

[KD 368] APRIL 2001

M.D.S. DEGREE EXAMINATION

Branch V — Orthodontics

Part II

Paper I — GROWTH AND DEVELOPMENT,
ANTHROPOLOGY, NUTRITION

Time : Three hours

Maximum : 100 marks

Answer ALL questions

1. Discuss the growth changes observed in the dentofacial area from post puberty to adulthood. Add a note on its significance in treatment planning and treatment outcomes. (25)
 2. Discuss the current doctrine of functional matrices in relation to growth of maxilla and mandible. (25)
 3. Write briefly on : (5 × 10 = 50)
 - (a) Peak height velocity of growth
 - (b) Cephalocaudal gradient of growth
 - (c) Role of vitamins in growth
 - (d) Delayed growth
 - (e) Role of calcium and phosphorus in growth.
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NOVEMBER 2001

[KE 368]

M.D.S. DEGREE EXAMINATION

(Revised Regulations)

Branch V — Orthodontics

Part II

Paper I — GROWTH AND DEVELOPMENT
ANTHROPOLOGY, NUTRITION

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss the growth of jaws in relation to heredity and congenital factors. (25)
 2. Discuss the role of tongue in maintenance of normal occlusion, etiology of malocclusion and relapse of treated orthodontic case. (25)
 3. Write briefly on : (5 × 10 = 50)
 - (a) Role of Vitamin E in growth of hard tissue
 - (b) Carbon tracing index
 - (c) Cephalic index
 - (d) Growth Indicators
 - (e) Settlement of occlusion from childhood to adulthood.
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[KG 368] MARCH 2002

M.D.S. DEGREE EXAMINATION.

(Revised Regulations)

Branch V — Orthodontics

Part II

Paper I — GROWTH AND DEVELOPMENT,
ANTHROPOLOGY, NUTRITION

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss in detail the different methods of growth study. (25)
 2. Role of function in determining the form and shape in craniofacial growth. (25)
 3. Write briefly about : (5 × 10 = 50)
 - (a) Teratogens.
 - (b) Development of Palate.
 - (c) Controlling factors in cranio-facial growth.
 - (d) Factors regulating and affecting eruption of teeth.
 - (e) Growth charts.
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SEPTEMBER 2002

[KH 368]

M.D.S. DEGREE EXAMINATION

(Revised Regulations)

Branch V — Orthodontics

Part II

Paper I — GROWTH AND DEVELOPMENT,
ANTHROPOLOGY, NUTRITION

Time : Three hours

Maximum : 100 marks

Answer ALL questions

1. Discuss in detail the concept of 'FUNCTIONAL MATRIX' and how do you relate it to facial growth and development. (25)

2. Describe in detail the settlement of Occlusion from deciduous dentition to permanent dentition. (25)

3. Write briefly

(5 × 10 = 50)

(a) Pre-pubertal growth

(b) Growth prediction

(c) Carbon tracing index

(d) Spheno-Occipital Synchronosis

(e) Cleft-Lip

APRIL 2003

[KI 368]

Sub. Code : 2341

M.D.S. DEGREE EXAMINATION.

(Revised Regulations)

Branch V — Orthodontics

Part II

Paper I — GROWTH AND DEVELOPMENT,
ANTHROPOLOGY, NUTRITION

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Describe various methods of prediction of growth in a child. (25)
 2. Discuss role of Vitamins and Hormones on growth and development of jaws. (25)
 3. Write briefly on : (5 × 10 = 50)
 - (a) Petrovic growth categories
 - (b) Adolescent growth spurt
 - (c) Spheno occipital synchondrosis
 - (d) Growth charts
 - (e) Piezo effect.
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OCTOBER 2003

[K.J 368]

Sub. Code : 2341

M.D.S. DEGREE EXAMINATION.

(Revised Regulations)

Branch V — ORTHODONTICS

Part II

Paper I — GROWTH AND DEVELOPMENT,
ANTHROPOLOGY, NUTRITION

Time : Three hours Maximum : 100 marks

Theory : Two hours and forty minutes	Theory : 80 marks
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M.C.Q. : Twenty minutes M.C.Q. : 20 marks

M.C.Q. must be answered **SEPARATELY** on the answer sheet provided as per the instructions on the first page of M.C.Q. booklet.

Answer ALL questions.

Draw suitable diagrams wherever necessary.

TWO Essay questions : (2 × 15 = 30)

1. Discuss the role of various cartilaginous sites in the growth and development of craniofacial region.
2. Describe the development of hard palate. Discuss its developmental anomalies, with clinical implications.

OCTOBER 2003

3. TEN short notes each 5 marks : (10 × 5 = 50)

(1) Describe drift verses displacement in facial growth.

(2) Enumerate the various growth theories.

(3) Enumerate the importance of neural crest cells in development of face.

(4) Enumerate the clinical features of ectodermal dysplasia.

(5) Describe the growth spurts in children and its clinical implication.

(6) Describe the cephalocaudal gradient of growth and its clinical implication.

(7) Describe, how the adenoid face develops and give the clinical implications.

(8) What are nutritional factors influencing growth and development?

(9) Write briefly on equilibrium effects on the Dentition.

(10) Write briefly on development of temporomandibular joint.

APRIL 2004

[KK 368]

Sub. Code : 2341

M.D.S. DEGREE EXAMINATION.

(Revised Regulations)

Branch V — ORTHODONTICS

Part II

**Paper I — GROWTH AND DEVELOPMENT,
ANTHROPOLOGY, NUTRITION**

Time : Three hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

MCQ : Twenty minutes

MCQ : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

A. Essay questions :

(2 × 15 = 30)

**(1) Describe growth and development of the
maxilla and its clinical implications.**

**(2) Discuss various methods of growth prediction
and its importance in orthodontics.**

B. Short Notes :

(10 × 5 = 50)

- (1) Give an outline of calcium metabolism.**
- (2) What is regional acceleratory phenomenon?**
- (3) How have implants been used to study
growth?**
- (4) What are growth spurts?**
- (5) What is the relevance of stone age man's
dentition in contemporary orthodontics?**
- (6) What are the risk factors for causing
osteoporosis and what are the orthodontic implications
of this problem?**
- (7) Discuss "Long Face Syndrome".**
- (8) What is the role of "Twin Studies" in
orthodontics?**
- (9) Write a short note on speech and malocclusion.**
- (10) Discuss various swallowing patterns.**

AUGUST 2004

[KL 368]

Sub. Code : 2341

M.D.S. DEGREE EXAMINATION.

(Revised Regulations)

Branch V — Orthodontics

Part II

**Paper I — GROWTH AND DEVELOPMENT,
ANTHROPOLOGY, NUTRITION**

Time : Three hours

Maximum : 100 marks

Theory : Two hours and

Theory : 80 marks

forty minutes

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL the questions.

Draw suitable diagrams wherever necessary.

I. Essay questions : (2 × 15 = 30)

**(1) Elaborate the methods of growth prediction
and its significance in treatment planning.**

(2) Describe the evolution of human face.

II. Write short notes on : (10 × 5 = 50)

(a) Cybernetic theory.

(b) Growth rotation.

(c) Roll of teratogens in malocclusion.

(d) Safety valve mechanism.

(e) Primary and secondary cartilage.

(f) Balanced diet.

(g) Micro skeletal units.

(h) Basal metabolic rate.

**(i) Effect of cleft palate in the growth and
development of human face.**

(j) Tooth sockets.

FEBRUARY 2005

[KM 368]

Sub. Code : 2341

M.D.S. DEGREE EXAMINATION.

(Revised Regulations)

Branch V — Orthodontics

Part II

**Paper I — GROWTH AND DEVELOPMENT,
ANTHROPOLOGY, NUTRITION**

Time : Three hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay Questions :

(2 × 15 = 30)

(1) Describe the role of oral habits in the dimensional changes of the dental arches during growth and development.

(2) Write in detail on growth assessment parameters.

II. Write short notes on :

(10 × 5 = 50)

- (a) Role of Vitamins in growth.
- (b) Scammon's basic growth curves.
- (c) Growth Spurts.
- (d) Biologic Maturity Indicators.
- (e) Chondrogenesis.
- (f) Cleft lip and palate.
- (g) Post natal growth of mandible.
- (h) Growth centers and growth sites.
- (i) Influence of Orthodontic treatment on the facial growth and development.
- (j) Pharyngeal apparatus.

SEPTEMBER 2006

[KP 368]

Sub. Code : 2341

M.D.S. DEGREE EXAMINATION.

(Revised Regulations)

Branch V — Orthodontics

Part — II

**Paper I — GROWTH AND DEVELOPMENT,
ANTHROPOLOGY, NUTRITION**

Time : Three hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay questions :

(1) Discuss pattern, variability and timing of growth and how to control mandibular growth in a growing child. (20)

(2) Discuss nutritional and hormonal factors affecting growth and development of face. (15)

(3) Discuss calcium metabolism and its regulation in the human body. (15)

II. Write short notes on :

(6 × 5 = 30)

(a) Synchondrosis and its importance in craniofacial growth.

(b) Evolution of TMJ.

(c) Branchial arches.

(d) Balanced diet.

(e) Naso maxillary complex.

(f) Growth markers.

MARCH 2007

[KQ 368]

Sub. Code : 2341

M.D.S. DEGREE EXAMINATION.

(Revised Regulations)

Branch V — Orthodontics

Paper I — GROWTH AND DEVELOPMENT
ANTHROPOLOGY, NUTRITION

(For candidates admitted from the academic year
1993-94 onwards)

Time : Three hours

Maximum : 100 marks

Theory : Two hours and
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay questions :

(1) Discuss the factors affecting craniofacial malformations during embryogenesis and their clinical significance. (20)

(2) Discuss the role of buccinator mechanism and its role in the developing normal occlusion. (15)

(3) Discuss longitudinal growth studies and their role in orthodontics. (15)

II. Short notes : (6 × 5 = 30)

(a) Concept of attritional occlusion

(b) Mutation

(c) Pubertal growth spurt

(d) Neuro ectodermal cells

(e) Maturation of swallowing pattern

(f) Post adolescent changes in the dentition and facial tissues.