

**Q.P.CODE:427/411**

DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008

BDS DEGREE EXAMINATION – JULY/AUGUST, 2017

FOURTH (NR) &amp; FINAL BDS (NR&amp;OR) EXAMINATION

**ORTHODONTICS & DENTOFACIAL ORTHOPAEDICS****Time : 3 Hours****Max. Marks : 70**

Note : Answer all questions.

- 1) Define retention and relapse. Write in detail the theorems of retention. 2+2+5=9

- 2) What are the stages of development of dentition? Write in detail about the self-correcting malocclusions. 4+5=9

**WRITE SHORT NOTES ON:**

8x4=32

- 3) Piezoelectric theory of tooth movement
- 4) Risks of orthodontic treatment
- 5) Cartilaginous theory of growth
- 6) Broadbent phenomena
- 7) Steiner's analysis
- 8) Adams clasp and its modifications
- 9) Nitinol archwires
- 10) Space maintainers

10x2=20

**WRITE BRIEFLY ON:**

- 11) Interceptive orthodontic procedures
- 12) Careys analysis
- 13) Chin cap
- 14) Pericision
- 15) Curve of spee
- 16) Keys to occlusion
- 17) Crossbite
- 18) Leeway space
- 19) Moment of a force
- 20) Elgiloy

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BDS DEGREE EXAMINATION – JANUARY, 2017

FOURTH (NR) & FINAL BDS (NR&OR) EXAMINATION

**ORTHODONTICS & DENTOFACIAL ORTHOPAEDICS**

**Time : 3 Hours**

**Max. Marks : 70**

Note : Answer all questions.

- 21) Discuss the various methods of gaining space. Write in detail about proximal stripping procedure. 5+4=9

- 22) Define anchorage. Discuss in detail about the various sources of anchorage. 2+7=9

**WRITE SHORT NOTES ON:**

8x4=32

- 23) Simon's classification
- 24) Postnatal growth of mandible
- 25) Transient malocclusion
- 26) Sterilization in orthodontics
- 27) Slow expansion devices
- 28) Reverse pull headgears
- 29) Fixed retainers
- 30) Angle's class II division II malocclusion

10x2=20

**WRITE BRIEFLY ON:**

- 31) Finger spring
- 32) Helical canine retractor
- 33) Types of tooth movement
- 34) Tweed's analysis
- 35) Catalan's appliance
- 36) Uses of Panoramic Radiograph
- 37) Types of growth data
- 38) Jackson's triad
- 39) Canine guided occlusion
- 40) Lip bumper

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**ORTHODONTICS & DENTOFACIAL ORTHOPAEDICS**

**Time : 3 Hours**

**Max. Marks : 70**

Note : Answer all questions.

41) Enumerate theories of retention. Add a note on causes of relapse. 5+4=9

42) Discuss the various treatment options for a 9 year old boy presenting with a skeletal and dental class II Division I malocclusion. 9

**WRITE SHORT NOTES ON:**

8x4=32

- 43) RME (Rapid Maxillary Expansion)
- 44) Thumb sucking habit
- 45) Merits and demerits of Angle's classification
- 46) Hand wrist X-Ray; A skeletal maturity indicator
- 47) Serial extractions
- 48) Ackerman Proffit's classification of malocclusion
- 49) Down's Analysis
- 50) Classification of springs

10x2=20

**WRITE BRIEFLY ON:**

- 51) Enumerate various modifications of activator
- 52) Six keys to normal occlusion
- 53) Angle (<) ANB
- 54) Bolton's Model Analysis
- 55) Pseudo class III malocclusion
- 56) Adam's Clasp
- 57) Growth site V/s Growth centre
- 58) Pericision
- 59) Facial index
- 60) Distal shoe space maintainers

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**DR NTR UNIVERSITY OF HEALTH SCIENCES :: VIJAYAWADA :: AP**  
**BDS DEGREE EXAMINATION – JANUARY, 2016**  
**FOURTH (NR) & FINAL BDS (NR&OR) EXAMINATION**  
**ORTHODONTICS & DENTOFACIAL ORTHOPAEDICS**

Time : 3 Hours

Max. Marks : 70

Note : Answer all questions.

61) Enumerate various theories of Growth. Write in detail about functional matrix theory. 5+4=9

62) Describe the various methods of gaining space. Explain in detail about maxillary expansion 5+4=9

**WRITE SHORT NOTES ON:** 8x4=32

63) Simon's classification of malocclusion

64) Recent advances in orthodontic diagnostic aids

65) Steiner's analysis

66) Mouth breathing habit

67) Histological changes following extreme forces

68) Reinforced anchorage

69) Moyer's analysis

70) Fixed space maintainer

**WRITE BRIEFLY ON:** 10x2=20

71) Synchronosis

72) Centre of resistance

73) Ideal requirement of orthodontic wire

74) Safety valve mechanism

75) Chin Cap

76) Open Bite

77) Midline diastema

78) Types of orthodontic force

79) Oral screen

80) Tweed's diagnostic triangle

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DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008

BDS DEGREE EXAMINATION – JULY / AUGUST, 2015

FOURTH (NR) & FINAL BDS (NR&OR) EXAMINATION

**ORTHODONTICS & DENTOFACIAL ORTHOPAEDICS**

**Time : 3 Hours**

**Max. Marks : 70**

Note : Answer all questions.

1) Define orthodontic appliance. Explain principles of appliance designing. 2+7=9

2) Classify etiology of malocclusion and explain local factors causing malocclusion. 4+5=9

**WRITE SHORT NOTES ON:** 8x4=32

3) Begg Vs Straight wire appliance

4) Serial extractions

5) Reverse pull headgear

6) Twin block

7) Management of cross bite

8) Thumb sucking habit

9) Undermining resorption

10) Wilkinson's extraction

10x2=20

**WRITE BRIEFLY ON:**

11) Sphenoccipital synchondrosis

12) Leeway Space of Nance

13) Effect of drugs on orthodontic treatment

14) Pubertal growth spurt

15) Frankfort horizontal plane

16) SNA & SNB

17) Functional space maintainer

18) Pericision

19) Stripping

20) Controlled and uncontrolled tipping

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**BDS DEGREE EXAMINATION – JANUARY, 2015  
FOURTH (NR) & FINAL BDS (NR&OR) EXAMINATION  
ORTHODONTICS & DENTOFACIAL ORTHOPAEDICS**

Time : 3 Hours

Max. Marks : 70

**Note : Answer all questions.**

21) Define optimum force. Classify and discuss  $2+3+4=9$   
Orthodontic forces.

22) Define and classify myofunctional appliances.  $2+3+2+2=9$   
Discuss indications and mode of action of Activator.

**WRITE SHORT NOTES ON:**

$8 \times 4 = 32$

- 23) Self correcting anomalies
- 24) Orthodontic study models
- 25) Cephalometrics: Uses, advantages and disadvantages
- 26) Space maintainers
- 27) Tweeds analysis
- 28) Importance of Medical History in Orthodontics
- 29) Adam's clasp and modifications
- 30) Growth of the cranial base

**WRITE BRIEFLY ON:**

$10 \times 2 = 20$

- 31) Jackson's triad
- 32) Visual treatment objective
- 33) Clinical features of cleft lip and palate
- 34) Cephalic index
- 35) Ponts analysis
- 36) Canine Retractors
- 37) Rotation
- 38) 'Y' Axis
- 39) Safety valve mechanism
- 40) Z Spring

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**BDS DEGREE EXAMINATION – JULY, 2014  
FOURTH (NR) & FINAL BDS (NR&OR) EXAMINATION  
ORTHODONTICS & DENTOFACIAL ORTHOPAEDICS**

**Time : 3 Hours**

**Max. Marks : 70**

**Note : Answer all questions.**

1) Classify etiology of malocclusion. Discuss in detail the various local etiological factors causing malocclusion. 3+6=9

2) Define interceptive Orthodontics. Discuss in detail various serial extraction procedures 2+7=9

**WRITE SHORT NOTES ON:** 8x4=32

3) Endochondral type of bone formation

4) Management of mouth breathing habit

5) Essential diagnostic aids

6) Theories of tooth movement

7) Extra oral sources of anchorage

8) Components of removable appliances

9) Preventive Orthodontics

10) Relapse in Orthodontics

**WRITE BRIEFLY ON:** 10x2=20

11) Hyrax

12) Types of tooth movement

13) Active components of fixed appliance

14) Father of modern Orthodontics and two of his contributions

15) Define development

16) Name different fixed appliance systems

17) Name some slow expansion devices

18) Oral screen

19) Mickel's cartilage

20) Ankylosis

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**BDS DEGREE EXAMINATION – JANUARY, 2014  
FOURTH (NR) & FINAL BDS (NR&OR) EXAMINATION  
ORTHODONTICS & DENTOFACIAL ORTHOPAEDICS**

**Time : 3 Hours**

**Max. Marks : 70**

**Note : Answer all questions.**

41) Define habits. Classify and discuss in detail the features of tongue thrusting habit and its treatment modalities. **2+3+4=9**

42) Mention the theories of growth, write about functional matrix hypothesis with examples **5+4=9**

**WRITE SHORT NOTES ON:**

**8x4=32**

43) Methods of studying bone growth

44) Ackerman and Proffit's classification

45) Bolton's analysis

46) Clinical features of Class II div 2 malocclusion

47) Lip bumper

48) Classify etiological factors in malocclusion

49) Undermined resorption

50) Theories of retention.

**WRITE BRIEFLY ON:**

**10x2=20**

51) Double cantilever spring

52) Baker's Anchorage

53) 18-8 Stainless Steel

54) Piezoelectric theory

55) Oral screen

56) Catalans appliance

57) SNA and SNB angle

58) Pericision

59) Pterygoid response

60) Spheno-occipital synchondrosis

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**BDS DEGREE EXAMINATION – JANUARY/FEBRUARY, 2013  
FOURTH (NR) & FINAL BDS (NR&OR) EXAMINATION  
ORTHODONTICS & DENTOFACIAL ORTHOPAEDICS**

**Time : 3 Hours**

**Max. Marks : 70**

**Note : Answer all questions.**

61) Define and classify Malocclusion. Describe in detail the role of Lip Biting habit in the development of Malocclusion. **2+3+4=9**

62) Define Growth and development. Write in detail about postnatal growth of mandible. **2+7=9**

**WRITE SHORT NOTES ON:**

**8x4=32**

63) Flush Terminal Plane

64) Canine retractors

65) Tissue response to orthodontic force application

66) Oral Screen

67) Molar Distalization

68) Rapid Palatal expansion

69) Functional Space maintainer

70) Moyer's Mixed Dentition Analysis

**WRITE BRIEFLY ON:**

**10x2=20**

71) Proximal stripping

72) Permanent Retention

73) Reciprocal anchorage

74) Jackson's Triad

75) Components of Fixed appliances

76) Elgiloy wires

77) Pericision

78) Deep bite

79) Flux

80) Tweeds Triangle

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**BDS DEGREE EXAMINATION – AUGUST, 2013**  
**FOURTH (NR) & FINAL BDS (NR&OR) EXAMINATION**  
**ORTHODONTICS & DENTOFACIAL ORTHOPAEDICS**

Time : 3 Hours

Max. Marks : 70

Note : Answer all questions.

81) Define interceptive Orthodontics and explain serial extraction in detail. 9

82) Discuss histological changes during orthodontic tooth movement. 9

**WRITE SHORT NOTES ON:** 8x4=32

83) Steiner's analysis

84) Mouth breathing habit

85) Hand – Wrist X rays

86) Local causes of Malocclusion

87) Activator

88) Anchorage

89) Expansion screws

90) Therapeutic extractions.

**WRITE BRIEFLY ON:** 10x2=20

91) Space regainer

92) Scammon's growth curve

93) Adam's clasp and its advantages

94) Open bite

95) 'Y' Axis

96) Nasolabial angle

97) Midline Diastema

98) Wolfe's law of bone transformation

99) Simple and complex tongue thrust

100) Advantage and disadvantage of removable appliance

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**427/411-BDS DEGREE EXAMINATION – JANUARY/FEBRUARY, 2013**

Fourth (nr) & final bds (nr&or) examination-Orthodontics & dentofacial orthopaedics

Time : 3 Hours-Max. Marks : 70-Answer all questions.

- 1..Define and classify Malocclusion. Describe in detail the role of Lip Biting habit in the development of Malocclusion=2+3+4=9m
- 2..Define Growth and development. Write in detail about postnatal growth of mandible=2+7=9m  
Write Short Notes On: 8 x 4=32m
- 3..Flush Terminal Plane      4..Canine retractors      5.Tissue response to orthodontic force application
- 6..Oral Screen                  7..Molar Distalization      8..Rapid Palatal expansion
- 9..Functional Space maintainer                          10.Moyer's Mixed Dentition Analysis
- Write Briefly On: 10 x 2=20m
- 11.Proximal stripping      12.Permanent Retention      13.Reciprocal anchorage      14.Jackson's Triad
- 15.Components of Fixed appliances      16.Elgiloy wires      17.Pericision      18.Deep bite      19.Flux
- 20.Tweeds Triangle

**427/411-BDS DEGREE EXAMINATION – AUGUST, 2012**

Fourth nr) & final bds nr&or) examination-Orthodontics & dentofacial orthopaedics-Time : 3 Hours-Max. Marks : 70-Answer all questions.

- 1..Define Anchorage. Explain various types of Anchorage with suitable examples=9m
- 2..Treatment planning of Skeletal class III malocclusion in adult patient=9m  
Write Short Notes On: 8 x 4=32m
- 3..Ackerman and Proffit classification      4..Stainless steel      5..Adam's clasp and modifications
- 6..Trajectories of forces                          7..Functional Matrix theory                          8..Classify springs
- 9..Serial Extraction                                  10.Space maintainers.
- Write briefly on: 10 x 2=20m
- 11.FMA      12.Catlan's appliance      13.Scissor's Bite      14.Growth Centre      15.Expanding 'V' Principle
- 16.Spot Welding      17.Incisor Liability      18.Frankel's Philosophy      19.Treatment of Midline diastema
- 20.Profile Analysis.

**427-FOURTH BDS (N.R) DEG. EXAMINATION – MARCH, 2012-ORTHODONTICS & DENTOFACIAL ORTHOPAEDICS-Time : 3 Hours-Max. Marks : 70-Answer all questions.**

- 1..Classify Myofunctional appliances. Name the components of Frankel II appliance and describe in detail its mode of action=9m
- 2..What are the various Diagnostic aids in Orthodontics? Write in detail about the clinical examination and case history record=9m  
Write Short Notes On: 8 x 4=32m
3. Mouth breathing habit                                  4. Extraoral Anchorage                                  5. Ugly Duckling stage
6. Limitations of Angle's classification                                  7. Buccinator Mechanism                                  8. Growth spurts
9. Hand wrist radiograph                                  10.Methods of gaining space in Orthodontics
- Write briefly on: 10 x 2=20m
- 11.Genioplasty                                  12.Flush Terminal Plane                                  13.Soldering      14.Coffins spring
- 15.Proximal Stripping      16.Blanch Test                                  17.Treatment of anterior crossbite
- 18.Vital staining                                  19.Distal shoe space maintainers      20.Aims of Orthodontic treatment

**411-FINAL BDS (O.R) DEG. EXAM-JAN., 2012-ORTHODONTICS & DENTOFACIAL**

- 1..Discuss the histological changes during orthodontic tooth movement=9m
- 2..Classify cleft lip and palate. Describe the orthodontic management of the same=9m  
Write Short Notes On: 8 x 4=32m
- 3..Micro implants in orthodontics                                  4..Muscles of mastication
- 5..Endochondral and intramembranous bone formation                                  6. Class II Div I v/s Class II Div II
7. Steiner's analysis      8. Tongue thrust habit                                  9. Retention in Orthodontics
- 10.Clinical application of growth and development
- Write Briefly On: 10 x 2=20m
- 11.Camouflage treatment                                  12.Cephalostat                                  13.Gum pads      14.Cross bites
- 15.E.H. Angle and his contributions      16.Evaluation of smile      17.Components of fixed appliances
- 18.Ashley How's analysis                                  19.Define orthodontics      20.Finger spring

- 1..Define Growth. Mention the various theories of growth and discuss in detail the functional matrix hypothesis=9m
- 2..Define optimum Orthodontic force. Discuss the various theories of tooth movement=9m
- Write Short Notes On:  $8 \times 4 = 32m$
- 3..Down's Analysis      4..Serial Extractions      5..Treatment of class III malocclusion
- 6..Andrew six keys of normal occlusion      7..Treatment of midline diastema
- 8..Spheno-occipital synchondrosis      9..Frankel's appliance
- 10.Space Maintainers

Write Briefly On:  $10 \times 2 = 20m$

- 11.Catalan's appliance      12. Antiflux      13. Rotation      14..Meckel's cartilage
15. Apertognathia      16. Pericision      17. Wilkinson's Extraction
- 18..Bakers anchorage      19. Face Mask      20. Facial divergence

#### **411-FINAL BDS DEGREE EXAMINATION – FEBRUARY, 2011-ORTHODONTICS**

- 1..Classify diagnostic aids. Discuss in detail the essential diagnostic aids=9m
- 2..Define habits. Classify and discuss in detail the features of tongue thrusting habit and its treatment modalities=9m

Write short notes on:  $8 \times 4 = 32m$

- 3.Role of X-rays in orthodontics      4.Undermining Resorption
- 5.Transient Malocclusion      6.Minor Surgical Procedures in Orthodontics
- 7.Features of anterior open bite
- 8.Buccinator mechanism      9..Trajectories of forces      10.Andersons activator

Write briefly on:  $10 \times 2 = 20m$

- 11.Gum pads      12.Electromyography      13.Frankfort Horizontal Plane      14.Force and couple
- 15.Careys analysis      16.Molar tubes      17.Imbrication      18.18/8 stainless steel
- 19.Tweeds triangle      20.Hawleys appliance

#### **411-FINAL BDS DEGREE EXAMINATION – JULY, 2010-ORTHODONTICS**

##### **PART-A**

1. Define and classify myofunctional appliances. Discuss the indications and mode of action of Activator=9m

Write Short Notes On= $4 \times 4 = 16m$

2. Headgears      3.Orthodontic arch wires      4.Self correcting anomalies      5.Essential diagnostic aids.

Write Briefly On= $5 \times 2 = 10m$

6. Chin Cap      7. Cranial base flexure      8. Herbst appliance      9. Supernumerary Teeth      10. Finger Springs

##### **PART - B**

11. Define Interceptive orthodontics. Discuss in detail the various serial extraction procedures=9m

Write Short Notes on:  $4 \times 4 = 16m$

12. Space regainers      13. Steiners analysis      14. Frankel's appliance

15. Preventive orthodontics

Write Briefly on:  $5 \times 2 = 10m$

16. Angle ANB      17. Tipping movement      18. Simons law of canine

19. Flush terminal plane      20. Jacksons traid

#### **411-FINAL BDS DEGREE EXAMINATION – FEBRUARY, 2010-ORTHODONTICS**

##### **PART-A**

1. Elaborate histology of tooth movement – changes following application of mild & extreme forces

WRITE SHORT NOTES ON= $4 \times 4 = 16m$

2. Define serial extraction and write on indications of serial extractions      3. Management of cross bite
4. Simons classification of malocclusion      5. Uses of roentgenographic cephalometry in orthodontics.

WRITE BRIEFLY ON= $5 \times 2 = 10m$

6. Pricisions      7. Catlans appliances      8. Differential growth
9. Prolonged retention of deciduous teeth      10. Bakers anchorage

##### **PART – B**

11. Classify various factors in the etiology of malocclusion. Elaborate endocrinal factors=9m

Write short notes on:  $4 \times 4 = 16m$

12. Trajectories of occlusal forces      13. Transient malocclusion

14. Wolfs theory of bone transformation      15. Springs used for distalizing canines

WRITE BRIEFLY ON= $5 \times 2 = 10m$

16. Ankylosis      17. Neurotropic theory of craniofacial growth      18. Carey's model analysis
19. Tweeds triangle      20. 18-8 stainless steel

**411-FINAL BDS DEGREE EXAMINATION – AUGUST, 2009-ORTHODONTICS**

**PART-A (35 MARKS)**

1. Explain slow and rapid expansion, their indications, contra-indications and appliances used=9m

WRITE SHORT NOTES ON: 4 x 4 =16m

2. Ackerman – Proffit classification of malocclusion

3. Lip bumper

4. Sterilization in orthodontics

5. Functional appliances

WRITE BRIEFLY ON: 5 x 2 =10m

6. Centric relation and centric occlusion

7. Ideal requirements of removable orthodontic appliance

8. Adams clasp

9. Synchondrosis

10. Types of orthodontic forces

**PART-B(35 MARKS)**

11. Enumerate theories of retention. Add a note on causes of relapse.=9m

Write short notes on: 4 x 4=12. Terminal planes

13. Orthodontic study models

14. Moyer's mixed dentition Analysis

WRITE BRIEFLY ON: 5 x 2 =10m

16. Uses of panoramic radiograph

17. Proximal slenderization / stripping

18. Jackson's triad

19. Incisal liability

20. Cleft Lip

**411-FINAL BDS DEGREE EXAMINATION – MARCH, 2009-ORTHODONTICS**

**PART -A**

1. Classify habits. Explain the triad of factors affecting habits. Elaborate on lip biting and nail biting

Habits=9m

Write Short=4X4=2. Importance of genetics in orthodontics

3. Maxillary anterior bite plane appliance

4. Classify myofunctional appliances and what are the indications of activator

5. Post natal growth and development of the mandible

Write Briefly On:= 5X2=6. Shape memory alloy

7. Optimum orthodontic force

8. Reinforced anchorage

9. Growth spurts

10. Space regainers

**PART-B**

11. Enumerate Cephalometric land marks and elaborate on STEINERS analysis=9m

Write Short Notes On=4X4=12. Relapse in orthodontics

13. Preventive orthodontics

14. Unfavorable sequel of malocclusion

15. Supernumerary teeth

Write Briefly On=5X2=16. Transitional period

17. Orthodontic impressions

18. Andrews six keys to normal occlusion

19. Piezo-electric theory

20. Pseudo class III malocclusion

**411-Final BDS DEGREE EXAMINATION – AUGUST/SEPTEMBER, 2008**

**PART -A**

1. Enumerate various diagnostic aids and elaborate on the various model analyses used for diagnosis and treatment planning in orthodontic practice=9m

Write Short Notes On:= 4X4=2. Local causes of malocclusion

3. Aims and scope of orthodontics

4. Mouth breathing habit

5. Dentofacial disturbances of genetic origin

Write Briefly On=5X2=6. Coffin spring

7. Methods of gaining space

8. Adams clasp and its advantages

9. Expanding V principle

10. Dewey's classification of malocclusion

**PART-B**

11. Discuss the histological changes during orthodontic tooth movement=9m

Write Short Notes On=4X4=12. Write about activator appliance

13. Serial extraction

14. Indication for 2<sup>nd</sup> premolar extraction

15. Scammons growth curve

Write Briefly On:= 5X2=16. Gum pads

17. Extra oral anchorage

18. Permanent retention

19. Wilkinson extraction

20. Open bite

**411-Final BDS DEGREE EXAMINATION – MARCH, 2008-ORTHODONTICS**

**PART -A**

1. Discuss essential diagnostic criteria used in orthodontics=9m

Write Short Notes On:= 4x4=2. Case selection for functional appliance

3. 18-8 stainless steel

4. Retention in orthodontics

5. Boltons analysis

Write Briefly On:= 5x2=6. Andrew's six keys of occlusion

7. Tweeds triangle

8. Gases used for soldering

9. Flux and antflux

10. Define orthodontics

**PART - B**

11. Discuss in detail about the clinical applications of growth and development in orthodontics=9m



Write Short Notes On:= 4x4=12. Face mask therapy 13. Space regainers 14. Hand wrist radiograph  
15. Reciprocal anchorage

Write Briefly On:= 5x2=16. Hyrax appliance 17. Ideal orthodontic force  
18. Drawbacks of Angle's classification 19. Irreversible hydrocolloids 20. Welding

**411-NR-FINAL B.D.S DEGREE EXAMINATION –OCTOBER, 2007-ORTHODONTICS**

**Part-A**

1. What are the causes of cleft lip and palate and write about the management=9m

Write short notes on: 4 x 4 =16m; 2. Oral screen 3. Functional matrix theory

4. Midline diasthema 5. Differentiate between activator and frankle appliance

Write briefly on: 5 x 2 =10m; 6. Growth spurts 7. Elgiloy wires

8. Wolf's law of bone transformation 9. Distal shoe space maintainers 10. Simons law of cuspid

**Part-B**

11. Write about the unfavourable sequelae of malocclusion=9m

Write short notes on: 4 x 4 =16m; 12. Buccinator mechanism 13. Ackerman Profit Classification

14. Incisal liability 15. Undermined resorption

Write briefly on: 5 x 2 =10m; 16. Angle ANB 17. Sheno-Occipital synchondrosis

18. Components of fixed appliances 19. Piezo-electric theory 20. Cantiliver spring

**APRIL, 2007**

**PART -A**

1. Describe the growth and development of mandible and its clinical importance in orthodontics.

2. Write short notes on: 4x4=16=a) Flush terminal plane b) Moyer's mixed dentition analysis

c) Stationary Anchorage d) Tweed's Triangle

3. Write: 5x2=a) Hand wrist X – rays b) SNA c) Diagnostic Aids d) Twin Block d) Mid line diastema

**PART - B**

4. Classify Frankel appliance and explain in detail any one clinical situation.

5. Write short notes on: 4x4=16=a) Mouth breathing habit b) Serial extractions c) Occlusal plane

d) Anterior biting plane

6. Write briefly on: 5x2=a) Adam's Clasp and its modifications b) Stainless steel c) Spot welding

d) Howley's Retainer e) Classify space maintainers and write briefly on any one fixed space maintainer.

**411-OR-FINAL B.D.S.DEGREE EXAMINATION – APRIL, 2007-ORTHODONTICS**

**PART -A**

1. Define growth and development. Explain in detail various methods of measuring growth.

2. Write short notes: 6x5 =a) Ugly duckling Malocclusion b) Geneoplasty c) Retention & relapse

d) Pout's analysis e) Midline diasthema f) Mouth breathing habit

**PART - B**

3. Classify Anchorage. Describe in detail the extra oral anchorage=10

4. Write short notes on: 6x5 =a) Dilaceration b) Y-axis c) I.O. X-rays d) Simon's classification

e) Distal shoe horn f) Activato

**OCTOBER-2006**

**Part-A**

1. Discuss pre-natal and post-natal growth of mandible and its clinical application in orthodontics=9m

2. Write: 4 x 4 =a) Aims and objectives of orthodontics b) S-N plane c) Crozat clasp d) Reciprocal Anchorage

3. Write briefly on: 5 x 2 =10m; a) Surgical orthodontics b) Expansion screws

c) Incisor liability d) Growth spurts e) Incline planes

**Part-B**

4. Explain the steps in fortification of Oval screen and give its advantages=9m

5. Write: 4 x 4=a) Canine retractors b) Preventive orthodontics c) Undermine resorption d) Study Models

6. Write briefly on: 5 x 2 =10m; a) High labial bow b) Twin studies c) RME

d) Stages of eruption of permanent teeth e) Orthodontic clasps

**APRIL-2006**

**Part-A**

1. Define growth and development. What are the theories of Growth? How growth disturbances can cause Malocclusion=9m

2. Write short: 4 x 4=a) Oral-Screen b) Diagnostic Aids c) Retention appliances d) Leeway space of nance

3. Write briefly on: 4 x 4 =16m; a) Chin-Cap b) Supplemental Teeth c) Carpal Index

d) Optimum Orthodontic Force e) Components of Removable appliance

**Part-B**

4. Define anchorage. Classify orthodontic anchorage and explain with examples=9m

5. Write short notes on: 4 x 4 =16m; a) Max.Middle Diastema b) Theories of Eruption

c) Methods of gaining space in dental arch d) Carey's analysis

6. Write briefly on: 5 x 2 = 10m; a) Inclined plane b) Disadvantages of removable appliances  
c) Bionator d) Panoramic Radiographics e) Simon's Classification

**OCT./NOV.2005 (N.R.)**

**Part-A**

- Discuss clinical picture of skeletal angle's class III malocclusion and its clinical management = 9marks
- Write short notes on: 4 x 4 = 16marks; a) Ugly duckling stage b) Therapeutic extractions  
c) Open bite d) Space maintainers
- Write briefly on: 5 x 2 = 10marks; a) Rotation b) Occlusal plane c) Adams clasp d) Angle SNA e) Canine retractors

**Part-B**

- Define malocclusions. Classify etiology of malocclusions. Discuss clinical picture and management of thumb-sucking habit = 9marks
- Write short notes on: 4 x 4 = 16marks; a) Validity of Angle's classification b) Orthodontic Study models  
c) F.R.II appliance d) Pubertal growth spurt
- Write briefly on: 5 x 2 = 10marks; a) Mandibular plane b) Angle SNB c) Pont's model analysis  
d) Tissue changes on pressure side e) Advantages of removable orthodontic appliances

**MAR/APR.2005 – N.R.**

**Part-A**

- Discuss pre-natal and post-natal growth of mandible and its clinical application in orthodontics = 9marks
- Write short notes on: 4 x 4 = 16marks; a) Tweed's triangle b) Rapid maxillary expansion  
c) I-O-X rays in orthodontics d) Trajectories of occlusal forces
- Write briefly on: 5 x 2 = 10marks; a) Pont's analysis (Pont's) b) Bolton plane  
c) Coffin spring d) Soldering and welding e) 'Y' Axis angle

**Part-B**

- Discuss the various tissue changes taking place during orthodontic tooth movement = 9marks
- Write short notes on: 4 x 4 = 16marks; a) Bite plane appliances b) Components of fixed appliance  
c) F.H.plane d) Primate spaces
- Write briefly: 5 x 2; a) Incisal liability b) Cleft lip c) Acromegaly d) Inter incisal angle e) Wolf's Law

**OCTOBER, 2004.**

**Part-A**

- Define Anchorage. Discuss classification of Anchorage. Explain Intermaxillary Anchorage = 9m
- Write short notes on: 4 x 4 = 16marks; a) Leeway space of Nance b) Incisal Liability  
c) 'Y' Axis Angle d) Ideal requisites of Orthodontic Appliance
- Write briefly on: 5 x 2 = 10marks; a) Study Models b) Trajectories c) Occlusal X-ray  
d) Oral Screen e) Expansion Appliances.

**Part-B**

- Discuss the various stages of development of occlusion, from birth to adolescent = 9m
- Write short notes on: 4 x 4 = 16marks; a) Thumb sucking habit b) Mandibular Retrognathism  
c) Self supporting springs d) Therapeutic Extractions in Orthodontics
- Write briefly on: 5 x 2 = 10marks; a) Flush Terminal Plane b) Carey's Model Analysis  
c) Bite Plane Appliances d) Pericision e) S-N-B Angle

**APRIL, 2003 (NEW REGULATIONS)**

**Part-A**

- Enumerate the aetiological factors causing mouth breathing and tongue thrust in children and discuss the line of treatment = 9marks
- Write short answers on: 4 x 4 a) Head gear b) Lip bumper c) Pericision d) Primate space
- Write : 5 x 2 = 10marks; a) Tweed's analysis b) Growth spurts c) 18-8 stainless steel d) Irreversible hydrocolloids

**Part-B**

- What are functional appliances. Give examples. Discuss any one appliance in detail = 9marks
- Write short notes on: 4 x 4 a) Y-Axis b) Model Analysis c) Hand-Wrist X-ray d) Midline diastema
- Write : 5 x 2 = 10marks; a) Posterior cross bite b) ANB angle c) Incisor liability d) Solder and flux e) Oral Screen

**MARCH/APRIL, 2003. (OLD REGULATIONS)**

**Part-A**

- Enumerate the aetiological factors causing mouth breathing and tongue thrust in children and discuss the line of treatment = 10marks
- Write : 6 x 5 = 30marks; a) Head gear b) Lip bumper c) Pericision d) Primate space e) Growth spurt f) Fixed retainer

**Part-B**

- What are the functional appliances give examples. Discuss any one appliance in detail. = 9marks
- Write short notes on: 6 x 5 a) 'Y' Axis b) Model analysis c) Hand-Wrist X-ray  
d) Midline diastema e) ANB angle f) Solder and flux

**(New Regulations) - OCTOBER, 2002**

**Part-A**

1. Discuss the local causes for Mal occlusion =9marks
2. Write short answers on: a) Synchondrosis b) Deep Bite c) Space Maintainer d) Ugly Duckling stage =16
3. Write briefly: 5 x 2- a) Primate Spacing b) SNA Angle c) Parts of fixed appliance d) Occlusal X-Ray e) Classification of functional appliance

**Part-B**

4. What is Classification? Discuss the different classification on Mal Occlusion. What is the latest classification on Mal Occlusion =9marks
5. Write short answers: a) Hand-wrist X-ray b) Growth Spurt c) 18-8 Stainless Steel d) Cleft Lip & Palate
6. Briefly: 5 x 2=a) Cross Bite b) Sutural Growth c) ANB Angle d) Skeletal Mal Occlusion e) Borderline case

**OCTOBER, 2002 ( Old Regulations) - Time:3hours - Max.Marks: 80**

**Part-A**

1. Define Anchorage. Discuss the different types of Anchorage with example for each =10marks
2. Write short notes : 6x5 - a) Oral Screen b) Interceptive orthodontics c) Torque force d) Chin cap e) Cephalogram f) Optimum orthodontic force

**Part-B**

3. Discuss Heredity as a cause for mal occlusion =10marks
4. Write short notes on: 6x5 - a) Angle's classification on mal occlusion b) Chronological age c) Edge wise appliance d) Cervical Traction e) Differential force technique f) Buccinator Mechanism

**FINAL B.D.S. - 18<sup>th</sup> APRIL, 2001.**

**Part-A**

1. Describe in detail about extractions in Orthodontics. Give your choice of teeth for extractions with reasons
2. Short Notes: a) Hand wrist radiographs b) Reciprocal anchorage c) Labial Bows d) Midlines Diastoma e) Study models f) Relapse =6x5=30marks

**Part-B**

3. Define growth and development, name and describe the various theories of eruption of teeth =10marks
4. Short Notes: a) Soldering and welding b) Direct Bowling c) Part of fixed appliance d) Ugly duckling stage e) Oral screen f) Clinical features of CL. II div.2 =6x5

**OCTOBER, 2000.**

**Part-A**

1. Describe in detail about different methods of classification of mal occlusion. Describe the basis, merits and demerits of Angle's classification =10marks
2. Short Notes: a) Anchorage b) Adam's Clasp c) Mode analysis d) Aims of Orthodontics e) Functional Regulators f) Orthodontic springs =6x5=30marks

**Part-B**

3. Define Cephalometrics. Describe in detail about its advantages and disadvantages, uses in the field of orthodontics=10marks
4. Short Notes: a) Thumb sucking b) Functional Matrix theory c) Lee way space d) Deep over bite e) Diagnostic aids f) Retention and its necessity =6x5=30marks

**APRIL, 2000.**

**Part-A**

1. What are the six keys of normal occlusion. State how Ackerman-Proffit system is an improvement over Angle's Classification=10marks
2. Short Notes: a) Sucking and suckling b) Components of fixed appliance c) Oral screen d) Occlusal Radiograph e) Cephalo Stat f) FMA Angle =6x5=30m

**Part-B**

3. State the principles of Andresen appliance. Discuss in detail indications, contra-indications, uses and construction=10m
4. Short Notes: a) Iccisal Liability b) Lower Anterior Crowding c) Canine Retractors d) Pubertal Growth periods e) Permanent Retention f) Intrusion =6x5=30marks

**15<sup>th</sup> OCTOBER, 1999.**

**Part-A**

1. Define preventive Orthodontics. Discuss the various treatment plan given under the preventive orthodontics =10marks



2. Short Notes: a) Anterior open bite b) Elastics c) Extraction in Orthodontics d) Arch perimeter analysis  
e) Draw packs of Angle's classification f) Distal shoe space maintainer =6x5=30marks

**Part-B**

3. Discuss the various diagnostic aids used in Orthodontics =10marks
4. Short Notes: a) Adam's Clasp b) Spot Welder c) Arch wire d) SNA Angle e) Functional Regulator f) Carpal index

**17<sup>th</sup> APRIL, 1999.**

**Part-A**

1. Define Mal Occlusion. Discuss the etiology of Mal occlusion =10marks
2. Short Notes: a) Synchronosis b) Lee way space c) Anterior Cross Bite d) Midline Diastoma  
e) Growth curve f) ANB Angle =6x5=30marks

**Part-B**

3. Discuss the treatment plan for Angle's Class II Mal occlusion patients in the mixed dentition period =10m
4. Short Notes: a) Slow Expansion Appliance b) Terratogen c) Mouth Breathing d) Deep Bite  
e) Ortho Pantomogram f) Curve of spee =6x5=30marks

**16<sup>th</sup> OCTOBER, 1998.**

**Part-A**

1. Define Interceptive Orthodontics. Describe in detail about serial Extractions =10marks
2. Short Notes: a) Anchorage in orthodontics b) Retention and relapse c) Functional Regulators  
d) Study models e) Growth spurts f) Modes analysis for mixed dentition =6x5=30marks

**Part-B**

3. Describe in detail about Extractions in Orthodontics =10marks
4. Short Notes: a) Genetics in Orthodontics b) Anterior open bite c) Fixed appliances  
d) Undermining Resorption e) Rapid Palatal expansion f) Thumb sucking habit =6x5=30

**17<sup>th</sup> APRIL, 1998.**

**Part-A**

1. Define Orthodontics. Describe about AIMS and scope of Orthodontics. =10marks
2. Short Notes: a) Local factors in Etiology of Mal-Occlusion b) Model Analysis c) Removable appliances  
d) Orthodontics springs e) Growth spurts f) Preventive Orthodontics =6x5=30marks

**Part-B**

3. What are Mayo functional appliances. Describe in detail about preparation and uses of oral screen =10m
4. Short Notes: a) Retention and Retainers b) Clinical features of CI, III Mal occlusion  
c) Theories of tooth movement d) Simon's classification of Mal occlusion  
e) Management of cleft lip and palate

**17<sup>th</sup> OCTOBER, 1997.**

**Part-A**

1. Describe in detail pre & post natal growth of mandible =10marks
2. Short Notes: a) Oral screen b) Muscle exercises c) Tongue thrusting habit d) Aims of Orthodontics  
e) Midline diastema and its causes =5x5=25marks

**Part-B**

3. Describe about extractions in Orthodontics with reasons =10marks
4. Short Notes: a) Frankel's appliance b) Fixed appliance c) Anterior open bite  
d) Under mining bone resorption e) Robert's Retractor f) Validity of Angel's Classification =6x5

**APRIL, 1997.**

**Part-A**

1. What are the reasons for Extractions in Orthodontics? Discuss the choice of teeth for Extractions =10m
2. Short Notes: a) Growth spurts b) Midline Diastema c) Springs to bring about Mesio Distal \ d) 'Y' Axis e) Modes analysis for Mixed Dentition =5x5=25marks

**Part-B**

3. What are functional Appliances? Give examples. Describe the Trimming and Mechanisms of Actions of Anderson's Appliance =10marks
4. Short Notes: a) Fixed appliances verses Removable appliance b) Hawley's Retainer c) Hand-Wrist Radiographs d) Extra oral Anchorage e) Thumb sucking habit f) Fixed space maintainers =6x5=30mark

