### [SUB.:- APPLIED ANATOMY, PHYSIOLOGY, PATHOLOGY, GENETICS, PHYSICAL ANTHROPOLOGY AND DENTAL MATERIALS; PAPER CODE: 02010301]

Time: 03:00 Hrs. Max. Marks: 75

#### **Instructions:-**

- 1. Write your Roll No. on the Question paper.
- 2. Before answering the question paper, candidate(s) should ensure that they have been provided correct question paper. Complaints in this regard, if any, should be made to the Invigilator/ Centre Supdt., in the Examination Hall within 15 minutes of the commencement of the exam. No complaint(s) in this regard will be entertained thereafter.
- 3. Attempt all questions. Parts of a question should be attempted in sequential order. Marks are indicated against each question.
- 4. Illustrate your answer with diagram wherever required.

### Long Answer of the following questions (Q.No.1 & Q.No.2):-

- Q.1 Define genes and describe various genes implicated in growth and development, along with their clinical significance. (20)
- Q. 2 Discuss the internal reconstruction of bone and biochemical changes that takes place during orthodontic tooth movement. (20)
- **Q. 3** Write short notes on:-

(7x5=35)

- a) Histomorphology of condylar cartilage.
- **b)** Ideal properties and specific material for mini- implants.
- c) Osteoprotegerin / RANKL in orthodontic tooth movement.
- **d**) Growth trends, and growth estimation.
- e) Systematic reviews and Meta analysis.
- f) Comparison between Super cable and superelastic arch wire.
- **g)** Bond enhancers.

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Roll No
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[SUB.:- DIAGNOSIS AND TREATMENT PLANNING; PAPER CODE: 02010302]

Time: 03:00 Hrs. Max. Marks: 75

#### Instructions:-

- 1. Write your Roll No. on the Question paper.
- 2. Before answering the question paper, candidate(s) should ensure that they have been provided correct question paper. Complaints in this regard, if any, should be made to the Invigilator/ Centre Supdt. in the Examination Hall within 15 minutes of the commencement of the exam. No complaint(s) in this regard will be entertained thereafter.
- 3. Attempt all questions. Parts of a question should be attempted in sequential order. Marks are indicated against each question.
- 4. Illustrate your answer with diagram wherever required.

### Long Answer of the following questions (Q.No.1 & Q.No.2):-

**Q. 1** Discuss cephalometric criteria for functional appliance therapy.

**(20)** 

Q. 2 Discuss errors in cephalomtrics, radiography and clinical significance.

(20)

Q. 3 Write short notes on:-

(5x7=35)

- a) Witzel grid
- b) CBCT
- c) Inadequacy of ANB Angle
- d) Natural Head Position
- e) Burstone soft tissue analysis

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Roll No.	

### [SUB.:- CLINICAL ORTHODONTICS AND MECHANOTHERAPY] (PAPER CODE: 02010303)

Time: 03:00 Hrs. Max. Marks: 75

### Instructions:-

- 1. Write your Roll No. on the Question paper.
- 2. Before answering the question paper, candidate(s) should ensure that they have been provided correct question paper. Complaints in this regard, if any, should be made to the Invigilator/ Centre Supdt., in the Examination Hall within 15 minutes of the commencement of the exam. No complaint(s) in this regard will be entertained thereafter.
- 3. Attempt all questions. Parts of a question should be attempted in sequential order. Marks are indicated against each question.
- 4. Illustrate your answer with diagram wherever required.

### Long Answer of the following questions (Q.No.1 & Q.No.2):-

- Q. 1 Discuss methods of anchorage preservation in high discrepancy case with vertical growth pattern. (20)
- Q. 2 Discuss in detail about frictionless mechanics in Orthodontics. (20)
- **Q. 3** Write short notes on: -

(5x7=35)

- a) Functional analysis
- **b)** Surgical treatment objectives.
- c) Classification and diagnosis of impacted canines.
- **d**) Intrusion arches.
- e) Invisible orthodontics.

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[SUB.:- ESSAY; PAPER CODE: 02010304]

Time: 03:00 Hrs. Max. Marks: 75

### **Instructions:-**

- 1. Write your Roll No. on the Question paper.
- 2. Before answering the question paper, candidate(s) should ensure that they have been provided correct question paper. Complaints in this regard, if any, should be made to the Invigilator/ Centre Supdt. in the Examination Hall within 15 minutes of the commencement of the exam. No complaint(s) in this regard will be entertained thereafter.
- 3. Attempt all questions. Parts of a question should be attempted in sequential order. Marks are indicated against each question.
- 4. Illustrate your answer with diagram wherever required.

Write essay on any one: -

(75)

**Q. 1** Evolution of Preadjusted Edgewise Appliance in Orthodontics.

OR

Controversies in Orthodontics.

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