ASWAN UNIVERSITY

Final exam for first year medical students

PATHOLOGY+PHARMACOLOGY

DATE: 27\6\ 2019 TIME ALLOWED: 3 HOURS

I- Choose the correct answer

1. **Light microscopy examination of a renal biopsy from a patient showed tubular cells swelling and granular cytoplasm and normal nucleus. Which of the following the most probable complaint of the patient?**
   A. Hematuria. C. Chronic infection
   B. Proteinuria. D. Dyspnea.

2. **The following changes are found in fatty liver except:**
   A. Reduced oxidative phosphorylation.
   B. ATP depletion.
   C. Mitochondrial dysfunction.
   D. Cellular swelling.

3. **A 48-year-old woman has a malignant lymphoma involving lymph nodes in the para-aortic region. She is treated with a chemotherapeutic agent which results in the loss of individual neoplastic cells through fragmentation of individual cell nuclei and cytoplasm. Over the next 2 months, the lymphoma decreases in size, as documented on abdominal CT scans. By which of the following mechanisms has her neoplasm primarily responded to therapy?**
   A. Coagulative necrosis. C. Acute inflammation.
   B. Mitochondrial poisoning. D. Apoptoses.

4. **A circumscribed mass of light yellow crumbly to pasty material associated microscopically with a macrophage response is characteristic of**
   A. Caseous necrosis. C. Fibrinoid necrosis.
   B. Coagulative necrosis. D. Gangrenous necrosis.

5. **A 30-year-old female had recurrent bouts of severe abdominal pain accompanied by elevated serum amylase. Partial pancreatectomy was performed for relief of chronic pain, unresponsive to medical therapy. Gross picture shows fibrosis obscured some areas of pancreas architecture. Saponification of peri-pancreatic fat was seen in small foci with inflammatory infiltrate around fat cells. The most probable diagnosis is:**

A. Coagulative necrosis.
B. Liquefactive necrosis.
C. Fat necrosis
D. Caseous necrosis.

6. **In an experiment, a disease process is found which leads to scattered loss of individual cells, with the microscopic appearance of karyorrhexis and cell fragmentation. The overall tissue structure remains intact. the most probable pathologic process is**
   A. Caseous necrosis.
   B. Phagocytosis.
   C. Apoptosis
   D. Atrophy.

7. **The best example of dry gangrene is:**
   A. Crush injury.
   B. late diabetic foot
   C. Senile gangrene
   D. Intestinal gangrene.

8. **A football player suffered Rt fracture femur during the game, He developed respiratory distress over next several days, died 3 days later. At autopsy, Sudan III positive material was detected in small blood vessels of brain and lung, the most likely diagnosis Is:**
   A. Air Emboli.
   B. Amniotic Fluid emboli.
   C. Fat emboli.
   D. Paradoxical emboli.
   E. Saddle emboli.

9. **During deep diving in the Red sea a 50-year-old male facing a problem with a huge fish and rapidly coming out of the sea, however he rapidly suffered from dyspnea, cyanosis and died. The most likely diagnosis Is:**
   A. Air Emboli.
   B. Amniotic Fluid Emboli.
   C. Fat Emboli.
   D. Paradoxical Emboli
   E. Saddle Emboli

10. **A pregnant female progressively became cyanotic and suddenly died during her delivery. The most likely diagnosis Is:**
    A. Air emboli.
    B. Amniotic fluid emboli.
    C. Fat Emboli
    D. Paradoxical emboli.
    E. Saddle Emboli.

11. **A 20-year-old woman had Goodpasture syndrome (renal and pulmonary disease) which progressed to chronic renal failure. She is 165 cm tall and weighs 55 kg. She**

now has blood pressure measurements in the range of 150/90 to 180/110 mm Hg, but does not regularly take medications. Laboratory studies show her blood urea nitrogen is over 100 mg/dL and she required chronic dialysis. A chest x-ray shows an enlarged heart. The size of her heart is most likely to be the result of which of the following processes involving the myocardial fibers?

A. Hypertrophy.
B. Fatty infiltration.
C. Hyperplasia
D. Fatty degeneration

12. 42-year-old policeman has been seen by his family physician for a 5-year history of heartburn. He has been intermittently taking ranitidine, a proton pump inhibitor, with some relief. An upper endoscopic examination that was performed recently revealed some reddish discoloration and friability of the lower esophageal region. A biopsy of the lower esophagus was performed, and the microscopic examination revealed benign columnar cells containing goblet cells. The Most Likely Diagnosis Is:

A. Chronic Bronchitis.
B. Cancer esophagus.
C. Barrett esophagus
D. Chronic gastritis

13. The Malignant Ulcer has:

A. Undermined edge with smooth floor.
B. Undermined edge with yellow caseous Floor.
C. Sharp edge with necrotic hemorrhagic floor.
D. Punched out edge with greyish granular floor.
E. Everted Edge with necrotic floor.

14. Tumor grading is concerned with:

A. Anatomical extent of the tumor.
B. Lymph nodal metastasis of the tumor.
C. Tumor Cells differentiation.
D. Blood metastasis of the tumor.
E. Tumor cell invasion of the basement membrane

15. Osteoclastoma is:

A. Benign tumor of bone.
B. Malignant tumor of bone.
C. Locally malignant tumor of bone.
D. Metastatic tumor of bone.

16. A benign tumor usually shows:

A. lymphatic spread.
B. Many mitotic figures

C. blood spread.
D. mature cell population
E. Extensive necrosis.

17. What does TNM stand for?

A. Tumor size, lymph node, malignancy.
B. Tumor size, leiomyoma, malignancy.
C. Tumor shape, lymph node, metastasis.
D. Tumor size, lymph node, metastasis.

18. A benign epithelial cell neoplasm derived from non-glandular surfaces is named:

A. Papilloma.
B. Sarcoma.
C. Adenoma.
D. Hamartoma.
E. Squamous cell carcinoma.

19. Which one of the following is considered to be the hallmark of malignancy

A. Anaplasia and the rate of growth of the neoplastic mass.
B. Metastasis and the degree of encapsulation of the neoplastic mass.
C. Formation of giant cells & cellular anaplasia within & around the neoplastic mass
D. Presence of undifferentiated cells and evidence of metastasis.
E. Cellular anaplasia and growth by expansion of the neoplastic mass.

20. Desmoid tumor is a:

A. Malignant Fibrous Tissue Tumor.
B. Locally Infiltrative Fibrous Tissue Tumor.
C. Capsulated Fibrous Tissue Tumor.
D. Benign Epithelial Tissue Tumor.

21. The most important change in acute inflammation is:

A. Metabolic changes.
B. Vascular changes.
C. Environmental changes.
D. All of the above
E. None of the above

22. The inflammatory exudate clots on standing because of its high content of:

A. Prostaglandins.
B. Growth factors.
C. Cytokines
D. Fibrinogen.

23. Chemotaxis is defined as:

A. Generation of chemical mediators.
B. Toxic effect of chemical substances.
C. Chemical reaction at the site of inflammation.
D. Attraction of leukocytes towards certain chemical products.
E. None of the above.

24. Phagocytosis means:

A. Ingestion of foreign material by the RBCs.
B. Production of phagocytic cells
C. Ingestion of foreign material by pus cells
D. None of the above

25. Signs of acute inflammation are explained by:

A. Presence of bacteria.
B. Vascular phenomenon.
C. Patient's immune response.
D. All of the above
E. None of the above

26.The membrane formed in membranous inflammation is formed of all EXCEPT:

A. Necrotic tissue.
B. Fibrin threads.
C. Polymorphs.
D. Lymphocytes and plasma cells
E. Organisms.

27. Examples of fibrinous inflammation include:

A. Appendicitis.
B. Bacillary dysentery.
C. Rhinitis.
D. All of the above
E. None of the above.

28. The main causative organism of abscess is:

A. Streptococcus haemolyticus.
B. Streptococcus viridans.
C. Staphylococcus aureus
D. E. coli.
E. Clostridia.

29. The following is an example of chronic non-specific inflammation:

A. Rhinoscleroma.
B. Leprosy.
C. Tuberculosis.
D. All of the above
E. None of the above.

30. Cellulitis is a type of diffuse inflammation because:

A. The organism secretes enzymes which lead to spread of infection.
B. The tissue produces enzymes which lead to spread of infection.
C. The patient has weak immune response.
D. All of the above.
E. None of the above.

31. Regeneration means:

A. Replacement of the damaged tissue by fibrosis.
B. Replacement of the damaged tissue by new one of the same type.
C. Replacement of the damaged tissue by new one of different type.
D. None of the above.

32. Labile cells are:

A. Cells which never multiply.
B. Cells which multiply only when stimulated
C. Cells which regenerate continuously during adult life
D. None of the above

33. Cells, which never regenerate, are called:

A. Labile cells.
B. Stable cells.
C. Permanent cells.
D. None of the above.

34. Organization means replacement of the damaged tissue by:

A. New tissue of the same type.
B. New tissue of different type.
C. Granulation tissue.
D. None of the above.

35. Angiogenesis means:

A. Loss of blood vessels.
B. Proliferation of blood vessels.
C. Abnormal formation of blood vessels.
D. New formation of blood vessels.

36. Keloid is:

A. Mass of tumor tissue.
B. Mass of fibrous tissue.
C. Excess formation of keratin.
D. Formation of keratinous cyst.

37. Repair in the central nervous system occurs by:

A. Regeneration.
B. Gliosis.
C. Organization.
D. Resolution.

38. **Causes of hypercalcemia include all EXCEPT:**

A. Hyperparathyroidism.
B. Hyperthyroidism.
C. Destructive bone diseases.
D. Increased absorption of calcium from the intestine.

39. **In metastatic calcification, calcium is deposited in:**

A. Healthy tissue.
B. Dead tissue.
C. Degenerated tissue.
D. All of the above.
E. None of the above.

40. **Vitiligo is characterized by:**

A. Increased melanin pigment.
B. Lack of melanin pigment.
C. Abnormal hemoglobin metabolism.
D. Abnormal porphyrin metabolism.

41. **Bronzed diabetes is a manifestation of:**

A. Hemosiderosis.
B. Primary Haemochromatosis.
C. Secondary Haemochromatosis.
D. Porphyria.
E. Peutz-Jeghers syndrome.

42. **Brown atrophy of the heart results from deposition of:**

A. Melanin pigment.
B. Iron pigment.
C. Lipofuscin pigment.
D. Lipochrome pigment.

43. **Primary amyloidosis occurs in:**

A. Chronic inflammation.
B. Multiple myeloma.
C. Viral infection.
D. Rheumatoid arthritis.
E. Suppurative lung diseases.

44. **Amyloid material in primary amyloidosis is secreted by:**

A. Histiocytes.
B. Eosinophils.
C. Mast cells.
D. All of the above.
E. None of the above.

45. **Amyloid material can be detected microscopically by using:**

A. Congo red stain.
B. Thioflavin stain.
C. PAS stain.
D. All of the above.
E. None of the above.

46. **Hypertrophy means:**
A. Increase in the size of individual cells of an organ.
B. Increase in the number of individual cells of an organ.
C. Increases in the size and number of individual cells of an organ.
D. None of the above.

47. **Hyperplasia means:**
A. Increase in the size of individual cells of an organ.
B. Increase in the number of individual cells of an organ.
C. Increases in the size and number of individual cells of an organ.
D. None of the above.

48. **The following conditions can occur as physiologic processes EXCEPT:**
A. Skeletal muscle hypertrophy.
B. Uterine muscle hypertrophy.
C. Cardiac muscle hypertrophy.
D. Breast hyperplasia.

49. **Abnormality of both differentiation and maturation of the tissue is called:**
A. Hyperplasia. B. Metaplasia. C. Dysplasia. D. Neoplasia.

50. **A 65 years old woman reports to surgeon for soreness and oozing from the nipple of her left breast. There is no history of trauma to the breast. On physical examination, there is fissuring and ulceration of the areola and nipple. Deep palpation of the breast shows a hard lump 5 cm in diameter, with irregular margins underneath the nipple. One lymph node 3 cm size is palpable in the apex of right axilla the most likely diagnosis Is:**
A. Renal cell carcinoma.
B. Adrenal adenoma.
C. Breast carcinoma.
D. Breast sarcoma.

51. **Edema is:**
A. Increased blood filling of organ, tissue.
B. Increased containment of interstitial fluid.
C. Difficulties of venous blood outflow.
D. Exudate accumulation.
E. Plasma infiltration.

52. **The most frequent type of embolism is produced by**
A- Air.
B- Fat.
C- Detached thrombi.
D- Parasites.

53. A 10-year boy is brought to the physician for routine physical examination. The physician notes a 2 cm spongy dull red circumscribed lesion on the upper left arm. The parents state that this lesion has been present since infancy. On excision the lesion shows dilated endothelial lined spaces filled with RBCs. Which of the following is the likely diagnosis?

A. A. Kaposi sarcoma.
B. Angiosarcoma.
C. Lymphangioma.
D. Telangiectasia.
E. Hemangioma.

54. A 22-year-old man develops marked right lower quadrant abdominal pain over the past day. On physical examination there is rebound tenderness on palpation over the right lower quadrant. Laparoscopic surgery is performed, and the appendix is swollen, erythematous, and partly covered by a yellowish exudate. It is removed, and a microscopic section shows infiltration with numerous neutrophils. The pain experienced by this patient is predominantly the result of which of the following two chemical mediators?

A. Complement C3b and IgG.
B. Interleukin-1 and tumor necrosis factor.
C. Histamine and serotonin.
D. Prostaglandin and bradykinin.

55. A 40-year-old woman had laparoscopic surgery 3 months ago. Now she has a small 0.5 cm nodule beneath the skin at the incision site that was sutured. Which of the following cell types is most likely to be most characteristic of the inflammatory response in this situation?

A. Mast cell. B. Eosinophil. C. Giant cell. D. Neutrophil.

56. A clinical study is performed of patients with pharyngeal infections. The most typical clinical course averages 3 days from the time of onset until the patient sees the physician. Most of these patients experience fever and chills. On physical examination, the most common findings include swelling, erythema, and pharyngeal purulent exudate. Which of the following types of inflammation did these patients most likely have?

A. Granulomatous.
B. Acute.
C. Gangrenous.
D. Resolving.
E. Chronic.

57. A 21-year-old man is involved in a motorcycle accident. He incurs a fracture to his right tibia. A year later there is pain with ambulation. A radiograph of his right leg shows nonunion of the tibial midshaft. Which of the following is the most likely risk for this complication?

A. Hyperparathyroidism.
B. Osteosarcoma.
C. Osteomyelitis.
D. Osteoporosis
E. Poor alignment.

58. While in a home improvement center warehouse buying paint, a 35-year-old man hears 'Look out below!' and is then struck on the leg by a falling pallet rack, which strikes him on his left leg in the region of his thigh. The skin is not broken. Within 2 days there is a 5 x 7 cm purple colour to the site of injury. Which of the following substances has most likely accumulated at the site of injury to produce a yellow-brown colour at the site of injury 16 days later?

A. Lipofuscin.
B. Bilirubin.
C. Melanin.
D. Hemosiderin.
E. Glycogen.

59. A 54-year-old man with a chronic cough has a squamous cell carcinoma diagnosed in his right lung. While performing a pneumonectomy, the thoracic surgeon notes that the hilar lymph nodes are small, 0.5 to 1.0 cm in size, and jet black in colour throughout. Which of the following is the most likely cause for this appearance to the hilar nodes?

A. Anthracotic pigment.
B. Lipochrome deposits.
C. Melanin accumulation.
D. Hemosiderosis.
E. Metastatic carcinoma.

60. 84-year-old man dies from complications of Alzheimer disease. At autopsy, his heart is small (250 gm) and dark brown on sectioning. Microscopically, there is light brown perinuclear pigment with H&E staining of the cardiac muscle fibers. Which of the following substances is most likely increased in the myocardial fibers to produce this appearance of his heart?

A. Hemosiderin from iron overload.
B. Lipochrome from 'wear and tear'.

C. Glycogen from a storage disease D. Cholesterol from atherosclerosis.

II. Encircle true (T) or false (F).

1. Heart failure cells contain hemosiderin pigments.
2. Malignant tumors are sharply demarcated and are often encapsulated in connective tissue.
3. Anaplasia means no Neoplasia.
4. Phlebothrombosis is thrombosis in inflamed veins.
5. Ischemia is reduction of venous blood supply to a tissue.
6. Krukenberg tumor is a primary tumor of ovary.
7. The chemical mediators in acute inflammation are responsible for localization of infection.
8. Pus cell produce proteolytic enzymes which liquify necrotic debris.
9. Typhoid is an example of membranous inflammation.
10. Cardinal signs of acute inflammation are explained mainly by the vascular changes.
11. *Degeneration is a type of healing.*
12. Regeneration means replacement of the damaged tissue by fibrosis.
13. Macrophages are essential for healing.
14. Fistula is a tract with a blind end
15. Metaplasia is always precancerous.

III. Match from COLUMN I the suitable choice from COLUMN II : Table1

1- CIN III	A. Epithelial metaplasia
2- Changes in the bronchi from smoking	B. Carcinoma in situ
3- Myositis ossificans	C. Compensatory hyperplasia
	D. Mesenchymal metaplasia

Table 2

1- Metaplasia	A. increased number of cells
2- Hyperplasia	B. abnormal differentiation & maturation
3- Dysplasia	C. change one type of tissue into another type
	D. undifferentiation of malignant tumor

Table 3

1. Infarcts	A. is disordered epithelial cellular proliferation
2. Exudate	B. is stained by Ziel-Nelsen stain
3. Pyemia	C. is a rapidly developing severe reaction in an already sensitized person
4. Mycobacterium tuberculosis	D. Are caused by arterial occlusion.
5. Dysplasia	E. is turbid and clot on standing
6. Human papilloma virus	F. are modified macrophages
7. Epithelioid cells	G. May cause tumors
8.Vascular phenomenon	H. bacillary dysentery
9. granuloma	I. abscess
10.Pseudomembranous formation	J. acute inflammation
	K. Tuberculosis

GOOD LUCK

Aswan University	First Year Medical Students
Faculty of Medicine	Final Physiology Exam.
Dep. of Medical Physiology	Time allowed: 3 h.
Date: Monday,15/7/2019	Total Marks: 140

The examination is composed of **TWO** pages.

Answer all the following questions:

1- *Cardiovascular I:* ***25***

a- Give an account on the waves of normal ECG ? 10

b- Compare between the first and second heart sounds (characters and causes)? 10

c- Mention FIVE events occur during the isometric contraction phase? 05

2- *Cardiovascular II:* ***25***

a- Define oedema and discuss TWO of its causes? 10

b- Define Bainbridge reflex and explain its mechanism ? 10

c- State the chemical factors affecting the coronary blood flow? 05

3- Respiratory system: ***25***

a- Describe the mechanism of inspiration? 05

b- Define cyanosis; mention its types and causes? 10

c- Discuss factors affecting the oxygen dissociation curve? 10

4- Digestive system: ***22***

a- Mention the control of salivary secretion? 08

b- Describe the protective reflexes which occur during the pharyngeal phase of deglutition? 08

c- Discuss TWO types of small intestinal movements? 06

Continuo second page

5- *Blood:* ***15***

a- Give an account on Five factors affecting erythropoiesis? 10

b- Mention the role of blood platelets in haemostasis? 05

6- *Nerve and Muscle:* ***10***

a- Describe the excitation contraction coupling in skeletal muscles? 05

b- Mention the types of nerve conduction? 05

7- *Autonomic nervous System:* ***10***

a- Mention types and functions of autonomic ganglia? 05

b- Enumerate the functions of the pelvic nerve? 05

8- *Biophysics:* ***08***

Discuss types of simple diffusion?

Good Luck.

Prof.Mahmoud Raafat and Exam Committee

Answer Aswan University

Faculty of Medicine

Pediatrics Department

Final first term exam of first module

(Final principles of studying medicine)

الفرقه الأولي طب بشرى نظام حديث

Date:10 th February 2019 **Time allowed: 30 minutess**

Choose the best answer for the following questions (3 marks)

1. **One of the following is correct answer: (one mark)**

a. Flipped class learning approach is that lectures are distributed to be watched by students before coming to the scheduled classroom session

b. The team based Learning approach is used for small groups only

c. The average student retention rate is around 90%with audiovisual method of learning

d. Portfolio reflection is one of the formal class teaching.

e. Assignments is one of the passive learning methods

2. **The prefix pre- means (one mark)**

a. After

b. Around

c. before

d. during

e. between

3. **One of the following is not survival strategy of the medical school (one mark)**

a. Use diagrams, charts, graphs to illustrate important concepts

b. excellent time management skills

c. Review, or self review as the learning process involved in preparing questions promotes long term memories

d. learning through team based learning

e. All of the above

4. Match the word parts in Column I with the definition in Column 2: (12 marks)

Column I	Column 2
a. Incision or cutting into	1. –itis (1.5 mark)
b. Surgical puncture to remove fluid	2. -ectomy (1.5 mark)
c. Enlargement	3. centesis (1.5 mark)
d. Excision or surgical removal	4. –therapy (1.5 mark)
e. Inflammation	5. megaly (1.5 mark)
f. Treatment	6. tomy (1.5 mark)
g. Record	7. gram (1.5 mark)
h. The scientific science of a particular subject	8. Ology (1.5 mark)

Good luck

Aswan University
Faculty of Medicine
Final exam of principles of studying medicine for 1st Year of M.B.B.Ch.

Date: 7th August 2019 **Time allowed: 30 minutes**

Choose the best (one) answer for the following questions(3 marks)

1. One of the following is correct answer: (one mark)

a) Flipped class learning approach is that lectures are distributed to be watched by students before coming to the scheduled classroom session
b) The team based Learning approach is used for small groups only
c) The average student retention rate is around 90%with audiovisual method of learning
d) Portfolio reflection is one of the formal class teaching.
e) Assignments is one of the passive learning methods

2.The prefix pre- means(one mark)

a. After
b. around
c. before
d. during
a) between

3.One of the following is not survival strategy of the medical school (one mark)

a. Use diagrams, charts, graphs to illustrate important concepts
b. excellent time management skills
c. Review, or self review as the learning process involved in preparing questions promotes long term memories
d. learning through team based learning
e. All of the above

4.Match the word parts in Column I with the definition in Column 2:(12 marks)

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f. Treatment	6.tomy
g. Record	7.gram
h. The scientific science of a particular subject	8. Ology

Aswan University
Faculty of Medicine
End block exam of introduction to patient care for 1st Year of M.B.B.Ch.

كلية الطب

Date: 15th July 2019 **Time allowed: 1 hours**

Student name:

Complete the following sentences

1. Factors That Affect Vital Signs include:
    a. .....
    b. .....
    c. .....
    d. .....
    e. .....
2. **Sites For Measurement Of Body temperature**
    a. .....
    b. .....
    c. .....
    d. .....
3. Normal adult pulse rate is:.....
4. In Tachycardia: heart rate is.....
5. In Bradycardia: heart rate is.....
6. **In Normal Blood Pressure**:
    a. Average adult systolic range:.....
    b. Average adult diastolic range: .....
7. **Normal respiratory rate for adult is .....**

With our best wishes

Aswan University
Faculty of Medicine
Final exam of introduction to patient care for
1st Year of M.B.B.Ch.

Date: 15th July 2019 **Time allowed: 2 hours**

Circle the correct answer (choose only one answer for each question) (2marks for each)

1. **Factors affecting pulse rate**
    a. Age
    b. Gender
    c. Fever
    d. Medication
    e. All of above
2. **Patient with symptomatic bradycardia may develop this sign:**
    a. Hypotension
    b. Headache
    c. Sweating
    d. All of above
    e. None of above
3. **Do not take an oral temperature on:**
    a. Any young child older than 15 year of age
    b. An unconscious patient
    c. Any patient that has had any surgery
    d. All of above
    e. None of above
4. **Abnormal respirations in normal adult man:**
    a. Tachypnea – respiratory rate over 40
    b. Bradypnea – respiratory rate below 30
    c. Dyspnea: shortness of breath or difficulty in breathing
    d. Hypoventilation – fast and deep respirations
    e. Hyperventilation – slow and shallow respirations
5. **Regarding blood pressure**
    a. Systolic pressure: pressure exerted when the heart muscle is contracting

b. diastolic pressure: pressure exerted when the heart muscle is relaxing between beats
c. Blood pressure is recorded as a fraction with the systolic pressure on top and the diastolic pressure on the bottom
d. The measurement of the amount of force the blood exerts against the artery walls
e. All of above are correct

6. Which of the following statement are correct:

a. Average adult systolic range: 100 to 160
b. Average adult diastolic range: 60 to 90
c. Hypertension: measurements below the normal systolic or diastolic pressures
d. Hypotension: measurements above the normal systolic or diastolic pressures
e. None of above

7. Factors that affect blood pressure

a. Age: blood pressure decreases as a person grows older.
b. Gender: women usually have higher blood pressure than men
c. Blood volume: severe bleeding lowers the blood pressure
d. Stress: heart rate and blood pressure decrease as part of the body's response to stress
e. Exercise: decreases heart rate and blood pressure

8. **Past History include what of the following items:**

a. Injuries
b. Vaccination
c. Illnesses
d. Operations
e. All of above

9. Items of family history include

a. Name
b. Age
c. Date of admission/ examination in case of outpatients
d. Marital status:
e. Any similar or serious illness in parents, grandparents, siblings

10. Items of drug family history include

a. Any medications, taken in the past and for current illness
b. Current medications

c. "over-the-counter" (OTC) Medication, such as ibuprofen
d. All of above
e. None of above

True or false questions (2marks):

11. The presenting complaint should be given briefly in scientific terms.
12. The taking of an accurate history is the most difficult and, in the majority of medical diseases, the most important part of a consultation.
13. Normal body temperature by oral rout is 97.6 ° F to 99.6 ° F
14. Normal adult pulse rate is – 60 to 100 beats per min.
15. Normal respiratory rate for adult is 20 – 40 breaths per min.
16. High-sodium diet increases the fluid volume in the body which increases blood pressure
17. Rectal temperatures are the most accurate rote for measurement of body temperature while axillary temperatures are the least accurate

WITH OUR BEST WISHES

Aswan University
Faculty of Medicine
Department of Pharmacology

Pharmacology Examination
For
First Year Medical Students

FINAL EXAM

Time allowed: 90 min ***Date: 28/8/2019***

PART I

Write on each of the following(Two Mark Each):-

1- Enumerate TWO different parasympatholytic drugs, mention the use and main side effects of only ONE of them.
2- THREE different reasons for failure by the treatment with antimicrobial agents.
3- THREE main side effects of penicillins.
4- Differences between oral and sublingual drug administration (give ONE drug example given by each).
5- TWO therapeutic uses of propranolol.
6- TWO examples, ONE therapeutic use and TWO side effects of H_2 receptor antagonists.
7- Types of drug antagonisms.
8- THREE different factors affecting drug biotransformation.
9- Epinephrine reversal.
10- TWO different anti TB. Explaine the mechanism of action and main side effects of only ONE of them.

PART II

For each of the following MCQs select the most appropriate answer: (Two Mark Each:) Inserte your selection in the answer sheet

1- Bethanechol is not used in one of the following:

A) Paralytic ileus. B) Acute urinary retention.
C) Intestinal atony D) Peptic ulcer.

2- *Edrophonium is the drug of choice for differentiation between myasthenia gravis and cholinergic crisis because of its:*

A) Longer duration of action. B) Direct action on motor end plate.
C) Shorter duration of action. D) Selective inhibition of true cholinesterase.

3- Which of the following is not a symptom of organophosphrous poisoning?

A) Bradycardia. B) Dry mouth.
C) Respiratory failure. D) Diarrhea.

4- Which of the following is a therapeutic use of Timolol?

A) Heart block. B) Myasthenia gravis.
C) Bronchial asthma. D) Glaucoma.

5- *All the following are therapeutic uses of pilocarpine except*

A) Treatment of glaucoma alone or in combination with physostigmine (double miotic).

B) Alternatively with mydriatics to break adhesions between iris and lens.

C) Sialagogue to treat the dry mouth (Xerostomia).

D) Parkinsonism.

6- All the following are pharmacological actions of diisoflurophospate (DFP) except:

A) Generalized cholinergic stimulation.

B) Paralysis of motor function (causing breathing difficulties) and convulsions.

C) Intense mydriasis.

D) Atropine in high doses can reverse many of the muscarinic and central effects.

7- Regarding the use of atropine in In preanesthetic medication all the following statements are true except::

A) It decreases both salivary and bronchial secretions (drying effect).

B) It protects the heart from excessive vagal tone.

C) It counteracts the inhibitory effect of morphine on respiratory center.

D) It produces an enhancement of exocrine secretion.

8- One of the following is considered as irreversible choline esterase inhibitor:

A) Physostigmine. B) Neostigmine.

C) Edrophonium chloride. D) Phospholine.

9- One of the following is not considered as phase II reaction in drug metabolism:

A) Acetylation. B) Reduction.

C) Glucuronidation. D) Methylation.

10- *One of the following increases the drug concentration at site of action:*

A) Renal tubular secretion. B) Renal tubular reabsorption.

C) First pass metabolism. D) Billary excretion.

11- The main site of drug metabolism is:

A) Liver. B) Lung.

C) Skin. D) GIT.

12- Drug administratered through which of the following routes is most likely to be subjected to first-pass metabolism:

A) Intravenous. B) Sublingual. C) Intra-articular. D) Oral.

13- A full agonist is characterized by having all the following Except:

A) Affinity for the receptor. B) High intrinsic activity.

C) Both A & B. D) Neither A nor B.

14- Beta lactamase inhibitors include all the following Except:

A) Calavulinic acid. B) Sulbactam.

C) Tazobactam. D) Ampicillin.

15- One of the following can produces acetyl choline reversal:

A) Atropine. B) Prazosin.

C) Propranolol. D) Neostigmine.

PART III

Write T for the True and F for the False in each of the following statement (0.5 MARK each): Inserte your selection in the answer sheet

1- Oximes are considerd as cholinestrases reactivators.
2- Choline esters are parasympathomimetics that activate the cholinergic receptors.
3- Intra-articular injection is given into the spinal subarachnoid space.
4- Parathione is considered as irreversible choline esters.
5- Enterohepatic circulation decreases the biological half life of the drugs.
6- Bethanecol is clinically used in paralytic ileus.
7- Endogenous catecholamines include adrenaline, noradrenaline and dopamine.
8- Atenolol blocks beta two adrenergic receptors.
9- Salbutamol is a selective beta two adrenergic receptors blocker.
10 - Epinephrine increases the heart rate as well as force of myocardal contraction.
11-Epinephrine is used as a local hemostatic and in treatment of anaphylactic shock.
12-Phenylepherine is a selective alpha one adrenergic agonist which can be used in case of hypotension.
13- Clonidin is a presynaptic alpha two adrenergic stimulant which can be used in treatment of hypertension.
14- Prazocin used mainly in acute bronchial asthma.
15- Propranolol is a non selective beta adrenergic blocker used in treatment of cardiac arrhythmia.
16- Beta adrenergic blockers potentiate the hypoglycemic effect of insulin.
17-Histamine dilates blood vessels and cause a fall in systemic blood pressure.
18-Aminoglycosides may lead to reversible ototoxicity on prolonged use.

Aswan University

Faculty of medicine

Microbiology and immunology department

date: 11\7\2019

Time allowed: 3.0 hours

(Total marks = 68 marks)

Microbiology examination- 1st year

Final examination

I- Choose the correct answer (30 marks)

1- Which of the following is a character of Eukaryotic cell
   a. Containing nucleus and nucleoli
   b. Has 70s ribosomes
   c. Divided by binary fission
   d. Has single chromosomes

2- Atypical bacteria include all the following EXCEPT
   a. Mycoplasma
   b. Chlamydia
   c. Rickettsiae
   d. E coli

3- Bacteria having one flagellum at one end of the cell is called
   a. Monotrichus
   b. Lophotrichus
   c. Amphitrichus
   d. Peritrichus

4- Which of the following cells is characterized by spore formation
   a. Mycobacterium TB
   b. Clostridium tetani
   c. Staphylococci
   d. Corynebacterium diphtheria

5- Bacteria which cannot grow, even killed in the presence of O_2 is called
   a. Strict aerobic
   b. Facultative anaerobic
   c. Strict anaerobic
   d. Microaerophelic

Microbiology examination- 1st year

Final examination

6- **Which of the following stage of bacterial growth, Bacteria replicate exponentially (very rapid)**
   a. Lag phase
   b. Log phase
   c. Stationary phase
   d. Decline phase

7- **Bacterial mutation can be due to:**
   a. Substitution of one base pair in the bacterial DNA by a different base.
   b. Insertion of one or more base pairs in the bacterial DNA.
   c. Transfer of plasmid from one bacterial cell to another.
   d. Both a, b.

8- **Production of mRNA from DNA is called**
   a. Translation
   b. RNA splicing
   c. Transcription
   d. Transposition

9- **Drug resistance in bacteria is mainly determined by factor:**
   a. F- factor
   b. R- factor
   c. Col- factor
   d. Lysogenic factor

10- **Virus adsorption to host cell occurs by**
   a. Endocytosis
   b. Attachment of viral surface proteins to host cell receptors
   c. Uncoating of viral particles
   d. None of the above

11- **Enveloped viruses are destroyed by**
   a. Low temperature
   b. Glycerol 50%
   c. Lyophilization
   d. Ether

date: 11\7\2019
Time allowed: 3.0 hours
(Total marks = 68 marks)

Microbiology examination- 1st year

Final examination

12- The most important non-specific immune response to viral infection is

a. Macrophages
b. Antibody production
c. Natural killer cells
d. Mast cells

13- Concerning Aspergillus

a. Affects superficial layer of the skin
b. May cause Mycotoxicosis
c. Classified as a protozoan
d. All of the above

14- MHC molecules:

a- Coding gene is found on chromosome 6
b- Also called HLA molecules
c- Have a role in graft rejection
d- All of the above

15- Acute graft rejection is

a. Cytolytic hypersensitivity
b. Cell mediated hypersensitivity
c. Type I hypersensitivity
d. All of the above

16- Organ transplantation between a genetically different individuals of the same species is:

a. Xenograft
b. Isograft
c. Allograft
d. autograft

17- Tissue typing can be done by

a. Heamadsorption test
b. ELISA test
c. Skin test
d. Lymphocytotoxicity test

Aswan University

Faculty of medicine

Microbiology and immunology department

date: 11\7\2019

Time allowed: 3.0 hours

(Total marks = 68 marks)

Microbiology examination- 1st year

Final examination

18- An immunosuppressive drug that prevents graft rejection through inhibition of cytokine production is:

a. Methotrexate
b. Cyclosporine
c. Corticosteroids
d. penicillin

19- Leucocyte adhesion deficiency is a defect in:

a- Leucocytes migration
b- Leucocytes engulfment
c- intracellular killing inside macrophages
d- All of the above

20- Deficiency of terminal component of complement C5-C9 may be associated with:

a- Hereditary angioedema
b- Increased susceptibility to infection with capsulated organisms
c- Granuloma formation
d- Little pus formation

21- Patient with Di George syndrome usually have

a. Normal humoral immunity
b. Defect in T cell immunity
c. Congenital aplasia of thymus
d. All of the above

22- The leading cause of secondary immunodeficiency in the world is

a. HIV
b. Cytotoxic drugs
c. Malnutrition
d. Tuberculosis

23- Concerning pneumocystis:

a. P. jiroveci is the human species
b. Cause oral thrush
c. Cause Madura foot
d. Have a large gelatinous capsule

Microbiology examination- 1st year

Final examination

24- All of the following statements regarding B cells are true Except:

a. They mature In bursa of fabricious or bursal equivalent
b. They are found in the germinal centers of lymph nodes and spleen
c. They are progenitors of plasma cells
d. They are involved in humoral immunity

25- Vaccination:

a. Is a form of antigen specific immunostimulation
b. Is a form of antigen-non-specific immunostimulation
c. Does not produce immunity
d. Aims to increase innate immunity

26- Opsonization depend on the presence of the following structures on the surface of phagocytic cells:

a. Fc receptors
b. C3b receptors
c. B cell receptor
d. a& b

27- Discrimination between "self and "non self" molecules is one of the characters of

a. Innate immune response
b. Acquired immune response
c. Hypersensitivity
d. None of the above

28- Which of the following is NOT considered a non-specific defense against pathogens

a. intact skin
b. cell-mediated immunity
c. inflammation
d. Fever

29- Regarding structure, IgM is

a. Pentamer
b. Monomer
c. Dimer
d. None of the above

30- One of the properties of antigen is

a) Foreignness b) diffusion
c) Solubility d) Toxicity

Aswan University **date: 11\7\2019**

Faculty of medicine **Time allowed: 3.0 hours**

Microbiology and immunology department **(Total marks = 68 marks)**

Microbiology examination- 1st year

Final examination

II- Complete the following (20 marks)

1. .....is a small viral particle that cannot replicate unless they are present with a helper virus
2. Virus particles show 3 types of symmetry:
   - .....
   - .....
   - .....
3. Penetration of non-enveloped viruses to host cell take place by ..... while in enveloped viruses penetration take place by.....
4. Enveloped viruses are released from infected host cell by.....
5. Retroviruses can made a negative sense ssDNA from a positive ssRNA using their..... Enzyme
6. .....is the time from uncoating until assembly of mature viruses during which no infectious viruses can be detected in host cell
7. Infection of cell culture with two viruses often leads to an inhibition of multiplication of one of the virus an effect called.....
8. The virus is continuously detected with mild or no clinical symptoms is called.....
9. .....are Fungi that have two forms of growth as they may grow as yeasts or as hyphae
10. .....is condition in which the graft reacts against the recipient s tissues, instead of the recipient reacting against the graft
11. .....is a mutation in which the resulting base triplet (codon) codes for the sane amino acid
12. ..... occurs when the organism gets benefit and make harmfull effect to the host e.g. pathogenic bacteria
13. The interval between invasion of the organism to the host and appearance of clinical picture is called .....
14. ..... Is extra-chromosomal DNA having self-replication character
15. .....are the sites either on or within the antigen with which antibodies react.
16. Antigen presenting cells includes .....and .....

Aswan University

Faculty of medicine

Microbiology and immunology department

date: 11\7\2019

Time allowed: 3.0 hours

(Total marks = 68 marks)

Microbiology examination- 1st year

Final examination

III- Compare between the following (12 marks)

	Local viral infections	Systemic viral infections
Site of pathology		
Viraemia		
Duration of immunity		

	Innate Immunity	Adaptive Immunity
Specificity		
Time of action		
Memory		

	Classic pathway of complement activation	Alternative pathway of complement activation
Type of immunity		
Initiated by		
Properdin system		

Aswan University date: 11\7\2019

Faculty of medicine Time allowed: 3.0 hours

Microbiology and immunology department (Total marks = 68 marks)

Microbiology examination- 1st year

Final examination

	Primary Immune response	Secondary immune response
Time of exposure to antigen		
Type of Antibody		
Time needed for response		

IV- Put true or false for the following statements (6 marks)

1. Monoclonal Ab is a high specific Ab that react against single epitope in Ag
2. IL8 and C5a are cytokines of chemotaxis
3. Bacteria divide and multiplicate by binary fission
4. Antibody class switching occurs by the interaction between CD40 on APCs and CD40L on CD4 T cells with the help of some cytokines
5. T lymphocytes secrete Immunoglobulins
6. Passage of immunoglobulin from mother to her fetus through placenta is considered as natural active immunity

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GOOD LUCK

ASWAN UNIVERSITY

Aswan University **date: 6\3\2019**

Faculty of medicine **Time allowed: 1.0 hour**

Microbiology and immunology department **(Total marks 10)**

Microbiology examination- 1st year

Formative assessment 3

I- Choose the correct answer

1- Which of the following is characteristic to adaptive Immunity
   a. Cannot discriminate self and non-self Antigens
   b. Specificity and memory
   c. Non-specific and fast action
   d. Phagocytes are the predominant cells

2- All the following are true about CD8 T cytotoxic cells **except**
   a. Are part of adaptive immunity
   b. Are major mediators of cytotoxicity to Tumor cells
   c. Respond to Ag presented by MHC class II
   d. Respond to Ag presented by MHC class I

3- Hematopoietic stem cells are precursors to all the following cells except
   a. Lymphocytes
   b. NK cells
   c. Monocytes
   d. Vascular endothelial cells

4- Which of the following is not included in innate immunity
   a. Phagocytosis
   b. Complement system
   c. C-reactive protein
   d. Antibodies

(I) MCQ: choose the most correct answer:

1. Isomers differing as a result of variations in configuration of the -H and —H on carbon atoms 2, 3 and 4 of glucose are known as
(A) Epimers (B) Anomers
(C) Optical isomers (D) Steroisomers

2. The most important epimer of glucose is
(A) Galactose (B) Fructose
(C) Arabinose (D) Xylose

3. The sugar found in DNA is
(A) Xylose (B) Ribose
(C) Deoxyribose (D) Ribulose

4. The sugar found in RNA is
(A) Ribose (B) Deoxyribose
(C) Ribulose (D) Erythrose

5. The homopolysaccharide used for intravenous infusion as plasma substitute is
(A) Agar (B) Inulin
(C) Pectin (D) Starch

6. The polysaccharide used in assessing the glomerular fittration rate (GFR) is
(A) Glycogen (B) Agar
(C) Inulin (D) Hyaluronic acid

7. The glycosaminoglycan which does not contain uronic acid is
(A) Hyaluronic acid
(B) Heparin
(C) Chondroitin sulphate
(D) Dermatan sulphate

8. Keratan sulphate is found in abundance in
(A) Heart muscle (B) Liver
(C) Adrenal cortex (D) Cornea

9. Fructose-2, 6-biphosphate is formed by the action of
(A) Phosphofructokinase-1
(B) Phosphofructokinase-2
(C) Fructose biphosphate isomerase
(D) Fructose-1, 6-biphosphatase

10. Glucose-6-phosphatase is absent or deficient in
(A) Von Gierke's disease
(B) Pompe's disease
(C) Cori's disease
(D) McArdle's disease

11. The branching enzyme acts on the glycogen when the glycogen chain has been lengthened to between glucose units:
(A) 1 and 6
(B) 2 and 7
(C) 3 and 9
(D) 6 and 11

12. Dihydroxyacetone phosphate and glyceraldehyde-3-phosphate are intercoverted by
(A) Triose isomerase
(B) Phosphotriose isomerase
(C) Diphosphotriose isomerase
(D) Dihydroxyacetone phosphorylase

13. Citrate is converted to isocitrate by aconitase which contains
(A) Ca++
(B) Fe++
(C) Zn++
(D) Mg++

14. The conversion of alanine to glucose is termed
(A) Glycolysis
(B) Oxidative decarboxylation
(C) Specific dynamic action
(D) Gluconeogenesis

15. Two important byproducts of HMP shunt are
(A) NADH and pentose sugars
(B) NADPH and pentose sugars
(C) Pentose sugars and 4 membered sugars
(D) Pentose sugars and sedoheptulose

16. Before pyruvic acid enters the TCA cycle it must be converted to
(A) Acetyl CoA (B) Lactate
(C) α-ketoglutarate (D) Citrate

17. The enzymes involved in Phosphorylation of glucose to glucose 6- phosphate are
(A) Hexokinase
(B) Glucokinase
(C) Phosphofructokinase
(D) Both (A) and (B)

18. The optically inactive amino acid is
(A) Glycine (B) Serine
(C) Threonine (D) Valine

19. Sulphur containing amino acid is
(A) Methionine (B) Leucine
(C) Valine (D) Asparagine

20. An aromatic amino acid is
(A) Lysine (B) Tyrosine
(C) Taurine (D) Arginine

21. An essential amino acid in man is
(A) Aspartate (B) Tyrosine
(C) Methionine (D) Serine

22. Non essential amino acids
(A) Are not components of tissue proteins
(B) May be synthesized in the body from essential amino acids
(C) Have no role in the metabolism
(D) May be synthesized in the body in diseased States

23. A tripeptide functioning as an important reducing agent in the tissues is
(A) Bradykinin (B) Kallidin
(C) Tyrocidin (D) Glutathione

24. The protein present in hair is
(A) Keratin (B) Elastin
(C) Myosin (D) Tropocollagen

25. The technique for purification of proteins that can be made specific for a given protein is
(A) Gel filtration chromotography
(B) Ion exchange chromatography
(C) Electrophoresis
(D) Affinity chromatography

26. The main sites for oxidative deamination are
(A) Liver and kidney
(B) Skin and pancreas
(C) Intestine and mammary gland
(D) Lung and spleen

27. The main site of urea synthesis in mammals is
(A) Liver (B) Skin
(C) Intestine (D) Kidney

28. A compound serving a link between citric acid cycle and urea cycle is
(A) Malate (B) Citrate
(C) Succinate (D) Fumarate

29. Positive nitrogen balance is seen in
(A) Starvation
(B) Wasting diseases
(C) Growing age
(D) Intestinal malabsorption

30. All of the following are required for synthesis of glutamine except
(A) Glutamate
(B) Ammonia
(C) Pyridoxal phosphate
(D) ATP

31. A protein rich in hydroxyproline is
(A) Prolamin
(B) Procollagen
(C) Collagen
(D) Proinsulin

32. Cystinuria results from inability to
(A) Metabolise cysteine
(B) Convert cystine into cysteine
(C) Incorporate cysteine into proteins
(D) Reabsorb cystine in renal tubules

33. All the following statements about phenylketonuria are correct except
(A) Phenylalanine cannot be converted into tyrosine
(B) Urinary excretion of phenyl-pyruvate and phenyl-lactate is increased
(C) It can be controlled by giving a low phenylalanine diet
(D) It leads to decreased synthesis of thyroid hormones, catecholamines and melanin

34. DOPA is an intermediate in the synthesis of
(A) Thyroid hormones
(B) Catecholamines
(C) Melanin
(D) Catecholamines and melanin

35. Essential fatty acid:
(A) Linoleic acid
(B) Linolenic acid
(C) Arachidonic acid
(D) All these

36. The number of double bonds in arachidonic acid is
(A) 1
(B) 2
(C) 4
(D) 6

37. Deterioration of food (rancidity) is due to presence of
(A) Cholesterol
(B) Vitamin E
(C) Peroxidation of lipids
(D) Phenolic compounds

38. Dietary fats after absorption appear in the circulation as
(A) HDL
(B) VLDL
(C) LDL
(D) Chylomicron

39. An important feature of Zellweger's syndrome is
(A) Hypoglycemia
(B) Accumulation of phytanic acid in tissues
(C) Skin eruptions
(D) Accumulation of C26-C38 polyenoic acid in brain tissues

40. Number of carbon atoms in cholesterol is
(A) 17
(B) 19
(C) 27
(D) 30

41. The major storage form of lipids is
(A) Esterified cholesterol
(B) Glycerophospholipids
(C) Triglycerides
(D) Sphingolipids

42. The nitrogenous base in lecithin is
(A) Ethanolamine
(B) Choline
(C) Serine
(D) Betaine

43. Elevated plasma level of the following projects against atherosclerosis:
(A) Chylomicrons
(B) VLDL
(C) HDL
(D) LDL

44. β-Oxidation of fatty acids requires all the following coenzymes except
(A) CoA
(B) FAD
(C) NAD
(D) NADP

45. All the following statements about ketone bodies are true except
(A) Their synthesis increases in diabetes mellitus
(B) They are synthesized in mitchondria
(C) They can deplete the alkali reserve
(D) They can be oxidized in the liver

46. Cerebrosides contain all the following except
(A) Galactose
(B) Sulphate
(C) Sphingosine
(D) Fatty acid

47. Niemann-Pick disease results from deficiency of
(A) Ceramidase
(B) Sphingomyelinase
(C) Arylsulphatase A
(D) Hexosaminidase A

48. Enzymes, which are produced in inactive form in the living cells, are called
(A) Papain
(B) Lysozymes
(C) Apoenzymes
(D) Proenzymes

49. Factors affecting enzyme activity:
(A) Concentration
(B) pH
(C) Temperature
(D) All of these

50. The CK isoenzymes present in cardiac muscle is
(A) BB and MB
(B) MM and MB
(C) BB only
(D) MB only

(II) cases:

Case -1

A 1-year-old girl is brought to her pediatrician's office with concerns about her development. She had an uncomplicated birth at term. The mother reports that the baby is not achieving the normal growth for a baby of her age. She also reports an unusual odor to her urine and some areas of hypopigmentation on her skin and hair. On exam, the girl is noted to have some muscle hypotonia and microcephaly. The urine collected is found to have a "mousy" odor.

- What is the most likely diagnosis?
- What is the biochemical basis of the hypopigmented skin and hair?

Case -2

A 50-year-old female presents to your clinic with complaints of excessive thirst, fluid intake, and urination. She denies any urinary tract infection symptoms. She reports no medical problems but has not seen a doctor in many years. On examination she is an obese female in no acute distress. Her physical exam is otherwise normal. The urinalysis revealed large glucose, and a serum random blood sugar level was 320 mg/dL.

- What is the most likely diagnosis?
- What other organ systems can be involved with the disease?
- What is the biochemical basis of this disease?

Good luck

ASWAN UNIVERSITY

كلية الطب

Aswan University
Faculty of Medicine **Code No: Block INI-105**
Department of Parasitology **Date: 20 -3- 2019**

Formative Exam for 1rd year students of Medicine Time (20 min)

Subject: Medical Parasitology **(2pages)**

Name of Student: **I.D**

All questions should be answered, Choose the correct answer

1-Balantidium **move by:**

a) **Flagella**
b) **Cilia**
c) **Pseudopodia**
d) **Gliding**

2-Amoeba move by:

a) **Flagella**
b) **Cilia**
c) **Pseudopodia**
d) **Gliding**

3-The habitat is the large intestine in:

a) ***Entamoeba gingivalis***
b) ***Entamoeba histolytica***
c) ***Giardia lamblia***
d) ***Naegleria fowleri***

4- Concerning complete metamorphosis of arthropods:

a) **Egg, nymph and adult stages are found.**
b) **The intermediate stage is similar to the adult**
c) **The intermediate stages are completely different in morphology than adult**
d) **It occurs in bugs and lice**

5- Female Anopheles mosquitoes transmit
A-Yellow fever
B-Leishmania parasite
C-Human malaria
D-lymphatic filariasis

6-Plague organism is transmitted by…

a. Winged bugs
b. Fleas
c. Head lice
d. Mosquitoes

7-Scabies is a disease caused by infestation of skin with…

a. Bed bugs
b. Soft tick
c. Mite
d. Hard tick

8-Winged bugs are the biological vectors of…

a. Trematoda
b. Nematode
c. Cestoda
d. protozoal parasite

9-All these statement about mosquitoes are true except:

a)Mouth parts are adapted for piercing and sucking blood in females only

b)They have aquatic larval and pupal stages

c) Scales cover their wings, palps, thorax and abdomen

D-They have eggs, larva, nymph, pupa and adult stages in their life cycle

10-Protozoa:

a- Are all unicellular organisms .

b- Have both macronucleus and micronucleus in all species.

c- Have contractile vacuoles in all species.

D-Form cysts in faces to overcome the changes of the external environment

GOOD LUCK

Prof. Dr Ahmed dyab

Head of the parasitology department

Aswan University date: 11\7\2019

Faculty of medicine (Total marks = 30)

Parasitology department

Parasitology examination- 1st year (Final examination)

I- Choose the correct answer (one mark each - 15 Total marks)

1-The examination of a farmer revealed Fascioliasis. How could the patient be infected?

a. While eating vegetables
b. While eating liver
c. While eating fish
d. During *river* swimming

2- All are routes of exit in parasitic infection Except

a. Sputum
b. Urine
c. Stool
d. Tears

3- Mutualism is an association between two organisms in which

a. Both gain benefits
b. One partner benefits and the other is unharmed
c. One partner benefits and the other is harmed
d. none of the above

4- An obligate Parasite means that it

a. Must live inside the host
b. Does not harm its host
c. Needs 2 hosts at least
d. Must have a host.

5- Eggs of trematodes hatch in contact to water contain

a. One cell stage embryo
b. Hexacanth Embryo
c. 3rd stage larva
d. Miracidium

6-Which of the following parasites predispose to malignant lesion in the urinary bladder

a. *Wuchereria bancrofti*
b. *Fasciola sp*
c. *Ascaris lumbricoides*
d. *Schistosoma haematobium*

7-Contaminated green salad may cause infection with

a. *Ancylostoma duodenale*
b. *Trichinella spiralis*
c. *Giardia lamblia*
d. *Leishmania donovani*

Aswan University date: 11\7\2019

Faculty of medicine (Total marks = 30)

Parasitology department

Parasitology examination- 1st year (Final examination)

8- Class Cestoda has the following characters :

a. Flat worm.
b. The worms are segmented.
c. Hermaphrodite.
d. All of the above

9-Which of the following nematode have an indirect life pathway inside its definitive host?

a. Ascaris lumbricoides.
b. Enterobius vermicularis.
c. Trichocephalus trichiura.
d. None of the above.

11- In order to diagnose filarial nematode, we must search for

a. 3rd stage filariform larva in stool
b. Eggs containing 2nd stage larva in stool
c. Embryo filaria in blood film
d. Microfilaria in blood film or tissue fluid

12. **The medical importance of arthropods includes:**

a. Irritate tissue by poison and secretion.
b. Invade tissue causing serious damage.
c. Transmit pathogens of diseases.
d. All the above

13. Vagabond's disease caused by

a. Mite
b. Pubic lice
c. House fly
d. Head lice

14. **Scabies is a disease caused by infestation of skin with...**

a. Bed bugs
b. Soft tick
c. Mite
d. Hard tick

15. Tick paralysis occur due to

a. Viral infections transmitted by Ticks
b. Bacterial infections transmitted by Ticks
c. Toxins released by Ticks in their stool
d. Toxins released by Ticks in their saliva

Aswan University date: 11\7\2019

Faculty of medicine (Total marks = 30)

Parasitology department

Parasitology examination- 1st year (Final examination)

II- **Complete the following (one mark each, 5Total marks)**

1- In the transmission of diseases by arthropods The causative organisms develop with multiplication is called ...
2- The Parasites found in abnormal hosts and adapts itself to live in the new host and flourish in it is called....
3- Eggs of trematodes have an operculum at one end, except .....not operculated
4- Finding gravid segment with more than 15 uterine branches in the stool of young boy is the diagnostic feature of.....
5- Elephantiasis is the enormous enlargement of a limb or the scrotum caused by obstruction of lymphatic vessels is due to presence of adult parasite named .....

III- **Define the:(one mark each, 5 Total marks)**

1- complete metamorphosis :
2- Erratic or Ectopic parasite:
3- Myiasis
4- Hydatid disease
5- Mention the Scientific term of The Dwarf tapeworm :

IV- **put (T) for correct statement and (F) for false statement (5 marks)**

1. Perianal swab is the usual method for diagnosis of Enterobiasis
2. Stool samples containing blood and mucus should be examined as fresh as possible.
3. Rupture of hydatid cyst is a very dangerous complication.
4. Therapy for *Hymenolepis nana* infection should be given in 2 courses two weeks apart.
5. *Heterophyes heterophyes* is found mainly in the lakes of Nasser, Aswan Egypt.

تم بحمد الله تعالى مع التمنيات الطيبه بالتوفيق والنجاح

Prof.Dr. Ahmed Dyab

ASWAN UNIVERSITY

Aswan University

Final Exam of Histology

Block II (PMS/102)
1st Year Students

كلية الطب

Faculty of Medicine

Department of Histology

Date: 24-1-2019	No of Pages: 4	Time allowed: 1hr	Total Mmarks:27

I- Enumerate only: ==========> (15 Marks)

I.1- The non-membranous organelles: (1.5Mark)

1)- ..... 2)- .....

3) - ..... 4)- .....

5) - ..... 6)- .....

I.2- The structural components of proteasomes: (1Mark)

1) -.....

2) -.....

I.3- The structural constituents of nuclear pore complexes: (1.5Mark)

1)- .....

2)- .....

3) - .....

I.4- The main sources of stem cells: (2Mark)

1)- .....

2)- .....

3)- .....

4)- .....

I.5- The ultra-structural constituents of Golgi complexes: (1.5Mark)

1)- .....

3) - .....

2)- .....

أنظر خلف الورقة (To be continued) ==========>

I.6- Cells of mononuclear phagocyte system: **(1.5Mark)**

1)- ..... 2)- .....

3) - ..... 4)- .....

5) - ..... 6)- .....

I.7- Types of connective tissue: **(1Marks)**

1)- ..... 2)- .....

3) - ..... 4)- .....

I.8- Types of cartilages (mention one site for each): **(1.5Mark)**

1) -.....

2) -.....

3) - .....

I.9- Collagen secreting cells: **(1.5Marks)**

1) -.....

2) -.....

3) - .....

4) - .....

I.10- Main functions of plasma membrane: **(2Marks)**

a) -.....

b) -.....

c) - .....

d)-.....

II- Choose the correct answer: ========> **(10 Marks,** *1Mark for each*)

II. 1-The matrix of the bone contains:

a- Collagen type I. b. Collagen type II.

c. Collagen type III. d. Collagen type IV

II. 2. The bone forming cells are:

a- Osteocytes. b. Osteoblasts.

c. Osteoclasts. d. Chondroblasts.

II. 3-Which type of cartilages form the articulating surface on bone:

a- Elastic cartilage.
b- Hyaline cartilage.
c- White fibro-cartilage.
d- None of the above.

II. 4- The meta-chromatic granules are present in:

a- Fibroblasts.
b- Mast cells.
c- Plasma cells.
d- Macropfages.

II. 5- Sharpey's fibers are:

a. Elastic fibers.
b. Collagen fibers.
c. Reticular fibers.
d. a & b

II. 6- The cilium arises from:

a. The basal body.
b. Centromeres.
c. The terminal web.
d. Basal membrane.

II.7- The stratified squamous keratinized epithelium is represented by:

a. The lining epithelium of the oesophagus.
b. The lining epithelium of the trachea.
c. The epidermis of the skin.
d. The lining epithelium of the aorta.

II.8- Merocrine glands:

a. Lose their apices during the process of secretion.
b. Lose their cells during the process of secretion.
c. Discharge their secretion by exocytosis.
d. None of the above.

II.9- Epithelial tissues have:

a. Numerous blood vessels.
b. Closely aggregated cells.
c. Abundant extracellular matrix.
d. Widely separated cells.

II.10- Strong adhesion between cells needs

a. Nexus.
b. Tight junction.
c. Zonnula adherens.
d. Desmosomes.

III. Indicate whether the statement is TRUE (T) or FALSE (F):

=========> **(2 Marks,** *½ Mark for each*)

1- Intercellular ionic exchange is achieved by intercellular canaliculi. ( )
2- The epithelium lining trachea is of transitional type. ( )
3- Exocrine glands secrete directly into blood capillaries. ( )
4- Limit of resolution of light microscope is 0.2 um. ( )

********** (إنتهت الأسئلة) **********

"Have a Good Luck"

Examination Committee:

Prof. Dr. Amal Taha
Prof. Dr. Gamal Kamel
Prof. Dr. Ramadan Sayed