

SANKALCHAND PATEL UNIVERSITY**BDS – 4th Year – EXAMINATION, July-Sept. 2024****Subject Code: 1DS1010306****Date: 13/07/2024****Subject Name: Orthodontics and Dental Orthopedics****Time: 3 Hrs.****Total Marks: 70****Instructions:**

1. Use separate answer book for each section.
2. Draw diagrams wherever necessary.
3. Figures to the right indicate marks.

SECTION – A

- Q.1 Answer following Structured Long Essay (1 out of 2) 10
- A Describe Ackerman – Profit System of Classification in detail.
B Define Anchorage. Describe various types of Anchorage.
- Q.2 Answer following Short Essay (3 out of 5) 15
- A Gum Pads
B Spheno – occipital synchondrosis
C Andrews' Six Keys to Normal Occlusion
D Tweed Analysis
E Bruxism
- Q.3 Answer following Objective type questions. 5
- A Define Flush Terminal Plane.
B Define Curve of Spee.
C Types of Facial Form.
D Define Gonion Point.
E Define Moment.
- Q.4 Answer following MCQ's 5
- A The components of Functional matrix are
a. Capsular Matrix b. Periosteal Matrix
c. Both a and b d. None of the above
- B Total number of bones in adult skull is
a. 22 b. 45 c. 35 d. 45
- C Scissors bite is a malocclusion occurring in which plane?
a. Sagittal Plane
b. Vertical Plane
c. Transverse Plane
d. None of the above
- D CMV in Pont's Analysis stands for
a. Calculated Molar Value
b. Calculated 1st Molar Value
c. Calculated 2nd Molar Value
d. Calculated 3rd Molar Value
- E E – Plane is called
a. Esthetic Plane
b. External Plane
c. Both a and b
d. None of the above

SECTION - B

- Q.5 Answer following Structured Long Essay (1 out of 2) 10
- A Define and classify Myofunctional Appliances and write down in detail about Twin Block.
 - B Describe in detail about Management of Class III Malocclusion.
- Q.6 Answer following Short Essay (3 out of 5) 15
- A Types of Tooth Movements
 - B Face Mask
 - C RME
 - D Elastics in Orthodontics
 - E Catlan's Appliance
- Q.7 Answer following Objective type questions. 5
- A Define Key Ridge.
 - B Define Retention.
 - C Optimum Orthodontic Force.
 - D Jackson's triad
 - E Define Pseudo Class III Malocclusion.
- Q.8 Answer following MCQ's 5
- A Frontal Resorption occurs as a result of
 - a. Mild Orthodontic Forces
 - b. Excessive Orthodontic Forces
 - c. Orthopedic forces
 - d. All of the above
 - B Button Pull Exercise is done for
 - a. Lips
 - b. Tongue
 - c. Cheeks
 - d. Teeth
 - C Correction of Single tooth cross bite is an example of
 - a. Reciprocal Anchorage
 - b. Intermaxillary Anchorage
 - c. Stationary Anchorage
 - d. Simple Anchorage
 - D Who introduced Pendulum Appliance?
 - a. Hilgers
 - b. Casino
 - c. Testa
 - d. None of the above
 - E Anterior Open bite can be
 - a. Skeletal
 - b. Dental
 - c. Both a and b
 - d. None of the above

Narsinhbhai Patel Dental college & Hospital, Visnagar

BDS – 4th Year – EXAMINATION – Preliminary -2024

Subject Name: Orthodontics & dentofacial Orthopaedics

Date:03/06/2024

Time: 3 Hrs.

Total Marks: 70

- Instructions:** a. Use separate answer book for each section. b. Attempt all questions.
c. Draw diagrams wherever necessary. d. Figures to the right indicate marks.

SECTION – A

Q.1 Answer Structured Long Essay (Any 1 out of 2) 10

A Enumerate different theories of growth and write in detail about Functional matrix theory.

B Write down in detail about management of class II malocclusion.

Q.2 Write Short Essay (Any 3 out of 5) 15

A) Essential diagnostic aids

B) Transient malocclusion

C) Scammon's growth curve

D) Ackerman Profitt classification

E) Bolton's analysis

Q.3 Answer Following short question. 5

A) Who is the Father of Modern Orthodontics?

B) What does brachycephalic mean?

C) Jackson's Triad

D) What is the normal value of Upper Incisor to NA linear?

E) What is crossbite?

Q.4 Answer following MCQ's 5

1) Followings are the theories of growth, Except

a) Functional matrix theory

b) Sutural theory

c) Genetic theory

d) Bolton's theory

2) Who has given theories of retention?

a) Rojers

b) McCauly and Nance

c) Riedel

d) Alex Lundstorm

3) Moment: Force Ratio For Bodily Movement Of Tooth Is?

a) 1

b) 9

c) 10

d) 12

4) "Flux" in Latin means

a) Magnetic attraction

b) Flow

c) Pressure

d) Cappillary attraction

5) What is Danholtz Appliance

a) Maxillary arch lip bumper

b) Mandibular arch lip bumper

c) both

d) none of the bove

SECTION - B

Q.5 Answer Structured Long Essay (Any 1 out of 2)

A Enumerate therapeutic methods of gaining space. Discuss in detail about expansion in orthodontics.

B Classify Etiology of malocclusion. Write in details regarding the etiological Factors responsible for malocclusion.

Q.6 Write Short Essay (Any 3 out of 5)

A) Types of Headgears and their uses

B) CVMI

C) Buccinator's mechanism.

D) Explain Trajectories of force

E) Retention and relapse.

Q.7 Answer Following short question.

A) Define Orthodontics.

B) Angle's Class II malocclusion

C) Curve of Spee

D) Define Retention.

E) Define Center Of Rotation

Q.8 Answer following MCQ's

1) What is Backer's anchorage

a) Inter-maxillary anchorage

b) Intra_maxillary anchorage

c) Both

d) None of the above

2) Intrusion Best Produced By.

a) Light Intermittent Forces

b) Heavy Intermittent Forces

c) Light Continuous Forces

d) Heavy Continuous Forces

3) The inclined plane to treat cross bite should be at an angle of

a. 30 degree

b. 45 degree

c. 60 degree

d. 75 degree

4) Parts of retentive appliance

a) Active Component

b) Retentive Component

c) Both

d) Baseplate

5) Who introduced twin block appliance

a. William clark

b. William twin

c. William active

d. William Andres

Narsinhbhai Patel Dental college & Hospital, Visnagar.BDS – 4th Year – EXAMINATION – 2nd Internal Examination -2024

Subject Name: Orthodontics and Dentofacial Orthopedics.

Date:18/03/2024

Total Marks: 50

Time: 2 Hrs.

- Instructions: 1. Use separate answer book for each section. 2. Attempt all questions
3. Draw diagrams wherever necessary. 4. Figures to the right indicate marks.

SECTION – A

- Q.1 Answer Structured Long Essay** **07 Marks**
A) Define habits, classification, Details and describe moth-breathing habits?
- Q.2 Write Short Essay (Any 3 out of 5)** **12 Marks**
A) Spheeno-occipital synchodrosis.
B) Headgear
C) Early mesial shift and late mesial shift.
D) Steiner analysis.
E) Retention and relapse.
- Q.3 Answer Following short question.** **06 Marks**
A) Define Anchorage.
B) Values of Y Axis
C) Define torque.
D) Minimum orthodontic pressure.
E) Name of fixed functional appliances.
F) Molar anchorage value anchorage.

SECTION – B

- Q.4 Answer Structured Long Essay** **07 Marks**
A) Define & classify myofunctional appliances & Write down in detail about bionator ?
- Q.5 Write Short Essay (Any 3 out of 5)** **12 Marks**
A) Class 2 division management.
B) Bolton's analysis.
C) Trajectories of force
D) Enlow's Expanding v principle.
E) Long face syndrome.
- Q.6 Answer following MCQ's** **6 Marks**
- 1)Synostosis is?
a) Fusion of two adjacent bone by cartilage b) Fusion of adjacent bone by fibrous cartilage
c) Early closure of suture or early fusion of bone by bone d) None of above
- 2)Relapse occurs due to
a) PDL traction b)Persistent etiology
c) Bone changes d) All of the above
- 3)Face mask is also called as
a) Reverse pull headgear b) Both A and C
c) Protraction headgear d) None of the above
- 4)Transient malocclusions are
a) Age relatetd b) Normal in adult occlusion
c) Self correcting d) Both A and B
- 5)Causes of midline diastema.
a) Abnormal frenum attachment b) congenitally missing or mirodontic
c) mesiodens d) all of the above
- 6)Who introduced twin block appliance
a)William clark b) Pancharg
c) Twin d) Andersen

Narsinhbhai Patel Dental college & Hospital, Visnagar
BDS – 4th Year – EXAMINATION – Preliminary -2023

Subject Name: Orthodontics & dentofacial Orthopaedics

Date: 29.5.23

Time: 3 Hrs.

Total Marks: 70

Instructions: a. Use separate answer book for each section. b. Attempt all questions.
 c. Draw diagrams wherever necessary. d. Figures to the right indicate marks.

SECTION – A

Q.1	Answer Structured Long Essay (Any 1 out of 2)	10
	A Prenatal growth of Mandible	
	B WRITE THE CHRONOLOGY OF ERUPTION OF DECIDUOUS AND PERMANENT DENTITION. ENUMERATE VARIOUS SELF-CORRECTING MALOCCLUSIONS	
Q.2	Write Short Essay (Any 3 out of 5)	15
	A Wolff's law of transformation of bone	
	B TWEED'S TRIANGLE	
	C DISCUSS IN DETAIL ANY ONE MIXED DENTITION ANALYSIS	
	D DISCUSS IN BRIEF VARIOUS METHODS OF AUGMENTING ANCHORAGE	
	E INDICATIONS AND TYPES OF SERIAL EXTRACTION	
Q.3	Answer Following short question.	5
	A On an average, mandibular growth will complete in males by ___ Year's	
	B Number of chromosomes in man	
	C What is the amount of force used to intrude upper incisors	
	D Thickness of anterior bite plane used in correction of deep bite should be of mm	
	E Cleft lip arises form failure of fusion between &	
Q.4	Answer following MCQ's	5
	1 During Orthodontic Movement Of Maxillary Central Incisor ,Centre Of Rotation Is Present At Apex ,It Show a) Controlled Tipping c) Uncontrolled Tipping b) Translation d) Intrusion	
	2 Good contacts in primary teeth with lack of spacing predicts: a. Normal occlusion in permanent teeth b. Crowding in permanent teeth d. Anterior cross bite c. Spaced permanent dentition	
	3 If a flush terminal plane is present in the deciduous dentition then the molars will erupt: a. Initially in class I occlusion c. Initially in class II occlusion b. Initially in class III occlusion d. End to end	
	4 The condylar cartilage in the mandible is held to be a a. Primary cartilage c. Secondary cartilage b. Tertiary cartilage d. Non growing cartilage	

5	In a newborn child we generally see
	a. Maxillary protrusion c. Maxillary retrusion
	b. Mandibular protrusion d. Mandibular retrusion

SECTION - B

Q.5	Answer Structured Long Essay (Any 1 out of 2)
A	SURGICAL MANAGEMENT OF A PATIENT WITH CLASS II MALOCCLUSION
B	ENUMERATE VARIOUS METHODS OF GAINING SPACE

Q.6	Write Short Essay (Any 3 out of 5)
A	BRIEF NOTE OF BRUXISM
B	CLASSIFICATION OF EXPANSION APPLIANCES
C	BALANCING VS COMPENSATING EXTRACTIONS.
D	BAUSCHINGER EFFECT
E	TREATMENT OF MIDLINE DIASTEMA

Q.7	Answer Following short question.
A	The symbolic stripped 'Y' classification was proposed by
B	When is the first stage of management of cleft lip and palate
C	The surgical procedure pericision is also called as
D	BSSO stands for
E	Loss of any correction achieved by orthodontic treatment is refereed to as

Q.8	Answer following MCQ's
1	The fusion temperature of filler material used for soldering. A. $< 450^{\circ}$ b. $> 450^{\circ}$ c. $< 350^{\circ}$ d. $> 350^{\circ}$
2	Transcription is the process by which A. Information is transmitted from DNA to RNA B. Information is transmitted from RNA to DNA C. All above D. None of above
3	In adult with periodontal disease center of resistance is lies at A. $1/3$ of root C. $1/2$ of root B. Apically D. None of above
4	Diagnosis procedures consider in adult patient is A. A full TMJ view C. Muscle examination B. Stress evaluation D. All of above
5	The condition deep bite is refereed to as a) Increased overbite b) Decreased overbite c) Over bite d) None of the above

Instructions: 1. Use separate answer book for each section.
3. Draw diagrams wherever necessary.

2. Attempt all questions
4. Figures to the right indicate marks.

SECTION - A

Q.1 Answer Structured Long Essay **07 Marks**

A) Define Habits, classification, details and describe about mouth breathing habits.

Q.2 Write Short Essay (Any 3 out of 5) **12 Marks**

A) Beta Dunlop hypotheses.

B) Venn diagrams.

C) Wolff's law of transformation of the bone.

D) Jackson triad.

E) Modification of labial bows.

Q.3 Answer Following short question. **06 Marks**

A) Who invented oral screen.

B) Center of rotation.

C) What is secondary displacement?

D) What is the normal value of upper Incisor to NA angular?

E) Use of Catalans appliance?

F) Incisal liability.

SECTION - B

Q.4 Answer Structured Long Essay **07 Marks**

A) Define myofunctional appliance, classification, details and describe about Bionator.

Q.5 Write Short Essay (Any 3 out of 5) **12 Marks**

A) Reciprocal anchorage.

B) Difference between class 2 division 1 and class 2 division II.

C) Infantile swallow.

D) Carey's analysis.

E) Scammon's growth curve.

Q.6 Answer following MCQ's **6 Marks**

1) Normal Nasolabial angle.

a) 20 - 30 degrees

c) 90 - 110 degrees

b) 111 to 120 degrees

d) all

2) Leeway's space was invented by

a) Nance

c) Angle

b) Calvin case

d) Dr. leeway's

3) Ideal value of SNA

a) 81

c) 82

b) 83

d) 80

4) Other name of single cantilever spring.

a) z spring

c) E spring

b) both

d) none of the above.

5) Mirror test is useful in.

a) Tongue thrusting

c) lip biting

b) mouth breathing habits

d) thumb sucking

6) Frankel appliance was invented by

a) Dr. Angles

c) Rolf Frankel

b) Willum Clark

d) Willum balter

Seat No.: _____

PRN _____

SANKALCHAND PATEL UNIVERSITY

BDS - 4th year - EXAMINATION - Sept - Dec 2023

Subject Code: IDS1010306

Date: 09/12/2023

Subject Name: Orthodontics and Dental Orthopaedics

Time: 3 Hrs.

Total Marks: 70

Instructions:

1. Use separate answer book for each section.
2. Draw diagrams wherever necessary.
3. Figures to the right indicate marks.

SECTION - A

Q.1 Answer following Structured Long Essay (1 out of 2) 10

A Post Natal growth of Mandible.

B Define anchorage. What are factors influencing anchorage. How will you reinforce anchorage.

Q.2 Answer following Short Essay (3 out of 5) 15

A Enumerate supplementary diagnostic aids.

B Andrew's keys to normal occlusion.

C Pressure tension theory of tooth movement

D What is incisor liability and its importance

E Define Cephalometrics. Write about its four uses in orthodontics.

Q.3 Answer following Objective type questions 5

A Angle's Class I malocclusion.

B Define Interceptive orthodontics.

C Define Synchronosis.

D Define Orthodontics.

E Deep Bite

Q.4 Answer following MCQ's 5

A Pre-pubertal growth spurt in girls takes place in

a) 10 - 11 years

b) 11 - 13 years

c) 7 - 8 years

d) 8 - 9 years

B Enlow's described growth pattern as

a) 'C' Principle

b) 'V' Principle

c) 'S' Principle

d) 'D' Principle

- C Retained infantile swallowing pattern will lead to
- Mouth breathing habit
 - Bruxism
 - Lip sucking habit
 - Tongue thrusting habit
- D During controlled tipping movement, the center of rotation is at
- Root tip
 - Incisor edge
 - Away from root edge
 - Outside the tooth
- E Inter-incisal angle mean value for Steiner's Analysis is
- 121°
 - 131°
 - 141°
 - 151°

SECTION - B

- Q.5 Answer following Structured Long Essay (1 out of 2) 10
- Give treatment of Class II div. 1 for mixed & permanent dentition
 - Classification of Myofunctional Appliances. Write about mode of action of activator & write in short note on Trimming of Activator.
- Q.6 Answer following Short Essay (3 out of 5) 15
- What is safety valve mechanism? Give it's clinical significance.
 - Enumerate active components of fixed appliances? Write about any two in detail.
 - Name different schools of thoughts for retention.
 - What are the indications of surgical Orthodontics
 - Write objectives of stage I of Begg's Mechanotherapy?
- Q.7 Answer following Objective type questions 5
- Butler Field Theory.
 - Mention causes of relapse.
 - Four types of Brackets.
 - Crouzon's syndrome.
 - Tongue Blade Therapy.

Q.8 Answer following MCQ's

A Posterior bite plane is contraindicated in

- a) Functional retrusion
- b) Bimaxillary protrusion
- c) Open bite
- d) Deep bite

B Which of the following is an example of Intermaxillary anchorage

- a) Class II elastics
- b) Cervical headgear
- c) High pull headgear
- d) Expansion plate

C Elgiloy is having a composition of

- a) Chrome-cobalt
- b) Chrome-Nickel
- c) Cobalt-Nickel
- d) Nickel Titanium

D Denholtz Appliance is used for

- a) Correction of open bite
- b) Distalisation of the molars
- c) Correction of deep bite
- d) correction of anterior open bite

E The only tissue- borne functional appliance is

- a. Activator
- b. Bionator
- c. Twin block
- d. Frankel

SANKALCHAND PATEL UNIVERSITY**BDS - 4th year - EXAMINATION - May - July 2023****Subject Code: 1DS1010306****Date: 06/07/2023****Subject Name: Orthodontics & Dental Orthopaedics****Time: 3 Hrs.****Total Marks: 70****Instructions:**

- Use separate answer book for each section.
- Draw diagrams wherever necessary.
- Figures to the right indicate marks.

SECTION - A

- Q.1 Structured following Long Essay (1 out of 2) 10**
- A Enumerate different theories of growth. Write in detail about Functional matrix theory.
- B Ackerman profit classification of malocclusion.
- Q.2 Answer following Short Essay (3 out of 5) 15**
- A Classification of etiology of malocclusion
- B Serial extraction
- C Enumerate different space maintainers & describe in detail about distal shoe space maintenance
- D Ugly duckling stage. Enumerate diff self-care anomalies
- E Drawbacks of Angle's classification of malocclusion
- Q.3 Answer following Objective type questions. 5**
- A Leeway space
- B Flush terminal plane
- C Who is father of modern orthodontics?
- D Difference between soldering & welding
- E 18:8 stainless steel
- Q.4 Answer following MCQ's. 5**
- A Sphenoccipital synchondrosis decreases at the age of
(a) 16 yrs. (b) 19 yrs
(c) 23 yrs. (d) 25 yrs
- B Mandibular condyle grows by
(a) sutural bone growth (b) Interstitial growth
(c) endotracheal bone growth (d) sub-periosteal surface addition
- C Which of the following methods used for growth prediction?
(a) cephalomatrix. (b) hand-wrist x-rays
(c) growth curves (d) all of the above
- D Crossbite is a dental modification in :
(a) vertical plane. (b) A-P plane
(c) Transverse plane (d) all of the above
- E Primate space are characteristic of:
(a) most murilian species (b) frogs
(c) cows & men. (d) human being

SPU

SPU

Narsinhbhai Patel Dental college & Hospital, Visnagar**BDS – 4th Year – EXAMINATION – Preliminary -2022****Subject Name: Orthodontics And Dentofacial Orthopedics****Date: 26-5-2022****Time: 3 Hrs.****Total Marks: 70****Instructions:**

1. Use separate answer book for each section.
2. Attempt all questions.
3. Draw diagrams wherever necessary.
4. Figures to the right indicate marks.

SECTION – A

- Q.1 Answer Structured Long Essay (Any 1 out of 2) 10**
- A Define Orthodontics . Write Aims , Objectives and Limitations of Orthodontics in details.
- B Define and Classify Myofunctional appliance . Describe in detail about Lip Bumper.
- Q.2 Write Short Essay (Any 3 out of 5) 15**
- A Tweed 's Triangle
- B Space Maintainers
- C Enlow's "V" Principle of Growth
- D Orthodontic Wire
- E Chin Cup
- Q.3 Answer Following short question. 5**
- A Curve of Monson
- B Angle of convexity
- C Pseudo Class III
- D Define Center of rotation
- E Components of Removable appliances.
- Q.4 Answer following MCQ's 5**
- 1 Development of face usually occurs at
- A. 4-6 weeks
- B. 2-6 weeks
- C. 4-8 weeks
- D. 2-4 weeks
- 2 Epiglottis is derived from
- A. 1st arch
- B. 2nd arch
- C. 3rd arch
- D. 4th arch
- 3 Leeway space was determined by ..
- A. Nance
- B. Angle
- C. Calvin Case
- D. Martin Dewey
- 4 Trauma to the teeth often results in
- A. Dilaceration
- B. Deformation
- C. Displacement
- D. All of the above
- 5 Normal Nasolabial angle is :
- A. 110 degree
- B. 90-110 degree
- C. 112 degree
- D. 113 degree

SECTION - B

- Q.5 Answer Structured Long Essay (Any 1 out of 2)** 10
- A Define Malocclusion . Classify It and Write Angle's Classification in details.
 B Write the various extraoral radiographic technique and write principles , indications , advantage & Disadvantage of OPG.
- Q.6 Write Short Essay (Any 3 out of 5)** 15
- A Sutural Theory of growth
 B Pressure Tension theory of tooth Movement
 C Classification of Cleft Lip and Palate
 D Adam's Clasp and Its Modification
 E Drawbacks of Angle's Classification
- Q.7 Answer Following short question.** 5
- A Enumerate Methods of serial Extraction
 B Enumerate list of Essential Diagnostic Aids In Orthodontics
 C Hand - Wrist Radiograph
 D Mandibular Plane In Cephalometrics
 E Band and Loop Space Maintainer
- Q.8 Answer following MCQ's** 5
- 1 Primary Palate is derived from
- Maxillary Process
 - Fronto--nasal Process
 - Mandibular Process
 - Lateral Nasal Process
- 2 How many skeletal Maturity indicators are there in fishman's method ?
- 10
 - 12
 - 14
 - 11
- 3 Uncontrolled tipping is
- Often undesirable
 - Very difficult to achieve
 - Most desirable type of tooth movement
 - A and B
- 4 Tissue respoce in RME is
- Physiologic
 - Traumatic
 - Either Physiologic or traumatic
 - None of the above
- 5 The amount of force used in slow arch expansion is
- 2-4 pounds
 - 10-20 pounds
 - 5-10 pounds
 - 10-15 pounds

2nd INTERNAL EXAMINATION

FINAL YEAR B.D.S.

Seat no:

ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS

Total Marks 80 Marks

SECTION-I

1 Long question

Define and classify Myofunctional Appliances. Write down in detail about Twin Block.

07

2 Answer any three short notes

- a. Bruxism
- b. Scammon Curve
- c. Tweed Analysis
- d. Orthodontic Study Models
- e. Types of Orthodontic Forces

12

3 Answer in One or Two Sentences: (Answer all questions)

- a. Define Centre of Resistance
- b. Branches of Orthodontics
- c. Define Development
- d. Define Flush Terminal Plane
- e. Define Hyalinization
- f. Use of Distal shoe space maintainer

06

SECTION-II

- 1 Long essay: 07
Write down in detail about Headgear.
- 2 Answer any three short notes: 12
- a. Vestibular Screen
 - b. Space Regaining
 - c. Ponts Analysis
 - d. Simon's Classification
 - e. Jackson's Triad
- 3 Six MCQs : (Answer all questions) 06
- 1. Ugly Duckling stage is described by
 - a) Angle
 - b) Tweed
 - c) Broadbent
 - d) Proffit
 - 2. Essential Diagnostic Aids except
 - a) Study models
 - b) Occlusograms
 - c) Case History
 - d) Facial Photographs
 - 3. Mean Value of SNA
 - a) 82
 - b) 86
 - c) 80
 - d) 78
 - 4. Phases of Tooth Movement except
 - a) Lag Phase
 - b) Post Lag Phase
 - c) Initial Lag Phase
 - d) Initial Phase
 - 5. Methods of Gaining Space
 - a) Expansion
 - b) Extraction
 - c) Distalization
 - d) All of the above
 - 6. Bionator is developed by
 - a) Balter
 - b) Adams
 - c) Frankel
 - d) None of the above

SANKALCHAND PATEL UNIVERSITYBDS – 4th Year – EXAMINATION – July – Sept 2022

Subject Code: 1DS1010306

Date: 11/07/2022

Subject Name: Orthodontics and Dental Orthopaedics

Time: 3 Hrs.

Total Marks: 70

Instructions:

1. Use separate answer book for each section.
2. Draw diagrams wherever necessary.
3. Figures to the right indicate marks.

SECTION – A

- Q.1 Answer following Structured Long Essay. (Any One) 10
- A Name the theories of tooth movement and describe anyone in detail
- B Management of deep bite in detail 15
- Q.2 Answer following Short Essay. (Any three)
- A Enlows expanding V principle
- B Meckle's Cartilage
- C Scammons growth curve
- D Methods of gaining space
- E Self-correcting malocclusion
- Q.3 Answer following in short. 5
- A What is Jackson's triad?
- B What is primary displacement?
- C How much is the leeway space in the upper arch?
- D Define hyalinization
- E Andrews 6 keys
- Q.4 Answer following MCQ's. 5
- A Deglutition occurs in how many phases?
a)-1 phase, b)-2 phases, c)-3 phases, d)-4 phases
- B Is Deep bite in primary dentition self correcting?
a) - Yes, b) - No
- C Serial extraction treatment is given by
a) Tweed, b) - Stewart, c) - Angle, d) - Andrews
- D Which of these is a Tooth borne appliances?
a) - Hyrax type, b) - Hass type, c) - Derichsweiler type, d) - twin block
- E At what age will you first see a patient for orthodontic screening?
a) - 6 years, b) - 8 years, c) - 10 years, d) - 12 years

SECTION – B

Q.5 Answer following Structured Long Essay. (Any One)

- A Write in details about theories of retention
- B Enumerate different habits and describe in detail with treatment of mouth breathing.

Q.6 Answer following Short Essay. (Any three)

- A Give us an insight on RME
- B Mention 5 Theories of growth and write about sutural theory
- C Write about phases of tooth movement and draw a graph
- D Define anchorage and write about absolute anchorage
- E What are the Types of fixed functional appliances and write in detail on jasper jumper

Q.7 Answer following in short.

- A What is the optimal orthodontic force ?
- B What is a distal step ?
- C What is secondary displacement ?
- D What is the full form of FR in FR-I appliance ?
- E What are the different Types of head gears ?

Q.8 Answer following MCQ's.

- A What is the real purpose of the ring in hotz modification of the oral screen?
a) – for easy removal, b) – for lip exercise,
c) – for easy insertion, d) - for use of fingers while using the appliance
- B How many cells are seen in a morula in the prenatal phase of growth and development?
a) – 12, b) – 18, c)-16, d)-24
- C Which of these is not a muscle of mastication?
a) Buccinator, b)- lateral pterygoid,
c)- medial pterygoid, d)- temporalis
- D Facial nerve is derived from which branchial arch ?
a) 1st arch, b)- 2nd arch, c)-3rd Arch, d)-4th arch
- E Extrusion is what type of tooth movement ?
a) – bodily movement, b) – tipping, c) – rotation, d)- torqing

Instructions:

1. Use separate answer book for each section.
2. Attempt all questions.
3. Draw diagrams wherever necessary.
4. Figures to the right indicate marks.

SECTION – A

Q.1 Answer Structured Long Essay . 07 Marks

A) Define and Classify Myofunctional appliance. Describe in detail about activator .

Q.2 Write Short Essay (Any 3 out of 5) 12 Marks

- A) Tweed Analysis
- B) Essential diagnostic aids
- C) Transient malocclusion
- D) Scammon's growth curve
- E) Ackerman Profitt classification

Q.3 Answer Following short question. 06 Marks

- A) Minimum orthodontic force
- B) FH Plane
- C) Labial bow modification name .
- D) What is ptm point .
- E) Define habits.
- F) Bodily movement .

SECTION – B

Q.5 Answer Structured Long Essay 07 Marks

A) Define growth Write down prenatal & postnatal growth of mandible

Q.6 Write Short Essay (Any 3 out of 5) 12 Marks

- A) Drawbacks' of angles classification
- B) Classification of habits & Management of Mouth Breathing Habit
- C) Essential Diagnostic Aids
- D) Steiner analysis
- E) Andrew's Six Keys

Q.7 Answer Following short question. 06 Marks

- A) Short hypotonic upper lip is a feature of
- a. Class I malocclusion
 - b. Class II malocclusion
 - c. Class III malocclusion

d. None of the above

B) The father of modern orthodontics:

- a) Edward h. angle
- b) Kingsley
- c) George crozat
- d) Tweeds

C) Spaces in deciduous dentition

- a) Physiological
- b) Pathological
- c) Incisal liability
- d) None of the above

D) Ugly duckling stage coincides with transitional phase

- a) 1st transitional phase
- b) 2nd transitional phase
- c) Inter transitional
- d) All of the above

E) Finger spring is also called

- a. Single cantilever spring
- b. Double cantilever spring
- c. One helix spring
- d. None of the above

F) Late mesial shift is due to

- a) Closure of primate spaces
- b) Eruption of 1st permanent molars
- c) Related to end on molar relation
- d) Closure of leeway space

Final Year BDS Examination

1st Internal Examination - 2021

ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS

(Total Marks: 50)

SECTION – I (25 Marks)

1. Long Essay: (7 marks)
- (1) Define growth and write down in detail about post natal growth of maxilla.
2. Answer any three short notes: (3×4 =12 marks)
- (1) Aims of Orthodontics
 - (2) Meckel's cartilage
 - (3) Flush Terminal Plane
 - (4) Mastication
 - (5) Bruxism
3. Answer in one line: (Answer all questions) (6×1 = 6 marks)
- (1) Define Orthodontics.
 - (2) Define Habit.
 - (3) Leeway space of Nance.
 - (4) Describe curve of spee.
 - (5) Types of Lips.
 - (6) Define Functional Occlusion

SECTION – II (25 Marks)

4. Long Essay: (7 marks)
- (1) Classify etiology of malocclusion. Describe in detail about local etiological factors.
5. Answer any three short notes: (3×4 =12 marks)
- (1) Thumb sucking
 - (2) Ponts analysis

Narsinhbhai Patel Dental College and Hospital, Visnagar
Department of Orthodontics and Dentofacial Orthopaedics
IV B.D.S. Preliminary Examination - 2021

Time: 1 hr

Total Marks: 25

Q.1- Write Long Question (Anyone).

(1 × 10 = 10 marks)

Define Growth and enumerate various theories of Growth, write in details about Functional Matrix Theory of growth.

Or

Define Anchorage and Classify Anchorage and write in details about Extra Oral Anchorage.

Q-2- Write Short Questions (Any Three).

(3 × 5 = 15 marks)

- a) Thumb Sucking Habit
- b) Cleft Lip and Palate
- c) Removable Orthodontic Appliances
- d) Tweed Triangle

Narsinhbhai Patel Dental College and Hospital, Visnagar
Department of Orthodontics and Dentofacial Orthopaedics
IV B.D.S. Preliminary Examination - 2021

Time: 1 hr

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Or

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- b) Cleft Lip and Palate
- c) Removable Orthodontic Appliances
- d) Tweed Triangle

Narsinhbhai Patel Dental College and Hospital, Visnagar
Department of Orthodontics and Dentofacial Orthopaedics
IV B.D.S. Preliminary Examination - 2021

Time: 1 hr

Total Marks: 25

Q.1- Write Long Question (Anyone).

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Or

Define Anchorage and Classify Anchorage and write in details about Extra Oral Anchorage.

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(3 × 5 = 15 marks)

- a) Thumb Sucking Habit
- b) Cleft Lip and Palate
- c) Removable Orthodontic Appliances
- d) Tweed Triangle

SANKALCHAND PATEL UNIVERSITY
BDS – 4th Year – EXAMINATION – July-Sept.- 2021

Subject Code: 1DS1010306

Date: 13/08/2021

Subject Name: Orthodontics and Dental Orthopedics

Time: 3 hours

Total Marks: 70

Instructions:

1. Use separate answer book for each section.
2. Draw diagrams wherever necessary.
3. Figures to the right indicate marks.

SECTION – A

- Q.1 Answer following Structured Long Essay (1 out of 2) 10
- A Define and classify Myofunctional appliances. Describe in detail about Activator.
- B Define Growth. Describe prenatal and post-natal growth of mandible.
- Q.2 Answer following Short Essay (3 out of 5) 15
- A Tweed Analysis
- B Tongue thrusting
- C Simon's Classification
- D Types of tooth movement
- E Andrew's six keys
- Q.3 Answer following Objective type questions 5
- A Five modification of Adam's Clasp.
- B Types of Head Gear.
- C Define Center of Resistance.
- D Branches of Orthodontics.
- E Use of Pendulum appliance.
- Q.4 Answer following MCQ's 5
- 1 Teeth present at the time of birth are known as:
- a. Neonatal Teeth
 - b. Prenatal Teeth
 - c. Postnatal teeth
 - d. Natal Teeth
- 2 Who introduced Twin Block?
- a. William Clark
 - b. Kingsley
 - c. Anderson
 - d. Proffit

- 3 Who Modified Angle's Classification?
- Dewey
 - Lischer
 - Both of Above
 - None of above
- 4 Normal Value of SNA Angle?
- 89°
 - 82°
 - 85°
 - 70°
- 5 What is the other name of Jackson's Clasp
- U Clasp
 - Liverpool Clasp
 - C Clasp
 - H Clasp

SECTION - B

Q.5 Answer following Structured Long Essay (1 out of 2)

- Describe in detail about management of class II malocclusion.
- Define Interceptive Orthodontics. Describe in detail about Serial Extraction.

Q.6 Answer following Short Essay (3 out of 5)

- Types of Force
- Theories of Retention
- Face Mask
- Study Model
- Types of Anchorage

Q.7 Answer following Objective type questions

- Define Flush Terminal Plane.
- Define Curve of Spee.
- Describe different types of facial form.
- Define Gnathion.
- Define Hyalinization.

Q.8 Answer following MCQ's

- 1 Baker's anchorage is known as:
 - a. Intra-maxillary anchorage
 - b. Palatal anchorage
 - c. Extraoral anchorage
 - d. Inter- maxillary anchorage
- 2 Appliance used to treat thumb sucking is...
 - a. Palatal crib
 - b. Activator
 - c. Vestibular screen
 - d. Hawley's Appliance
- 3 Mirror test is helpful in diagnosing..
 - a. Lip Biting
 - b. Thumb sucking
 - c. Tongue thrusting
 - d. Mouth Breathing
- 4 Examples of periosteal matrices include..
 - a. Muscles
 - b. Tendon
 - c. Nerves, blood vessels and glands
 - d. All of the above
- 5 Recessive chin is a feature of:
 - a. Class I Malocclusion
 - b. Class II Malocclusion
 - c. Class III Malocclusion
 - d. None of the above

SANKALCHAND PATEL UNIVERSITYBDS - 4th Year - EXAMINATION - NOV-DEC 2021

Subject Code: IDS1010306

Date: 11/12/2021

Subject Name: Orthodontics and Dentofacial Orthopedics

Time: 3 hours

Total Marks: 70

Instructions:

1. Use separate answer book for each section.
2. Draw diagrams wherever necessary.
3. Figures to the right indicate marks.

SECTION - A

- Q.1 Answer Structured Long Essay (1 out of 2) 10
- A Define Orthodontics and Write in Details about History of Orthodontics
 - B Define Growth and Enumerate various Craniofacial Deformities with classification
- Q.2 Answer Short Essay (3 out of 5) 15
- A Jackson's Triad
 - B Sutural Theory of Growth
 - C Thumb Sucking
 - D Space Regainer
 - E Serial Extraction
- Q.3 Answer following Objective type / short questions 5
- A Who is the father of Modern Orthodontics
 - B What is Progression towards Maturity?
 - C Who gave functional matrix theory of growth?
 - D Cleft Lip Happens because of lack of fusion of?
 - E what is cephalostat?
- Q.4 Answer following MCQ's 5
- A The term orthodontics is derived from
 1. Greek
 2. Latin
 3. French
 4. Spanish
 - B Pierry Fauchard was
 1. A French Dentist
 2. An American Dentist
 3. A Greek Dentist
 4. A German Dentist

Q.8 Answer following MCQ's

A The following appliance is used for RME

1. Hyrax
2. Coffin spring
3. Jaw screw
4. None of the above

B Relapse occurs most frequently with which of tooth movement?

1. Extrusion
2. Tipping
3. Rotation
4. Translation

C Proximal Stripping is carried out by

1. Metallic abrasive strips
2. Safe sided carborundum discs
3. Long thin tapered fissure burs
4. All of the above

D Myofunctional appliances

1. Usually contains active components
2. Harness natural forces from peri oral muscles
3. Fixed only
4. Not loose fitting

E Catalan's Appliance is used to treat

1. Open Bite
2. Anterior Deep Bite
3. Anterior Cross Bite
4. Scissor Bite



CIH-13025

Seat No. _____

Fourth Year B. D. S. Examination

January - 2020

Orthodontics And Dentofacial Orthopedics

Time : 3 Hours]

[Total Marks : 70

SECTION - I

- 1 Long Question : 14
Define normal occlusion. Describe normal occlusion in deciduous dentition and its further development till the age of 12 years.
- 2 Short Question : (Any Three) 15
(1) Scammon's growth curve.
(2) Fishman's skeletal maturity indicator.
(3) Ackerman's - Profit system of classification
(4) Ashley - Howe's analysis
(5) Steiner's analysis,
- 3 Answer in one or two sentence : 6
(1) Planes and normal values of tweeds triangle.
(2) Causes of Pseudo Class III molar relationship.
(3) Loss of which tooth will indicate the use of Distal Shoe appliance?
(4) Incisal Liability.
(5) In which cases Undermining resorption occurs.
(6) Name the phases of tooth movement.

SANKALCHAND PATEL UNIVERSITY
BDS – 4th Year – EXAMINATION – July-August 2020

Subject Code: 1DS1010306

Date: 20/08/2020

Subject Name: Orthodontics and Dental Orthopaedics

Time: 3 hours

Total Marks: 70

Instructions:

1. Use separate answer book for each section.
2. Draw diagrams wherever necessary.
3. Figures to the right indicate marks.

SECTION – A

- Q.1** Structured Long Essay with options (1 out of 2) **10**
- A Write in detail about the post natal development of mandible
- B Write in detail about Angle's classification and its drawbacks
- Q.2** Short Essay with options (3 out of 5) **15**
- A Tweed's triangle
- B NiTi wires
- C Oral screen and its modification
- D Fixed functional appliances
- E HYRAX
- Q.3** Objective type Without options **5**
- A Who is the father of Orthodontics ?
- B Which wire has got the property of shape memory?
- C Which cells are responsible for bone resorption?
- D What is the other name for straight profile?
- E What is the other name for Ugly duckling stage ?
- Q.4** MCQ's Without options **5**
- A Which of the following is the most accepted theory of growth and development?
- a) Functional matrix theory
- b) Servosystem theory
- c) Genetic theory
- d) none
- B Which of the following is a derived landmark?
- a) Gonial angle
- b) Point A
- c) Point B
- d) nasion

- C** In which type of anchorage the anchorage units are moved in equal and opposite direction?
- Stationary anchorage
 - Reciprocal anchorage
 - Moderate anchorage
 - Minimum anchorage
- D** Which cephalometric analysis uses SN plane as the reference plane?
- Downs
 - Tweeds
 - Stienrs
 - none
- E** What is the correct time of doing orthognathic surgery?
- During growth
 - During mixed dentition
 - After completion of growth
 - None

SECTION - B

Q.5 Structured Long Essay with options (1 out of 2)

10

- Write about oral habits and its management
- Classify myofuntional appliances and write in detail about the components of Frankel appliance.

Q.6 Short Essay with options (3 out of 5)

15

- Difference between slow maxillary expansion and rapid maxillary expansion
- Study models
- Proximal stripping
- Controlled and uncontrolled tipping
- Components of fixed appliances

Q.7 Objective type Without options

5

- What type of appliance is an activator ?
- Can we move an ankylosed tooth by applying force ?
- What should be the ideal position of lower incisor on the basal bone to avoid relapse ?
- What is the other name of universal clasp ?
- What is the type of stainless steel used for orthodontic purpose?

Q.8 MCQ's Without options

5

- Which of the following is distalization appliance?
 - Jasper jumper
 - Activator
 - Pendulum appliance
 - all

- B** What is the other name of single cantilever spring?
- a) Finger spring
 - b) Z spring
 - c) Adams clasp
 - d) Universal clasp
- C** Water holding test is used for diagnosing which of the following condition?
- a) Oral submucous fibrosis
 - b) Mouth breathing
 - c) Lip biting
 - d) TMJ problem
- D** Which two points are connected to make a SN plane?
- a) Porion nasion
 - b) Sella nasion
 - c) Orbitale nasion
 - d) none
- E** Which is the most commonly extracted tooth for orthodontic reasons?
- a) First premolar
 - b) Second premolar
 - c) Canine
 - d) Third molar



MGQ-5645

Seat No. _____

Fourth B. D. S. Examination

January - 2019

Orthodontics & Dentofacial Orthopedics

Time : Hours]

[Total Marks :

SECTION - I

- 1 Full Question. 14
Define functional appliances, classify them.
Describe in detail about Twin block appliance.
- 2 Short Notes. [any three]. 15
A Self correcting malocclusions.
B. Diagnosis & treatment planning of thumb sucking.
C. Labial. bow & it's modifications.
D. Enumerate various theories of growth & describe in detail about sutural theory.
E. Enumerate various methods of Gaining space. Describe in detail about Molar distalization.
- 3 Very short Answers. 6
A Tweed's Diagnostic triangle.
B. Relapse.
C. Growth spurts.
D. Lip Bumper.
E. Nickle Titanium wires.
F. Lee way space.

SECTION-II

- 1 Full Question. 14
Name various classification of malocclusion.
Describe in detail about Ackerman-Proffit classification.
- 2 Short Notes (any three). 15
A. Centre of Rotation Vs Centre of resistance.
B. Space maintainers.
C. Skeletal maturity indicators.
D. Classify Anchorage with example.
E. Classification of Etiology of malocclusion.
- 3 Very short Answers. 6
A. Soldering & welding.
B. Andrews six keys of Normal occlusion.
C. Growth sites & Growth centre.
D. Simon's law of canine.
E. Pont's Index.
F. Optimum orthodontic force.
-



CAB-8355

Seat No. _____

Fourth Year B. D. S. Examination

July / August - 2019

Orthodontics & Dentofacial Orthopedics

Time : 3 Hours]

[Total Marks : 70

SECTION - I

- 1 Full question : 14
Define malocclusion. Describe in detail about Angle's classification, its drawbacks and modifications.
- 2 Write short notes : (any three) 15
- a) Oral manifestation of thumb-sucking.
 - b) Cephalo-caudal gradient of growth
 - c) Difference between primary and secondary cartilage.
 - d) Enlow's 'V' principle
 - e) Post natal growth of mandible.
- 3 Write in one or two sentences : 6
- a) What is flush terminal plane ?
 - b) What is overjet ?
 - c) What is interceptive orthodontics ?
 - d) What is rhythm of growth ?
 - e) Cross sectional studies
 - f) Infantile swallow.

SECTION - II

- 1 Full question : 14
What is myofunctional appliance ? Classify them and describe in detail about activator.
- 2 Write short notes : (any three) 15
- a) Classification of anchorage and give one example of each.
 - b) Which are the different components of removable orthodontic appliance ? Write in detail about Adam's clasp and its modification.
 - c) Write in detail about space maintainers.
 - d) Schools of retention.
 - e) Describe in detail about types of force.
- 3 Write in one or two sentences : 6
- a) What is couple ?
 - b) What is tarnish ?
 - c) What is translation of tooth ?
 - d) Incisal liability.
 - e) Name skeletal parameters of Steiner's analysis.
 - f) Double cantilever spring.
-



MT-17505

Final Year B. D. S. Examination

July / August - 2018

Orthodontics & Dentofacial Orthopaedics

Time : 3 Hours]

[Total Marks : 70

- Instructions :**
- (1) Figures to the right indicate marks.
 - (2) Draw diagrams wherever necessary.
 - (3) Write legibly.
 - (4) Use separate answer books for each section.

SECTION - I

- 1 **Full question :** **14**
Define and classify habit. Describe in detail about thumb and digit sucking habit.

- 2 **Write short notes : (any three)** **15**
 - (a) Growth markers
 - (b) Cartilaginous theory of growth
 - (c) Self correcting malocclusion of dentition
 - (d) Fluid dynamic theory of tooth movement
 - (e) Extra oral examination in orthodontics.

- 3 **Write in one or two sentences :** **6**
 - (a) Which is the main growth site of mandible ?
 - (b) Mesial step terminal plane relationship of dentition.

- (c) Which of the following is a bilateral landmark ?
- (A) Nasion
 - (B) Gnathion
 - (C) Gonion
 - (D) Pogonion
- (d) Diagnostic aids in orthodontics.
- (e) Rearward resorption.
- (f) Cephalometrically, A 20 years old female has SNA- 86 degree and SNB - 74 degree. What type of skeletal malocclusion does she have ?

SECTION - II

- 1 Full question : 14
 Discuss the role of Orthopaedic appliances in orthodontics.
- 2 Write short notes : (any three) 15
- (a) Re-inforced anchorage
 - (b) Intra-oral methods of gaining space
 - (c) Vetibular screen
 - (d) Labial bow and its modifications
 - (e) Serial extraction.
- 3 Write in one or two sentences : 6
- (a) Diagrammatic presentation of reciprocal anchorage.
 - (b) What is 18/8 stainless steel ?
 - (c) Causes of relapse.
 - (d) Tooth borne passive appliances.
 - (e) Angle's class II molar relationship.
 - (f) Where does the centre of rotation lie for translation tooth movement ?

AI-3605

Seat No. _____

Final Year B. D. S. Examination

January - 2018

Orthodontia

Time : 3 Hours]

[Total Marks : 70

Instruction : Answer clearly and legibly with diagrams wherever necessary.

SECTION - I

- 1 Full question : 14**
Enumerate all the differences between removable and fixed appliances. Describe adams clasp in detail. Describe few differences between beggs appliance and the straight wire appliance.
- 2 Short notes : (any three) 15**
(a) Methods of studying growth.
(b) R. M. E.
(c) Midline diastima.
(d) Factors affecting relapse.
(e) Lee way space of nance.
- 3 Very short answers : (one mark each) 6**
(a) Imbrication.
(b) Flush terminal plane.
(c) Orthodontic traige.
(d) Incisal liability.
(e) Pitch of the expansion screw.
(f) Stationary anchorage.

SECTION - II

- 1 Full question : 14
- Define Angle's class II malocclusion. Describe in details the various stages in Diagnosis and treatment planning of Angle's class II malocclusion. Describe the steps taken in fabrication of a construction bite for a myofunctional appliance.
- 2 Short notes : (any three) 15
- (1) Cary's Analysis
 - (2) Tweed's Analysis
 - (3) Serial Extractions
 - (4) Pattern, variability, and Timing of growth
 - (5) Functional matrix theory
- 3 Very short answer : (one mark each) 6
- (1) C.S.F
 - (2) Moment of Force
 - (3) Optimum orthodontic force
 - (4) Hyalinization
 - (5) Jackson's triad
 - (6) Father of modern orthodontics.
-