| Candidate's | Seat | No | : |  |
|-------------|------|----|---|--|
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#### M.D.S. Examination

# Orthodontics & Dentofacial Orthopaedics : Branch V

#### Paper-I

(Applied Anatomy, Physiology, Pathology, Genetics Physical Anthropology & Dental Materials) [Max. Marks: 75

Date: 01-04-2019, Monday]

Time: 3 Hours

**Instructions**: (1) Figure to the right indicates marks.

- (2) Write legibly and to the point.
- (3) Draw diagrams wherever necessary.
- 1. Differentiate between Growth and Development. Write in Detail about principles of Craniofacial Growth Modifications. Add a note on "Growth Modification: What works, what not, and why?" (20 marks)
- 2. Define Nutrition and Mal-nutrition. Discuss in detail about the concept of Balance diet. Add a note on Protein Energy Malnutrition as a Public Health problem in Clinical Orthodontics. (20 marks)
- 3. Write short notes on Any five (7 marks each) –

[35 marks]

- a. Functions of Blood
- b. Role of Growth Hormone on Pubertal Growth Spurt.
- Randomized Control Trials (RCT) and Clinical Control Trials (CCT) as a research design in Clinical Orthodontics.
- d. Evolution of TMJ
- e. Stress and Strain in Orthodontic Wires.
- Twin Studies.

| Candidate's Seat No | : |  |
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## M.D.S. Examination

# Orthodontics & Dentofacial Orthopaedics : Branch V

## Paper-I

(Applied Basic Sciences)

|   | (Applied Basic Science   | es) [Max. Marks               | : 100     |
|---|--|-------------------------------|-----------|
| Date: 16-04-2019, Tues                                | day]   |                               |           |
| Time: 3 Hours] Instructions: (1) Fi (2) W (3) D (4) E | gure to the right indicates marks.  rite legibly and to the point.  raw diagrams wherever necessary.  ach question carries 10 marks. | dovolonment                   | (10)      |
| 1. Describe the                                       | formation of tongue and discus   | s its role in the development |           |
| and mainten   | ance of normal occlusion   |                               |           |
| and mainten   | etail about growth rotations of th   | ne mandible and the clinical  | (10)      |
| application   |  |                               | (10)      |
|   | cium metabolism  |                               | (10)      |
| 4. Discuss bri  | efly genetics & orthodontics   | th mayoment                   | (10)      |
| 5. Discuss the  | role of Osteoid tissue in orthod   | ontic tooth movement          | (10)      |
| 6. Describe th  | ne Growth trends and their forec   | cast<br>from decidu           | ious (10) |
| 7. Discuss t  | ne Dimensional change in th  | ne dental alor nom as         |           |
| dentition t   | o permanent dentition  |                               | (10)      |
| 8. Explain th   | e diagnostic criteria for impacte  | ed canine                     | (10)      |
| 9. Describe   | in detail the concept of cortical  | anchorage in ormodomics       | (10)      |
| 10. Discuss   | Anova test in brief  |                               | •         |
|   |  |                               |           |

Candidate's Seat No:

# M.D.S. Examination

# Orthodontics & Dentofacial Orthopaedics : Branch V

#### Paper II

(Diagnosis and Treatment Planning)

[Max. Marks: 75

Date: 03-04-2019, Wednesday

Time: 3 Hours]

**Instructions**: (1) Figure to the right indicates marks.

- (2) Write legibly and to the point.
- (3) Draw diagrams wherever necessary.
- 1. Write about "Normal Sleep Architecture". Add a note on Etio-pathogenesis, Diagnosis and Treatment of Obstructive Sleep Apnea as a challenge in Dental sleep Medicine. (20 Marks).
- 2. Define "Predictive Orthodontics". Write in detail about Growth Prediction Analysis available in Orthodontic Diagnosis. Add a note on Template Analysis (20 Marks).

3. Write Short note on Any five (7 Marks each)

(35 Marks)

- a. Idiopathic Condylar Resorption
- b. Density Guided Orthodontics
- c. Yen Angle
- d. Use of CBCT in Clinical Orthodontics
- e. Glenoid Fossa Remodeling.
- Biopsychosocial approach in TMD

Candidate's Seat No:

# M.D.S. Examination

# Orthodontics & Dentofacial Orthopaedics : Branch V

#### Paper III

(Clinical Orthodontics & Mechanotherapy)

[Max. Marks: 75

Date: 05-04-2019, Fridayl

- Instructions: (1) Figure to the right indicates marks. Time: 3 Hours]
  - (2) Write legibly and to the point.
  - (3) Draw diagrams wherever necessary.
  - 1. Classify Fixed Functional Appliances. Write in Detail about Indications, Mode of Action & Advantages of Jasper Jumper, Forsus FRD & Power-scope Appliance (20 marks).
  - 2. Define Headgear. Classify them. Write in Detail about biomechanical guidelines of Headgear application in Clinical orthodontics. Add a note on Vertical pull Headgear. (20 marks) (35 marks)
  - 3. Write Short notes on Any five (7 marks each)
    - a. Speed Brackets
    - b. Ballista Spring
    - c. Integrated Orthodontics
    - d. Use of Skeletal Anchorage for Skeletal correction
    - e. Genioplasty
    - Distraction Osteogenesis.

Candidate's Seat No:

[Max. Marks: 75

## M.D.S. Examination

# Orthodontics & Dentofacial Orthopaedics : Branch V

#### Paper IV

# Essay (Modern Trends & recent Advances)

Date: 09-04-2019, Tuesday]

Time: 3 Hours]

Instructions: (1) Figure to the right indicates marks.

- (2) Write legibly and to the point.
- (3) Draw diagrams wherever necessary.

1. Current Controversies in Clinical Orthodontics.

(75 marks)

OR

1. Accelerated Orthodontics: Myth or Reality?

(75 marks)