

Annual Examination, August 2022
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) Two drugs are said to be bioequivalent if:
 - i) Both drugs produce comparable biological effect in experimental animals.
 - ii) Both drugs produce comparable clinical effects and side effects..
 - iii) Both drugs containing same active ingredients, same dosage forms and administered via same route, result in comparable rate and extend of absorption.
 - iv) Both drugs contain active ingredients of similar biological activity.
- b) Drug of choice for anaphylactic shock is:
 - i) Epinephrine
 - ii) Norepinephrine
 - iii) Dopamine
 - iv) Dobutamine
- c) Which type of drugs are better absorbed sublingually:
 - i) Strong electrolytes
 - ii) Lipophilic drugs
 - iii) Quaternary ammonium compounds
 - iv) Hydrophilic drugs
- d) Which of the following is a long-acting insulin analogue?
 - i) Insulin aspart
 - ii) Insulin glulisine
 - iii) Insulin lispro
 - iv) Insulin glargine
- e) Which of the following is an oral direct thrombin inhibitor?
 - i) Warfarin
 - ii) Argatroban
 - iii) Dabigatran
 - iv) Fondaparinux

1x5

Q.2 Write short notes on the following:

- a) FQ drugs.
- b) Pharmacological management of myocardial infarction.
- c) Write briefly about selective COX-2 inhibitors.
- d) Management of status asthmaticus.
- e) Opioids in the management of pain.

5x5

Q.3 Explain the mechanism of action, examples, adverse effects and uses of 'Local Anesthetic Agents' in detail.

10

PART-B

Q.4 Multiple choice questions:

a) Low dose aspirin is used as an:

- i) Analgesic
- ii) Anti-inflammatory agent
- iii) Antipyretic
- iv) Antiplatelet drug

b) If patient has a history of allergy with penicillin G, the probability of cross allergy will be least with which of the following beta lactam antibiotics?

- i) Aminopenicillins
- ii) Carbapenems
- iii) Cephalosporins
- iv) Monobactam

c) Omeprazole is a/an?

- i) Proton pump inhibitor
- ii) H₂ receptor antagonist
- iii) Antacid
- iv) Prostaglandin analogue

d) All of the following are first line antitubercular drugs, except?

- i) Rifampicin
- ii) Isoniazid
- iii) Dapsone
- iv) Ethambutol

e) Which of the following group of antimicrobial agents are most nephrotoxic:

- i) Penicillin
- ii) Cephalosporins
- iii) Macrolides
- iv) Aminoglycosides

1x5

Q.5 Write short notes on the following:

- a) ADR of steroid.
- b) Antimicrobial resistance.
- c) Desensitizing agents.
- d) Treatment of typhoid fever.
- e) Antiplatelet agents.

5x5

Q.6 Classify Penicillin group of antibiotics. Write mechanism of action, uses and adverse effects of amoxicillin in detail.

10

Annual Examination, August 2022

Bachelor of Dental Surgery – Second Year

COMPUTER APPLICATIONS (BDS-CA-OE-001)

Time: 3 hrs.
Marks: **100**

Max

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 tags are most commonly used by search engines?

[CO-4][L-1]

i) Heading

ii) Title

iii) paragraph

iv) All of the above

b) bgcolor is an attribute of body tag.

[CO-3][L-1]

i) TRUE

ii) FALSE

c) HTML tags are enclosed in: [CO-3][L-1]

i) { and }

ii) < and >

iii) ! and ?

iv) # and #

d) Which is the default alignment in word?

[CO-1][L-1]

i) Left

ii) Right

iii) Centre

iv) Justify

e) Following is used for creating presentations:

[CO-2][L-2]

i) MS Word

ii) MS Access

iii) MS Excel

iv) Power Point

f) File extension of word document is:

[CO-1][L-1]

i) .xls

ii) .doc

- iii) .word iv) .jpeg
- g) We can insert a page number at: [CO-1][L-1]
- i) Header ii) Footer
- iii) Both i) and ii) iv) None of the above
- h) A number of letter that appears little above the normal text is called: [CO-1][L-1]
- i) Superscript ii) Subscript
- iii) Supertext iv) Toptext
- i) Can data cell contain images? [CO-3][L-1]
- i) YES ii) NO
- j) What is cell padding? [CO-3][L-1]
- i) Used to separate cell walls from their content.
- ii) Used to space between cells.
- iii) Both i) and ii).
- iv) Used to provide width to a cell. **1x10**

Q.2 Write short notes on the following:

- a) Benefits of Microsoft Word. [CO-2][L-2]
- b) Comparison of Microsoft Word and Microsoft Excel. [CO-2][L-3]
- c) Usage of Microsoft Access. [CO-3][L-2]
- d) Format Painter tool in Microsoft Word. [CO-2][L-2]
- e) Use of fonts and its attributes in HTML. [CO-2][L-1]

6x5

Q.3 Create a list of 10 faculty members. Create an 'invitation' letter. Use the Mail Merge feature of MS-WORD to create an invitation letter for each of your faculty for inviting her on teacher's day celebration.

[CO1][L5] **10**

PART-B

Q.4 Multiple choice questions:

- a) Which of the following tag is a special formatting tag? [CO-5][L-1]
- i) <h1> ii) <pre>
- iii) <p> iv)

- b) Which of the following html tag is used to display the scrolling effect of text on website? [CO-5][L-1]
- i) <scroll> ii) <div>
- iii) <marquee> iv) None of the above

- | | |
|--|-----------------------|
| c) What is the tag for space? | [CO-5][L-1] |
| i)
 | ii) <p> |
| iii) <space> | iv) <lr> |
| d) What is the attribute for image tag? | [CO-5][L-1] |
| i) pt | ii) url |
| iii) path | iv) src |
| e) Can a data cell contain images? | [CO-5][L-1] |
| i) Yes | ii) No |
| f) Can I play audios in HTML? [CO-5][L-1] | |
| i) No | ii) Yes |
| g) What attribute is used to specify number of rows? [CO-5][L-1] | |
| i) Rownum | ii) Rownumb |
| iii) rn | iv) Rowspan |
| h) bgcolor is an attribute of body tag: [CO-5][L-1] | |
| i) True | ii) False |
| i) How to create a hyperlink in HTML _____? [CO-5][L-1] | |
| j) Tag for creating an unordered list in html? [CO-5][L-1] | |
| i) | ii) |
| iii) <list> | iv) None of the above |

1x10

Q.5 Write short notes on the following:

- Different types of lists in HTML.
- Formatting tags in HTML.
- Importance of blog writing.
- Difference between cell spacing and cell padding.
- tag in html.

[CO-5][L-2,3] **6x5**

Q.6 In how many ways can we specify the CSS styles for the HTML element? Explain with examples.[CO 5][L1] **10**

Annual Examination, August 2022
Bachelor of Dental Surgery – Second / Third 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 texte et répondez (Read the text and answer the following questions) :

Aujourd'hui, c'est l'anniversaire de mon amie Pauline. Elle a seize ans. Le soir, elle invite ses amis et ses cousins pour célébrer son anniversaire. J'achète un gâteau au chocolat et un cadeau. Elle fête son anniversaire dans le jardin (garden) parce qu'il fait beau. Sa mère prépare des bonbons, des sandwiches, des tartines et des frites. Il y a aussi du jus de fruits et des glaces. Ses parents sont médecins. Ils sont très sympathiques. Elle porte une belle robe blanche. Elle coupe le gâteau et nous chantons << Bon anniversaire>>. Tous les amis donnent les cadeaux à Pauline. Ses parents achètent un portable pour Pauline. Après le dîner, nous chantons et dansons. Je rentre à la maison à 8 h et j'étudie pour mon examen de français.

A. Répondez aux questions (Answer the questions) :

2

i.) Quelle est la profession des parents de Pauline ?

_____.

ii.) Quel temps fait-il ?

_____.

B. Complétez avec un mot du texte :

5

(Complete with a word from the text):

- i.) Les enfants jouent dans le _____. (jardin/maison/portable)
- ii.) L'_____ de ma mère est le 12 novembre. (examens/anniversaire/invite)
- iii.) Le printemps, il fait _____. (belle/beau/bon)
- iv.) La _____ de Diwali est en octobre. (robe/mère/fête)
- v.) Tous les amis donnent _____ à Pauline. (le livre, les cadeaux, médecins)

C. Donnez l'infinitif des verbs (write the infinitive form of the verbs):

3

- i.) Chantons : _____
- ii.) Sont : _____
- iii.) Achète : _____

SECTION-B

Expression Écrite

Q.2 Décrivez votre journée ou décrivez votre famille.
(Describe your daily routine or describe your family)

10

SECTION-C

Grammaire

Q.3 Mettez au pluriel (write in plural):

5

a) Tu manges la pizza.

b) Il a un livre anglais.

c) Elle est une belle femme française.

d) J'aime la chanson.

e) Je range la chambre.

Q.4 Mettez au féminin (write in feminin):

5

a) Le père de Ben est Italien.

b) Le frère d'Alex est beau.

c) Voici un petit garçon Indien.

d) L'homme Indien est intelligent.

e) Le garçon est content.

**Q.5 Complétez avec les adjectifs possessifs (mon,ma...,notre,leurs)
(Complete using possessive adjectives):**

5

a) Elle aime _____ professeur.

b) Vous parlez à _____ étudiants.

c) Je parle à _____ amie.

d) Tu finis _____ devoirs.

e) Elles aiment _____ robes.

**Q.6 Complétez avec les articles définies – le, la, l', les
(Complete using definite articles)**

5

a) Je regarde _____ livre.

b) Nous allons à _____ école.

c) Elle sont _____ robes.

d) J'ai _____ livres intéressants.

e) Vous choisissez _____ voiture verte.

**Q.7 Complétez avec les articles indéfinis – un, une, des
(Complete using indefinite articles):**

5

a) _____ gommes sont rouges.

b) J'ai _____ sac.

c) Nous avons _____ cahiers.

d) Tu as _____ copine française.

e) Tu ne fais pas _____ devoirs.

- Q.8 Complétez avec les prépositions :** **5**
(sur/dans/avec/de/contre/ à droite de)
(Complete using prepositions)
- a) Martin va _____ Jacques.
 - b) Le livre est _____ la table du salon.
 - c) Les fruits sont _____ le frigo.
 - d) L'horloge est _____ le mur.
 - e) Les fruits sont _____ le frigo.
- Q.9 Quelle heure est-il ?** **5**
(What time is it ?)
- a) **8:30** : _____
 - b) **00:00** : _____
 - c) **10:15** : _____
 - d) **6 :45** : _____
 - e) **8 :00** : _____
- Q.10 Écrivez en français et accordez l'adjectif :** **5**
(Write the french adjective according to the noun)
- a) Mon père achète une _____ maison. (Big/Tall)
 - b) La robe est très _____. (Beautiful)
 - c) Mes amis sont _____. (Naughty)
 - d) Alina est _____. (Kind)
 - e) Des livres sont _____. (Small)
- Q.11 Traduisez les expressions en anglais :** **5**
(Translate the expressions in english)
- a) Il fait froid : _____
 - b) Il neige : _____
 - c) Il fait beau : _____
 - d) Il fait du soleil : _____
 - e) Il fait orageux : _____
- Q.12 Quelle est leur profession?** **5**
(What is their profession?)
- a) Elle enseigne à l'école : Elle est _____
 - b) Il écrit les romans(novels): Il est _____
 - c) Il fait un gateau : Il est _____

- d) Elle travaille avec les ordinateurs (computers) : Elle est _____
- e) Il travaille avec l'appareil (device,machine) : Il est _____

Q.13 Mettez en ordre:
(Put in order):

5

- a) Famille/la/cathédrale/la/va/à

- b) Livres/nous/les/français/regardons

- iii.) Sportive/Sylvie/très/est

- iv.) Français/mon/pour/ J'étudie/examen/de.

- v.) Belle/une/porte/robe/blanche/elle.

Q.14 Complétez avec les articles partitifs:
(Complete using definite articles)

6

- a) Nous buvons _____ thé ou _____ coca.
- b) Elle prend _____ pizza et _____ chocolats.
- c) Je mange _____ biscuits et Elle mange _____ croissant.

Q.15 Conjuguez les verbes:
10
(Conjugate the verbs):

- a) Nous _____ (acheter) les fleurs.
- b) Tu _____ (aller) à l'école.
- c) Elles _____ (avoir) les livres français.
- d) Je _____ (être) Indienne.
- e) Il _____ (faire) un gâteau.
- f) Tu _____ (manger) dans la cuisine.
- g) Ils _____ (nettoyer) la classe.
- h) Elles _____ (finir) le devoir.
- i) Vous _____ (se coucher) tard ?
- j) Je _____ (se laver) ma voiture.

SECTION-D

Q.16 Complétez les phrases :

5

(Complete the sentences)

- a) _____ est l'hymne national (national anthem) français.
- b) _____ est le vin (wine) français.
- c) _____ est la ville (city) de la France.
- d) _____ est la monnaie (currency) unique européenne.
- e) _____ est le fromage (cheese) français.

Q.17 Cochez la bonne réponse:

4

(Choose the correct option)

- a) The colours of French flag are _____
 - i.) Blue, white, red
 - ii.) Orange, white, green
 - iii.) Yellow, white, red
- b) _____ is the capital of the France.
 - i.) Lyon
 - ii.) Paris
 - iii.) Nice
- c) _____ is a monument of France.
 - i.) La Tour Eiffel
 - ii.) Le Brie
 - iii.) Le Bordeaux
- d) The currency of France is l'_____
 - i.) Dollar
 - ii.) Franc
 - iii.) Euro

Annual Examination, August 2022
Bachelor of Dental Surgery – Second/Third 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.*

Q.1 Lee el texto y responde las preguntas: 10
Read the text and answer the question

Querida Gema:

¿Cómo estás? Yo estoy muy bien pero un poco enfadada contigo porque no me escribes nunca,
ni me llamas por teléfono.

La nueva escuela es muy grande y bonita. No tengo muchos amigos en esta escuela porque soy muy tímido pero tengo un mejor amigo que se llama Carlos, él tiene 14 años y es de Italia. El habla italiana, inglés y un poco español, nosotros practicamos español juntos. Él es muy alto y delgado. Lleva las gafas y tiene el pelo rizado. A él le gusta jugar el futbol y le gustan los deportes.

El es fantástico.

En la próxima carta te escribiré sobre mi profesor. Escribe pronto o me enfadare.

Muchos besos

Pablo

Elige la respuesta correcta

Choose the correct option

a) ¿De dónde es Carlos? i) Italia ii) España iii) Francia

b) ¿Cuántas lenguas habla Carlos? i) 5 ii) 3 iii) 2

c) ¿Cuántos años tiene Carlos? i) 14 ii) 17 iii) 12

d) ¿Le gusta jugar? i) Futbol ii) Baloncesto iii) Tennis

Traduce el texto en negrita

Translate the text in bold

Q.2 Escribe un dialogo entre tú y tu amigo/a discutiendo qué vas a hacer después de examen. Write a dialogue between you and your friend discussing what are you going to do after the exams. (Use ir a infinitivo)
10

Q.3 Completa las frases con la conjugación de ser/ estar 1x8
Complete the sentences with the conjugation of ser/estar.

- a) Los profesores no _____ en la escuela.
- b) El libro que está delante de mi botella _____ de Rohan.
- c) Mi prima y yo _____ cerca de nuestra oficina.
- d) Mi hermano _____ en la clase de español.
- e) Mi padre y mi madre _____ enfermo.
- f) Tú y tú tenéis un bolso que _____ muy pequeño.
- g) ¿Dónde _____ el museo de arte?
- h) El 30 de abril _____ el cumpleaños de la señorita.

Q.4 Observa cada uno de los dibujos y describe cómo son en español. Habla del pelo, el color de ojos y la piel (skin)
Observe each picture and describe in Spanish. Talk about their hair, eye and skin color, etc.

8



1.

Marcos tiene 47 años. Él es ingeniero.

Marcos es



2.

Wan-Chin tiene 25 años. Ella es de Taiwán.



5.

Elizabeth es estadounidense.

Q.5 Completa las frases con la conjugación de ser/ estar 1x8
Complete the sentences with the conjugation of ser/estar.

- a) Los profesores no _____ en la escuela.
- b) El libro que está delante de mi botella _____ de Rohan.
- c) Mi prima y yo _____ cerca de nuestra oficina.
- d) Mi hermano _____ en la clase de español.
- e) Mi padre y mi madre _____ enfermo.
- f) Tú y tú tenéis un bolso que _____ muy pequeño.
- g) ¿Dónde _____ el museo de arte?
- h) El 30 de abril _____ el cumpleaños de la señorita.

Q.6 Escribe qué está haciendo.
Write what is she doing.

7

montar la bicicleta,	ducharse,	hacer la compra,	cocinar,
conducir el coche,		trabajar,	sacar a
pasear al perro,	regar las plantas		

e.g. Ella está cocinando.



- a) _____.
- b) _____.
- c) _____.
- d) _____.
- e) _____.
- f) _____.
- g) _____.
- h) _____.

Q.7 Elige la respuesta correcta.
Choose the correct option.

1x12

- a) ¿Cómo _____ llama?
i) tú ii) se iii) te
- b) Mi padre _____ en una fábrica.
i) trabaja ii) trabaja iii) trabajáis
- c) _____ tres y media.
i) son ii) son las iii) están
- d) Cuando tengo tiempo libre, me gusta _____.
i) bailar ii) bailando iii) bailo
- e) Carlos y Susana _____ treinta y dos años.
i) tienen ii) es iii) está
- f) Todos los sábados yo _____ tarde.
i) levanto ii) me levanto iii) me levantas
- g) Cada sábado mi amigo visita a _____ padres.
i) su ii) sus iii) suyo
- h) A Roberta _____ el gato.
i) se gusta ii) le gusta iii) les gustan
- i) Soy estudiante pero durante las vacaciones estoy _____ de camarera.
i) trabajando ii) trabajar iii) trabajo
- j) La película es _____ interesante.
i) muy ii) mucha iii) muchos
- k) Todos los días de este mes Marisa _____ levanta a las seis y media.
i) me ii) te iii) se
- l) ¿_____ casas hay en esta calle?
i) cuántas ii) cuántos iii) qué

Q.8 Escribe la hora:

1x6

Write the time:

- a) 8:30 AM: _____
- b) 10:50 PM: _____
- c) 2:35 AM: _____
- d) 1:35 AM: _____
- e) 7:42 PM: _____
- f) 12:15 AM: _____

Q.9 Traduce. Translate

1x5

- a) I go to the park every Saturday. : _____

- b) I get up at 06:00 almost always. : _____
- c) I can play basketball for the whole day. : _____
- d) They normally don't eat late. : _____
- e) Frequently she travels to Spain. : _____

Q.10 Encuentra los errores gramaticales que hay en las siguientes oraciones.
Find the errors and rewrite the sentences.

1x5

- a) El coche de mi amigo soy amarilla. : _____
- b) Nuestras zapatos son blancas. : _____
- c) Vuestros plantas es verdas. : _____
- d) Mi madre tiene una bolsa rojo. : _____
- e) Su portátil son de color negro. : _____

Q.11 Responde las preguntas.

1x5

Answer the questions.

- a) ¿Cuándo es tu cumpleaños? _____
- b) ¿Cómo se llama tu abuelo? _____
- c) ¿Cómo se llama tu mejor amigo? _____
- d) ¿Cómo se llama tu hermano/a? _____
- e) ¿Dónde estudias tú? _____

Q.12 Completa con el verbo llamarse y tener.

16

Fill in the blanks with llamarse and tener.

- a) Yo _____ José y _____ doce años.
- b) Ustedes _____ Manuel y Pablo y _____ cinco y seis años.
- c) Usted _____ Mario López y _____ veinticuatro años.
- d) Nosotros _____ Ricardo y Joselina,
 _____ diez y ocho años respectivamente.
- e) Tú _____ Oscar _____ cuatro años.
- f) Ellas _____ María y Clara y _____ trece años.
- g) Él _____ Gabriel y Ella _____ Gabriela. Él
 _____ once y Gabriela _____ trece años.

Annual Examination, August 2022

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 Answer the following questions:

a) As per Income Tax Act, accounting period is started:

i) From 1st January to 31st December

ii) From 1st April to 31st March

iii.) From 1st July to 31st June

b) As per dual aspect concept Assets = Liabilities. **(True/False)**

c) Accrual Concept is based on _____ concept.

(Matching / Cost / Going Concern)

d) Wages Accounts is always credited. **(True/False)**

e) Cash discount is allowed to encourage quick or prompt payment. **(True/False)**

[CO-1, 2,3][L-1,2]

1x5

Q.2 Answer the following questions

a) Discuss the advantages of accounting.

[CO-1][L-1]

b) Explain 'Cash Book' in brief.

[CO-2][L-2]

c) Define 'Double Entry System'.

[CO-2][L-1]

d) Differentiate between capital and revenue expenditure with examples.

[CO-2][L-4]

e) Elaborate the three golden rules of accounts.

[CO-3][L-3]

5x5

Q.3 Journalise the following transactions:

a) Dr. Gupta started 'Roshan Dental Clinic' with cash Rs 80,00,000

b) He purchased dental chair of Rs 40,00,000 for treatment of patient.

c) He paid Rs 5,000 electricity bill and Rs 10,000 salary to assistant.

- d) Received cash Rs 5,000 from patient for their treatment.
- e) He deposited Rs 1,00,000 into bank.
- f) Depreciation paid Rs 4,000 on chair
- g) Cash withdrawal from clinic Rs 10,000 for personal use.
- h) Rent paid Rs 10,000 through cheque
- i) Treatment Material purchased Rs 4,500 from Mr Ram.
- j) He introduces additional capital Rs 2,00,000 in the clinic.

[CO-2][L-3]

20

PART-B

Q.4 Multiple choice questions:

- a) Final accounts can be prepared with Ledgers. (True/False)
- b) Depreciation is decline in the value of _____. (Capital/Land/Fixed Assets)
- c) Trial Balance serves as a summary of all ledger accounts. (True/False)

- d) Balance sheet is prepared to know the _____ of the firm.

(Accuracy / Financial Position / Profit and Loss)

- e) Amount withdrawn for personal use is debited to _____ account.

(Cash / Bank / Drawing / Capital) [CO-1, 2][L-2]

1x5

Q.5 Answer the following questions

- a) Define 'depreciation' and their needs of calculation. [CO-1][L-1]
- b) Explain 'Balance Sheet' in brief. [CO-2][L-2]
- c) Explain any two conventions of accounting. [CO-3][L-2]
- d) Describe any two concepts of accounting. [CO-2][L-1]
- e) On 1st April 2019 'Roshan Dental Clinic' purchased furniture for Rs 1,00,000/- and spent Rs 20,000/- on its carriage. On the date of purchased it was estimated that the rate of depreciation is 15% with diminishing balance methods. Books are closed on 31st March every year. Calculate the amount of depreciation for year 2019-20, 2020-2021 and 2021-22. [CO-2][L-4] **5x5**

Q.6 Define 'accounting process' in detail and explain briefly its advantages. Mention the different users of accounting information. [CO-2][L-3, 4] **20**

Annual Examination, August 2022

Bachelor of Dental Surgery – Third Year

AESTHETIC DENTISTRY (BDS-CONS-OE-001)

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) Organosilanes used in composites function as:

- | | |
|---------------------|---------------|
| i) Resin matrix | ii) Fillers |
| iii) Coupling agent | iv) Activator |

b) Dicor is:

- | | |
|-------------------------|-------------------------|
| i) Pressable ceramic | ii) Castable ceramic |
| iii) Machinable ceramic | iv) Infiltrated ceramic |

c) In case of heavily discolored teeth

- i) Etching time is increased followed by adhesive application & composite restoration.
- ii) Concentration of etchant is increased followed by adhesive application and composite restoration .
- iii) Both of these.
- iv) None of these

d) Which of the following is not a component of modified Mc Innes solution?

- | | |
|----------------------------|---------------------------|
| i) 0.2% anaesthetic ether | ii) 36% hydrochloric acid |
| iii) 30% hydrogen peroxide | iv) 20% sodium hydroxide |

e) Shade selection should be done under:

- | | |
|----------------------|----------------------|
| i) Natural day light | ii) Yellow light |
| iii) White light | iv) Any of the above |

1x5

Q.2 Write short notes on the following:

- a) Adhesion.
- b) Castable and machinable ceramics.
- c) Illusion.
- d) Walking bleach technique.
- e) Describe the treatment for correction of midline diastema.

5x5

Q.3 Define and classify Dental Veneers. Discuss in detail materials used and technique of fabrication of Indirect veneers.

10

PART-B

Q.4 Multiple choice questions:

a) Metamerism is:

- i) Different perception of color by different light sources.
- ii) Variable reflection of light from different depths of an object.
- iii) Variation in surface characterization in young and old individuals.
- iv) None of the above.

b) Agent used for office bleaching is

- | | |
|----------------------------|---------------------------|
| i) Sodium perborate | ii) 35% hydrogen peroxide |
| iii) 20% hydrogen peroxide | iv) 10% hydrogen peroxide |

c) Microabrasion is:

- i) Eliminating discoloration by removing surface enamel.
- ii) Bleaching stains
- iii) Bleaching developmental defects
- iv) All of the above

d) Silane primer is used to condition the internal surface of which of the following indirect veneer.

- | | |
|------------------------|-----------------------|
| i) Composite veneer | ii) Porcelain veneer |
| iii) Both of the above | iv) None of the above |

e) What is the best treatment in case of superficial fluorosis.

- | | |
|--------------|-------------------|
| i) Bleaching | ii) Direct veneer |
|--------------|-------------------|

iii) Indirect veneer

iv) Microabrasion

1x5

Q.5 Write short notes on the following:

- a) Write a note on Golden Proportion.
- b) Describe the role of color in esthetic dentistry.
- c) Discuss various light curing units used in operative dentistry.
- d) Differentiate between total etch and self etch bonding systems.
- e) Discuss about smile line and its types.

5x5

Q.6 Discuss in detail artistic and scientific principles of esthetic dentistry. **10**

Annual Examination, August 2022
Bachelor of Dental Surgery – Third Year
GENERAL MEDICINE (BDS-GEME-301)

Time: 3 hrs.
Marks: **80**

Max

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 one of these is not present in DKA?
- | | |
|-----------------------------|----------------------------|
| i) Blood sugar > 250 mg | ii) Ph of < 7.3 |
| iii) Serum bicarbonate > 20 | iv) Serum +VE for Ketones. |
- b) Which is a wrong statement about Mitral stenosis?
- | |
|--|
| i) Mostly due to rheumatic fever |
| ii) Characterized by a mid diastolic murmur |
| iii) LVH is seen |
| iv) Balloon valvotomy is an option for non calcific MS |
- c) Which one of these is not a useful test for AIDS?
- | | |
|-----------------|-----------------------|
| i) P-24 Antigen | ii) Western blot test |
| iii) CD-4 Count | iv) Mantoux |
- d) All are OH except:
- | | |
|-----------------|---------------|
| i) Metformin | ii) Ramipril |
| iii) Gliclazide | iv) Voglibose |
- e) Which among these is not a feature of primary pulmonary TB?
- | |
|----------------------------|
| i) Seen mainly in children |
| ii) Seen mainly in adults |
| iii) Ghon Lesion present |

iv) Localized to middle and lower zone

1x5

Q.2 Write short notes on the following:

- a) Oral manifestations of hematologic disorders
- b) Scurvy
- c) Trigeminal neuralgia
- d) Secondary hypertension
- e) Thyroid storm

5x5

Q.3 Define and classify epilepsy. Discuss the management of seizure disorder.

10

PART-B

Q.4 Multiple choice questions:

a) Which one of these is not present in pellagra?

- i) Diarrhea
- ii) Dementia
- iii) Peripheral neuropathy
- iv) Dermatitis

b) Nephrotic syndrome is characterized by all except one.

- i) Proteinuria < 2 Gm/24 MS
- ii) Edema
- iii) Hypercholesterolemia
- iv) Serum albumin <30 gm/L

c) Which one of these is not a 1st line ATT?

- i) INH
- ii) Rifampicin
- iii) Kanamycin
- iv) Pyrazinamide

d) Which among these is a congenital cyanotic heart disease?

- i) VSD
- ii) PDA
- iii) ASD
- iv) TOF

e) Which is not among the causes of hypercalcemia?

i) Milkalkali syndrome

ii) Sarcoidosis

iii) VIT D Deficiency

iv) Multiple myeloma

1x5

Q.5 Write short notes on the following:

a) HAART

b) Microvascular complications of diabetes

c) Megaloblastic anemia

d) ITP

e) Syncope

5x5

Q.6 Define 'cirrhosis'. Mention the causes of cirrhosis liver. Discuss the management of acute hepatic encephalopathy.

10

Bachelor of Dental Surgery – Second Year
GENERAL PATHOLOGY (BDS-GEPA-201)

Time: 3 hrs.
Marks: **80**

Max

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) Dystrophic calcification
 - i) Occurs in atheromatous disease
 - ii) Is associated with hypercalcaemia
 - iii) Is seen in vitamin D related disease
 - iv) May be a part of the milk alkali syndrome
- b) Irreversible cell injury is seen in
 - i) Apoptosis
 - ii) Hypertrophy
 - iii) Hyaline change
 - iv) Fatty change
- c) The type of necrosis seen in hypoxic brain is:
 - i) Caseous necrosis
 - ii) Coagulative necrosis
 - iii) Liquefactive necrosis
 - iv) Fibrinoid necrosis
- d) Locomotion across chemical gradient is called:
 - i) Diapedesis
 - ii) Chemotaxis
 - iii) Pavement
 - iv) Margination
- e) What is a small piece of dead bone separated from healthy bone known as?
 - i) Osteophyte
 - ii) Osteosarcoma
 - iii) Involucrum
 - iv) Sequestrum

1x5

Q.2 Write short notes on the following:

- a) Types of necrosis.
- b) Fatty Liver.
- c) Ghon's complex.
- d) Hemophilia.
- e) Pathogenesis of thrombus.

5x5

Q.3 Define and classify 'Shock'. Describe pathogenesis of Septic shock and write its stages.

10

PART-B

Q.4 Multiple choice questions:

- a) Chronic myeloid leukemia is characterized by all except.
 - i) Philadelphia chromosome
 - ii) Decrease in NAP score
 - iii) Splenomegaly
 - iv) Decrease in Total Leukocyte count
- b) The most significant risk factors for atherosclerosis include all of the following except:

i) Hyperlipidemia	ii) Hypertension
iii) "Type A" personality	iv) Diabetes
- c) Keratin pearls are seen in

i) Ameloblastoma	ii) Squamous cell carcinoma
iii) PSA	iv) Lipoma
- d) Cause of macrocytic anemia is:

i) Sideroblastic anemia	ii) Iron deficiency
iii) Vitamin B12 deficiency	iv) Thalessemia
- e) Cause of edema is:
 - i) Decreased plasma protein concentration
 - ii) Decreased hydrostatic pressure
 - iii) Increased plasma protein concentration
 - iv) Decreased capillary permeability

1x5

Q.5 Write short notes on the following:

- a) Laboratory diagnosis of Iron deficiency anemia.
- b) Pathogenesis of Diabetes mellitus.
- c) Dry gangrene Vs Wet gangrene.
- d) Fallot's tetralogy.
- e) Leukoplakia of oral cavity.

5x5

Q.6 Define and classify neoplasm. Write mechanism and routes of Metastasis.

10

Annual Examination, August 2022
Bachelor of Dental Surgery – Third Year
GENERAL SURGERY (BDS-GESU-301)

Time: 3 hrs.
Marks: **80**

Max

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) Interpret which one of the following statements is correct:
 - i) Both facial and trigeminal nerves are purely motor nerve.
 - ii) Interictal numbness is an important feature in 7th nerve palsy.
 - iii) Unilateral LMN palsy of 7th nerve gives rise to bilateral symptoms and signs.
 - iv) Bilateral trigeminal nerve palsy in a young person could be a sign of multiple sclerosis.
- b) Label malignant tumour with any one of the correct choices below:
 - i) It has got a very sharply defined edge.
 - ii) It never gives rise to the cauliflower appearance.
 - iii) They can re-programme the energy metabolism (Warburg effect).
 - iv) This does not have any variation in its normal mitotic activity.
- c) Choose anyone of the correct statements out of the following:
 - i) Double chin appearance is seen in Ludwig's angina.
 - ii) A thyroid swelling in the neck moves both with deglutition and protrusion of the tongue.
 - iii) Papillary carcinoma is never associated with a thyroglossal cyst.
 - iv) Dermoid cyst is a brilliantly trans-illuminant cyst.
- d) Interpret which of the following is false:
 - i) Cystic hygroma is most common in the posterior triangle of the neck.
 - ii) MRI provides the best soft tissue detail in cystic hygroma.

- iii) It is always possible to excise the cystic hygroma completely without any recurrence later on.
- iv) Cystic hygroma can be diagnosed in fetus with the help of ultrasound.
- e) Relate the disease with the correct pathologic organism:
 - i) Gas gangrene is caused by the gram-positive organism *Clostridium tetani*.
 - ii) Gas gangrene later on gets complicated with HIV.
 - iii) Gas gangrene is primarily caused by the gram-positive organism *Clostridium perfringens*.
 - iv) *C. Perfringens* infection is a very mild infection with good prognosis. **1x5**

Q.2 Write short notes on the following:

- a) Outline the aetiology, clinical features and management of anaphylaxis.
- b) Categorize the TNM classification of squamous cell carcinoma in head and neck cancers.
- c) Classify lateral neck swellings. Enumerate the clinical features, diagnosis and management of a Branchial cyst.
- d) Outline the divisions and boundaries of the anterior triangle of neck. Describe the contents of the Carotid triangle.
- e) Classify different odontogenic cysts. Enumerate the aetiology, clinical features and management of a Dentigerous cyst. **5x5**

Q.3 Classify different types of shock. Enumerate the clinical features of different types of hemorrhagic shock in a tabular form, and how you will manage of a hemorrhagic shock.

10

PART-B

Q.4 Multiple choice questions:

- a) Tubercular abscess is identified by all of the following except:
 - i) Acute inflammation along with severe tenderness.
 - ii) Collar stud abscess.
 - iii) Absence of acute features of inflammation.
 - iv) Sinus formation as an end result in untreated cases.
- b) Neurogenic shock is not identified by:
 - i) Pale and cool skin.
 - ii) Tachycardia with features of shock.
 - iii) Bradycardia with features of shock.
 - iv) Decreased urine output.
- c) Example of Tetanus prone wound is:
 - i) Age of the wound greater than 6 hrs.

- ii) Depth of the wound greater than 1mm.
 - iii) Presence of devitalized ischemic tissue, and infection.
 - iv) All of the above.
- d) Diagnosis of a Rodent ulcer is established by:
- i) 90% are seen on the face above a line from the lobe of the ear to the corner of the mouth.
 - ii) This is a slow growing, locally invasive malignant tumour.
 - iii) Managed with complete excision by Moh's micrographic surgery.
 - iv) All of the above.
- e) Example of Waldeyer's ring is/are:
- i) All the tonsils in the neck region.
 - ii) Outer ring of lymph nodes around the neck.
 - iii) These are the lymphatic stations in the region of the neck.
 - iv) All of the above.

1x5

Q.5 Write short notes on the following:

- a) Categorize different types of gangrene. Write what you know about gas gangrene.
- b) Outline the differences between a hypertrophic scar and a keloid in a tabular form.
- c) Describe the pathophysiology and clinical features of the favorable and unfavorable fractures of the angle of the mandible.
- d) Outline the differentiating features between a CSF rhinorrhea and nasal secretion.
- e) Summarize what you know about oral submucosal fibrosis.

5x5

Q.6 Classify Le-Forte fractures with detailed tracing of the fracture lines. Describe the aetiology, clinical features, diagnosis and management of the Le forte II fracture.

10

Annual Examination, August 2022

Bachelor of Dental Surgery – Second Year

GENERAL 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.

• 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) Best method of Sterilisation of LJ medium [L1, CO2]
- i) 121 C at 10 min, 15 lb. pressure
 - ii) 75-85° C for 1 hour for 3 consecutive days
 - iii) ETO
 - iv) Sodium hypochlorite
- b) What is the structure that is found in gram-positive but not in gram-negative bacteria? [L2, CO1]
- i) Teichoic acid
 - ii) Peptidoglycan layer
 - iii) Cell membrane
 - iv) Nucleoid
- c) The absence of all forms of microbial life, including spores, is known as? [L1, CO2]
- i) Decontamination
 - ii) Disinfection
 - iii) Sterility
 - iv) Asepsis
- d) Which is the Immunoglobulin that can cross the placenta and provide passive immunity to newborn? [L1, CO3]
- i) IgM
 - ii) IgG
 - iii) IgA
 - iv) IgE
- e) **Which of the following cells is involved in cell-mediated immunity?**

[L2, CO3]

- | | |
|-----------------|------------------------|
| i) T-cells | ii) B-cells |
| iii) Mast cells | iv) Both T and B cells |
- 1x5**

Q.2 Answer the following in briefly:

- Define 'bacterial capsules'. How will you demonstrate them in the laboratory and support your answer with examples and diagrams? [L1, CO1]
- Tabulate the difference between endotoxins and exotoxins. Support your answers with examples. [L3, CO2]
- Draw the structure of an Immunoglobulin and label its parts. What are the different classes of Immunoglobulins and how will you differentiate them? [L5, CO4]
- Define 'immunity'. Differentiate between Active and Passive immunity with examples. [L3, CO3]
- Classification of Streptococci and describe in detail laboratory diagnosis of Streptococcal sore throat. [L4, CO5] **5x5**

Q.3 Illustrate and create a flow chart for the sterilisation methods. Describe in detail the moist heat method of sterilisation. Support your answer with diagrams. [L6, CO4] **10**

PART-B

Q.4 Multiple choice questions:

- The bacteria involved in the production of dental caries is/are: [L1, CO1]

i) Streptococcus mutans	ii) S sanguis
iii) Both i) and ii)	iv) Streptococcus pyogenes
- Which among the following is responsible for hepatocellular carcinoma? [L1, CO2]

i) HSV	ii) HIV
iii) HBV	iv) HAV
- M. avium intracellulare complex: [L1, CO3]

i) photochromogen	ii) Non-photochromogen
iii) Scotochromogen	iv) Rapid growers
- Dogs are the source of human infection by each of the following parasites: [L4, CO4]

i) Echinococcus granulosus	ii) Taenia solium
iii) Plasmodium	iv) Entamoeba histolytica
- Name the true yeast which is responsible for fungal meningitis:

[L2, CO5]

- | | |
|---------------------------|-------------------------------------|
| i) <i>H. capsulatum</i> | ii) <i>C. albicans</i> |
| iii) <i>C. neoformans</i> | iv) <i>Blastomyces dermatitidis</i> |

1x5

Q.5 Answer the following in briefly:

- a) Tabulate the difference between pathogenic and nonpathogenic *Staphylococcus*. [L5, CO2]
- b) Briefly write the laboratory diagnosis of HIV infection. [L3, CO3]
- c) Describe the laboratory diagnosis of pulmonary tuberculosis. [L3, CO4]
- d) Describe the life cycle of *Plasmodium falciparum*. Justify your answer with a diagram and label them. [L1, CO5]
- e) Describe in detail candidiasis. Add a note on its laboratory diagnosis. [L2, CO3] **5x5**

Q.6 Define 'meningitis' and list out the etiological agents and describe in detail the laboratory diagnosis of Meningococcal meningitis. Tabulate the difference between Pyogenic and Aseptic meningitis. [L6, CO5] **10**

Annual Examination, August 2022

Bachelor of Dental Surgery – Third Year

ORAL PATHOLOGY, MICROBIOLOGY AND FORENSIC ODONTOLOGY (BDS-ORPA-301)

Time: 3 hrs.
Marks: **80**

Max

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) "Wickhams striae" are characteristic clinical features of:

- | | |
|------------------|-----------------|
| i) Lichen planus | ii) Leukoplakia |
| iii) Pemphigus | iv) Pemphigoid |

b) Failure of tuberculum impar to retract before the failure of lateral halves of the tongue causes:

- i) Geographic tongue
- ii) Cleft tongue
- iii) Ankyloglossia
- iv) Median rhomboid glossitis

c) Blue sclera is a feature seen in:

- | | |
|------------------------------|------------------------|
| i) Osteosarcoma | ii) Osteomyelitis |
| iii) Osteogenesis imperfecta | iv) Osteoradionecrosis |

d) Atrophy of pharyngeal and gastric mucosa with koilonychia and predisposition to oral carcinoma is seen in:

- | | |
|--------------------------|-----------------------------|
| i) Sturge Weber syndrome | ii) Ramsay hunt syndrome |
| iii) Ascher's syndrome | iv) Plummer Vinson syndrome |

e) Tooth that is more susceptible to dental caries is:

- | | |
|-------------------------------------|--------------------------------------|
| i) Mandibular 1 ST molar | ii) Mandibular 2 nd molar |
|-------------------------------------|--------------------------------------|

iii) Maxillary canine

iv) Maxillary 2nd premolar **1x5**

Q.2 Write short notes on the following:

- a) Trigeminal neuralgia.
- b) Sjogren's Syndrome.
- c) Residual cyst.
- d) Aphthous ulcer.
- e) Oral manifestations of Pernicious anemia.

5x5

Q.3 Classify fibro osseous lesions of oral cavity. Explain the clinical and histopathologic features of Fibrous dysplasia.

10

PART-B

Q.4 Multiple choice questions:

a) The most common benign tumor occurring in the oral cavity.

i) Papilloma

ii) Adenoma

iii) Fibroma

iv) Hemangioma

b) Heck's disease is caused by:

i) Herpes Simplex

ii) Human papilloma

iii) varicella zoster

iv) Epstein Barr

c) Which amongst the following drugs are capable of inducing gingivitis either directly or systemically?

i) Acyclovir

ii) Dilantin

iii) Diclofenac

iv) Ampicillin

d) Which amongst the following histological variants of ameloblastoma is considered to be most aggressive clinically?

i) Basal cell

ii) Granular cell

iii) Desmoplastic

iv) Acanthomatous

e) Mucocele is not a true cyst because:

i) It is lined by epithelium

ii) Its lumen is filled by Pus

iii) It occurs as a result of trauma

iv) it is not lined by epithelium

1x5

Q.5 Write short notes on the following:

- a) TNM Classification.
- b) Histopathological picture of Pleomorphic adenoma.
- c) Oral manifestation of AIDS.
- d) Bite Marks.
- e) Attrition, Abrasion and Abfraction.

5x5

Q.6 Classify Odontogenic Cysts. Mention the possible sources of epithelium for the formation of odontogenic cysts. Discuss the clinical features, radiographic features and histopathologic features of dentigerous cyst.

10

Bachelor of Dental Surgery – Second Year

FORENSIC ODONTOLOGY (BDS-ORPA-OE-001)

Time: 3 hrs.
Marks: **80**

Max

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) Dental formula for primary set of human dentition is:
- | | |
|----------------|---------------|
| i) 2102/2102 | ii) 2012/2012 |
| iii) 2123/2123 | iv) 1223/1223 |
- b) Which of the following adult bone is useful in determining sex of an individual?
- | | |
|---------------|------------|
| i) Skull | ii) Femur |
| iii) Clavicle | iv) Pelvis |
- c) Forensic Odontology is a branch of forensic science that deals with:
- | | |
|---------------------------|-----------------|
| i) Finger prints | ii) Bone study |
| iii) Teeth and Bite-marks | iv) Dead People |
- d) Which method is used for Chronological age estimation?
- | | |
|--------------------------|----------------------|
| i) Radiographic method | ii) Visual method |
| iii) Histological method | iv) All of the Above |
- e) Which component of the Teeth is the hardest substance in the Human body?
- | | |
|-----------|--------------|
| i) Enamel | ii) Dentine |
| iii) Pulp | iv) Cementum |

1x5

Q.2 Write short notes on the following:

- a) Dental age and Chronological age.
- b) Maintenance of Dental records.

- c) Medico legal cases and liability.
- d) Odontometrics.
- e) Significance of DNA in forensic investigation.

5x5

Q.3 Describe the methodology involved in identification of human remains and manage victim identification in a mass disaster.

10

PART-B

Q.4 Multiple choice questions:

- a) In a Mass disaster, identification of a victim could be achieved on the basis of:
 - i) Ante mortem dental records
 - ii) Fingerprints
 - iii) Photographs
 - iv) All of the above
- b) Bite marks help in personal identification using all mentioned evidences except.
 - i) Saliva
 - ii) Lip prints
 - iii) Teeth marks
 - iv) DNA
- c) Kvaal Radiographic method of age estimation is based on indirect measurement of:
 - i) Primary dentine
 - ii) Secondary dentine
 - iii) Tertiary dentine
 - iv) All of the above
- d) Which one is not a type of a bite-mark evidence?
 - i) Hemorrhage
 - ii) Contusion
 - iii) Incision
 - iv) Bleeding gums
- e) Which method is used to estimate age by teeth after 21years of age?
 - i) Schour and Massler
 - ii) Gustagson method
 - iii) Harris method
 - iv) Kazmi method

1x5

Q.5 Write short notes on the following:

- a) Radiographic methods of age estimation.
- b) Bite marks in forensics.
- c) Kvaal method of age estimation.
- d) Role of Palatal Rugae in forensics.
- e) Describe Tongue point's role in forensics.

5x5

Q.6 Determine roles and responsibilities of a forensic odontologist.

10

Annual Examination, August 2022

Bachelor of Dental Surgery – Third Year

ETHICS (BDS-PHDE-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) Rationale ways of approaching ethical issues is:

- | | |
|-----------------------|---------------|
| i) Obedience | ii) Intuition |
| iii) Consequentialism | iv) Desire |

b) _____ is known for their longstanding egalitarianism.

- | | |
|---------------------|-----------|
| i) Sweden | ii) USA |
| iii) United Kingdom | iv) India |

c) Fee splitting and advertising is forbidden in codes of ethics such as the.

- i) American Dental association Principles of Ethics and Code of Professional conduct.
- ii) Canadian Dental Association Code of Ethics.
- iii) International Principles of Ethics for the Dental Profession.
- iv) All of the above.

d) Macro ethics principle guide the conduct of:

- i) Patients
- ii) Population Based Research
- iii) Professional Colleagues
- iv) Society

e) Plagiarism literally means:

- i) not doing wrong. Dentists and dental researchers are to avoid inflicting harm on patients.

- ii) a good quality in people, especially in their character and behaviour.
- iii) a form of dishonest behaviour whereby a person copies the work of someone else.
- iv) fair treatment of individuals and groups. **1x5**

Q.2 Write short notes on the following:

- a) Brief on global view of health.
- b) Bioethics.
- c) Rationale approaches of ethical issues.
- d) Social value in ethics.
- e) Define 'ethics' with examples.

6x5

Q.3 Who decide, what is ethical? Does dental ethics change? Discuss in detail.

15

PART-B

Q.4 Multiple choice questions:

- a) Which of the following are not the fundamental principles that form the foundation of the ADA Code?
 - i) Patient Autonomy
 - ii) Non-maleficence
 - iii) Advertising
 - iv) Veracity
- b) Doctor-Patient relationship models are:
 - i) Guide model
 - ii) Agent model
 - iii) Commercial model
 - iv) Interactive model
- c) ACD stands for
 - i) Act Communicate Dentist
 - ii) Asses Communicate Decide
 - iii) Assess Consequentialism Decide.
 - iv) Attrition Compare Decide
- d) Macro ethics principle guide the conduct of:
 - i) Patients
 - ii) Population Based Research
 - iii) Professional Colleagues
 - iv) Society
- e) Confidentiality is also important because a person deserves.

i) to be secretive

ii) Respect

iii) to look forward

iv) autonomy

1x5

Q.5 Write short answers of the following:

a) How communication and consent is important for a good dentist and patient relationship?

b) Does dental ethics differ from one country to another?

c) International Principles of Ethics for the Dental Profession states.

d) Discuss about the decision making for incompetent patients.

e) Three sources of confidentiality.

6x5

Q.6 Discuss FDI World Dental Federation International Principles of ethics for the dental profession.

15

Annual Examination, August 2022
Bachelor of Dental Surgery – Second Year
DENTAL MATERIALS (BDS-PROS-201)

Time: 3 hrs.
Marks: **80**

Max

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) A patient reports with pain on mastication in a recently restored mandibular right second molar. Clinical examination reveals a protruded and perforated amalgam restoration and tenderness on percussion. What could be the reason behind this complaint?

[L3, CO4]

- | | |
|-----------------------------|-----------------------|
| i) Mercuroscopic Expansion | ii) Delayed Expansion |
| iii) Shrinkage of the alloy | iv) Primary expansion |
- b) A patient got a cast restoration in a mandibular molar. However, the casting so obtained was incomplete. What could be the possible reason for an incomplete casting? [L3, CO4]
- | | |
|--|---|
| i) Poorly adjusted torch flame | ii) Premature solidification |
| iii) Entrapment of gas during solidification | iv) Incomplete elimination of wax residues from the mold. |
- c) Irreversible strain behavior that occurs when polymer chains slide over one another and become relocated within the material, resulting in permanent deformation is called: [L1 CO1]
- | | |
|-------------------------------|-------------------------|
| i) Plastic flow | ii) Elastic recovery |
| iii) Viscoelastic deformation | iv) Elastic deformation |
- d) Which impression material is most likely to remain accurate even after one week? [L1 CO4]
- | | |
|--------------------------|--------------|
| i) Condensation silicone | ii) Alginate |
|--------------------------|--------------|

- iii) Addition silicone
- iv) Agar-Agar
- e) Restorative material with coefficient of thermal expansion closest to dentine is: [L1 CO2]
- i) Glass Ionomer Cement
- ii) Composite Resin
- iii) Silver Amalgam
- iv) Ceramic
- 1x5**

Q.2 Write short notes on the following:

- a) How will you manage a case of accidental mercury spill in a dental clinic? [L2CO4]
b) Activator-Initiator system in composite resins. [L1 CO2]
c) Laminate technique. [L1 CO3]
d) Soldering flux. [L1 CO4]
e) Metamerism. [L1 CO1] **5x5**

Q.3 Classify impression materials. Compare composition, setting reaction, advantages and disadvantages of addition silicone and polyether impression materials. [L1 CO1]**10**

PART-B

Q.4 Multiple choice questions:

- a) C factor is of most significance in which of the following cavities: [L2 CO4]
- | | |
|----------------|--------------|
| i) Class I | ii) Class II |
| iii) Class III | iv) Class IV |
- b) Casting shrinkage of base metal alloys is: [L1 CO2]
- | |
|--------------------------------|
| i) Less than cast gold alloys |
| ii) More than cast gold alloys |
| iii) Equal to cast gold alloys |
| iv) Do not shrink at all. |
- c) Which of the following waxes is the most suitable for making wax patterns for crowns and bridges? [L2 CO3]
- | | |
|--------------------|----------------|
| i) Blue Inlay wax | ii) Alu wax |
| iii) Modelling wax | iv) Sticky wax |
- d) Which dental cement is the most compatible to pulp? [L2 CO2]
- | | |
|-------------------------|--------------------|
| i) Zinc polycarboxylate | ii) Zinc phosphate |
|-------------------------|--------------------|

iii) Glass Ionomer Cement

iv) Zinc oxide eugenol

e) Loss of water from Alginate to the environment is known as:

[L1CO1]

i) Imbibition

ii) Creep

iii) Syneresis

iv) Evaporation

1x5

Q.5 Write short notes on the following:

a) Putty wash impression technique.

[L2 CO4]

b) Cohesive and Non Cohesive gold.

[L1 CO1]

c) How do you restore a carious posterior tooth in a dental camp?

[L3 CO4]

d) Discuss the role of corrosion in a dental amalgam restoration.

[L2 CO2]

e) Composition and properties of Inlay Casting Wax.

[L1CO1]

5x5

Q.6 Classify 'Investment materials'. Write their composition and application. Discuss briefly how we compensate casting shrinkage in dentistry.

[L2 CO2] **10**

Annual Examination, August 2022

Bachelor of Dental Surgery – Second Year

RESEARCH INNOVATION CATALYST (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) In India, IPRs can be protected and monopolized under the provisions of different Acts, mainly,

- | | |
|---------------------------|------------------------------|
| i) The Patent Act | ii) The Trade Mark Act, 1999 |
| iii) The Designs Act 2000 | iv) All of the above |

b) Which is a product innovation?

- i) Powered Toothbrush
- ii) Taxi Hailing Application
- iii) Electronic Medical Records
- iv) Use of AI in Patient Flow in OPD

c) An invention according to Indian Patent Act means:

- | | |
|-----------------|----------------------|
| i) Novelty | ii) Innovation |
| iii) Usefulness | iv) All of the above |

d) All of the following are databases except:

- | | |
|--------------|--------------------|
| i) Wikipedia | ii) Google Scholar |
| iii) EMBASE | iv) MEDLINE |

e) All are reference management software except:

- | | |
|---------------|-------------|
| i) Harvard | ii) EndNote |
| iii) Mendeley | iv) Zotero |

1x5

Q.2 Write short notes on the following:

- a) Boolean Operators.
- b) Importance of Referencing.
- c) Vancouver Style.
- d) Scoping Review.
- e) Sources of Literature.

5x5

Q.3 What is the full form of IPR? Describe in detail regarding the ACT and its effects on innovation in India.

10

PART-B

Q.4 Multiple choice questions:

a) Why should an IP be protected?

- i) IP is an assets and can be used by the owner for commercial gains.
- ii) IP owner can stop others from manufacturing and selling products and services which are dully protected by the IP owner.
- iii) IP owner can sell and/or license the IP for commercial gains.
- iv) All of the above.

b) The three main Boolean:

- | | |
|-----------------|----------------|
| i) AND OR YES | ii) AND OR NOT |
| iii) AND IF NOT | iv) AND YES NO |

c) All are printed sources of literature except:

- | | |
|------------|----------------|
| i) Pubmed | ii) Newspapers |
| iii) Books | iv) Banners |

d) All of the following are types of reviews except:

- | | |
|-------------------------|-----------------------|
| i) Argumentative Review | ii) Systematic Review |
| iii) Verbal Review | iv) Scoping Review |

e) Which Ministry Grants patents for Healthcare Devices?

- i) Ministry of Health and Family Welfare.
- ii) Ministry of Commerce and Industry.
- iii) Ministry of Labour.

iv) Ministry of Defence.

1x5

Q.5 Write short notes on the following:

- a) Standard Deviation.
- b) Harvard Style.
- c) Steps in Systematic Review.
- d) Patents and Copyrights.
- e) Types of Literature Review.

5x5

Q.6 What are 'Data Bases' in Scientific Literatures?

10

Annual Examination, August 2022

Bachelor of Dental Surgery – Third Year

RESEARCH INNOVATION CATALYST (BDS-RIC-301)

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) Case-Control Study is a type of:

- | | |
|-------------------------|-----------------------|
| i) Analytical Study | ii) Descriptive Study |
| iii) Experimental Study | |

b) Case Reports can be generalized beyond the presented case also:

- | | |
|---------|-----------|
| i) True | ii) False |
|---------|-----------|

c) Brushing Technique for Children is:

- | | |
|------------------|-----------|
| i) Modified Bass | ii) Bass |
| iii) Stillman's | iv) Fones |

d) All are Study designs in RCT except:

- | | |
|----------------------------|-------------------------|
| i) Before and After Trials | ii) Concurrent Parallel |
| iii) Cross-overver Trial | iv) Factorial Design |

e) Non-Parametric equivalent of Pearson's Correlation Coefficient is:

- | | |
|----------------------|------------------------------------|
| i) Schaffe's Test | ii) Tukey's Test |
| iii) Spearman's Test | iv) Mann-Whitney U test 1x5 |

Q.2 Write short notes on the following:

- a) Chi-square test.
- b) History of Presenting illness in case of Pain.
- c) Parametric Tests.

- d) General Principles of Photography in Dentistry.
- e) Computers in Statistics.

5x5

Q.3 Design a study to analyze the long-term effect of childhood obesity on the oral health of a group of children.

10

PART-B

Q.4 Multiple choice questions:

a) Imparting Oral health education is a type of:

- | | |
|---------------------------|---------------------------|
| i) Tertiary Prevention | ii) Primary Prevention |
| iii) Secondary Prevention | iv) Primordial Prevention |

b) Curve with many peaks is that of a

- | | |
|--------------------------|-------------------------|
| i) Point source Epidemic | ii) Propagated Epidemic |
|--------------------------|-------------------------|

c) Application of Pit and Fissure sealant is:

- | | |
|-----------------------|--------------------------|
| i) Primary prevention | ii) Secondary Prevention |
|-----------------------|--------------------------|

d) Which of the following is not a Principle of Experimental Design?

- i) Principle of Replication
- ii) Principle of Randomization
- iii) Principle of Local Control
- iv) Principle of Blinding

e) Methods to achieve double blinding are:

- | | |
|-----------------------------|----------------------|
| i) Matching | ii) Masking |
| iii) Allocation Concealment | iv) All of the above |

1x5

Q.5 Write short notes on the following:

- a) Study designs in RCT.
- b) Importance of Medical History.
- c) Define Evidence Based Dentistry. Enumerate the steps in EBD.
- d) Epidemic Curve.
- e) ANOVA

5x5

Q.6 Steps in writing a Case Report. 10

Annual Examination, Dec. 2022

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 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 is mono saccharides?**

- | | |
|---------------|------------------------|
| i) Galactose. | ii) Glycogen. |
| iii) Sucrose. | iv) None of the above. |

b) What is the biosynthetic source of all steroid hormones?

- | | |
|--------------------|-------------------|
| i) Cholesterol. | ii) Ketonebodies. |
| iii) Carbohydrate. | iv) Protein. |

c) Prostate tumor marker enzyme is:

- | | |
|----------|---------|
| i) AST | ii) ALT |
| iii) ACP | iv) GGT |

d) Which of the following is a common compound shared by the TCA cycle and the Urea cycle?

- | | |
|------------------------------|--------------------|
| i) α -Keto glutarate. | ii) Succinyl co A. |
| iii) Oxalo acetate. | iv) Fumarate. |

e) Which of the following amino acids has to be supplemented in the diet?

- | | |
|-------------------|-----------------|
| i) Phenylalanine. | ii) Cysteine. |
| iii) Glutamine. | iv) Asparagine. |

1x5

Q.2 Write short notes on the following:

- a) Significance of HMP Shunt.
- b) Biologically active compounds of Glycine.
- c) Phenylketonuria.
- d) Competitive and Non competitive inhibition.
- e) Calcium regulation.

5x5

Q.3 Discuss urea cycle and significance of blood urea. Add a note on Ammonia Toxicity.

10

PART-B

Q.4 Multiple choice questions:

- a) In a child suffering from marasmus which of the following clinical manifestation is not observed?
 - i) Watery diarrhea with acid stools.
 - ii) Subnormal temperature.
 - iii) Hyperglycemia and ketoacidosis.
 - iv) Generalized edema.

- b) Which of the following has the highest biological value?
 - i) Egg.
 - ii) Potato.
 - iii) Corn oil.
 - iv) Mango.

- c) Buffers are mixtures of:
 - i) Strong acid and strong base.
 - ii) Strong acid and weak base.
 - iii) Weak acid and their conjugate base.
 - iv) Weak base and their conjugate acid.

- d) What test is most accurate in diagnosing long term sugar level?
 - i) HbA1C.
 - ii) Random blood sugar.
 - iii) F. Blood sugar.
 - iv) GTT.

- e) Muscle does not release glucose to blood stream due to the absence of enzyme.
 - i) Glycogen synthase.
 - ii) Glucose-6-phosphatase.

iii) Glu-6-phosphate dehydrogenase.

iv) Glycogen phosphorylase.

1x5

Q.5 Write short notes on the following:

a) Balance diet and role of dietary fibres.

b) BMR.

c) Steps of beta-oxidation of palmitic acid and tests to identify.

d) Types of Jaundice.

e) Types of blood buffer.

5x5

Q.6 Describe the sources, biochemical functions and deficiency manifestations of Vitamin D.

10

Annual Examination, Dec. 2022
Bachelor of Dental Surgery – First Year
FRENCH (BDS-CDC-OE-001)

Time: 3 hrs.
Marks: **100**

Max

No. of

pages: 6

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

SECTION A
Compréhension Écrite

Q.1 **Lisez le texte et répondez**
(Read the text and answer the following questions) :

M. Dubois travaille dans un hôpital. Il est médecin. Il est sympathique. Il aime les enfants. Mme. Dubois est actrice. Elle joue bien ses rôles. Elle est belle et gentille. Elle aide les pauvres (the poor and needy). Paul, le fils de M. et Mme Dubois est pilote. Il conduit l'avion. Il est beau et souriant. Sa sœur Christelle est journaliste. Elle travaille dans une agence de journal. Elle voyage beaucoup. Elle est vive et active.

a) **Répondez aux questions (Answer the questions) :**

2

vi.) Quelle est la profession de Mme Dubois ?

vii.) Décrivez la sœur de Paul ?

b) **Trouvez le contraire dans le texte**
(Find the opposite from the text):

3

i.) Antipathique - _____

ii.) Laide - _____

iii.) Riches - _____

c) **Complétez avec un mot du texte**
(Complete with a word from the text):

5

i.) M. Dubois _____ les enfants.

ii.) Ma mère est _____.

iii.) _____ conduit l'avion.

iv.) Les enfants _____ dans le jardin.

v.) La journaliste travaille dans une _____.

SECTION-B
Expression Écrite

Q.2 Décrivez votre journée ou décrivez votre famille.
(Describe your daily routine or describe your family)

10

SECTION-C
Grammaire

Q.3 Mettez au pluriel (write in plural):

5

f) Je regarde la télévision.

g) Il a une fleur rouge.

h) Elle est grande.

i) J'aime la chanson.

j) Je range la chambre.

Q.4 Mettez au féminin (write in feminin):

5

f) Le père de Sophie est Indien.

g) Le frère de Caroline est intelligent.

h) Voici un petit garçon anglais.

i) L'homme Indien est intelligent.

j) Le garçon est content.

Q.5 Complétez avec les adjectifs possessifs (mon, ma, ..., notre,)

5

(Complete using possessive adjectives):

f) Tu aimes _____ professeur.

g) Ils parlent à _____ étudiants.

h) Elle parle à _____ amie.

i) Tu finis _____ devoirs.

j) Elles aiment _____ robes.

Q.6 Complétez avec les articles définies – le, la, l', les

5

(Complete using definite articles):

f) Je regarde _____ image.

g) Nous allons à _____ école.

h) Elle sont _____ livres.

i) J'ai _____ livres intéressants.

j) Vous choisissez _____ voiture verte.

Q.7 Complétez avec les articles indéfinis – un, une, des

5

(Complete using indefinite articles):

- a) _____ stylos sont rouges.
- b) J'ai _____ cahier.
- c) Nous avons _____ biscuits.
- d) Tu as _____ copine française.
- e) Tu ne fais pas _____ devoirs.

Q.8 Complétez avec les prépositions : (sur/dans/avec/de/contre/ à gauche de)
(Complete using prepositions):

5

- f) L'amie _____ Jacques est belle.
- g) Le dessert est _____ la table.
- h) La glace est _____ le frigo.
- i) L'horloge est _____ le mur.
- j) Les fruits sont _____ le frigo.

Q.9 Quelle heure est-il ? (What time is it ?)

5

- f) **9 :30:** _____
- g) **12 Noon:** _____
- h) **7 :15:** _____
- i) **00 :00 :** _____
- j) **4 :45 :** _____

Q.10 Écrivez en français et accordez l'adjectif

5

(Write the french adjective according to the noun):

- f) Ma mère achète une _____ robe. (Beautiful)
- g) La rivière est très _____. (Big/Tall)
- h) Mes amis sont _____. (Happy)
- i) Heena est très _____ fille. (Kind)
- j) Les stylos sont _____. (Small)

Q.11 Traduisez les expressions en anglais : (Translate the expressions in english)

5

- a) Il fait beau : _____
- b) Il neige : _____

- c) Il fait du soleil : _____
- e) Il fait orageux : _____
- f) Il fait chaud : _____

Q.12 Quelle est leur profession? (What is their profession?) 5

- f) Elle soigne les malades : Elle est _____
- g) Elle travaille avec les ordinateurs (computers) : Elle est _____
- h) Il repare un taxi : Il est _____
- i) Elle écrit les romans(novels): Elle est _____
- j) Elle fait un gateau : Elle est _____

Q.13 Mettez en ordre (Put in order): 5

- a) Je/au/cinéma/vais.

- b) Le/est/stylo/chaise/sur/la.

- c) Petits/chiens/sont/les.

- d) Français/mon/pour/ J'étudie/examen/de.

- e) Belle/une/porte/robe/blanche/elle.

Q.14 Complétez avec les articles partitifs (Complete using definite articles): 6

- d) Nous buvons _____ eau ou _____ coca.
- e) Elle prend _____ pomme et _____ raisins.
- f) Il mange _____ gâteau et Elle mange _____ glace.

Q.15 Conjuguez les verbes (Conjugate the verbs): 10

- k) Nous _____ (aimer) les fleurs.
- l) Ils _____ (aller) à l'école.

- m) Vous _____ (avoir) les livres français.
- n) Elle _____ (être) Indienne.
- o) Il _____ (faire) froid en hiver.
- p) Tu _____ (nager) dans la piscine.
- q) Les filles _____ (s'habiller) pour aller à la classe.
- r) Je _____ (finir) l'exercice.
- s) Les étudiants _____ (apprendre) les verbes au présent.
- t) Tu _____ (s'amuser) avec tes amis le samedi soir ?

SECTION-D

Q.16 Complétez les phrases:
(Complete the sentences)

5

- f) _____ est l'hymne national (national anthem) français.
- g) _____ est le vin (wine) français.
- h) _____ est la ville (city) de la France.
- i) _____ est la monnaie (currency) unique européenne.
- j) _____ est le fromage (cheese) français.

Q.17 Cochez la bonne réponse:
(Choose the correct option)

4

- e) The colours of French flag are _____
 - i) Blue, white, red
 - ii) Orange, white, green
 - iii) Yellow, white, red
- f) _____ is the capital of the France.
 - i) Lyon
 - ii) Paris
 - iii) Nice
- g) _____ is a monument of France.
 - i) La Tour Eiffel
 - ii) Le Brie
 - iii) Le Bordeaux

h) The currency of France is l'_____

- i) Dollar
- ii) Franc
- iii) Euro

Bachelor of Dental Surgery – First Year
SPANISH (BDS-CDC-OE-002)

Time: 3 hrs.
100

Max Marks:

No. of pages: 6

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

Q.1 Conjuga los verbos para completar la historia.
Complete the verbs to complete the history.

Mi rutina de los lunes por la mañana

Mi nombre _____ (ser) Julia, _____ (ser) doctora.
Yo _____ (trabajar) en un hospital. Hoy _____ (ser) lunes. Por
eso _____ (yo, levantarse) a las 5:00 de la mañana, porque
_____ (tener) que ir a trabajar. Después de levantarme,
_____ (yo, cepillarse) los dientes y tomo un café, a las 7:30 de la
mañana, _____ (ir) a correr, me gusta mucho hacer ejercicios.
Cuando yo _____ (regresar) de correr, _____ (yo,
desayunar) unas frutas y después _____ (yo, ducharse),
_____ (yo, ponerse) el uniforme, cuando ya _____
(yo, estar) lista, _____ (yo, salir) para mi trabajo.

Responde a las preguntas:

a) ¿A qué hora se levanta Julia?

b) ¿A qué hora desayuna Julia?

c) ¿A qué hora sale Julia de su casa para correr?

d) ¿Qué haces después de correr?

Q.2 **Lee el texto y responde a las preguntas****Read the text and answer the questions****Mi familia**

Mi familia es muy grande. Somos seis personas: mi abuelo, mi abuela, mi padre, mi madre, mi hermana y yo. También tenemos una mascota que se llama Tom, un perro. Yo me llamo Gustavo, soy mayor que mi hermana Elina, pero ella es más alta. Vamos juntos a la escuela en un coche. Yo tengo trece años y ella tiene once años. Mis padres se llaman Santiago y Marta. Vivimos en una casa muy bonita y muy grande. Mi padre es negociante y mi madre ama de casa. Por la mañana desayunamos junto, me gusta desayunar con mi familia. Después del colegio, mi madre prepara una comida deliciosa para todos. Por la tarde, mi madre queda con sus amigas y mi padre juega al tenis. Mi hermana y yo hacemos los deberes y después vemos la televisión. Los viernes por la tarde vamos al mercado para hacer la compra. Mi padre es alto y rubio, y mi madre es morena y delgada. A mi hermana le gusta nadar con sus amigas en la piscina. Yo me divierto mucho más jugando a los videojuegos en casa.

a) **¿Cuántas personas hay en la familia?**

b) **¿Cuántos hermanos son?**

c) **¿Cómo es la casa de la familia?**

d) **¿A qué se dedica el padre?**

e) **¿Qué mascota tiene la familia?**

Q.3 Elige la opción correcta.
Choose the correct option.

- a) i. Un coche ii. Una coche iii. Uno coche iv. Unas coches
b) i. Unas casos ii. Unas casas iii. Unos cacos iv. Uno casa
c) i. El perra ii. La perro iii. El pero iv. El perro
d) i. Las silas ii. Las cilas iii. Las sillas iv. Los sillas
e) i. La dia ii. Las dias iii. Lo día iv. El día
f) i. Un llave ii. La llave iii. El laves iv. Unos laves
g) i. Una planta ii. Un planta iii. Las planta iv. Los plantes

7

Q.4 Completa las oraciones con la conjugación del verbo ser o estar:
Complete the sentences with the conjugation of ser or estar.

- a) Miguelmuy delgado.
b) Ana y Juan en la casa de sus abuelos.
c) Ellosprofesores de universidad de Delhi.
d) La escuelaal lado de la iglesia.
e) Raquelestudiando.
f) Mis amigos y yo honestos.
g) ¿Cómo tú hoy?

7

Q.5 Escribe la hora:
Write the time:

- a) 8:30 AM: _____
b) 10:50 PM: _____
c) 2:35 AM: _____
d) 1:13 AM: _____

e) 7:42 PM: _____

5

Q.6 Modifica las oraciones haciendo uso del presente continuo:

Modify the sentences using present continuous.

a) El tren sale de la estación. -> Ej: El tren está saliendo de la estación.

b) Ellos trabajan mucho. -> _____

c) Javier prepara la comida. -> _____

d) Ella compra los billetes. -> _____

e) Nosotros tomamos un café. -> _____

4

Q.7 Conjuga y escribe los verbos en el espacio

Conjugate and write the verbs in blanks

a) ¿Esta mañana vosotros _____ (beber) leche?

b) Mis padres nunca _____ (estar) en Brasil.

c) Hoy mis amigos y yo _____ (venir) de la universidad de
Salamanca.

d) ¿Esta semana tú _____ (viajar) a Madrid?

e) Ya _____ (comprar, yo) una camiseta para mi padre.

5

Q.8 Traduce usando el verbo gustar

Translate using the verb gustar

a) I like to listen Spanish songs. :

b) We like ice creams. :

c) She likes to speak French. :

d) He likes cars & bicycles. :

e) Do you like your school? :

5

Q.9 **Completa las oraciones con los verbos**

Complete the sentences.

- a) Ellos _____ (poder) nadar.
- b) ¿Ustedes _____ (querer) ir con nosotros?
- c) Él _____ (decir) que le gusta jugar fútbol.
- d) Nosotros _____ (soñar) con nuestra propia casa.
- e) Yo _____ (sentir) que ellos son honestos.

5

Q.10 **Escribe el articulo determinado que corresponde**

Write the definite article

- (a) _____ rey es Juan Carlos.
- (b) _____ reyes Magos son Gaspar, Melchor y Baltasar.
- (c) _____ chica se llama Estrella.
- (d) _____ chicos están contentos.
- (e) _____ profesora está furiosa.
- (f) _____ alumnos no escuchan.

7

Q.11 **Escribe 10 líneas sobre tu colegio.**

Write 10 lines about you college.

10

**Q.12 Describe las siguientes personas, escribe 2 líneas para cada persona.
Describe the following people, write 2 lines on each.**



6

Q.13 Busca los errores y escribe las oraciones

Find the errors and rewrite the sentences.

a) Ella soy profesor de la escuela.

b) Yo hablamos francés y quiero aprender alemán.

c) Vosotros estamos en la clase.

d) Ellos están estuidantes.

4

Q.14 Conjuga los verbos

Conjugate the verbs

Comprar	Ir	Tener

12

Annual Examination, Dec. 2022

Bachelor of Dental Surgery – First Year

FINANCIAL ACCOUNTING - (BDS-COM-OE-001)

Time: 3 hrs.
100

Max Marks:

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 Answer the following questions:

a) As per Income Tax Act, accounting period is:

i) 12 Months starting from 1st January to 31st December.

ii) 12 Months starting from 1st April to 31st March.

iii) 12 Months starting from 1st July to 31st June.

b) As per dual aspect concept Assets = Liabilities + Capital. **(True/False)**

c) Accrual Concept is based on _____ concept.

(Matching / Cost / Going Concern)

d) If total sales is Rs.5,00,000/- and credit sales is Rs 100000 find out cash sales.

e) Cash discount is allowed to encourage quick or prompt payment. **(True / False)**

[CO-1,2,3][L-1,2]

1×5

Q.2 Answer the following questions:

- f) Discuss the objectives of financial accounting. [CO-1][L-1]
 g) What is Journal? Give importance of journal books. [CO-2][L-2]
 h) What is Double Entry System? [CO-2][L-1]
 i) Define the 'three rules' of accounts. [CO-3][L-3]
 j) Journalise the following transactions:
 i) Dr. Royal started 'Royal Dental Clinic' with Rs 100,00,000/-
 ii) He purchased dental chair of Rs 1, 00,000 for the treatment of patient.
 iii) He paid Rs 15,000 electricity bill and Rs 20,000 salary to assistant and Rs 10000 for maintenance of clinic.
 iv) He withdraws Rs 50000 for personal use from business.
 v) He withdrawn Rs 10,000 cash from bank. [CO-2][L-3] **5×5**
- Q.3 Differentiate between book keeping and accounting. Explain concept and conventions of accounting with their practical utilities. [CO-1][L-1,2] **20**

PART-B

- Q.4 Multiple choice questions:
- a) Final accounts can be prepared from Journal entries. **(True / False)**
 b) Depreciation is decline in the value of _____. (Capital / Land / Fixed Assets)
 c) Trial Balance serves as a summary of all ledger accounts. **(True / False)**
 d) Balance sheet is prepared to know the _____ of the firm.
 (Accuracy / Financial Position / Profit and Loss)
 e) Amount withdrawn for personal use is debited to _____ account.
 (Cash / Bank / Drawing / Capital)
- [CO-1,2][L-2]
- 1×5**

- Q.5 Answer the following questions:
- f) What is Trial Balance? Why is it prepared? [CO-3][L-2]
 g) Differentiate between capital and revenue receipts with two examples. [CO2][L4]
 h) Royal Dental Care centre purchased dental chair of Rs.100000/- on 1st January 2020 and spend Rs 50000 on carriage. Calculate the amount of depreciation for two years

- i.e. 2020 and 2021, when rate of depreciation is 10% on the diminishing balance method. Books are closed on 31st December every year. [CO-3][L-5]
- i) What is Cash Book? Draw the specimen of two column cash book. [CO-3][L-2]
- j) Differentiate between profit and non-profit organization with an example. [CO-3][L-2] **5×5**

Q.6 Define 'accounting mechanism' in detail and explain the format of final accounts. Discuss briefly the different users of Financial Statement. [CO-2][L-3,4] **20**

Annual Examination, Dec. 2022

Bachelor of Dental Surgery – Third Year

AESTHETIC DENTISTRY (BDS-CONS-OE-001)

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) Material of choice in Class V cavities.

i) GIC

Polycarboxylate cement

ii)

iii) Silicate cement

iv) Unfilled resins

b) Expanding matrix composites contain.

i) Rosin
resins

ii) Epoxy

iii) Camphroquinone
carbonates

iv) Spiro ortho

c) The term "Water trees" in adhesive dentistry refers to:

i) Collapse of collagen fibrils

ii) Residual water causing porosities in polymerized adhesion layer.

iii) Excessive water content in bonding agents.

iv) Tree shaped defects in etched dentin.

- d) Chemical method of strengthening porcelain involves.
- i) Exchange of sodium and potassium ions.
 - ii) Exchange of aluminium and sodium ions.
 - iii) Exchange of aluminium and potassium ions.
 - iv) None of the above
- e) For Porcelain fused to metal crown, Porcelain should have.
- i) High fusion expansion.
 - ii) High fusion temperature.
 - iii) Linear coefficient of thermal expansion more than that of metal.
 - iv) Linear coefficient of thermal expansion less than that of metal. **1×5**

Q.2 Write short notes on the following:

- a) Ceramic Laminates.
- b) Smear layer in Aesthetic dentistry.
- c) Ways to compensate for polymerisation shrinkage of composite resins.
- d) Factors affecting bonding to dental tissues.
- e) Tooth preparation for Laminate and Veneers.

5×5

Q.3 Discuss in detail the importance of smile design and write about composite and ceramic veneering.

10

PART-B

Q.4 Multiple choice questions:

- a) Main purpose of adding metallic oxides to ceramics is:
- i) Transparency
 - ii) Color matching
 - iii) Strength
 - iv) Opacity
- b) In aesthetic dentistry, The color of the tooth is:
- i) Chroma
 - ii) Hue

- | | |
|-------------------|-----------|
| iii) Translucency | iv) Value |
|-------------------|-----------|
- c) Following intracoronal bleaching a composite restoration needs to be done. What is the best approach?
- i) Wait for minimum 7 days before doing restoration.
 - ii) Do surface treatment with hydrogen peroxide for 3 minutes.
 - iii) Do a composite restoration with GIC base.
 - iv) Treat with desensitising solution and then etch.
- d) Acid etched tooth was contaminated by oil from air rotor handpiece. The best operator response is:
- i) Dry the tooth followed by bonding.
 - ii) Clean with alcohol followed by bonding.
 - iii) Do etching again followed by bond.
 - iv) Bond without etching.
- e) A 25-year-old patient comes to the dental office with discoloration of the upper left central incisor. The tooth is intact and asymptomatic. The most common sequel following bleaching of non vital tooth is:
- | | |
|-----------------------------------|-----------------|
| i) Periodontal pathology | ii) Ankylosis |
| iii) External Cervical Resorption | iv) Reinfection |

1×5

Q.5 Write short notes on the following:

- a) Shade selection in aesthetic dentistry.
- b) Discuss in detail the management of Gingival tissues during restorative procedures.
- c) Recent advances in bleaching materials.
- d) Microabrasion
- e) Night guard bleaching.

5×5

Q.6 Describe Contacts and contours for composite restorations.

10

Annual Examination, Dec. 2022

Bachelor of Dental Surgery – Third Year

GENERAL MEDICINE (BDS-GEME-301)

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 one of these is not seen in pellagra?

- | | |
|---------------|---------------------------|
| i) Diarrhoea | ii) Peripheral neuropathy |
| iii) Dementia | iv) Dermatitis |

b) Which drug is avoided in a patient of seizure disorder?

- | | |
|-----------------|-----------------|
| i) Azithromycin | ii) Rifampicin |
| iii) Ofloxacin | iv) Ceftriaxone |

c) Which one of these is not essential in DKA?

- | | |
|-----------------------------|----------------------------|
| i) Blood sugar > 250 mg | ii) PH of < 7.3 |
| iii) Serum bicarbonate > 20 | iv) Serum +Ve for ketones. |

d) Which among these is not given for migraine prophylaxis?

- | | |
|--------------------|-----------------|
| i) Propranolol | ii) Sumatriptan |
| iii) Amitriptyline | iv) Topiramate |

e) Which one of these is not useful test in AIDS?

- i) CD.4 count
- ii) Mentoux
- iii) Western blot test
- iv) P-24 antigen

1x5

Q.2 Write short notes on the following:

- a) Scurvy.
- b) T/T of hepatic encephalopathy.
- c) ITP.
- d) Gingival hyperplasia.
- e) Trigeminal neuralgia.

5x5

Q.3 Discuss about the CF/LAB/AND management of diabetic ketoacidosis.

10

PART-B

Q.4 Multiple choice questions:

- a) Which among these is not an Antiepileptic drug?
 - i) Valproic Acid
 - ii) Lamotrigine
 - iii) Flunarizene
 - iv) Carbamazepine
- b) Which among these is not a correct statement about Hepatitis B?
 - i) Is a DNA virus
 - ii) Incubation period is 50-150 days
 - iii) Feco-oral transmission
 - iv) May progress to CLD or sometimes liver cancer.
- c) Nephrotic syndrome is characterized by all except one:
 - i) Proteinuria < 2GM/24 HRS.
 - ii) Edema
 - iii) Hypercholesterolemia
 - iv) Serum albumin < 30g/L

d) All can cause syncope except.

- | | |
|--------------------------|---------------------------|
| i) Severe as | ii) Acute rheumatic fever |
| iii) Sick sinus syndrome | iv) Alpha blockers |

e) Which among these is not a common symptom of community acquired pneumonia?

- | | |
|-------------------------|--------------|
| i) Pleuritic chest pain | ii) Fever |
| iii) Dry or productive | iv) Seizures |

1x5

Q.5 Write short notes on the following:

- a) Acute glomerulonephritis.
- b) Myxedema Coma.
- c) Ascites.
- d) Heart.
- e) Peripheral signs of AR.

5x5

Q.6 Discuss acute Rheumatic Fever in detail.

10

Annual Examination, Dec. 2022
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 following is not a feature of apoptosis: (CO1,BL1)
- | | |
|-----------------------------|----------------------------|
| i) Inflammatory reaction | ii) Cell shrinkage |
| iii) Bcl 2 gene involvement | iv) Activation of caspases |
- b) Which is not a feature of granuloma: (CO3,BL2)
- | | |
|----------------------|-----------------|
| i) Epithelioid cells | ii) Lymphocytes |
| iii) Blood vessels | iv) Giant cells |
- c) Which of the following is not a benign tumor? (CO1,BL1)
- | | |
|-----------------------|--------------------------|
| i) Basal cell adenoma | ii) Basal cell carcinoma |
| iii) Lipoma | iv) Hemangioma |
- d) Which of the following is not a congenital heart disease: (CO2,BL3)
- | | |
|--------------------------|----------------------------|
| i) Dextrocardia | ii) Atrial septal defect |
| iii) Tetralogy of Fallot | iv) Infective endocarditis |

e) A boy aged 15 years has sunburst appearance on upper end of tibia. Which bone tumour is the most likely suffering from? (CO2,BL 3)

i) Ewings sarcoma

ii) Osteoclastoma

iii) Osteosarcoma

iv) Chondrosarcoma

1x5

Q.2 Write short notes on the following:

a) Enumerate the causes of white lesions in mouth and discuss leukoplakia.

(CO1, BL4)

b) Discuss osteoclastoma in detail.

(CO3,BL2)

c) Explain the sequential pathological changes in Myocardial Infarction.

(CO3,BL4)

d) Tabulate the differences between healing by primary and secondary union.

(CO3,BL4).

e) Describe in short about chronic myeloid leukemia.

(CO2,BL2) **5x5**

Q.3 Define and classify Anaemia. Discuss iron deficiency anaemia with respect to its etiology, clinical features and lab diagnosis. (CO4, BL2) **10**

PART-B

Q.4 Multiple choice questions:

a) Following is not true about Atherosclerosis: (CO4, BL3)

i) Foam cells are lipid laden monocytes and smooth muscle cells.

ii) Initial event is endothelial damage.

iii) Most commonly accepted theory is encrustation theory.

iv) Smoking is a major risk factor.

b) Which of the following is not an antioncogene:

(CO2, BL2)

i) Rb

ii) P 53

iii) WT

iv) RAS

c) Bone disease having fish hook appearance on microscopic examination is _____.

(CO3, BL4)

i) Osteomyelitis.

ii) Fibrous dysplasia.

iii) Pagets diseased.

iv) Osteosarcoma.

d) Which of the following is not a cardinal sign of inflammation:

(CO2, BL1)

- i) Dolor.
- ii) Rubor.
- iii) Tumor.
- iv) Pallor.
- e) A benign tumour seen in 3rd to 5th decade, having most commonly follicular and plexiform pattern on microscopy is: (CO6, BL5)
 - i) PSA.
 - ii) Ameloblastoma.
 - iii) Warthin tumor.
 - iv) Lipoma.

1x5

Q.5 Write short notes on the following:

- a) Define metastasis. List the routes of spread along with its mechanism. (CO5, BL3)
- b) Discuss amyloidosis of spleen along with a suitable diagram. (CO4, BL 4)
- c) Discuss the pathogenesis of endotoxic shock. (CO1, BL2)
- d) Give a brief account of granulomatous inflammation. (CO 2, BL4)
- e) Describe von Willebrand disease in detail. (CO6, BL5) **5x5**

Q.6 Define 'necrosis'. Discuss the types of necrosis. Differentiate it from apoptosis.)

Annual Examination, Dec. 2022
Bachelor of Dental Surgery – Third Year
GENERAL SURGERY (BDS-GESU-301)

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) Interpret which one of the following statement is correct?
 - i) Both facial and trigeminal nerves are purely motor nerve.
 - ii) Interictal numbness is an important feature in 7th nerve palsy.
 - iii) Unilateral LMN palsy of 7th nerve gives rise to bilateral symptoms and signs.
 - iv) Bilateral trigeminal nerve palsy in a young person could be a sign of multiple sclerosis.
- b) Label malignant tumour with the correct choice below:
 - i) It has got a very sharply defined edge.
 - ii) It never gives rise to the cauliflower appearance.
 - iii) They can cause distant metastasis.
 - iv) This does not have any variation in its normal mitotic activity.
- c) List of the Universal precautions include all except:
 - i) Full-face mask in addition to proper spectacles.

- ii) Use of fully disposable, waterproof drapes and double gloving.
 - iii) No limits on the number of health care workers in the operating room.
 - iv) Use of rubber boots to prevent accidental injury by sharps.
- d) Choose the one correct statements out of the following:
- i) Double chin appearance is seen in Ludwig's angina.
 - ii) A thyroid swelling in the neck moves both with deglutition and protrusion of the tongue.
 - iii) Papillary carcinoma is never associated with a thyroglossal cyst.
 - iv) Dermoid cyst is a brilliantly translucent cyst.
- e) Example of Tetanus prone wound is:
- i) Age of the wound greater than 6 hrs.
 - ii) Depth of the wound greater than 1mm.
 - iii) Presence of devitalized ischemic tissue, and infection.
 - iv) All of the above.

1x5

Q.2 Write short notes on the following:

- a) Outline the differences between Troisier' sign, Trousseau's sign, and Trousseau's syndrome.
- b) Categorise different types of shocks with their etiology.
- c) Classify midline neck swellings. Enumerate the clinical features of a thyroglossal cyst and how can you differentiate it from a midline thyroid cyst.
- d) Enumerate different eye signs in thyrotoxicosis.
- e) Describe what you know about Fine Needle Aspiration Cytology (FNAC).

5x5

Q.3 What are the potentially malignant disorders of the oral cavity? Classify these with examples. Describe the aetiology, signs/symptoms and functional staging of the oral submucosal fibrosis.

10

PART-B

Q.4 Multiple choice questions:

- a) Example of Waldeyer's ring is:
 - i) All the tonsils in the neck region.
 - ii) Outer ring of lymph nodes around the neck.
 - iii) These are the lymphatic stations in the region of the neck.
 - iv) All of the above.
- b) Rodent ulcer is identified by:
 - i) Its location above a line joining the ear lobule and angle of the mouth.
 - ii) Rolled out pearly transparent edges.
 - iii) Ultraviolet rays are one of the important predisposing factors.
 - iv) All of the above.
- c) Examples of early compensation in a hypovolemic shock are all except:
 - i) Tachycardia and tachypnea.
 - ii) Selective peripheral vasoconstriction.
 - iii) Reduced capillary refill time.
 - iv) Bradycardia.
- d) Carotid body tumour is identified by all of the following except:
 - i) A firm mass in the anterior triangle with an expansile pulsation on palpation.
 - ii) Shamblin staging determines the operability of the lesion.
 - iii) It is a slow growing tumour of the middle aged.
 - iv) Preoperative embolization of the feeding vessel is one of the management modalities in advanced centers.
- e) The treatment for anaphylactic shock is:
 - i) Corticosteroids
 - ii) Epinephrine is the hall mark for the treatment of anaphylaxis.
 - iii) H1 and H2 antihistamine blockers and albuterol.

iv) All of the above.

1x5

Q.5 Write short notes on the following:

- a) Outline what you know about a branchial cyst.
- b) Give examples of oral manifestations of AIDS.
- c) Describe the malignancy potential of a solitary thyroid nodule.
- d) Discuss on the screening and detection for oral cancer.
- e) Describe the fracture line and clinical features of Le Forte I fracture.

5x5

Q.6 Classify different types of wound healings. Describe in a tabular form the differences between a hypertrophy scar and a keloid.

Annual Examination, Dec. 2022

Bachelor of Dental Surgery – First Year

HUMAN ANATOMY, EMBRYOLOGY, HISTOLOGY AND MEDICAL GENETICS (BDS-HUAN-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 the **PART-A** and **PART-B** in the separate answer sheets.

PART-A

Q.1 Multiple choice questions:

- a) The contents of the jugular foramen include:
- i) Superior petrosal sinus
 - ii) Internal jugular vein
 - iii) Vagus nerve
 - iv) Hypoglossal nerve
- b) Branches of anterior trunk of mandibular nerve are all EXCEPT:
- i) Nerve to lateral pterygoid
 - ii) Nerve to medial pterygoid
 - iii) Buccal
 - iv) Masseteric

- c) Hoarseness of voice after thyroidectomy results from damage to:
- i) Superior thyroid nerve.
 - ii) Recurrent laryngeal nerve.
 - iii) Internal laryngeal nerve.
 - iv) Internal thyroid nerve.
- d) Which structure is NOT in the carotid sheath?
- i) Internal jugular vein
 - ii) External jugular vein
 - iii) Internal carotid artery
 - iv) Common carotid artery
- e) Which is an intrinsic muscle of the tongue?
- i) Superior longitudinal muscle.
 - ii) Genioglossus muscle.
 - iii) Hyoglossus muscle.
 - iv) Palatoglossus muscle.

1x5

Q.2 Write short notes on the following:

- a) Superior cervical ganglion and Horner's syndrome.
- b) Development of palate and its anomalies.
- c) Microanatomy of palatine tonsil.
- d) Medial wall of nose and epistaxis.
- e) Maxillary artery.

5x5

Q.3 Long question:

Describe parotid gland under the following heads.

- a) Location, size and coverings
- b) Relations
- c) Microanatomy

10

PART-B

Q.4 Multiple choice questions:

- a) Sternocleidomastoid muscle is related to all on deep surface EXCEPT:
 - i) External carotid artery.
 - ii) External jugular vein.
 - iii) Internal jugular vein.
 - iv) 9th, 10th, 11th and 12th cranial nerves.
- b) Which laryngeal muscle is NOT supplied by the recurrent laryngeal nerve?
 - i) Thyroarytenoid
 - ii) Cricothyroid
 - iii) Oblique arytenoid
 - iv) Posterior cricoarytenoid
- c) Which extraocular muscle does NOT arise from the tendinous ring of the orbit?
 - i) Superior rectus
 - ii) Superior oblique
 - iii) Medial Rectics
 - iv) Inferior rectus
- d) The following is true about the layers of the scalp EXCEPT:
 - i) Second layer consist of loose connective tissue
 - ii) Fourth layer is the dangerous layer of scalp
 - iii) The fifth layer is pericranium that is adherent at the sutures
 - iv) The third layer consists of epicranial aponeurosis
- e) Sinus opening on hiatus semilunaris is:

- i) Maxillary air sinus
- ii) Sphenoidal air sinus
- iii) Middle ethmoidal air sinus
- iv) Posterior ethmoidal air sinus

1x5

Q.5 Write short notes on the following:

- a) Covering and blood supply of thyroid gland and associated clinical anatomy.
- b) Upper and lower motor neuron lesions of facial nerve.
- c) Nasopharynx and associated tonsillitis.
- d) Cavernous Sinus and dangerous area of face.
- e) Depressors of mandible.

5x5

Q.6 Long question:

Describe trigeminal nerve under following heads:

- a) Functional components and associated nuclei.
- b) Branches and distribution in oral cavity.

10

Annual Examination, Dec. 2022

Bachelor of Dental Surgery – First Year

HUMAN ANATOMY, EMBRYOLOGY, HISTOLOGY AND MEDICAL GENETICS (BDS-HUAN-101)

Time: 3 hrs.

Max Marks: **80**

No. of pages: 2

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Q.1 Multiple choice questions:

- a) The contents of the jugular foramen include:
 - i) Superior petrosal sinus
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 - iii) Vagus nerve
 - iv) Hypoglossal nerve
- b) Branches of anterior trunk of mandibular nerve are all EXCEPT:
 - i) Nerve to lateral pterygoid
 - ii) Nerve to medial pterygoid
 - iii) Buccal
 - iv) Masseteric
- c) Hoarseness of voice after thyroidectomy results from damage to:

- i) Superior thyroid nerve.
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 - iii) Internal laryngeal nerve.
 - iv) Internal thyroid nerve.
- d) Which structure is NOT in the carotid sheath?
- i) Internal jugular vein
 - ii) External jugular vein
 - iii) Internal carotid artery
 - iv) Common carotid artery
- e) Which is an intrinsic muscle of the tongue?
- i) Superior longitudinal muscle.
 - ii) Genioglossus muscle.
 - iii) Hyoglossus muscle.
 - iv) Palatoglossus muscle.

1x5

Q.2 Write short notes on the following:

- a) Superior cervical ganglion and Horner's syndrome.
- b) Development of palate and its anomalies.
- c) Microanatomy of palatine tonsil.
- d) Medial wall of nose and epistaxis.
- e) Maxillary artery.

5x5

Q.3 Long question:

Describe parotid gland under the following heads.

- a) Location, size and coverings

b) Relations

c) Microanatomy

10

PART-B

Q.4 Multiple choice questions:

a) Sternocleidomastoid muscle is related to all on deep surface EXCEPT:

- i) External carotid artery.
- ii) External jugular vein.
- iii) Internal jugular vein.
- iv) 9th, 10th, 11th and 12th cranial nerves.

b) Which laryngeal muscle is NOT supplied by the recurrent laryngeal nerve?

- i) Thyroarytenoid
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- iv) Posterior cricoarytenoid

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- iii) The fifth layer is pericranium that is adherent at the sutures
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e) Sinus opening on hiatus semilunaris is:

- i) Maxillary air sinus

- ii) Sphenoidal air sinus
- iii) Middle ethmoidal air sinus
- iv) Posterior ethmoidal air sinus

1x5

Q.5 Write short notes on the following:

- a) Covering and blood supply of thyroid gland and associated clinical anatomy.
- b) Upper and lower motor neuron lesions of facial nerve.
- c) Nasopharynx and associated tonsillitis.
- d) Cavernous Sinus and dangerous area of face.
- e) Depressors of mandible.

5x5

Q.6 Long question:

Describe trigeminal nerve under following heads:

- a) Functional components and associated nuclei.
- b) Branches and distribution in oral cavity.

10

Annual Examination, Dec. 2022

Bachelor of Dental Surgery – Second Year

GENERAL 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) The absence of all forms of microbial life, including spores, is known as:

[CO2,L1]

i) Decontamination

ii) Disinfection

iii) Sterility

iv) Asepsis

b) Sterilization method of Lowenstein Jenson's medium?

[CO1,L2]

i) Autoclaving

ii) Filtration

iii) Gamma radiation

iv) Inspissation

c) The bacteria involved in the production of dental caries is/are:

[CO1, L1]

i) Streptococcus mutans

ii) S sanguis

iii) Both i) and ii)

iv) Streptococcus pyogenes

d) The most toxic exotoxin is:

[CO2,L1]

i) Tetanus toxin

ii) Diphtheria toxin

- iii) Botulinum toxin
- iv) Cholera toxin
- e) What is the structure that is found in gram-negative but not in gram-positive bacteria?

[CO2,L1]

- i) Capsule
- ii) Outer membrane
- iii) Cell membrane
- iv) Endospore

1x5

Q.2 Answer the following in brief:

- a) Define 'bacterial capsules' and support your answer with suitable examples.

[CO1, L1]

- b) Tabulate the difference between various immunoglobulin classes. Support your answers with diagrams.

[CO2, L3]

- c) Describe in detail sterilization by the gaseous method. [CO4, L5]

- d) Tabulate the difference between active and passive immunity. Justify your answer with examples.

[CO3, L2]

- e) Classify Streptococci and describe in detail laboratory diagnosis of Streptococcal sore throat. [CO5, L4] **5x5**

Q.3 Illustrate and create a flow chart for the moist heat method of sterilization. Describe in detail an Autoclave. Support your answer with a working model of the Autoclave.

[CO4L6] **10**

PART-B

Q.4 Multiple choice questions:

- a) Serum sickness is an example of:

[CO1 L1]

- i) Type-I hypersensitivity
- ii) Type-II hypersensitivity
- iii) Type-III hypersensitivity
- iv) Type-IV hypersensitivity

b) VDRL is an example of:

[CO2,L2]

- | | |
|------------------------|--------------------------------|
| i) Precipitation test | ii) Agglutination test |
| iii) Flocculation test | iv) Passive agglutination test |

c) Which of the following statements does not apply to IgG?

[L5, CO5]

- i) Appears early in the primary immune response.
- ii) Neutralizes bacterial toxins.
- iii) Can fix complement.
- iv) Crosses the human placenta.

d) Mycobacteria are acid-fast positive bacteria because of:

[CO3,L2]

- i) The presence of lipopolysaccharide in the bacterial cell wall.
- ii) The presence of mycolic acid in the bacterial cell.
- iii) Wall the presence of lipids.
- iv) Both ii) and iii).

e) Which of the following properties are the characteristics of tetanospasmin?

[CO4] [L1]

- | | |
|--------------------------------|------------------------|
| i) It is a heat-labile protein | ii) It is a neurotoxin |
| iii) It can be toxoided | iv) All of these |

1x5

Q.5 Answer the following in brief:

a) Tabulate the differences between Herpes simplex virus 1 and virus 2.

[CO3L5,]

b) Give an account of the laboratory diagnosis of Hepatitis B virus infection.

[CO4, L3]

c) Describe the laboratory diagnosis of meningococcal meningitis. [CO4, L3]

d) Describe the life cycle of Entamoeba Histolytica. Justify your answer with a diagram and label them.

[CO5 L1]

e) Describe in detail candidiasis. Add a note on its laboratory diagnosis.

[CO3, L2] **5x5**

Q.6 Classify 'Mycobacteria'. Write in detail the laboratory diagnosis of pulmonary and extrapulmonary tuberculosis.
[CO5 L3, L6] **10**

Annual Examination, Dec. 2022

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) The eruption of permanent maxillary canine is at the age of:

- | | |
|-----------------|--------------------|
| i) 6-7 years | ii) 11-12 years |
| iii) 13-15years | iv) Above 18 years |

b) Which of the following gland/s are purely serous in nature'?

- i) Parotid and Von Ebner's glands
- ii) Sub-mandibular glands
- iii) Glosso-palatine glands
- iv) Blandin-Nuhn glands

c) At which Stage of Odontogenesis the stellate reticulum is fully developed?

- | | |
|----------------------|----------------------|
| i) Late Cap Stage | ii) Early Bell Stage |
| iii) Late Bell Stage | iv) Early Cap Stage |

- d) The principle direction of movement of tooth in eruptive phase is:
- i) Lateral
 - ii) Mesial
 - iii) Distal
 - iv) Axial
- e) Name the tooth which has well marked marginal ridges and deep developmental groove.
- i) Permanent maxillary central incisor
 - ii) Permanent mandibular lateral incisor
 - iii) Permanent mandibular central incisor
 - iv) Permanent maxillary lateral incisor

1x5

Q.2 Write short notes on the following:

- a) List the differences between primary and secondary dentin. Add a note on osteodentin.
- b) Enumerate the zones of pulp. Add a note on age changes of pulp.
- c) Describe the light and electron-microscopic features of Parotid gland.
- d) Describe the occlusal morphology of permanent maxillary first molar.
- e) Discuss the functions of saliva with added note on its composition.

5x5

Q.3 Enumerate physiological and morphological stages of odontogenesis. Discuss in detail on advanced bell stage.

10

PART-B

Q.4 Multiple choice questions:

a) The average length of permanent maxillary canine is:

- i) 27mm
- ii) 33 mm

- iii) 20mm
 - iv) 17mm
 - b) The remnants of the dental lamina are called:
 - i) Hertwigs' Epithelial Root Sheath Cells
 - ii) Cell Rests of Malassez
 - iii) Cell Rests of Serre
 - iv) Reduced Enamel Epithelium
 - c) The widely accepted tooth numbering system which is compatible with computers and word processing systems is:
 - i) Universal system notation
 - ii) Palmer
 - iii) FDI system
 - iv) WHO system
 - d) The activation of vitamin D into its active form occurs in the:
 - i) Liver
 - ii) Kidney
 - iii) Liver and Kidney Gland
 - iv) Thyroid
 - e) The first deciduous tooth to exfoliate is:
 - i) Deciduous Maxillary Lateral Incisor
 - ii) Deciduous Mandibular Lateral Incisor
 - iii) Deciduous Mandibular Central Incisor
 - iv) Deciduous Maxillary Central Incisor
- 1x5**

Q.5 Write short notes on the following:

- a) List the differences between permanent maxillary and mandibular first premolars.
- b) Discuss the various stages in the life cycle of ameloblast.

- c) Classify alveolar bone. List the differences between mature and immature bone.
- d) List out morphologic and histologic differences between deciduous and permanent tooth.
- e) Classify oral mucous membrane. Add a note on histology of Gingiva.

5x5

- Q.6 Describe in detail the morphology of permanent mandibular first molar and add a note on its chronology.

10

Annual Examination, Dec. 2022

Bachelor of Dental Surgery – Third Year

**ORAL PATHOLOGY, MICROBIOLOGY AND FORENSIC
ODONTOLOGY (BDS-ORPA-301)**

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) Fordyce's granules is associated with the heterotopic collection of _____ in oral cavity.
- | | |
|---------------------|----------------------|
| i) Sweat glands | ii) Salivary glands |
| iii) Hair follicles | iv) Sebaceous glands |
- b) Name the inorganic constituent which is present in highest concentration in dental plaque?
- | | |
|---------------|--------------|
| i) Phosphorus | ii) Calcium |
| iii) Iron | iv) Fluorine |
- c) Pain which increases in intensity as the patient lies down is identified as:
- | | |
|------------------------------------|----------------------|
| i) Focal reversible pulpitis | ii) Acute pulpitis |
| iii) Chronic hyperplastic pulpitis | iv) Chronic pulpitis |
- d) "Herringbone" pattern of proliferation of spindle-shaped cells is associated with:

- | | |
|---|--------------------------|
| i) Fibrous histiocytoma
histiocytoma | ii) Malignant
fibrous |
| iii) Neurofibrosarcoma | iv) Fibrosarcoma |
- e) The central, acellular, eosinophilic mass found in center of Antoni A tissue of neurilemmoma is named as:
- | | |
|-------------------|----------------------|
| i) Verrucous body | ii) Verruciform body |
| iii) Verocay body | iv) Basaloid body |

1x5

Q.2 Write short notes on the following:

- Describe Warthins tumor in detail.
- List and explain the various histopathological variants of Ameloblastoma.
- Discuss the pathogenesis of Oral Submucous Fibrosis.
- Determine the role of DNA in Forensic Odontology.
- Summarize the developmental anomalies associated with tongue.

5x5

Q.3 Classify Fibro-osseous lesions. Explain in detail the etiology, clinical features and histopathology of Fibrous Dysplasia. Add a note on the syndromes associated with it.

10

PART-B

Q.4 Multiple choice questions:

- a) A dentigerous cyst develops due to collection of fluid between _____ and tooth surface. Select the correct option.
- | | |
|---|-----------------------------------|
| i) Reduced dental epithelium | ii) Stellate reticulum |
| iii) Internal dental epithelium
epithelium | iv) External dental
epithelium |
- b) The tumor cells of calcifying epithelial odontogenic tumor presents a close histological resemblance to _____ cells of dental organ.
- | | |
|-------------------------------|------------------------|
| i) External dental epithelium | ii) Stellate reticulum |
|-------------------------------|------------------------|

- iii) Stratum intermedium epithelium
- iv) Internal dental
- c) Submandibular salivary gland is the most common location associated with which of the following pathologies?
- i) Mucocele
- ii) Sjögren's syndrome
- iii) Sialolithiasis
- iv) Necrotizing sialometaplasia
- d) Identify the lesion, in which pale blue sclera is not seen?
- i) Paget's disease syndrome
- ii) Marfan
- iii) Ehlers-Danlos syndrome
- iv) Pierre Robin syndrome
- e) Auspitz's sign and Monroe's abscess are present in which of the following skin lesions?
- i) Erythema multiforme erythematosis
- ii) Lupus
- iii) Psoriasis
- iv) Pemphigus
- 1x5**

Q.5 Write short notes on the following:

- a) Explain Syphilis in detail.
- b) List the various Caries activity tests. Explain in detail the Snyder test.
- c) Describe Burning Mouth Syndrome.
- d) Illustrate the histopathology of Pemphigus Vulgaris.
- e) Classify 'Anemia'. Explain in detail the Iron Deficiency Anemia.

5x5

Q.6 Classify Cysts of Oro-facial region. Explain in detail the clinical features, radiographic features and histopathology of Dentigerous Cyst. Also add a note on its potential complications.

10

Annual Examination, Dec. 2022

Bachelor of Dental Surgery – Second Year

FORENSIC ODONTOLOGY (BDS-ORPA-OE-001)

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 Demirjian method for staging tooth development recognizes:

(BL-1, CO-3)

- i) 9 defined stage categories for each tooth type- Stage A to H2.
- ii) Has a greater number of stage categories than the other method discussed.
- iii) Is not associated with a mean age of attainment of each of the stages.
- iv) Must always be used in conjunction with assessments of hand/wrist x-rays.
- v) Is rarely used in forensics.

b) Neonatal line determines:

(BL-3, CO-1)

- i) The presence in the teeth and in the long bones of a skeleton.
- ii) Dental calculus.
- iii) Arrested growth during infant and child enamel formation.
- iv) Premature loss of teeth.

- d) Discuss concept of chain of custody.
(BL-2, CO-5)
e) Create a Forensic report.
(BL-5, CO-4) **5×5**

Q.3 Discuss in detail about classification systems, variables affecting, methods of recording and analysis of bite mark evidence. (BL-2, CO-1) **10**

PART-B

Q.4 Multiple choice questions:

- a) I am credited with making the earliest recorded case of dental identification. I lived in Ancient Rome around 15-59 AD. I was married to the Emperor Claudius. I ordered my soldiers to kill his mistress and bring me her head as proof of death. Who am I?

(BL-2, CO-3)

- | | |
|--------------|-----------------|
| i) Agripina. | ii) Urgulanilla |
| iii) Aelia | iv) Messalina |

- b) Forensic dentistry involves the study of teeth with the intention of providing facts to be used as evidence in court. What is another name for this field of study?

(BL-3, CO-1)

- | | |
|---------------------------|-------------------------|
| i) Forensic Anthropology | ii) Forensic Odontology |
| iii) Forensic Palynology. | iv) Forensic Entomology |

- c) Although I am known as a silversmith who indulged in nocturnal horse-riding, I was also a practising dentist. I performed the first documented case of forensic dental identification in America. Who am I?

(BL-4,

CO-2)

- | | |
|------------------------|---------------------|
| i) George Washington. | ii) Paul Revere |
| iii) Benjamin Franklin | iv) Abraham Lincoln |

- d) I ascended the English throne in 1066 and was the first of the Norman kings. According to legend, the first use of bite-mark identification can be attributed to me. Who am I?

(BL-3, CO-2)

- | | |
|-----------------|---------------------------|
| i) Henry –I. | ii) King Norman. |
| iii) Richard –I | iv) William the conquerer |

e) How many teeth does a human adult normally have? (BL-3, CO-4)

i) 28

ii) 32

iii) 30

iv) 27

1×5

Q.5 Write short notes on the following:

a) Underline the importance of record keeping in Dental office. (BL-1, CO-3)

b) Discuss CAPMI.

(BL-2, CO-1)

c) Explain step wise procedure of Amelogyphics. (BL-2, CO-3)

d) Propose role of Tongue prints in forensic investigations. (BL-5, CO-2)

e) Judge the role of Dentists in cases of child abuse. (BL-6, CO-5) **5×5**

Q.6 Define 'Forensic Odontology'. Assess the roles and responsibilities of a Forensic Odontologist?

(BL-6, CO-5) **10**

Annual Examination, Dec. 2022

Bachelor of Dental Surgery – Third Year

ETHICS (BDS-PHDE-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) Non-rational ways of approaching ethical issues is:

- | | |
|-----------------|-------------------|
| i) Imitation | ii) Virtue ethics |
| iii) Deontology | iv) Principlism |

b) _____ is known for their longstanding egalitarianism.

- | | |
|-------------------|-----------|
| i) United Kingdom | ii) India |
| iii) Sweden | iv) USA |

c) Habit is a very efficient method of:

- | | |
|---------------------------|---------------------|
| i) Doing dental treatment | ii) Cooperation |
| iii) Decision making | iv) Public speaking |

d) Macro ethics principle guide the conduct of:

- | | |
|------------------------------|------------------|
| i) Population Based Research | ii) Patients |
| iii) Society
Colleagues | iv) Professional |

e) Plagiarism literally means:

- i) fair treatment of individuals and groups.
- ii) not doing wrong. Dentists and dental researchers are to avoid inflicting harm on patients.
- iii) a good quality in people, especially in their character and behaviour.
- iv) a form of dishonest behaviour whereby a person copies the work of someone else.

1×5

Q.2 Write short notes on the following:

- a) Dentist society relationship.
- b) Whistle blowing.
- c) Rationale approaches of ethical issues.
- d) The Nuremberg code.
- e) Define ethics with examples.

6×5

Q.3 What is special about dental ethics? How is it different from medical and other field ethical issues?

15

PART-B

Q.4 Multiple choice questions:

a) Which of the following are not the fundamental principles that form the foundation of the ADA Code?

- | | |
|--------------------|-------------|
| i) Non-maleficence | ii) Patient |
| autonomy | |
| iii) Veracity | iv) |
| Advertising | |

b) Doctor-Patient relationship models are:

- | | |
|---------------------|-----------------|
| i) Commercial model | ii) Interactive |
| model | |

- iii) Guide model model
 - iv) Agent
 - c) ACD stands for:
 - i) Asses communicate decide
 - ii) Assess consequentialism decide
 - iii) Act communicate dentist
 - iv) Attrition compare decide
 - d) Macro ethics principle guide the conduct of:
 - i) Population based research
 - ii) Patients
 - iii) Society Professional colleagues
 - iv)
 - e) Confidentiality is also important because a person deserves.
 - i) Respect to look forward
 - ii)
 - iii) to be secretive
 - iv) autonomy
- 1×5**

Q.5 Write short answers of the following:

- a) How communication and consent is important for good dentist and patient relationship.
- b) Discuss the non rational approaches of ethical issues.
- c) Elements of informed consent.
- d) Discuss about the decision making for incompetent patients.
- e) Role of FDI in ethics.

6×5

Q.6 What are OZAR and SOKOL proposal for six values in dentistry?

15

Annual Examination, Dec. 2022

Bachelor of Dental Surgery – First Year

GENERAL HUMAN PHYSIOLOGY (BDS-PHYS-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 the **PART-A** and **PART-B** in the separate answer sheets.

PART-A

Q.1 Multiple choice questions:

a) SA Node is the dominant pacemaker because:

- i) Located higher
- ii) Large in size
- iii) Has regular activity
- iv) Has fastest rate

b) P wave in ECG corresponds to:

- i) Ventricular depolarization
- ii) Atrial depolarization
- iii) Ventricular repolarization
- iv) Atrial systole

c) Normal stroke volume is:

- i) 5 - 6 ml/beat
- ii) 70 -80 ml/beat

- iii) 5-6 L/beat
 - iv) 20 -30 L/beat
 - d) Most potent respirator stimulant is:
 - i) Oxygen
 - ii) Carbon dioxide
 - iii) H +
 - iv) K +
 - e) The diffusing capacity for CO₂ compared to that of O₂ is ____ times:
 - i) 20
 - ii) 10
 - iii) 05
 - iv) 02
- 1x5**

Q.2 Write short notes on the following:

- a) Ionic basis of action potential.
- b) Surfactant.
- c) Factors affecting erythropoiesis.
- d) GFR.
- e) Hypoxia.

5x5

Q.3 Long question:

Describe in detail sequence of events in Excitation-contraction coupling of skeletal muscle.

10

PART-B

Q.4 Multiple choice questions:

- a) Which of the following refractory errors requires use of concave lens for correction?
 - i) Hypermetropia
 - ii) Myopia
 - iii) Astigmatism
 - iv) Colour blindness
- b) Which of the following controls the Circadian rhythm?
 - i) Hypothalamus
 - ii) Cerebellum
 - iii) Thalamus
 - iv) Mid brain
- c) The chromosomal pattern in Klinefelter's syndrome is:
 - i) XO
 - ii) XX
 - iii) XXY
 - iv) XXX
- d) Phases of menstrual cycle include all except:
 - i) Proliferative phase
 - ii) Secretory phase
 - iii) Menstrual phase
 - iv) Hypertrophic phase
- e) The chromosomal pattern in Turner's syndrome is:
 - i) XO
 - ii) XX

iii) XXY

iv) XXX

1x5

Q.5 Write short notes on the following:

- a) Functions of cerebellum.
- b) Functions of Plasma Protein.
- c) Oxygen-Dissociation curve.
- d) Acromegaly.
- e) Function's of saliva.

5x5

Q.6 Long question:

Describe briefly the action of thyroid hormones. Also, explain the mechanism of synthesis.

10

Annual Examination, Dec. 2022
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) Following factors can play a role in achieving adhesive bonds, except:
 - i) Wetting.
 - ii) Interpenetration.
 - iii) Micro-mechanical interlocking.
 - iv) Elastic modulus.
- b) Absorption of mercury in the human body occurs least from:
 - i) Lungs.
 - ii) Kidneys.
 - iii) GI track.
 - iv) Skin.
- c) Which one of the following is not the objective of trituration
 - i) Remove oxides from powder particle surface.
 - ii) Keep the amount of gamma 1 or gamma 2 matrix crystals to maximum.
 - iii) Pulverize pellets into particles to aid in attack by mercury.
 - iv) Achieve a workable mass of amalgam in minimum time.

- d) Which of the following is present in the powder of acrylic?
- | | |
|-------------------------|-----------------------|
| i) Methyl methacrylate. | ii) Benzoyl peroxide. |
| iii) Hydroquinone . | iv) Para-toludine. |
- e) Acrylic resins are used for:
- | | |
|---------------------------|-----------------------|
| i) Anterior restorations. | ii) Denture base. |
| iii) Temporary bridges. | iv) All of the above. |

1x5

Q.2 Write short notes on the following:

- Visible light cure resin.
- Galvanism.
- Titanium alloys.
- Eames technique.
- Adverse effects of dental materials.

5x5

Q.3 Discuss in detail the properties, advantages, disadvantages of dental ceramics. What are CAD-CAM restorations?

10

PART-B

Q.4 Multiple choice questions:

- a) Side effect of light cure system is:
- | | |
|----------------------|---------------------|
| i) Cataract. | ii) Conjunctivitis. |
| iii) Retinal damage. | iv) Iritis. |
- b) Particle size in micro-filled composite is:
- | | |
|--------------------|----------------------|
| i) 0.05-0.04 mm. | ii) 0.01-0.1 micron. |
| iii) 0.5-1 micron. | iv) 0.3-0.4 mm . |
- c) Deformation that is recovered upon removal of externally applied force or pressure is called:
- | | |
|--------------------|---------------------|
| i) Youngs modulus. | ii) Plastic strain. |
|--------------------|---------------------|

- iii) Elastic strain.
 - iv) Flexural strength.
- d) Brazilian test is used to determine the ultimate tensile strength of:
- i) Ductile materials.
 - ii) Flexible materials.
 - iii) Brittle materials.
 - iv) Malleable materials.
- e) The pattern for metallic framework for removable partial denture is fabricated from:
- i) Inlay wax type II.
 - ii) Boxing wax.
 - iii) Casting wax.
 - iv) Modeling wax.

1x5

Q.5 Write short notes on the following:

- a) Die spacer.
- b) Elastic limit.
- c) Sandwich technique.
- d) Soldering vs Welding.
- e) Pickling.

5x5

Q.6 What are the types of denture base materials? Write in detail about their chemical and physical stages of polymerization and add a note on types of curing cycles.

10

Annual Examination, Dec. 2022

Bachelor of Dental Surgery – First Year

BEHAVIOURAL SCIENCES (BDS-PSY-OE-001)

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 concept of the cocktail party effect was given by:

- | | |
|--------------|-----------|
| i) Cherry | ii) Freud |
| iii) Allport | iv) Wundt |

b) The way people evaluate their various abilities and attributes.

- | | |
|------------------|--------------------|
| i) Self-concept | ii) |
| Self-perception | |
| iii) Self-esteem | iv) Self-attribute |

c) The measurement of emotional intelligence is known as:

- | | |
|---------|--------|
| i) EQ | ii) SQ |
| iii) IQ | iv) PQ |

d) Sociometry is the study of:

- | | |
|-----------------------|-------------------|
| i) Group cohesiveness | ii) Communication |
| iii) Performance | iv) Satisfaction |

e) The part of the self which is unknown to us is known as:

- | | |
|-------------------|-----------------|
| i) Open self | ii) Blind |
| self | |
| iii) Unknown self | iv) Hidden self |

[CO1,5L2] **1x5**

Q.2 Write short notes on the following:

a) Discuss differences between positive and negative self-concepts.

[CO1,L1]

b) What are the characteristics of the individuals with high self-esteem?

[CO1,L1]

c) What is attitude? Discuss the components of attitude . [CO1,L1]

d) Discuss the importance of emotional intelligence in professional field.

[CO5,L5]

e) Discuss the importance of interpersonal relationship in professional set up.

[CO4, L4] **5x5**

Q.3 "Our attitude determines perception, behaviour and motivation". Elaborate with example.

[CO 1, L6] **10**

PART-B

Q.4 Multiple choice questions:

a) _____ stages for team development.

- | | |
|------------|----------|
| i) Five | ii) Four |
| iii) Three | iv) Nine |

b) Emotional Intelligence has _____ components.

- | | |
|------------|-----------|
| i) Three | ii) Five |
| iii) Seven | iv) Eight |

c) An attitude about one's physical attributes and characteristics are known as:

- i) Role performance
 - ii) Body image
 - iii) Self-identity
 - iv) Self esteem
 - d) Anything that causes stress is known as:
 - i) Stressor
 - ii) Event
 - iii) Coping
 - iv) Mindfulness
 - e) The first step of self-concept development is:
 - i) Self-awareness
 - ii) Self-acceptance
 - iii) Self- disclosure
 - iv) Self- help [CO1,5 L2]
- 1x5**

Q.5 Write short notes on the following:

- a) Draw the common pattern of interactions in teams. [CO 5 L 6]
- b) Discuss the role of the Johari window in conflict management.

[CO5L 2]

- c) Suggest some strategies for team building with example.
- d) Discuss the differences between team and group with example.
- e) What is stress? Discuss the nature of stress with example. **5x5**

Q.6 Formulate some strategies for managing stress.

10

Annual Examination, Dec. 2022

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) Computers are used in which phase of research?
- i) Conceptualization phase
 - ii) Dissemination phase
 - iii) Design and planning phase
 - iv) All of the above
- b) All of these are a method of presentation of data except:
- i) Spot map chart
 - ii) Pie
 - iii) Histogram
 - iv) Ring diagram
- c) Which of these is a style manual for referencing?
- i) Vancouver system
 - ii) Chicago manual of style
 - iii) Harvard system

- iv) All the above
- d) All are measures of dispersion except:
 - i) Mean
 - ii) Variance
 - iii) Standard deviation
 - iv) Range
- e) Which of the following is a source of primary data?
 - i) Books
 - ii) Surveys questionnaire data
 - iii) Newspapers
 - iv) Internet articles

1x5

Q.2 Write short notes on the following:

- a) Explain research ethics.
- b) Describe the various types of interviews in research.
- c) What are the advantages and disadvantages of observational research?
- d) What is the role of computers in research?
- e) What are the steps of report writing?

5x5

Q.3 What are the types of survey? Explain the various steps of survey.

10

PART-B

Q.4 Multiple choice questions:

- a) To find the Standard deviation we need to know:
 - i) Mean
 - ii) Mode
 - iii) Median
 - iv) All the above
- b) Quantitative data can be collected by all the following methods except.
 - i) In depth interviews with open ended questions
 - ii) Surveys with closed ended questions

iii) Experiments

c) Difference between the upper and lower limits is called a:

i) Range

ii) Frequency

iii) Standard deviation

iv) Class interval

d) Male/female is a:

i) Nominal scale

ii) Ratio scale

iii) Ordinal scale

iv) Interval scale

e) All of the following are indexing databases except:

i) Scopus

ii) EMBASE

iii) PUBMED

iv)

Harvard

1x5

Q.5 Write short notes on the following:

a) What are the considerations in selecting a research problem?

b) Plagiarism in research.

c) Measures of central tendency.

d) Selecting a research topic.

e) Write about the different types of scales.

5x5

Q.6 Describe the various types of sampling techniques used in research.

10

Annual Examination, Dec. 2022

Bachelor of Dental Surgery – Second Year

RESEARCH INNOVATION CATALYST (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) Preferred portal for Scientific Literature search is:

- i) Search Engine
- ii) Database

b) NLM stands for:

- i) National Literature of Medicine
- ii) National Library of Medicine
- iii) Novel Literature in Medicine
- iv) National Library of Medical Terms

c) Following is not a method of random selection.

- i) Purposive sampling
- ii) Table of random numbers
- iii) Computer randomization

d) Plagiarism is:

- i) Copying verbatim
- ii) Explaining findings and giving credit to author

e) Mode is:

- i) Middle most value
- ii) Most commonly appearing value

1x5

Q.2 Write short notes on the following:

- a) IPR.
- b) Importance of Referencing.
- c) How will you reference a Chapter in a book using Vancouver style?
- d) Prototype.
- e) Measures of Dispersion.

5x5

Q.3 You are writing a systematic review on comparison of shear bond strength of GIC v/s Composite. Write the PICO statement for the same. Mention the search strategy for literature search for this topic, including specific key words and Word Builders.

10

PART-B

Q.4 Multiple choice questions:

- a) Root mean square deviation is:
 - i) Standard deviation.
 - ii) Mean Deviation.
 - iii) Variance.
- b) PICO stands for:
 - i) Prevention Intervention Comparison and Outcome.
 - ii) Patient Intervention Comparison and Outcome.
 - iii) Patient Intervention Community and Outcome.
- c) Elevator pitch is:
 - i) A Short business pitch
 - ii) A detailed business pitch

- iii) A method of process improvement

- d) All of the following are types of reviews except.
 - i) Book Review
 - ii) Systematic Review
 - iii) Argumentative Review
 - iv) Scoping Review

- e) 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

1x5

Q.5 Write short notes on the following:

- a) Ethical Clearance.
- b) Digital Research Profile.
- c) List the different acts for the protection of IP.
- d) What is an invention according to Indian Patents Act?
- e) Types of Literature Review.

5x5

Q.6 Write in detail about 'innovation' and types of innovations. Also, write the steps involved in product innovation with an example.

10

Annual Examination, Dec. 2022

Bachelor of Dental Surgery – Third Year

RESEARCH INNOVATION CATALYST (BDS-RIC-301)

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) Brushing technique for patients with recession

- i) Modified bass
- ii) Bass
- iii) Stillman's

b) A Case Control Study of Dental Erosion and Soft Drink Consumption revealed that of the 120 cases 80 consumed soft drinks and of the 210 cases 60 consumed soft drinks. Odds ratio is:

- i) 5
- ii) 4
- iii) 0.5
- iv) 10

c) Level of Evidence of Systematic Review and meta analysis is:

- i) 1a
- ii) 1b
- iii) 2a
- iv) 2b

d) The following is a type of control in a Case Control Study:

- i) Hospital Control
- ii) Neighborhood Control

- iii) Best Friend Control
- iv) All of the above
- e) Non Parametric equivalent of Paired t test is:
 - i) Kruskal Wallis ANOVA
 - ii) Wilcoxon Sign Rank Test
 - iii) Chi square Test
 - iv) Mann Whitney U test

1x5

Q.2 Write short notes on the following:

- a) Measures of Morbidity.
- b) A study is planned to assess percentage of males and females having supernumerary tooth Present or Absent. Which test of significance will be applied? Draw the 2x2 table.
- c) Ethics in Experimental research.
- d) Neyman's Bias.
- e) Blinding.

5x5

Q.3 Describe the significance of tests in research.

10

PART-B

Q.4 Multiple choice questions:

- a) p less than _____ is considered statistically significant.
 - i) 0.05
 - ii) 0.01
 - iii) 0.5
 - iv) Both i) and ii)
- b) All of the following comes under demographic data except:
 - i) History of tobacco habit
 - ii) Name
 - iii) Religion
 - iv) Age
- c) The individual squares in forest plot depict:
 - i) Summary effect of each study
 - ii) Combined effect summary of all studies
- d) Mean Median and mode are:
 - i) Measures of Central Tendency

- ii) Measures of Dispersion
- e) Percentage of Values within 1, 2 and 3 Standard deviation as plotted on a Normal Curve is:
- | | |
|--------------------------|-------------------------|
| i) 62%, 92% and 95% | ii) 65.2%, 95.3%, 99.9% |
| iii) 67.4%, 95.4%, 99.7% | iv) 68.3%, 95.4%, 99.7% |
- 1x5**

Q.5 Write short notes on the following:

- a) Measures of Mortality.
- b) Steps in Case Control Study.
- c) Levels of Prevention.
- d) Intraoral Examination.
- e) Study models – Maintenance of records.

5x5

Q.6 Define 'Epidemiology'. Write in detail about experimental Epidemiology.

10

Roll No.:_____

Annual Examination, September 2022

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 **Write short notes on:**

- | | |
|--|-----------------------|
| a) Physical properties of dental materials. | [CO1][L1] |
| b) Caries risk assessment. | [CO4][L3] |
| c) Impact of rotary files metallurgy on their shaping ability. | [CO2][L4] |
| d) Forest Plot. | [CO3][L2] |
| e) Bioactivity of restorative materials. | [CO1][L2] |
| f) Nerve supply of jaws. | [CO1][L1] |
| g) Recent concepts in Dentine Adhesion. | [CO4][L4] |
| h) CAD CAM in Restorative Dentistry. | [CO2][L2] |
| i) Role of inflammatory mediators in Pulpal Inflammation. | [CO4][L1] |
| j) Role of Vitamins in maintenance of oral health. | [CO1][L3] 5x10 |

Long questions:

Q.2 Discuss 'physiology of saliva'. Elaborate the role of saliva in caries prevention.

25

Q.3 Discuss the development of teeth and congenital anomalies affecting the tooth form.

25

Roll No.:_____

Annual Examination, September 2022

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 **Write short notes on:**

- | | |
|-------------------------------------|--------------|
| a) Role of meckels cartilage. | [CO-1] [L-1] |
| b) Genetic counseling. | [CO-1] [L-3] |
| c) Wolfe's Law. | [CO-2] [L-2] |
| d) Bio ethics. | [CO-3] [L-3] |
| e) Local anesthetics. | [CO-2] [L-4] |
| f) Importance of parathormone. | [CO-1] [L-5] |
| g) Hyalinization. | [CO-4] [L-1] |
| h) Samples and sampling techniques. | [CO-4] [L-3] |
| i) Thyroid Hormone. | [CO-2] [L-3] |
| j) Banding and bonding. | [CO-4] [L-2] |

5x10

Long questions:

Q.2 Describe various methods used for assessment of skeletal age. **25**

Q.3 Describe the composition and role of elastics in orthodontics. **25**

Roll No.: _____

Annual Examination, September 2022

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 **Write short notes on:**

- | | | |
|---|-------------|-------------|
| a) Referred pain. | [CO-2][L-4] | |
| b) Syncope. | [CO-3][L-3] | |
| c) Balanced diet. | [CO-4][L-3] | |
| d) Passive immunity. | [CO-1][L-2] | |
| e) Inferior Alveolar Nerve. | [CO-1][L-1] | |
| f) Drug dosage calculation in children. | [CO-2][L-5] | |
| g) Genetic counselling. | [CO-3][L-6] | |
| h) Mentalis muscle. | [CO-1][L-1] | |
| i) Sample size estimation. | [CO-4][L-5] | |
| j) Oral manifestations of COVID. | [CO-2][L-4] | 5x10 |

Long questions:

- Q.2 Analyse the role of different aspects of dental plaque and saliva in the initiation and progress of Dental Caries. [CO-3][L-4] **25**
- Q.3 Describe in detail the development, histological structures ,innervations, functions, regressive changes and clinical considerations of Dental Pulp. [CO-1,2,3][L-2] **25**

Annual Examination, September 2022

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:**

- a) Summarize the role of saliva as a diagnostic marker. [CO-5][L-2]
- b) Formulate the role of antibiotics in periodontics. [CO-3][L-6]
- c) Classify the randomized controlled trials. [CO-5][L-4]
- d) Recommended culture media for periodontopathogens. [CO-4][L-5]
- e) Develop a Research question. [CO-6][L-6]
- f) Illustrate the origin, insertion and functions of muscles of mastication.[CO-1][L-3]
- g) Applied aspects of Maxillary sinus. [CO-2][L-3]
- h) List the role of micronutrients in periodontal health and disease.
[CO-3][L-1]
- i) Describe the pain pathway mechanism. [C-5][L-2]
- j) Outline the role of inflammasomes in periodontitis. [CO-1][L-4] **5x10**

Long questions:

Q.2 Describe the biology of periodontal tissues in detail.

[CO-1][L-2] **25**

Q.3 Explain 'Pharmacokinetics'. Discuss the various routes of drug administration in detail.

[CO-4][L-1] **25**

Annual Examination, December 2022

Master of Dental Surgery – First Year

PROSTHODONTICS AND CROWN AND BRIDGE- BASICS

(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 **Write short notes on:**

- | | |
|--|-------------------------|
| a) Secondary hypertension. | [CO-1] [L-1] |
| b) Age changes in the mandible. | [CO-1] [L-2] |
| c) Muscles of tongue. | [CO-1][L-1] |
| d) Geriatric nutrition. | [CO-1] [L-3] |
| e) Biomaterial waste disposal. | [CO-1][L-3] |
| f) Anti-inflammatory and Analgesics used in dentistry. | [CO-1] [L-2] |
| g) Elastomeric impression materials. | [CO-1] [L-1] |
| h) Casting defects. | [CO-1] [L-2] |
| i) Calcium metabolism. | [CO-1] [L-1] |
| j) T test and ANOVA test. | [CO-2][L-2] 5x10 |

Long questions:

- | | | |
|-----|---|-----------------------|
| Q.2 | Applied anatomy of temporomandibular joint. Also, discuss temporomandibular disorders and their prosthodontic significance. | [CO-2][L-4] 25 |
| Q.3 | Write in detail about implant biomaterials used in dentistry. | [CO-1][L-2] 25 |

Roll No.: _____

Annual Examination, September 2022

Master of Dental Surgery – First Year

**PROSTHODONTICS AND CROWN AND BRIDGE- BASICS
(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 **Write short notes on:**

a) Discuss biomedical waste management in a prosthodontic clinic.

[CO-1] [L-2]

b) Physiology of mastication and deglutition.

[CO-4] [L-1]

c) Physiology of Polysynaptic reflex action.

[CO-4][L-1]

d) Does occlusion have any role in temporomandibular disorders?

[CO-3] [L-4]

e) Discuss causes of cracks and voids in all ceramic restorations and how you can control them.

[CO-1][L-5]

f) Discuss different study designs.

[CO-2] [L-1]

g) Endocrinal disorders affecting the prosthodontic treatment.

[CO-5] [L-2]

h) Discuss development and histology of enamel and dentin.

[CO-5] [L-1]

i) What difficulties will be encountered and what measures you will take, while fabricating a complete denture in a case suffering from neuromuscular incoordination.

[CO-5] [L-3]

j) Discuss manipulation and how you can control the setting expansion of gypsum bonded investment material.

[CO-1][L-4] **5x10**

Long questions:

Q.2 Why TMJ is known as ginglymoarthrodial joint? Describe its anatomy and write about the physiology of Mandibular movements. **25**

Q.3 Discuss properties of base metal alloys, casting shrinkage, its compensation, and casting defects. **25**