

I- GIVE AN ACCOUNT ON: (6 Marks)

- A- Factor Affecting Drug Absorption (drug related factors).
- B- Drug Tolerance.
- C- Pilocarpine (pharmacodynamics and uses).
- D- Atropine (side effects).

II- During injection of local anesthetic for tooth extraction, patient suffer from wheezy chest, difficulty in breathing and hypotension. You diagnose the condition as anaphylactic reaction and decide to give him SC Adrenalin (2 Marks)

- A- Explain, why did you decide to use adrenalin?
- B- Enumerate adrenalin indications and side effects.

III- Multiple Choice Questions: (1 Mark)

- 1- Disadvantage of sublingual route of administration.
(Rapid absorption – Easy administration – Not for vasoconstricting drugs).
- 2- Which of the following drugs is Hepatic Microsomal Enzyme inhibitor?
(Phenobarbiton – Phenytoin – Estrogen).
- 3- Used for treatment of emergent hypertension.
(Fenoldopam – Dopamine – Noradrenaline)
- 4- On using atropine with neostigmine, atropine had to given
(After Neostigmine – Before Neostigmine – With Neostigmine)

III- Mention True OR False (1 Mark)

- 1. Pharmacodynamics is the effect of body on drug.
- 2. Heart failure not affect pharmacokinetic of drugs.
- 3. Sudden stop of β -blocker is safe.
- 4. Salbutamol is better than isoprenaline in treatment of bronchial asthma.

Dr. Mohamed Balaha

أطلب لينة ٢٠١٧

بفرصة لينة
شيرة حسن

Kafr Elsheikh University Faculty of Dentistry Department of Oral Biology

Midyear Exam ofDental Anatomy forSecond Year

Marks:20 Marks..... Date: ...15 January 2017 Time Allowed:one hours

First Questions: Choose the correct answers (5 marks)

1- How many pulp horns of newly erupted permanent maxillary central incisor?

- a. Two
- b. Three
- c. One
- d. Four

2- A child normally at the age of 7 years has following number of teeth:

- a. ١٦ 16
- b. ٢٤ 24
- c. ٢٠ 20
- d. ٢٨ 28

3- The sequence of eruption for lower permanent teeth is

- a. (٦٠), ٢, ٣, ٥, ٤, ٧, ٨ (6-1), 2, 3, 5, 4, 7, 8
- b. ١, ٢, ٣, ٤, ٥, ٦, ٧, ٨ - 1, 2, 3, 4, 5, 7, 8
- c. (٦٠), ٢, ٣, ٤, ٥, ٧, ٨ (6-1), 2, 3, 4, 5, 7, 8
- d. ٦, ١, ٢, ٣, ٤, ٥, ٧, ٨ - 6, 1, 2, 3, 4, 5, 7, 8

4- From labial view, mesial and distal contact areas of mandibular central incisors are located:

- a. at the junction of incisal and middle thirds
- b. at the junction of cervical and middle thirds
- c. cervical to the junction of incisal and middle thirds
- d. incisal to the junction of incisal and middle thirds

5- A stray crown is found in your office. It is an anterior tooth and has a cingulum deviated distally and its incisal ridge sloped distally and cervically. What tooth is it most likely to be?

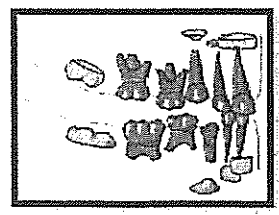
- a. Maxillary canine
- b. Maxillary lateral incisor
- c. Mandibular lateral incisor
- d. Mandibular central incisor

6- In maxillary canine, the labial crest of curvature in relation to the palatal crest of curvature

- a. Is more cervically.
- b. Is more incisally.
- c. Is more distally.
- d. Both are in the same level.

7- The expected age of this model is

- a. ١٠ months 10 months
- b. ٢٤ months 24 months
- c. ٢٠ months 20 months
- d. ٣٦ months 36 months



8- Succedaneous teeth include all of the following EXCEPT one? Which one is the EXCEPTION?

- a. the permanent maxillary and mandibular premolars
- b. the permanent maxillary and mandibular first molars
- c. the permanent maxillary and mandibular central incisors
- d. the permanent maxillary and mandibular canines

9- The "moon shape" labial outline is characteristic for which of the following teeth:

- a. Permanent maxillary canine.
- b. Permanent mandibular canine.
- c. Permanent mandibular lateral incisor.
- d. Permanent maxillary central incisor.

10- A football player, got hit by a flying ball in a game, comes into your office holding his right canines (maxillary and mandibular) in his hand. Which of the following would you look for in the maxillary canine as compared to the mandibular canine?

- a. It is narrower mesiodistally
- b. It has a less pronounced cingulum
- c. It is wider mesiodistally
- d. It has a shorter root

1	2	3	4	5	6	7	8	9	10

Second Questions: Correct the underlined incorrect word (s) (5 marks).

- 1- The permanent mandibular lateral incisor is the smallest tooth in the dental arch-----

- 2- The socket means the bone cavity in the alveolar bone that carry the tooth germ of the developing tooth.-----

- 3- The labial aspect of permanent anterior teeth are formed from four lobes.-----

- 4- In mandibular permanent canine, the distal contact area is lying in the middle third -----

- 5- In a child who has normal eruption and exfoliation dates , the first maxillary deciduous second molar comes in contact with the permanent first molar at 7 years of age .-----

- 6- In the primary dentition period the dental arches has both deciduous and permanent teeth.-----

✓- From the proximal aspects of the permanent mandibular incisors, the incisal tip is lying at midline of the tooth. -----

^- As soon as a child gets his/her second premolars he/she is considered to be in the mixed dentition. -----

9- In the universal numbering system the permanent mandibular right canine is represented by the number 22-----

10- When looking at the facial or lingual aspect of all anterior teeth, they have a rhomboidal outline. -----

Third Questions: Give an account on (5 marks).

- 1- Main difference between deciduous and permanent teeth.
- 2- List and Define all the elevations and depressions found on the labial surface and lingual surfaces of permanent mandibular canine.

Fourth Questions: Describe the following aspect with drawing (5 marks).

- The lingual aspect of permanent maxillary canine.

Good Luck

Student's name -----
No. -----

أعمال السنة - الفرقة الأولى
ع. ١٥ - ع. ١٦

First Questions: Choose the correct answers (5 marks)

- 1- The deciduous dentition remains intact until a child is about the age of
A. 3 year C 5years
B. 4 years D. 6 years
- 2- Which of the following teeth is called succedaneous teeth?
A. Permanent incisor and canine
B. Premolars
C. Premolars and permanent canine
D. All of the above
- 3- The small elevation on some portions of the crown produced by an extra formation of enamel is called as.
A Cusp
B. tubercle
C. Cingulum
D. Ridge
- 4- The union of the triangular ridge of the distobuccal cusp and the mesiolingual cusp of maxillary molar forms the:
A. Marginal ridge
B. Oblique ridge
C Both of the above
U. None of the above
- 5- The labial surface of maxillary central incisor than the maxillary lateral incisor and canine is
A. More convex
B. Less convex
C. Flat
D. None of the above
- 6- Which permanent tooth has small mesiodistal dimension?
A Maxillary central incisor
B. Mandibular central incisor
C Mandibular lateral incisor
D. Maxillary central incisor

7- A child normally at the age of 7 years has following number of teeth:

- A. 16
- B. 20
- B. C.24
- D. 28

8- The periodontium consists of which of the following structures?

- A. Alveolar bone, dentin, dental pulp and cementum.
- B. Cementum, alveolar bone, periodontal ligament and enamel.
- C. Cementum, alveolar bone, periodontal ligament and gingiva.
- D. Enamel, dentin, dental pulp and cementum

9- The expected age of this model is

- A. 6 months
- B. 30 months
- C. 20 months
- D. 36 months



10-How many pulp horns of newly erupted permanent maxillary central incisor?

- A. Two
- B. One
- C. Three
- D. Four

1	2	3	4	5	6	7	8	9	10

Second question: Correct the underlined incorrect word (s) (5 marks).

1. From the proximal aspects of the permanent mandibular incisors the incisal tip is lying at midline of the tooth. -----

2. Eruption sequence of maxillary permanent teeth is (6-1) - 2 -3 - 4 - 5 -7 - 8 ---

3. Radicular pulp extends in crown and root portions. -----

4. In deciduous maxillary canine, both cusp slopes have the same length-----

5. The physiological exfoliation of the deciduous teeth is named extraction-----

6. The permanent mandibular lateral incisor is the smallest tooth in the dental arch-----

7. In Palmer Notation system, the permanent mandibular right third molar is represented as #17-----

8. The central fossa is seen in anterior teeth-----

9. The labial aspect of permanent anterior teeth are formed from four lobes-----

10. In the primary dentition period the dental arches has both deciduous and permanent teeth-----

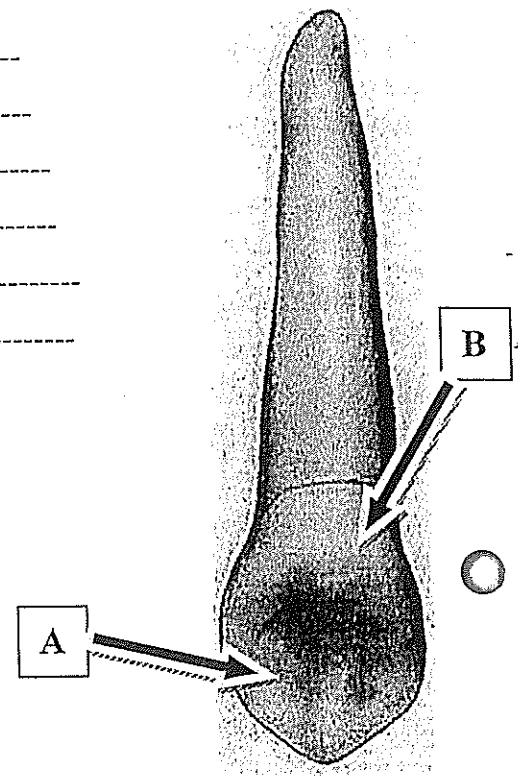
Third question: Complete the sentences according to the following figure (2.5 marks)

This is the -----
aspect of a tooth known As -----

The date of its eruption is -----

Arrow A is pointed at -----

Arrow B is pointed at-----



Fourth Question: Give an account on (2.5 marks):

A. Main differences between deciduous and permanent teeth



أعمال السنة ٢٠١٧

إفحصه الثاني
ميكروبيولوجيا

Kafrelsheikh University
Faculty of Oral and Dental Medicine
First term exam
Microbiology & Immunology
Date: 24/1/2017
Time allowed: 1 hour

جامعة كفر الشيخ
كلية طب الأسنان
امتحان الفصل الدراسي الاول
مادة الميكروبيولوجي والمناعة
التاريخ: 2017/1/24
مدة الامتحان: ساعة

All Questions Are to Be Attempted

- برجاء قراءة جميع الأسئلة جيدا والالتزام بالزمن المحدد لكل سؤال
- هذا الامتحان يشتمل على 3 أنماط من الأسئلة في صفتين مختلفتين

I- Choose the best answer: (estimated time 10 minutes, 2.5 marks)

- 1) The optimal growth temperature for mesophilic bacteria is
a) under 20°C. b) near 37°C c) 45-70°C d) around 100°C.
- 2) non-specifically kill any cancerous or virus-infected cells.
a) plasma cells b) natural killer cells c) activated T cells d) macrophages
- 3) is gram positive bacilli.
a) *Staphylococcus* b) *Bacillus* c) *Neisseria* d) *E-coli*
- 4) Immunoglobulins are secreted by.....
a) neutrophils b) plasma cells c) activated T cells d) macrophages
- 5) Host response to the infectious agent is an example of.....
a) active natural immunity b) active artificial immunity
c) passive natural immunity d) passive artificial immunity
- 6) Trans-placental transfer of antibodies from mother to fetus is an example of..
a) active natural immunity b) active artificial immunity
c) passive natural immunity d) passive artificial immunity
- 7) Growth rate of bacteria exactly equal to death rate during.....
a) lag phase b) log phase c) stationary phase d) death phase
- 8) Clavams belongs to.....
a) β -lactams b) tetracycline c) rifamycins d) aminoglycosides
- 9) If the glycocalyx is not tightly bound to cell, it is called
a) slime layer b) capsule c) periplasmic space d) spore
- 10) is the critical permeability barrier.
a) Capsule b) Plasma membrane c) Periplasmic space d) Cell wall

II- Complete the following: (estimated time 10 minutes, 2.5 marks)

- 1)are a group of soluble proteins that regulate cellular functions.
- 2) is pentamer (5 unites linked by J-chain) released by plasma cells during the primary immune response.
- 3) CD4+ T cells recognize antigens bound to
- 4) The main complication of is aplastic anaemia.
- 5) Each antigen has many antigenic sites called.....
- 6) include all the neutral, antagonistic or synergistic relationship between two dissimilar organisms.
- 7)is the drug level required for treatment of specific infection while is the drug level at which the agent becomes harmful to the host.
- 8) Rifampicin penetrates well into cerebrospinal fluid so it can be used in treatment of
- 9) Collagenase, produced by, degrades collagen present in connective tissue.

III- Short answered questions: (estimated time 30 minutes, 5 marks)

- 1) Mention the functions of complement system? (1 mark)
- 2) What are the different types of antigens? (1 mark)
- 3) Compare between innate and adaptive immunity? (0.5 mark)
- 4) Define the properties of true pathogen? (0.5 mark)
- 5) What are the causes of inherent resistance of certain bacteria to some antibiotics? (1 mark)
- 6) Compare between exotoxins and endotoxins? (1mark)

Good luck

Kafrelsheikh University
Faculty of Oral and Dental Medicine
Term exam
Date: 14/1/2016
Time allowed: 1 hour

جامعة كفر الشيخ
كلية طب الأسنان
امتحان أعمال السنة
التاريخ: ٢٠١٦/١/١٤
مدة الامتحان: ساعة

الفرقة الثالثة
أعمال السنة
٢٠١٥ - ٢٠١٦

I- Choose the best answer:

1) is Gram negative cocci.

- a) *Staphylococcus*
- b) *Streptomyces*
- c) *Neisseria*
- d) *Enterobacteriaceae (E-coli)*

2) Which one of the following agents lacks nucleic acid?

- a) *Bacteria*
- b) *Viruses*
- c) *Viroids*
- d) *Prions*

3) Facultative anaerobes.....

- a) grow only in presence of O₂
- b) grow only in absence of O₂ as *Clostridium perfringens*
- c) grow in either presence or absence of oxygen but better growth occurs in presence of O₂
- d) requires oxygen, but less than that present in the air.

4) Which one of the following agents simultaneously contains both DNA and RNA?

- a) *Bacteria*
- b) *Viruses*
- c) *Viroids*
- d) *Prions*

5) Which of the following are prokaryotes?

- a) *Archaeobacteria*
- b) *Protozoa*
- c) *Viruses*
- d) *Prions*

6) inhibits phagocytosis.

- a) *cell wall,*
- b) *periplasmic membrane*
- c) *capsule*
- d) *ribosomes*

7) A group of six children younger than 8 years of age live in a semitropical country. Each of the children has several crusted weeping skin lesions of impetigo (pyoderma). The lesions are predominantly on the arms and faces. Which of the following microorganisms is a likely cause of the lesions?

- a) *Escherichia coli*
- b) *Chlamydia trachomatis*
- c) *S aureus*
- d) *Streptococcus pneumoniae*

8) A 60-year-old-man has a 5-month history of progressive weakness and a weight loss of 13 kg along with intermittent fever, chills, and a chronic cough productive of yellow sputum, occasionally streaked with blood. A sputum specimen is obtained, and numerous acid-fast bacteria are seen on the smear. Which treatment regimen is most appropriate for initial therapy?

- a) *Isoniazid and rifampin*
- b) *Sulfamethoxazole-trimethoprim and streptomycin*
- c) *Isoniazid, rifampin, pyrazinamide, and ethambutol*
- d) *Isoniazid, cycloserine, and ciprofloxacin*
- e) *Rifampin and streptomycin*

9) Which of the following statements about the purified protein derivative (PPD) and the tuberculin skin test is most correct?

- a) *It is strongly recommended to have PPD skin tests every 5 years.*
- b) *Persons immunized with BCG rarely convert to positive PPD skin test.*
- c) *The intradermal skin test is usually read 4 hours after being applied.*
- d) *A positive tuberculin test result indicates that an individual has been exposed to *Mycobacterium tuberculosis* in the past.*

10) *Staphylococcus aureus* are.....

- a) *gram-positive cocci*
- b) *usually arranged in grape-like irregular clusters*
- c) *coagulase positive*
- d) *all of the above*

11) *Streptococcus pneumoniae* resistance to the drug is caused by.....

- a) *The action of acetyltransferase*
- b) *The action of β -lactamase*
- c) *Substitution of the d-Ala-d-Ala dipeptide with d-Ala-d-Lac dipeptide*
- d) *Genetically modified binding proteins in the bacterial cell wall*

12) Which one of the following groups of antimicrobial agents acts on microorganisms by inhibiting protein synthesis?

- a) *Fluoroquinolones*
- b) *Aminoglycosides & tetracyclines*
- c) *Penicillins*
- d) *Glycopeptide*

13) Immunity to extra-cellular bacteria is mainly through.....

- a) *CD4+ T- lymphocytes*
- b) *CD8+ T- lymphocytes*
- c) *NK cells*
- d) *Antibodies*

14) Immunity to mycobacteria is mainly through

- a) *cell mediated immunity (CMI)*
- b) *CD8+ T- lymphocytes*
- c) *NK cells*
- d) *All of the above*

15) is responsible for cell-mediated immune responses.

- a) *Dendritic cells.*
- b) *B-lymphocytes.*
- c) *Macrophages.*
- d) *T-lymphocytes.*

16) IgG is important in.....

- a) *B cell activation.*
- b) *The primary immune response.*
- c) *Primary and secondary response.*
- d) *Preventing attachment of pathogens to epithelial cell surfaces.*

17) All β -lactam drugs act by.....

- a) *selective toxicity,*
- b) *inhibition of cell wall synthesis,*
- c) *inhibition of cell membrane synthesis and function,*
- d) *inhibition of protein synthesis,*

18) is the main phagocytic cells.

- a) *Mast cells*
- b) *Macrophages*
- c) *eosinophile*
- d) *CD4+ T- lymphocytes*

19)are spore-Forming, aerobic G+ve Bacilli

- a) *Bacillus species*
- b) *Clostridium Species*
- c) *Corynebacterium*
- d) *Actinomycetes*

20)are spore-Forming, anaerobic G+ve Bacilli

- a) *Bacillus species*
- b) *Clostridium Species*
- c) *Pneumococci.*
- d) *Corynebacterium*

II. Complete the following:

1. Types of adaptive immune response are
&.....
2. Mycoplasma is.....that
3. Glycocalyx is defined as.....
4. Cell envelope includes....., and
5. Chloramphenicol binds to of the ribosome.
6. Origin of drug resistance may be or
7. Genetic variation in bacteria takes place by.....or
8. Bacteriostatic antibiotic are capable of
9. The major toxic, virulent pathogen in the Bacillus genus is
that causes
10. Steps of bacterial infection include:
 - a.
 - b.
 - c.
 - d.

III. Put (✓) or (X) in front of the following statements:

- 1) Cocci arranged in pairs are called diplococci, for example *meningococci*. ()
- 2) Depend on the parasitized cell for survival and multiplication. ()
- 3) Mutualism means mutually beneficial relationship between two species. ()
- 4) Cell membrane is responsible for rigidity & shapes of bacteria. ()
- 5) Gram negative bacteria have teichoic acid in the cell wall. ()
- 6) Endotoxins are formed from cell-bound lipopolysaccharides. ()
- 7) Broad spectrum antibiotics are effective against G+ve bacteria & viruses. ()
- 8) Selective toxicity is relative rather than absolute. ()
- 9) Haptens can stimulate specific immune response. ()
- 10) *B. cereus* and *B. thuringiensis* cause food poisoning. ()

Good luck



Pathology Exam for second year students

Date: 18-1-2016

Midyear 10% Exam

Total marks: 10

3 Papers

Time Allowed: 1 hour

Answer the following questions, all questions to be answered:

1) Define the following terms: (2 marks)

A- Embolus:

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B- Amyloidosis:

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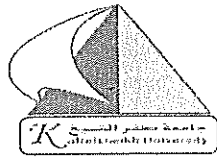
2) Choose the correct one answer for each question: (3.5 marks)

I-Which of the following is not a type of embolus?

- A. Air
- B. Bacteria
- C. Tumor
- D. Viral.

II-Apoptosis has the following features EXCEPT:

- A. There is cell shrinkage in apoptosis
- B. There are no acute inflammatory cells surrounding apoptosis
- C. There may be single cell loss or affect clusters of cells
- D. Apoptosis is seen in pathologic processes only.



III- Russel bodies are:

- A. Histiocytes engulfing the bacilli
- B. Degenerated lymphocytes
- C. Degenerated plasma cells
- D. Plasma cells engulfing the bacilli

IV- Metastatic calcification develops in:

- A. hypoxia
- B. hyperlipidemia
- C. hypercalcemia
- D. hemochromatosis

V- Pale infarction occurs in all of the following organs **EXCEPT**:

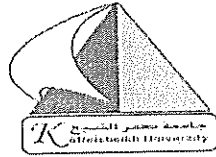
- A. Heart
- B. Kidney
- C. Lung
- D. Spleen

VI- Granulation tissue consists of the following **EXCEPT**:

- A. Newly formed capillaries
- B. Fibroblasts
- C. Macrophages
- D. lymphocytes
- E. Neutrophils.

VII- Types of interstitial hemorrhage include all **EXCEPT**:

- A- Ptechiae
 - B- Eccymosis
 - C- Purpura
 - D- Heamatoma
 - E- Heamothorax
-



4) Asses the following statements (True or False): (2.5 marks)

- i- Fistula is atract with blind end ()
- ii- Amyloid material shows yellow florescense when stained with Congo red ().
- iii- In chronic venous congestion the central zones of the liver lobules are affected more than peripheral zones ().
- iv- Pus cells produce proteolytic enzymes which liquefy necrotic debris ().
- v-Cellulitis is a diffuse type of inflammation because polymorphs produce enzymes which lead to spread of infection ().

3) Enumerate the complications of bone fracture healing: (2 marks)

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GOOD LUCK

Kafrelsheikh University - Faculty of Dentistry
10% examination in Pathology for second year students
Date: 27-1-2016
Time allowed: One hour
Total marks: 10

جامعة كفر الشيخ



اعمال السنة - الفرقة الثانية
2015 - 2016

Answer the following questions (All questions to be answered):

I. Choose the correct answer:

(2.5 marks)

1. The following are characters of transudate except:

- (A) Low protein content
- (B) Low specific gravity
- (C) Poor cellularity
- (D) Clots on standing

2. In parasitic infestations, the following cells are present in large numbers:

- (A) Neutrophils
- (B) Lymphocytes
- (C) Eosinophils
- (D) Plasma cells

3. Replacement of damaged tissue by cells of the same type is called:

- (A) Gliosis
- (B) Regeneration
- (C) Fibrosis
- (D) Degeneration

4. The cause of death in secondary amyloidosis is:

- (A) Heart failure
- (B) Renal failure
- (C) Liver failure
- (D) All of the above

5. The following events occur in necrosis except:

- (A) Pyknosis
- (B) Karyorrhexis
- (C) Karyolysis
- (D) Formation of membrane blebs

II. Mention if the statement is true or false: (2.5 marks)

- 1) Nutmeg liver occurs in cases of liver amyloidosis.
- 2) In chronic specific inflammation, the causative agent can be identified from the microscopic picture.
- 3) Albinism is a localized area of melanin hypopigmentation.
- 4) In secondary tuberculosis, the patient must get exogenous infection for the second time.
- 5) Thrombosis usually occurs in circulating blood.

III. Give the correct term for the following: (2.5 marks)

- 1) A type of degeneration characterized by extracellular accumulation of mucin.
- 2) A type of healing that occurs in clean cut surgical wounds with no gapping and minimal tissue destruction.
- 3) Escape of blood into the serous cavities or into a hollow viscus.
- 4) Deposition of calcium salts in normal tissues other than bone and teeth.
- 5) Localized suppurative inflammation of a hair follicle, usually caused by staphylococcus aureus.

IV. Complete the following sentences: (2.5 marks)

- 1) The definition of haematuria is.....
- 2) The characteristic giant cells present in tuberculosis are called.....
- 3) The type of necrosis that occurs commonly in the breast and pancreas is
- 4) The process of programmed cell death is called.....
- 5) The type of shock that occurs due to acute disease of the heart is called.....

Faculty of Dentistry.

كلية طب الأسنان

Dental Biomaterials department

قسم خواص المواد الحيوية لطب الأسنان

Date:10/1/2017

التاريخ: ١٠-١-٢٠١٧

Time Allowed: 90 minutes.

الزمن: ٩٠ دقيقة.

ALL QUESTIONS TO BE ANSWERED

I- **Choose the correct answers:**

"5 Marks"

(1) Co/Cr alloys are:

- A. Yellow and soft alloys.
- B. Rigid and ductile alloys.
- C. Soft and brittle alloys.
- D. Hard and rigid alloys.

(2) Carbon percentage in cobalt-chromium alloys varied from:

- A. 0.2 to 0.4%.
- B. 0.02 to 0.04%.
- C. 1 to 1.5 %.
- D. 0.2 to 4% .

(3) Denture base materials should have the following properties except:

- A. High impact strength and hardness.
- B. Radiolucent.
- C. Resist solubility.
- D. High tarnish and corrosion resistance.

(4) Specific gravity of gold alloys is:

- A. Twice of base metal alloys and this complicate the retention.
- B. Half of base metal alloys and this help in casting.
- C. Twice of base metal alloys and this help in soldering.
- D. Half of base metal alloys and this help in retention.

(5) Modulus of elasticity is affected by:

- A. Material composition.
- B. Material bonding.
- C. Material spatial structure.
- D. A and B.
- E. B and C.

(6) Hardness of the material determines the ability to:

- A. Resist fracture.
- B. Resist scratch.
- C. Resist penetration.
- D. A and B.
- E. B and C.

(7) Materials with lower values of Young's modulus are said to be:

- A. Stronger.
- B. Weaker.
- C. Harder.
- D. More flexible.
- E. More elastic.

(8) As stress-strain curve becomes more near to vertical axis, this means:

- A. Material more elastic.
- B. Material more resilient.
- C. Material more rigid.
- D. Material more flexible.
- E. Material more ductile.

(9) Diametral compression test measures:

- A. Compressive strength.
- B. Tensile strength.
- C. Shear strength.
- D. Flexural strength.

(10) Brinell Hardness test used to measure hardness of:

- A. Enamel and dentin.
- B. Ceramics.
- C. Polymers.
- D. Alloys.

II- Complete the following:

"10 Marks"

- (1) Atoms try to achieve the highly stable configuration of having eight electrons in the outer shells through 1-.....2-.....
3-.....
- (2) Permanent deformation is destructive in.....And reconstructive in the case of.....
- (3) The fatigue strength depends on.....&.....
- (4) Endurance limit is.....
- (5) Wear of tooth structure may result from&.....&.....
- (6) Investment molds for base metal alloys must be capable of.....high casting temperatures, and compensate
- (7) Co/Cr alloys are rigid materials as they have high.....which is about of gold alloys. So, it can be fabricated in.....

- (8) Great amount of permanent deformation indicates high.....and greater.....
- (9) The nickel-chromium (Ni / Cr) alloys are commonly used for cast restorations, while cobalt-chromium are used mainly in
- (10) The addition ofand.....to gold alloys result in whitening and hardening effects without affecting their tarnish and corrosion resistance.

III-Give reasons:**“20****Marks”**

- (1) Chromium percentage in cobalt-chromium alloys is a critical value?
- (2) High hardness and density of base metal alloys may be an advantage and disadvantage at the same time?
- (3) Phosphate bonded investment is the most commonly used type of investment?
- (4) Condensation polymerization reaction gives greater polymerization shrinkage?
- (5) Alloys have melting range instead of melting point?
- (6) Eutectic alloys have greater tarnish and corrosion tendency?
- (7) Self-cured acrylic denture base materials should not be used as a permanent denture base?
- (8) Presence of Contraction Porosity in some newly fabricated denture?
- (9) Packing of acrylic resin must be done in dough stage?
- (10) Gold alloys must be heated to a temperature above 424 °C and allowed to cool slowly to room temperature if super-lattice is to be formed?

IV-Give short notes: ONLY FIVE (5)**“25 Marks”**

- 1- Transvers strength, and its significant?
- 2- Thermal Conductivity and its significant?
- 3- Anelastic material (delayed elasticity)?
- 4- Classify Polymers According to their Thermal Behavior?
- 5- Cored structure of solid-solution alloys?
- 6- The most important THREE elements in gold alloys?

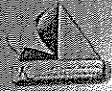
V- Define ONLY FIVE (5) of the following:**“20 Marks”**

- | | | |
|-----------------|--------------------------------|-----------------------|
| - Polymorphism. | - Atomic Packing Factor (APF). | - Malleability. |
| - Toughness. | - Cross-Linking process. | -Investment material. |

GOOD LUCK

جامعة كفر الشيخ
الكلية
الاسنان

University of Kafrelsheikh
Faculty of Dentistry



Department of Pharmacology
Mid-year Examination –Second year
Clinical Pharmacology

Date: 21/1/2017

Time Allowed 60 min.

ALL questions should be answered

Total 10 Marks

I. First Question :Complete the following statements (2.5 Marks)

1.a cholinergic agonist, used in diagnosis of myasthenia gravis .
2. is used in emergency hypertension
3. In variant angina, the drug of choice isand.....
While is contraindicated
4.symptoms, usually occur with physical dependence
5. A first generation antihistaminic is
6. is a competitive neuromuscular blocker.
7.is antidote of heparin
8. Oral anticoagulant dose is controlled by.....
9. is the physiological antagonist of histamine that
..... receptors in
- 10..... is an opioid receptor antagonist

II. Second question
PUT True or False for the following and correct the false if any
(1.5 Marks)

1. Drug potency is assessed by median dose (ED_{50})
2. Bioavailability is measured through a half-life equation
3. Acidification of urine helps aspirin excretion
4. Ipratropium Bromide is an anti-cholinergic indicated for eye examination
5. Captopril is a drug of choice in pregnancy
6. Low molecular heparins have short half-life

VI. Fourth question:

Choose the ONE best answer

(2.5Marks)

1. Paracetamol can be used clinically as anti-pyretic rectally in children in the form of:
 - a. Slow release capsule
 - b. Suppository
 - c. Effervescence tablet
 - d. Nutrition enema

2. Propranolol is classified as:
 - a. β blocker
 - b. α blocker
 - c. β_1 agonist
 - d. α_1 agonist

3. The anti-choline esterase that can be used in management of urine retention is one of the following:
 - a. Atropine
 - b. Pilocarpine
 - c. Adrenaline
 - d. Neostigmine

4. When aspirin is administered with the oral anticoagulant warfarin, one would expect the following :
 - a. Antagonism
 - b. Tolerance
 - c. Idiosyncrasy
 - d. Bleeding

5. Half life of drugs is important to determine the following:
 - a. Dose amount
 - b. Frequency of dosing
 - c. Efficacy
 - d. Potency of dosing

6. A Nitrate donor is one of the following:
 - a. Chlorpheniramine
 - b. Nitroglycerine
 - c. Adrenaline
 - d. Mepyramine

III. Third question : Complete the following table (1 Mark)

Drug	Mechanism of action	Main therapeutic use
Thiazides		
		Treatment of common cold rhinitis

7. Atropine is used is contraindicated in the following:

- a. Colic
- b. Fundus examination
- c. Anti-secretory
- d. Urine retention

8. The delicate balance between the desired effect and the unwanted toxicity of Loratidine(One of the anti-histaminic) is measured by the drug's:

- a. Potency
- b. Efficacy
- c. Therapeutic index
- d. Pharmacokinetics

9. The main organ for elimination of drugs is :

- a. Intestine
- b. Liver
- c. Kidney
- d. Sweat glands

10. The following is true, regarding Selective COX γ inhibitors:

- a. They are only antipyretic
- b. Bronchodilator effect is potent
- c. Lower gastric side effects
- d. Treat gout at the same analgesic dose

Rewrite your choices in the following table

1	2	3	4	5	6	7	8	9	10

VI. Fifth question : Short Essay questions (2.5 Marks)

1- Treatment of digitalis toxicity

- 1.
- 2.
- 3.

2- Paracetamol is preferred rather than aspirin as analgesic (two points)

-
-
-
-
-
-

3- Some drugs should NOT be administered orally (three points)

-
-
-
-
-
-

4- Define hypersensitivity

-
-

8 . Why is Warfarin contraindicated in pregnancy?

.....
.....
.....
.....
.....
.....

9- Give reason (s) for : Combination of nitrates and nifedipine is prohibited

.....
.....
.....
.....
.....
.....

10-Heparin should not be injected intramuscular

.....
.....
.....
.....
.....
.....
.....
.....

Best Wishes;

Prof. Inas Darwish Prof. Ahmed Al Gazar Prof. Mohamad Shehab

5- Give reason : Adrenaline may be added to local anesthetics

.....

.....

.....

.....

.....

.....

6- Compare between pethidine and morphine (four points)

-	
-	
-	
-	

7- Enumerate characters of Type A adverse effects (four points)

.....

.....

.....

.....

Kafrelsheikh University.

Faculty of Dentistry.

Dental Biomaterials

Date:23/1/2016

Time Allowed: one hour and half.

جامعة كفر الشيخ

كلية طب الفم والأسنان

خواص المواد الحيوية لطب الأسنان

التاريخ: ٢٣-١-٢٠١٦

الزمن: ساعة ونصف

Complete the following:

20 marks

1. Hooke's law stated that,.....
2.is the main factor affecting the elastic modulus.
3. Wear is.....and may be as a result of:
.....or.....or.....
4.&.....&.....are metals that could be used in the pure form in dentistry.
5. Voight model of viscoelasticity viscous & elastic elements are arranged.....while, in Maxwell model they are.....
6. High modulus of elasticity of cobalt-chromium alloys is an advantage as it &
&
7. High values of proportional limit of base metal alloys prevent....., while high density facilitate.....
8. Metals should have the following conditions to form solid solution alloys, (1).....
(2).....
(3).....
(4).....
9. As regard to corrosion resistance, homogenous solid- solution alloys havethan cored ones.

10. Solid solution alloys may be.....or
according to atoms distribution, and may
 be.....or.....according to size of atoms.
11. Eutectic alloys are.....

12. The presence of platinum and palladium in gold alloys results
 in.....and.....
13. Iridium is effective in gold alloy. While zinc is
 added in small quantities to act as.....
14. Softening heat treatment of the gold alloys is indicated
 to.....and carried out
 by.....and results
 in.....
15. Tarnish is a surface discoloration of a metal which results
 from.....or from.....
16. In electrolytic cell, anode is the surface having.....dissolution
 tendency andelectrode potential, and electrons are

17. Rate of corrosion depends on, 1-....., 2-
, 3-.....
18. Function of refractory material in investment
 is.....&.....while,
 the function of binder material
 is.....&.....
19. Reconstructive transformations of silica involves the and
of Si – O bonds. So it needs.....energy and occurs
 atrate.
20. The amount of thermal expansion in investment materials depends on,
&.....&.....

Give reasons:

10 marks

1-Elastic impression materials must be removed rapidly from the mouth?.....

.....

2- Permanent deformation may be destructive and constructive in dentistry?.....

.....

3-The nickel-chromium alloys are commonly used for crown and bridge restorations?.....

.....

4- Chromium percentage in cobalt-chromium alloys is a critical value?

.....

.....

5- Although nickel-chromium alloy is biocompatible alloy but, it has some health hazard?.....

.....

6- Cupper is considered to be the most important alloying element in gold alloys?.....

.....

.....

7- The oral environment is very conducive to the formation of corrosion products?.....

.....

8-Investment materials must be chemically stable at higher temperatures?.....

.....

9. In silica-bonded investment two liquids must be mixed and allowed to stand for a prescribed time before mixing with the powder?.....

.....

10. Surface-active wetting agent should be applied on the wax pattern before investing ?.....

.....

III- GIVE SHORT NOTES ON:

20 marks

**Resilience & Impact strength & Endurance limit
& Coefficient of thermal expansion.**

IV- COMPARE:

10 marks

Between two hardness methods, in which indentors are of the same material.