

**Annual Examination, August 2021**  
**Bachelor of Dental Surgery – First Year**  
**COMPUTER APPLICATIONS (BDS-CA-OE-001)**

Time: 3 hrs.

Max Marks: **100**

No. of pages: 2

Note: • Question Paper has **TWO** parts: **PART-A** and **PART-B**. Marks are indicated against each question.

• All questions are **compulsory**. Draw the diagrams where ever necessary.

• Attempt **Part-A** and **Part-B** in the separate answer sheets.

**PART-A**

Q.1 Multiple choice questions:

a) Which of the following tag is used for inserting the largest heading: in HTML?

- |           |          |
|-----------|----------|
| i) <h1>   | ii) <h4> |
| iii) <h6> | iv) <h2> |

b) Which one is used for creating database:

- |               |                |
|---------------|----------------|
| i) MS Word    | ii) MS Access  |
| iii) MS Excel | iv) PowerPoint |

c) File extension of word document is:

- |            |           |
|------------|-----------|
| i) .xls    | ii) .doc  |
| iii) .word | iv) .jpeg |

d) We can insert a page number at

- |                      |                   |
|----------------------|-------------------|
| i) Header            | ii) Footer        |
| iii) Both i) and ii) | iv) None of these |

e) A number of letter that appears little below the normal text is called:

- |                |               |
|----------------|---------------|
| i) Superscript | ii) Subscript |
| iii) Supertext | iv) Toptext   |

**1x5**

Q.2 Write short notes on the following:

- a) Utility of Microsoft Word
- b) Inbuilt functions in Microsoft Excel.
- c) Features of Microsoft Access.
- d) Format Painter and types of alignments in Microsoft Word.
- e) Use of Animation in PowerPoint.

**5x5**

Q.3 a) Explain mail merge with steps to create and also explain where the mail merge is used. **10**

b) How queries can be applied on tables in Microsoft Access? **10**

**PART-B**

Q.4 Multiple choice questions:

a) Which of the following tag is responsible for making the text bold in HTML?

- |          |            |
|----------|------------|
| i) <p>   | ii) <Bold> |
| iii) <b> | iv) <bo>   |

**Annual Examination, August 2021**  
**Bachelor of Dental Surgery – First Year**  
**HUMAN ANATOMY, EMBRYOLOGY, HISTOLOGY AND**  
**MEDICAL GENETICS (BDS-HAUN-101)**

Time: 3 hrs.

Max Marks: **80**

No. of pages: 2

Note: ● Question Paper has **TWO** parts: **PART-A** and **PART-B**. Marks are indicated against each question.

● All questions are **compulsory**. Draw the diagrams where ever necessary.

● Attempt **Part-A** and **Part-B** in the separate answer sheets.

**PART-A**

Q.1 Multiple choice questions:

- a) Which structure passing through the posterior part of jugular foramen?
- |                              |                       |
|------------------------------|-----------------------|
| i) Vestibulo cochlear        | ii) Hypoglossal nerve |
| iii) Superior petrosal sinus | iv) Vagus nerve.      |
- b) A 22 year old cricket player was rushed to emergency department after being hit in the head with the ball. CT scan revealed a fracture at pterion and extradural hematoma. Which of the following vessel is likely to be injured?
- |                                |                          |
|--------------------------------|--------------------------|
| i) Superficial temporal artery | ii) Maxillary artery     |
| iii) Middle meningeal artery   | iv) Deep temporal artery |
- c) Which of the following nerve pass through the cavernous sinus?
- |                     |                      |
|---------------------|----------------------|
| i) Trochlear nerve  | ii) Oculomotor nerve |
| iii) Abducent nerve | iv) Trigeminal nerve |
- d) All of following muscles are supplied by trunk of mandibular division except:
- |                           |                       |
|---------------------------|-----------------------|
| i) Medial Pterygoid       | ii) Tensor tympani    |
| iii) Tensor veli palatine | iv) Lateral pterygoid |
- e) The structure that is not present within the parotid gland is:
- |                            |                          |
|----------------------------|--------------------------|
| i) External carotid artery | ii) Facial artery        |
| iii) Facial nerve          | iv) Retromandibular vein |
- 1x5**

Q.2 Write short notes on the following:

- i) Nerves and Vessels related to the mandible.
- ii) Pterygopalatine ganglion.
- iii) Dangerous area of Scalp.
- iv) Bell's palsy.
- v) Fertilization.

**5x5**

Q.3 Describe boundaries, content and sub-division of posterior triangle of neck. **10**

**PART-B**

Q.4 Multiple choice questions:

- a) Which is NOT a branch of the facial nerve?

**Annual Examination, August 2021**  
**Bachelor of Dental Surgery – First Year**  
**DENTAL ANATOMY, EMBRYOLOGY AND ORAL HISTOLOGY**  
**(BDS-ORPA-101)**

Time: 3 hrs.

Max Marks: **80**

No. of pages: 2

Note: • Question Paper has **TWO** parts: **PART-A** and **PART-B**. Marks are indicated against each question.

• All questions are **compulsory**. Draw the diagrams where ever necessary.

• Attempt **Part-A** and **Part-B** in the separate answer sheets.

**PART-A**

Q.1 Multiple choice questions:

- a) External manifestation of striae of Retzius are:
  - i) Perikymata
  - ii) Enamel rods
  - iii) Enamel cuticle
  - iv) Enamel cracks
- b) Hypoplasia is:
  - i) Disturbance in matrix formation
  - ii) Disturbance in calcification
  - iii) Disturbance in maturation
  - iv) All of the above
- c) The remnants of epithelial root sheath found in periodontal ligament are called:
  - i) Enamel pearls
  - ii) Enamel knots
  - iii) Rests of Malassez
  - iv) Epithelial diaphragm
- d) Dental lamina is formed when the embryo is:
  - i) 3 weeks old
  - ii) 4 weeks old
  - iii) 5 weeks old
  - iv) 6 weeks old
- e) Cap stage contains the following transitory structures:
  - i) Enamel knot, enamel cord, enamel niche
  - ii) Enamel matrix
  - iii) Stratum intermedium
  - iv) Cervical loop

**1x5**

Q.2 Write short notes on the following:

- i) Keratinized mucosa.
- ii) Formation of enamel.
- iii) Classify Cementum.
- iv) Tome's Granular Layer.
- v) Histology of Mixed salivary gland.

**5x5**

Q.3 Enumerate the stages of development of a tooth. Write in detail about Bell stage.

**10**

**PART-B**

Q.4 Multiple choice questions:

- a) The long depression or valley in the surface of the tooth between ridges and cusp is:

**Annual Examination, August 2021**  
**Bachelor of Dental Surgery – First Year**  
**RESEARCH INNOVATION CATALYST-I (BDS-RIC-101)**

Time: 3 hrs.

Max Marks: **80**

No. of pages: 2

Note: • Question Paper has **TWO** parts: **PART-A** and **PART-B**. Marks are indicated against each question.

• All questions are **compulsory**. Draw the diagrams where ever necessary.

• Attempt **Part-A** and **Part-B** in the separate answer sheets.

**PART-A**

Q.1 Multiple choice questions:

- a) Which is a type of research?
  - i) Descriptive
  - ii) Exploratory
  - iii) Both
- b) Pilot study is also called as:
  - i) Feasibility study
  - ii) Simple study
- c) Pre-testing of investigative tool is done in the case of:
  - i) Data Analysis
  - ii) Questionnaire
  - iii) Ethnography
  - iv) Observations
- d) Which method of data presentation looks like a pie?
  - i) Histogram
  - ii) Spot map
  - iii) Pie diagram
  - iv) Frequency polygon
- e) Simple random sampling is:
  - i) Probability sampling
  - ii) Non probability sampling **1x5**

Q.2 Write short notes on the following:

- i) What should be the criteria for a protocol?
- ii) Explain nominal and ordinal scale in detail.
- iii) Discuss 'structured interview'. How is it different from an unstructured interview?
- iv) Differentiate between 'exploratory' and 'correlation research'.
- v) "Research ethics is doing what is morally and legally right in research". Comment on the statement. **5x5**

Q.3 Explain the steps of a survey to be conducted among factory workers of Faridabad district to check their knowledge and attitude towards harmful effects of tobacco. **10**

**PART-B**

Q.4 Multiple choice questions:

- a) Informed consent is taken from:
  - i) Participant
  - ii) Interviewer
- b) Ethical issues are important in research.
  - i) Yes
  - ii) No
- c) Blood Pressure is:
  - i) Qualitative data
  - ii) Quantitative data

**Annual Examination, August 2021**  
**Bachelor of Dental Surgery – First Year**  
**BIOCHEMISTRY, NUTRITION AND DIETETICS**  
**(BDS-BIOC-101)**

Time: 3 hrs.

Max Marks: **80**

No. of pages: 2

Note: • Question Paper has **TWO** parts: **PART-A** and **PART-B**. Marks are indicated against each question.

• All questions are **compulsory**. Draw the diagrams wherever necessary.

• Attempt **Part-A** and **Part-B** in the separate answer sheets.

**PART-A**

Q.1 Multiple choice questions:

- a) Which vitamin is associated with Bleeding Gums?
  - i) Vitamin A
  - ii) Vitamin B Complex
  - iii) Vitamin C
  - iv) Vitamin K
- b) Vanden Bergh reaction test performed in:
  - i) LFT
  - ii) KFT
  - iii) GFT
  - iv) Both LFT and KFT
- c) BMR IS:
  - i) Body mass index
  - ii) Basal metabolic rate
  - iii) Both i) and ii)
  - iv) None of these
- d) TPP is coenzyme of:
  - i) Thiamine
  - ii) Biotin
  - iii) Tyrosine
  - iv) Niacin
- e) Fe is present in Hb in which form?
  - i) Fe(3+)
  - ii) Fe(2+)
  - iii) Fe atom
  - iv) Sometimes Fe(2+) and sometimes Fe(3+)

**1x5**

Q.2 Write short notes on the following:

- a) How is blood sugar (Plasma Glucose) regulated in our body?
- b) Justify statement "V.D.Bergh Reaction is clinical test to analyze Jaundice and its type".
- c) Compare the role of Vitamin D, PTH and Calcitonin to maintain blood calcium levels.
- d) Illustrate how 'blood buffers' maintains pH of blood.
- e) Explain mechanism of beta oxidation of fatty acids.

**5x5**

Q.3 Describe sources, functions and deficiency of Vitamin C.

**10**

**PART-B**

Q.4 Multiple choice questions:

- a) Reference range of Serum Urea level is:
  - i) 60-80 mg%
  - ii) 80-100 mg%
  - iii) 14-40 mg%
  - iv) 0.4 -1.4 mg%
- b) All regarding water soluble Vitamins are correct except:

# Annual Examination, August 2021

Bachelor of Dental Surgery – First Year

**SPANISH (BDS-CDC-OE-002)**

Time: 3 hrs.

Max Marks: **100**

No. of pages: 6

Note: ● All questions are **compulsory**. Marks are indicated against each question.

## Comprensión

Q.1 **Lee el texto y responde a las preguntas.**

**Read the paragraph and answer the following questions.**

Me llamo Pedro. Hoy voy a hablar del parque que está cerca de mi casa. Yo juego todos los días en el parque. En el parque veo los patos (ducks) que comen y beben agua. También veo pájaros de colores diferentes en los árboles (tree). Yo juego con mis amigos, cuando termino (I finish) los deberes de la escuela. Mis amigos favoritos son Juan y Luis. Juego muchos juegos con ellos, como baloncesto (basketball) y voleibol. Mi padre también (also) juega voleibol con mí en los domingos. Mi madre mira (looks) a nosotros cuando jugamos, ella habla con sus amigas en el parque. Este parque es mi favorito porque veo muchas cosas y juego mucho.

a) ¿Dónde está el parque?

\_\_\_\_\_.

b) ¿Cuántos días juega Pedro en el parque?

\_\_\_\_\_.

c) ¿Qué son los animales que ve Pedro en el parque?

\_\_\_\_\_.

d) ¿Qué son amigos favoritos de Pedro?

\_\_\_\_\_.

e) ¿Cuándo juega con sus amigos?

\_\_\_\_\_.

f) ¿Qué hace (do) la madre de Pedro en el parque?

\_\_\_\_\_.

g) ¿Qué deporte (sports) juega Pedro con sus amigos?

\_\_\_\_\_.

h) ¿Porque el parque es favorito de Pedro?

\_\_\_\_\_ **1x8**

i) ¿Busca dos verbos en el texto y hace 1 frase para los dos verbos.

\_\_\_\_\_.

**Annual Examination, August 2021**  
Bachelor of Dental Surgery – First Year  
**FRENCH (FOREIGN LANGUAGE) (BDS-CDC-OE-001)**

Time: 3 hrs.

Max Marks: **100**

No. of pages: 5

Note:  All questions are **compulsory**. Marks are indicated against each question.

**(COMPRÉHENSION ÉCRITE)**

**Q.1 Lisez le passage et répondez aux questions**

(Read the passage and answer to the questions)

**Au travail !**

**Marie:-**Salut Zoé! Ça va?

**Zoé:-**Salut Marie! Oui ça va bien, merci et toi?

**Marie:-**Ça ne va pas bien. Je suis malade (someone who is not well).

**Zoé:-**Il faut aller chez le médecin.

**Marie:-**Mais comment? Ma mère n'est pas à la maison.

**Zoé:-**Où est-elle?

**Marie:-**Elle est à l'école. Elle est institutrice.

**Zoé:-**Et ton père?

**Marie:-**Il est coiffeur. Alors, il est aussi au travail.

**Zoé:-**D'accord! Ce n'est pas grave! (It's not a big problem). Mon père, il est médecin.

**Marie:-**Merci beaucoup! Et ta mère? Elle est aussi médecin?

**Zoé:-**Non ! Elle est chanteuse.

**Marie:-**OK ! C'est génial.

**a) Répondez aux questions:- (Respond to the questions)**

i.) **Qui est malade?**

---

ii.) **Où est la mère de Marie?**

---

iii.) **Quelle est la profession des parents de Zoé?**

---

**1x3**

**b) Dites Vrai ou Faux:- (Tell True or False)**

i) Zoé appelle le médecin à la maison. \_\_\_\_\_

ii) Marie n'est pas malade. \_\_\_\_\_

iii) Le père de Marie n'est pas à la maison. \_\_\_\_\_

iv) Le père de Zoé est coiffeur. \_\_\_\_\_

**1x4**

**c) Cochez la bonne réponse: (Pick the right answer)**

i) Marie est:

a) Bien

b) Malade

c) Heureuse.

ii) Le père de Marie est:

a) Coiffeur

b) Professeur

c) Médecin

**Annual Examination, August 2021**  
**Bachelor of Dental Surgery – First Year**  
**GENERAL HUMAN PHYSIOLOGY (BDS-PHSY-101)**

Time: 3 hrs.

Max Marks: **80**

No. of pages: 2

Note: • Question Paper has **TWO** parts: **PART-A** and **PART-B**. Marks are indicated against each question.

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• Attempt **Part-A** and **Part-B** in the separate answer sheets.

**PART-A**

Q.1 Multiple choice questions:

- a) P wave in ECG corresponds to:
- |                                 |                           |
|---------------------------------|---------------------------|
| i) Ventricular depolarization   | ii) Atrial depolarization |
| iii) Ventricular repolarization | iv) Atrial systole        |
- b) Normal stroke volume is:
- |                  |                    |
|------------------|--------------------|
| i) 5 - 6 ml/beat | ii) 70 -80 ml/beat |
| iii) 5- 6 L/beat | iv) 20 -30 L/beat  |
- c) Chief cells of Stomach secrete:
- |            |                      |
|------------|----------------------|
| i) HCl     | ii) Pepsinogen       |
| iii) Mucus | iv) Intrinsic factor |
- d) The hormone produced by kidney is:
- |                  |                    |
|------------------|--------------------|
| i) Gastrin       | ii) Erythropoietin |
| iii) Aldosterone | iv) ADH            |
- e) Osmotic Fragility is increased in:
- |                               |                             |
|-------------------------------|-----------------------------|
| i) Thallasemia                | ii) Sickle cell Anaemia     |
| iii) Hereditary Spherocytosis | iv) Iron deficiency Anaemia |

**1x5**

Q.2 Write short notes on the following:

- i) Excitation contraction coupling in Skeletal Muscle.  
ii) Regulation of Blood Pressure.  
iii) Composition and functions of Gastric Juice.  
iv) Neuromuscular Junction.  
v) Transport of Oxygen

**5x5**

Q.3 Define GFR. Write its normal value. Describe the factors affecting GFR. Also add a note on its regulation.

**10**

**PART-B**

Q.4 Multiple choice questions:

- a) Which of the following controls the Circadian rhythm?
- |                 |                |
|-----------------|----------------|
| i) Hypothalamus | ii) cerebellum |
| iii) Thalamus   | iv) Mid brain  |
- b) The chromosomal pattern in Klinefelter's syndrome is:
- |          |         |
|----------|---------|
| i) XO    | ii) XX  |
| iii) XXY | iv) XXX |
- c) Which of the following refractory errors requires use of convex lens for correction?



**Annual Examination, August 2021**  
Bachelor of Dental Surgery – First Year  
**BEHAVIOURAL SCIENCES (BDS-PSY-OE-001)**

Time: 3 hrs.

Max Marks: **100**

No. of pages: 1

Note: • Question Paper has **TWO** parts: **PART-A** and **PART-B**. Marks are indicated against each question.

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• Attempt **Part-A** and **Part-B** in the separate answer sheets.

**PART-A**

- Q.1 a) Define 'stress'.  
b) Why is self-esteem important?  
c) I have a perception problem. What can I do to perceive other people in a right manner?  
d) Jane holds a very good image of herself. What is it that she holds best about herself?  
e) What is cognitive dissonance? **1x5**
- Q.2 a) Why are emotions important in one's life?  
b) Define a relationship circle.  
c) What is the importance of intra-personal relationships in life?  
d) Jessica and her boss share a happy relationship. Define this relationship.  
e) Define 'self-confidence'. **6x5**
- Q.3 Emotional intelligence is an ability to perceive, assess, and manage the emotions of yourself and others. Daniel Goleman's groundbreaking work on emotional intelligence group's leadership competencies into four buckets: self awareness, self management, social awareness, and relationship management; explain this concept at length. **15**

**PART-B**

- Q.4 a) What are the four quadrants of Johari's window?  
b) What is self-acceptance?  
c) State aspects of your behavior that you consider are positive in nature.  
d) What is attitude?  
e) What is a team? **1x5**
- Q.5 a) State and explain the types of stress.  
b) What do you consider as a stressor in your life?  
c) Why is it important to have healthy interpersonal relationships?  
d) Why is it important to understand oneself?  
e) What are intrapersonal relationships? **6x5**
- Q.6 How as a doctor will you handle a difficult patient? **15**

**Annual Examination, August 2021**  
**Bachelor of Dental Surgery – Second Year**  
**COMPUTER APPLICATIONS (BDS-CA-OE-001)**

Time: 3 hrs.

Max Marks: **100**

No. of pages: 2

Note: • Question Paper has **TWO** parts: **PART-A** and **PART-B**. Marks are indicated against each question.

• All questions are **compulsory**. Draw the diagrams where ever necessary.

• Attempt **Part-A** and **Part-B** in the separate answer sheets.

**PART-A**

Q.1 Multiple choice questions:

- a) Which is the default alignment in word?
  - i) Left
  - ii) Right
  - iii) Centre
  - iv) Justify
- b) Following is used for creating presentations.
  - i) MS Word
  - ii) MS Access
  - iii) MS Excel
  - iv) Power Point
- c) File extension of word document is:
  - i) .xls
  - ii) .doc
  - iii) .word
  - iv) .jpeg
- d) We can insert a page number at
  - i) Header
  - ii) Footer
  - iii) Both i) and ii)
  - iv) None of these
- e) A number of letter that appears little above the normal text is called:
  - i) Superscript
  - ii) Subscript
  - iii) Supertext
  - iv) Toptext

**1x5**

Q.2 Write short notes on the following:

- i) Advantages of Microsoft Word.
- ii) Comparison of Microsoft Word and Microsoft Excel.
- iii) Features of Microsoft Access.
- iv) Format Painter in Microsoft Word.
- v) Use of fonts and its attributes.

**6x5**

Q.3 Create a list of 10 best friends. Create a Thank You letter. Use Mail Merge feature of MS-WORD to create a Thank You letter for each of your friends from the above two files.

**15**

**PART-B**

Q.4 Multiple choice questions:

- a) What is the attribute for tag?
  - i) pt
  - ii) url
  - iii) path
  - iv) src
- b) Can a data cell contain images?
  - i) Yes
  - ii) No
- c) Can I play audios in HTML?

**Annual Examination, August 2021**  
Bachelor of Dental Surgery – Second Year  
**FINANCIAL ACCOUNTING (BDS-COM-OE-001)**

Time: 3 hrs.

Max Marks: **100**

No. of pages: 2

Note: • Question Paper has **TWO** parts: **PART-A** and **PART-B**. Marks are indicated against each question.

• All questions are **compulsory**. Draw the diagrams where ever necessary.

• Attempt **Part-A** and **Part-B** in the separate answer sheets.

**PART-A**

Q.1 Multiple choice questions:

- a) As per Income Tax Act, accounting period is:
  - i) From 1<sup>st</sup> January to 31<sup>st</sup> December
  - ii) From 1<sup>st</sup> April to 31<sup>st</sup> March
  - iii) From 1<sup>st</sup> July to 31<sup>st</sup> June
- b) As per dual aspect concept Assets = Liabilities – Capital.
  - i) True
  - ii) False
- c) Accrual Concept is based on \_\_\_\_\_ concept.
  - i) Matching
  - ii) Cost
  - iii) Going Concern
- d) Sales Accounts is always credited:
  - i) True
  - ii) False
- e) Cash discount is allowed to encourage quick or prompt payment.
  - i) True
  - ii) False

**1x5**

Q.2 Answer the following questions:

- i) Discuss the Functions of financial accounting.
- ii) Out of Journal and Ledger, which book is more important and why?
- iii) What is Double Entry System?
- iv) Define the three rules of accounts.
- v) Journalise the following transactions:
  - a) Dr. Royal started 'Royal Dental Clinic' with Rs.100,00,000/-
  - b) He purchased dental chair of Rs.1,00,000/- for the treatment of patient.
  - c) He paid Rs.15,000/- electricity bill and Rs.20,000/- salary to assistant and Rs.10000/- for maintenance of clinic.
  - d) He withdraws Rs.50000/- for personal use from business.
  - e) He withdrawal Rs.10,000/- cash from bank.

**6x5**

Q.3 Differentiate between book keeping and accounting. Explain concept and conventions of accounting with their practical utilities. **15**

**PART-B**

Q.4 Multiple choice questions:

- a) Final accounts can be prepared with Ledgers.
  - i) True
  - ii) False

**Annual Examination, August 2021**  
**Bachelor of Dental Surgery – Second Year**  
**MICROBIOLOGY (BDS-MBIO-201)**

Time: 3 hrs.

Max Marks: **80**

No. of pages: 2

Note: • Question Paper has **TWO** parts: **PART-A** and **PART-B**. Marks are indicated against each question.

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• Attempt **Part-A** and **Part-B** in the separate answer sheets.

**PART-A**

Q.1 Multiple choice questions:

a) Mycobacterium tuberculosis complex includes all of the following except:

- |                    |                        |
|--------------------|------------------------|
| i) M. tuberculosis | ii) M. bovis           |
| iii) M. africanum  | iv) M. intracellulare. |

b) Which Ig class is involved in type-I hypersensitivity?

- |          |         |
|----------|---------|
| i) IgE   | ii) IgA |
| iii) IgM | iv) IgG |

c) Beaded appearance of Corynebacterium diphtheriae indicates:

- |                   |                          |
|-------------------|--------------------------|
| i) Live bacilli   | ii) Stored energy        |
| iii) Dead bacilli | iv) Presence of exotoxin |

d) Which of the following is responsible for drug resistance in bacteria?

- |                         |                                |
|-------------------------|--------------------------------|
| i) Colicinogenic factor | ii) Resistance transfer factor |
| iii) F factor           | iv) None of these              |

e) Motility in spirochetes is by:

- |                 |                   |
|-----------------|-------------------|
| i) Endoflagella | ii) Flagella      |
| iii) Fimbriae   | iv) None of these |

**1x5**

Q.2 Write short notes on the following:

- i) Principle of autoclave.
- ii) Enumerate methods of gene transfer.
- iii) Enumerate causes of bacterial sore throat and also add a note on 'laboratory diagnosis'.
- iv) Principle of agglutination reactions with examples and its applications.
- v) Enumerate Hypersensitivity reactions and explain in detail type-1 Hypersensitivity reaction.

**5x5**

Q.3 Enumerate clinical infections caused by 'Staphylococci'. Discuss laboratory diagnosis of Staphylococcus aureus infection in detail. **10**

**PART-B**

Q.4 Multiple choice questions:

a) Laboratory method to test for HIV infection during window period:

- i) p24 antigen assay
- ii) IgM capture ELISA
- iii) IgG ELISA

**Annual Examination, August 2021**  
**Bachelor of Dental Surgery – Second Year**  
**FORENSIC ODONTOLOGY (BDS-ORPA-OE-001)**

Time: 3 hrs.

Max Marks: **100**

No. of pages: 2

Note: • Question Paper has **TWO** parts: **PART-A** and **PART-B**. Marks are indicated against each question.

• All questions are **compulsory**. Draw the diagrams where ever necessary.

• Attempt **Part-A** and **Part-B** in the separate answer sheets.

**PART-A**

Q.1 Multiple choice questions:

- a) The use of tooth eruption for age estimation should be limited to
  - i) Deciduous Dentition                      ii) Mixed Dentition
  - iii) Permanent Dentition                  iv) Edentulous Patients
- b) Various stages of tooth calcification when evaluated on radiograph can be used to estimate the age upto:
  - i) First decade of life                      ii) Second decade of life
  - iii) Third decade of life                    iv) Fourth decade of life
- c) A Bite mark with inter-canine width of more than 3 cms on a young child could be a sign of:
  - i) Sexual abuse                                  ii) Self-inflicted bite
  - iii) Animal bite                                  iv) Insect bite
- d) The best known method for preserving bite marks is:
  - i) impressions                                  ii) photography
  - iii) radiographs                                iv) tracing
- e) Which is the most reliable method of forensic identification?
  - i) Finger print identification
  - ii) Dental identification
  - iii) Serological marker identification
  - iv) DNA identification

**1x5**

Q.2 Write short notes on the following:

- i) Rugoscopy.
- ii) Explain the various factors influencing the effects of poison in an individual.
- iii) Role of amelogenin gene as a Gender determinant.
- iv) Gustafson's index is used in age estimation. Justify.
- v) Tabulate the various craniofacial morphologic indicators of sex. **6x5**

Q.3 In case involving child trafficking, discuss the various methods of dental age estimation which could help determine the age of the victim. **15**

**PART-B**

Q.4 Multiple choice questions:

- a) What changes in a tooth is the most reliable technique for the determination of age of individual?

**Annual Examination, August 2021**  
**Bachelor of Dental Surgery – Second Year**  
**GENERAL AND DENTAL PHARMACOLOGY AND**  
**THERAPEUTICS (BDS-PHAR-201)**

Time: 3 hrs.

Max Marks: **80**

No. of pages: 2

Note: • Question Paper has **TWO** parts: **PART-A** and **PART-B**. Marks are indicated against each question.

• All questions are **compulsory**. Draw the diagrams where ever necessary.

• Attempt **Part-A** and **Part-B** in the separate answer sheets.

**PART-A**

Q.1 Multiple choice questions:

- a) The study of absorption, distribution, metabolism and excretion of drugs in the body is known as:
  - i) Pharmacognosia
  - ii) Pharmacokinetics
  - iii) Dose effective study
  - iv) Pharmacotherapy
- b) Drugs mostly cross biological membranes by:
  - i) Passive diffusion
  - ii) Active diffusion
  - iii) Active transport
  - iv) Carrier mediated transport
  - v) All of the above
- c) All are 2nd line Antitubercular drug except:
  - i) Thiacetazone
  - ii) Rifampicin
  - iii) Cycloserin
  - iv) PAS
- d) What is the advantage of sublingual route of administration of drugs?
  - i) Prevents first pass effect
  - ii) Easy to administer
  - iii) Lipid soluble
  - iv) Can be spitted out with signs of toxicity
- e) All of following are examples of prodrugs except:
  - i) Levodopa
  - ii) Enalapril
  - iii) Omeprazole
  - iv) Indomethacin

**1x5**

Q.2 Write short notes on the following:

- i) Write briefly on Adrenaline.
- ii) Compare first and second generation antihistamines.
- iii) Describe the indication and side effects associated with 'Penicillins'.
- iv) Critically evaluate the combination of sulfamethoxazole with trimethoprim.
- v) Describe the clinical significance of 'Obtundents'.

**5x5**

Q.3 Explain regarding 'Disclosing Agents' with suitable examples in detail. **10**

**PART-B**

Q.4 Multiple choice questions:

- a) Ipratropium bromide is:
  - i) Bronchoselective anticholinergic

**Annual Examination, August 2021**  
**Bachelor of Dental Surgery – Second Year**  
**DENTAL MATERIALS (BDS-PROS-201)**

Time: 3 hrs.

Max Marks: **80**

No. of pages: 2

Note: • Question Paper has **TWO** parts: **PART-A** and **PART-B**. Marks are indicated against each question.

• All questions are **compulsory**. Draw the diagrams where ever necessary.

• Attempt **Part-A** and **Part-B** in the separate answer sheets.

**PART-A**

Q.1 Multiple choice questions:

a) Which by product is formed in ZOE chelation reaction?

- |          |                      |
|----------|----------------------|
| i) ZnOH  | ii) H <sub>2</sub> O |
| iii) ZnO | iv) Zn eugenolate.   |

b) Which material is most stiff?

- |                |                  |
|----------------|------------------|
| i) mercaptan   | ii) polysulphide |
| iii) polyether | iv) polysiloxane |

c) Which material is not used in dental implants?

- |                  |              |
|------------------|--------------|
| i) titanium      | ii) ceramic  |
| iii) epoxy resin | iv) zirconia |

d) Least water powder ratio required for:

- |                 |                        |
|-----------------|------------------------|
| i) dental stone | ii) plaster            |
| iii) die stone  | iv) impression plaster |

e) Cause of delayed expansion in amalgam restoration:

- |         |                      |
|---------|----------------------|
| i) Cu   | ii) Zn               |
| iii) Mo | iv) H <sub>2</sub> O |

**1x5**

Q.2 Write short notes on the following:

- i) Explain in brief laminate technique of impression making.
- ii) Explain bonding mechanism in GIC.
- iii) Biocompatibility test.
- iv) Types of Direct filling gold.
- v) Elastic impression materials.

**5x5**

Q.3 What is dental ceramic? Explain in detail about methods of strengthening of ceramics. **10**

**PART-B**

Q.4 Multiple choice questions:

a) Which one is a temporary cement?

- |                      |                    |
|----------------------|--------------------|
| i) ZoE               | ii) GIC            |
| iii) polycarboxylate | iv) harward cement |

b) Absorption of moisture by alginate impression is called as:

- |                |                |
|----------------|----------------|
| i) hysteresis  | ii) imbibition |
| iii) syneresis | iv) gelation   |

c) Time dependent deformation is:

- |          |                |
|----------|----------------|
| i) creep | ii) elasticity |
|----------|----------------|

**Annual Examination, August 2021**  
**Bachelor of Dental Surgery – Second Year**  
**RIC-II (BDS-RIC-201)**

Time: 3 hrs.

Max Marks: **80**

No. of pages: 2

Note: • Question Paper has **TWO** parts: **PART-A** and **PART-B**. Marks are indicated against each question.

• All questions are **compulsory**. Draw the diagrams where ever necessary.

• Attempt **Part-A** and **Part-B** in the separate answer sheets.

**PART-A**

Q.1 Multiple choice questions:

a) What is the first step in the Design Thinking Process?

- |              |               |
|--------------|---------------|
| i) Empathize | ii) Define    |
| iii) Ideate  | iv) Prototype |

b) Process innovation refers to:

- i) the development of a new service.
- ii) the development of a new product.
- iii) the implementation of a new or improved production method.
- iv) the development of new products or services.

c) During which stage would you:

Analyze observations and data collected in order to identify the core problem.

- |              |               |
|--------------|---------------|
| i) Prototype | ii) Define    |
| iii) Ideate  | iv) Empathize |

d) Design thinking is a

- i) Way to think about design
- ii) Designing a product
- iii) Method and mindset to define, frame and solve problems
- iv) Way to separate thinking from making

e) Elevator pitch is:

- i) A short business pitch
- ii) An elevated playing field
- iii) A method of process improvement
- iv) A detailed business pitch

**1x5**

Q.2 Write short notes on the following:

i) Explain the causes of failure of Google Glass and how it could be prevented?

ii) Write an elevator pitch for 'Stema - stem cell treatment for knocked out teeth'.

iii) How would you differentiate between process and product innovation

iv) Write about different types of intellectual property rights.

v) What is competition? Why are competitive advantages important?

**5x5**

Q.3 What is design thinking? What are various steps in design thinking?



**Annual Examination, August 2021**  
**Bachelor of Dental Surgery – Second Year**  
**GENERAL PATHOLOGY (BDS-GEPA-201)**

Time: 3 hrs.

Max Marks: **80**

No. of pages: 2

Note: • Question Paper has **TWO** parts: **PART-A** and **PART-B**. Marks are indicated against each question.

• All questions are **compulsory**. Draw the diagrams where ever necessary.

• Attempt **Part-A** and **Part-B** in the separate answer sheets.

**PART-A**

Q.1 Multiple choice questions:

- a) The type of necrosis seen in tuberculosis is:
  - i) Fat necrosis
  - ii) Fibrinoid necrosis
  - iii) Caseous necrosis
  - iv) All of the above.
- b) Which of the following statement is TRUE about dystrophic calcification?
  - i) It is similar to metastatic calcification
  - ii) Associated with hyperparathyroidism
  - iii) Seen in dead tissues
  - iv) Example is calcific bone disease
- c) Which of the following is the cell of acute inflammation?
  - i) Macrophage
  - ii) Plasma cell
  - iii) Lymphocyte
  - iv) Neutrophil
- d) Virchow's triad for thrombosis includes all EXCEPT?
  - i) Stasis
  - ii) Endothelial injury
  - iii) Hypercoagulability
  - iv) Platelet aggregation
- e) Which of the following Vitamin deficiencies causes bleeding gums?
  - i) Vitamin A
  - ii) Vitamin D
  - iii) Vitamin B
  - iv) Vitamin C

**1x5**

Q.2 Write short notes on the following:

- i) Pathogenesis of edema
- ii) Routes of Metastasis
- iii) Granulomatous Inflammation
- iv) Lab diagnosis of iron deficiency Anemia
- v) Infective Endocarditis.

**5x5**

Q.3 Define 'apoptosis'. Discuss it in detail. Differentiate between 'necrosis' and 'apoptosis'.

**10**

**PART-B**

Q.4 Multiple choice questions:

- a) Increase in the number of cells is:
  - i) Atrophy
  - ii) Hyperplasia
  - iii) Hypertrophy
  - iv) Metaplasia
- b) Which of the following is a feature of 'Malignant' tumour?
  - i) Well encapsulated
  - ii) Metastasis

**Annual Examination, August 2021**  
Bachelor of Dental Surgery – Second Year  
**FRENCH (BDS-CDC-OE-001)**

Time: 3 hrs.

Max Marks: **100**

No. of pages: 6

Note: All questions are **compulsory**. Marks are indicated against each question.

**Section-A**  
**(COMPRÉHENSION ÉCRITE)**

**Q.1 Lisez le passage et répondez aux questions**  
(Read the passage and answer to the questions)

Bonjour ! Je m'appelle Sandrine Dupont et J'ai dix ans. J'habite à Paris. J'ai un frère. Il s'appelle Alain Dupont, il a quatorze ans. Mon oncle Jean Dupont, le frère de mon père a deux enfants. Ils sont grands. Mes grands-parents habitent à Lyon. Ils sont vieux mais actifs. J'aime bien mes grands-parents. Ils sont très gentils. J'ai un chien et deux chats. Ma famille est grande. J'aime beaucoup ma famille.

**a) Répondez aux questions :**

(Answer to the questions)

i.) Comment s'appelle le frère de Sandrine ?

\_\_\_\_\_ .

ii.) Où habite Sandrine ?

\_\_\_\_\_ .

**1x2**

**b) Dites vrai ou faux :**

(True or False)

i.) La famille de Sandrine est petite.

\_\_\_\_\_

ii.) Sandrine a dix ans.

\_\_\_\_\_

iii.) Elle a deux chiens et deux chats.

\_\_\_\_\_

iv.) Ses grands-parents habitent à Lyon.

\_\_\_\_\_

**1x4**

**c) Complétez avec un mot du texte.**

(Complete with a word from the text.)

i.) J'ai une \_\_\_\_\_ famille.

ii.) Nous avons \_\_\_\_\_ frères.

**1x2**

**d) Trouvez le contraire du texte :**

(Find out the opposites from the text)

i) Jeunes ≠ \_\_\_\_\_

ii) Petits ≠ \_\_\_\_\_

**1x2**

# Annual Examination, August 2021

Bachelor of Dental Surgery – Second Year

## SPANISH (BDS-CDC-OE-002)

Time: 3 hrs.

Max Marks: **100**

No. of pages: 7

Note:  All questions are **compulsory**. Marks are indicated against each question.

### Comprensión

Q.1 **Lee el texto y responde las preguntas.**

**Read the text and respond to the questions.**

¡Hola! Yo soy Anjela. Mi hermano se llama Pablo. Su edad es 12 años. Él habla cuatro lenguas hindi, chino, español y un poco de italiano. Él también aprende inglés. Mi mejor amiga y mi hermano estudian en misma (same) escuela. Mi mejor amiga se llama María y ella tiene 16 años. Ella es muy guapa y estudiosa. Ella también habla cuatro lenguas. Nosotros vemos películas juntos. Yo amo a mi amiga mucha.

**Verdadero o falso:**

- a) Pablo habla español un poco. \_\_\_\_\_
- b) El hermano de Anjela es Pablo. \_\_\_\_\_
- c) María y Pablo no estudian en misma escuela. \_\_\_\_\_
- d) Anjela y María tienen 16 años. \_\_\_\_\_
- e) La mejor amiga de Anjela es guapa y estudiosa. \_\_\_\_\_

**1x5**

Q.2 **Lee el texto y conteste a las preguntas.**

**Read the text and answer the questions.**

Enrique: Buenas tardes. Soy Enrique y necesito trabajo.

Empleado: Muy bien, Enrique. ¿Cuáles son sus apellidos?

Enrique: Gómez Santana. Enrique Gómez Santana.

Empleado: ¿Edad?

Enrique: Veintiuno años.

Empleado: ¿Usted de Madrid?

Enrique: No, soy de Toleado, pero estudio en Madrid.

Empleado: Y no tiene usted trabajo, ¿Verdad?

Enrique: No trabajo.

Empleado: Y usted también estudia.

Enrique: Sí, estudio económicas en la Universidad. Pero necesito trabajar para pagar los estudios.

Empleado: ¿Habla usted algún idioma?

Enrique: Sí, hablo un poco de inglés y también de francés.

Empleado: Estupendo. Hablar inglés ayuda a encontrar trabajo.

Empleado: Esta empresa necesita un contable. ¿Le interesa?

Enrique: ¿Cuál es el horario de trabajo?

Empleado: Media jornada por las tardes.

Enrique: ¿Y dónde está la empresa?

Empleado: En el centro de Madrid y pagan bien.

Roll No.: \_\_\_\_\_

**Annual Examination, July 2021**  
**Master of Dental Surgery – First Year**  
**FINANCIAL ACCOUNTING–BASICS (MDS-COM-OE-101)**

Time: 3 hrs.

Max Marks: **100**

No. of pages: 1

Note: *All questions are **compulsory** and also draw the diagrams where ever necessary. Marks are indicated against each question.*

**Q.1 Short Questions:**

- a) Discuss the scope of financial accounting.
- b) Explain 'Book Keeping' in brief.
- c) What is 'Balance Sheet'? Why is it prepared? Give its specimen.
- d) Define 'double entry system'.
- e) Differentiate between 'capital' and 'revenue expenditure' with examples.
- f) Elaborate the three rules of accounts.
- g) Give the specimen of Profit and Loss Account.
- h) What is Trial Balance? Why is it prepared?
- i) Laxmi Dental Care centre purchased furniture of Rs. 90000/- on 1<sup>st</sup> April, 2019 and spend Rs. 10000/- on carriage. Calculate the amount of depreciation for two years i.e. 2019 and 2020, when rate of depreciation is 20% on the diminishing balance method. Books are closed on 31<sup>st</sup> March every year.
- j) Journalise the following transactions:
  - i) Dr. Roshan started 'Roshan Dental Clinic' with Rs. 20,00,000/-
  - ii) He purchased dental chair of Rs. 5,00,000/- for treatment of patients.
  - iii) He paid Rs. 1,000/- electricity bill and Rs. 5,000/- salary to assistant.
  - iv) Received cash Rs. 2,000/- from patients for their treatment.
  - v) He deposited Rs. 10,000/- into bank.

**5x10**

**Long questions:**

- Q.2 What do you mean by financial accounting? Explain the different types of accounting principles with their practical utilities. **25**
- Q.3 Define 'accounting'. Explain briefly its advantages. Mention the different types of users of financial statements. **25**

Roll No.: \_\_\_\_\_

**Annual Examination, July 2021**  
**Master of Dental Surgery – First Year**  
**CONSERVATIVE DENTISTRY AND ENDODONTICS-BASICS**  
**(MDS-CONS-101)**

Time: 3 hrs.

Max Marks: **100**

*No. of pages: 1*

Note: *All questions are **compulsory** and also draw the diagrams where ever necessary. Marks are indicated against each question.*

**Q.1 Short Questions:**

- a) Discuss Muscles of tongue.
- b) Explain Errors in casting procedure with respect to class II inlay.
- c) Explain Theories of pain pertaining to pulpitis.
- d) Waste management and disposal in the current scenario.
- e) Discuss Age changes in dentin.
- f) A patient with severe pain in the upper maxillary posterior quadrant presents to your clinic but on clinical examination there is no evident carious lesion, explain and justify your course of action.
- g) Discuss measures of central tendency.
- h) Blood supply of human dentition.
- i) Discuss various types of adhesive cements.
- j) Non parametric tests.

**5x10**

**Long questions:**

- Q.2 Discuss role of local anesthesia in endodontics in detail. **25**
- Q.3 Describe etiology and management of various non carious lesions of teeth. **25**

Roll No.: \_\_\_\_\_

**Annual Examination, July 2021**  
**Master of Dental Surgery – First Year**  
**ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS –**  
**BASICS (MDS-ORTH-101)**

Time: 3 hrs.

Max Marks: **100**

*No. of pages: 1*

Note: *All questions are **compulsory** and also draw the diagrams where ever necessary. Marks are indicated against each question.*

**Q.1 Short Questions:**

- a) Discuss the role of muscle function in development of Malocclusion.
- b) Innovations in bonding procedures using currently available bonding materials during Covid-19 pandemic.
- c) Illustrate the expression of calcium regulating hormones during orthodontic tooth movement.
- d) Critically evaluate the role of meta-analyses in orthodontics research.
- e) Describe sterile necrosis during orthodontic tooth movement.
- f) Summarize current recommendations for cross infection control in orthodontic operatory.
- g) Describe the evolutionary development of human dentition.
- h) Parametric vs nonparametric test statistics.
- i) Discuss the effect of Estrogen on orthodontic tooth movement and orthodontically induced root resorption.
- j) Describe Regional Acceleratory Phenomenon (RAP). **5x10**

**Long questions:**

- Q.2 Discuss the role of genetics in orthodontics and add a note on homeobox genes. **25**
- Q.3 Discuss current methods of growth prediction and its importance in orthodontic treatment planning. **25**

Roll No.: \_\_\_\_\_

**Annual Examination, July 2021**  
Master of Dental Surgery – First Year  
**PEDIATRIC AND PREVENTIVE DENTISTRY-BASICS**  
**(MDS-PEDO-101)**

Time: 3 hrs.

Max Marks: **100**

*No. of pages: 1*

Note: *All questions are **compulsory** and also draw the diagrams where ever necessary. Marks are indicated against each question.*

**Q.1    *Short Questions:***

- a) Pain pathways.
- b) Temporalis muscle.
- c) Facial nerve paralysis .
- d) Tertiary dentine.
- e) Role of pedodontist in management of Cleft lip and Palate.
- f) Role of saliva in caries prevention.
- g) Child abuse and dental neglect.
- h) Extrinsic pathway of blood coagulation.
- i) Growth spurts.
- j) Antibiotics in pedodontics .

**5x10**

***Long questions:***

Q.2    Describe the origin, course and branches of 'Mandibular Nerve' in detail. **25**

Q.3    Describe infection prevention and control in pediatric clinical practice in current COVID pandemic in detail. **25**

Roll No.: \_\_\_\_\_

**Annual Examination, July 2021**  
**Master of Dental Surgery – First Year**  
**PERIODONTOLOGY–BASICS (MDS-PERI-101)**

Time: 3 hrs.

Max Marks: **100**

*No. of pages: 1*

Note: *All questions are **compulsory** and also draw the diagrams where ever necessary. Marks are indicated against each question.*

**Q.1 Write short notes on the following:**

- a) Test of significance.
- b) Muscles of mastication.
- c) Physiology of pain.
- d) Fat soluble vitamins.
- e) Mandibular nerve .
- f) Clotting mechanism.
- g) Facial Artery.
- h) Diabetes and periodontitis.
- i) Anaphylactic shock.
- j) Fibers of periodontal ligament.

**5x10**

***Long questions:***

**Q.2** Analyze the role of inflammation in periodontal health and disease in detail. **25**

**Q.3** Describe, in detail, macroscopic and microscopic features of gingiva. **25**



Roll No.: \_\_\_\_\_

**Annual Examination, July 2021**  
Master of Dental Surgery – First Year  
**PROSTHODONTICS AND CROWN AND BRIDGE**  
**(MDS-PROS-101)**

Time: 3 hrs.

Max Marks: **100**

*No. of pages: 1*

Note: *All questions are **compulsory** and also draw the diagrams where ever necessary. Marks are indicated against each question.*

**Q.1    *Short Question:***

- a) Syncope and its management .
- b) Muscles of mastication.
- c) Role of saliva in prosthodontics.
- d) Chi square test.
- e) Describe CBCT and its use in prosthodontics.
- f) Wound healing.
- g) Hospital waste management.
- h) Describe various casting defects and their prevention.
- i) Non steroidal anti inflammatory drugs.
- j) Nutrition care for denture wearing patients.

**5x10**

***Long questions:***

Q.2    Discuss Dental ceramics in detail.

**25**

Q.3    Discuss about Temporomandibular joint in detail.

**25**