marks**

**Distribution of Topics and Type of Questions**

<b>Contents</b>	<b>Type of Questions and Marks</b>	<b>Marks</b>
A. Dental anatomy- one question – 10 marks B. Dental histology – one question – 10 marks (One of them may be case scenario on Applied aspect)	Long Essays	20
A. Oral histology – five questions – 15 marks B. Dental anatomy – three questions – 9 marks C. Oral physiology – two question – 6 marks	Short Essays	30
A. Oral histology – Four questions – 08 marks B. Dental anatomy – two questions – 04 marks C. Oral physiology – two questions – 04 marks D. Oral embryology – two questions – 04 marks	Short Answers	20
E.	Total	70

**B. Viva Voce : 20 Marks (All four examiners examine the student separately, and preferably the four sections will be on Applied aspects, Anatomy, Embryology and Histology, 5 marks each)**

**C. Internal Assessment-Theory : 10 marks, Practicals: 10 marks**

**D. Practicals : 90 Marks**

1. Carving 30 marks 1 hour 15 min
2. Spotters 60 marks (20 spotter x 3 marks) 1 hour 15 min
  - 13 histology and ground section slides
  - 4 tooth identification
  - 3 casts for identifications of teeth, numbering system and age assessment.