EHERQA

LICENSURE MODEL EXAM For Pharmacy

Time allowed: 3:00 hr

Name _____Id No _____Section_____

Multiple Choice Questions

Choose the letter of correct answer and write it in space provided on separate sheet.

1. Erythromycin suspension is very viscous and, therefore, difficult to pour from the original container into the dispensing bottles. It is also stored in a refrigerator. Prior to dispensing the desired volume of the suspension, the original container is shaken rigorously to make it easier to pour into the dispensing bottle. Why is it easier to pour after shaking?
   A. Suspensions like erythromycin are described a shear-thinning systems.
   B. When it is shaken, it is subjected to higher forces, which, in turn, increase the rate of shear.
   C. The increase in the rate of shear lower the viscosity of the suspension and enable it to flow easily.
   D. All
   E. None
2. How does the increase in the viscosity of the liquid affect the rate of sedimentation in a suspension? (Assume that the density of the particles is greater than the density of the dispersing liquid.)
   A. The sedimentation rate will not change.
   B. The sedimentation rate will be higher.
   C. The sedimentation rate will be slower.
   D. Particle sedimentation will not take place.
   E. None
3. Concerning the physical properties of emulsions, which of the following statement is wrong?
   A. Water in oil emulsions conduct electrical current and make glow of electric bulb when a pair of electrodes connected to the bulb is dipped into the emulsion.
   B. Oil in water emulsions may be used for the oral administration of therapeutic agents
   C. If the emulsion is o/w type and it is diluted with water, it will remain stable as water is the dispersion medium but if it is diluted with oil, the emulsion will break as oil and water are not miscible with each other.
   D. When a filter paper soaked in cobalt chloride solution is added to an emulsion and dried, it turns from blue to pink, indicating that the emulsion is o/w type.
   E. None

4. Regarding the rate of sedimentation of pharmaceutical suspensions designed for oral administration, which of the following statements are true?
   A. The rate of sedimentation is increased as the diameter of the dispersed drug particles is increased.
   B. The rate of sedimentation is increased as the viscosity of the continuous phase is increased.
   C. The rate of sedimentation may be increased by centrifugation.
   D. All
   E. None

5. Sodium sulfate.....5gm
   Liquid paraffin.....50gm
   Cherry syrup q.s.....120gm

   Liquid paraffin and Cherry syrup are two immiscible liquids. What ingredient would you need to formulation these preparation
   A. Suspending agents
   B. Viscosity inducing agents
   C. Emulsifying agents
   D. Solvent
   E. None

6. Which equation is used to predict the stability of a drug at room temperature from experiments at increased temperatures?
   A. Stoke's equation
   B. Arrhenius equation
   C. Michaelis–Menten equation
   D. Henderson–Hasselbalch equation
   E. Noyes–Whitney equation

7. Nystatin is one of the anti-fungal agent used and one of the common feature of this drug is its bitterness. So if we want to formulate it in a tablet form, what could be the possible way of masking its unwanted taste
   A. Conventional Tablet
   B. Chewable Tablet
   C. Coated Tablet
   D. None

8. Avoiding contact of the drug with heavy-metal ions such as iron, cobalt or nickel is one of the ways to reduce oxidative degradation of pharmaceutical products. Chelating agents like EDTA, citric acid and tartaric acid are used to complex the metals acting as
   A. True antioxidants
   B. Reducing agents
   C. Antioxidant synergists
   D. All
   E. None

9. A bottle of aspirin tablets was left loosely closed in the medicine cabinet located in the bathroom. After a few months, the user complained about an unusual odor upon opening the container and brought the bottle back to the pharmacist. The reason for such a decomposition is
   A. Formation of salicylic acid and acetic acids upon hydrolysis.
   B. Oxidation
   C. Photo-degradation
   D. Lower temperature
   E. pH

10. Which of the following solvents cannot be ingested orally with a formulation?
    A. Ethanol
    B. Glycerin
    C. Propylene glycol
    D. Polyethylene glycol 400
    E. None
11. _____are liquid preparations which comprise nitrocellulose or pyroxylin dissolved in a solvent mixture with or without a medicinal agent and are highly volatile and highly flammable and care should be taken to label any preparation appropriately.
    A. Colloidons
    B. Lotions
    C. Elixirs
    D. Linctuses
    E. None
12. Converting chloramphenicol (soluble form) to chloramphenicol palmitate (insoluble form)
    A. Makes the preparation more palatable
    B. Increase the drugs absorption
    C. Makes the preparation more permeable
    D. Makes the preparation more soluble
    E. None
13. Chloroquine is common drug for the treatment of malaria. It is a substance that is susceptible to photodegradation. So, which glass would you use as a container for these drug
    A. Blue colored
    B. Amber colored
    C. Green colored
    D. Uncolored
    E. None
14. Drug-plastic interaction is a major potential problem when intravenous solutions are stored in bags or infused via administration sets that are made from polyvinyl chloride (PVC). Which one of the following drugs does not undergo sorption with PVC bags?
    A. nitroglycerin
    B. quinidine gluconate
    C. diazepam
    D. insulin
    E. None
15. Regarding the use of preservatives in pharmaceutical solutions for oral administration, which of the following statement is true?
    A. Preservatives are not required if the solution is manufactured under sterile conditions.
    B. Esters of parahydroxybenzoic acid are used as preservatives for pharmaceutical solutions for oral administration.
    C. Preservatives render pharmaceutical solutions for oral administration sterile.
    D. They should never possess a broad spectrum of antimicrobial activity encompassing Gram-positive and Gram-negative bacteria and fungi
    E. None
16. You have been asked to prepare a suspension with the following formula. You prepare this prescription and notice that the suspension settles extremely fast, such that within 30 seconds it has completely settled.

Rx

Tracmicin: 250 mg/ml
2% methylcellulose: 10 ml
Vanillin (flavoring agent): 0.2%
Water qs ad: 100 ml

Which of the following techniques could be used to decrease the rate of settling?

A. You could increase the concentration or volume of methycellulose used in the formulation.
B. You could add a viscous liquid, such as glycerin, to this suspension.
C. You could decrease the particle size by levigating the Tracmicin in a mortar and pestle.
D. All of the above.

17. All of the following are examples of irrational use of drugs except
    b. Non-compliance with prescriptions
    c. Self-medication with prescription drugs
    d. Over use and misuse of antibiotics
    e. High adherence with medication
18. _____ is part of prescription which contains direction to be given for patient.
    A) Inscription
    B) Superscription
    C) Signatura
    D) Subscription
    E) None
19. The same drug may not be used for patients having renal or hepatic problem with that patients with healthy liver and kidney for the same disease. This indicates that
    A) Cost effectiveness
    B) Appropriateness
    C) Effectiveness
    D) Safety
20. A pregnant woman comes to your pharmacy with a prescription for prostaglandin and you required to give PG for her. Your reason most likely to avoid the risk of
    A) Teratogenic effect
    B) Abortion
    C) Eclampsia
    D) Preclampsia
21. In which of the following combination drug-drug interaction is detrimental
    A) Ampicillin and salbactum
    B) Morphine and naloxone
    C) Amoxicillin and clavulnic acid
    D) Propranolol and salbutamol
22. Which one is correct?
    A) Lack of proof of teratogenecity means that a drug is safe
    B) Lack of teratogenecity in animals is not proof of safety in animals

C) Proof of teratogenecity means that every exposure will result in a birth defect
D) All drugs cause teratogenecity

23. Which of the following drugs caused the most notorious tragedy in pharmaceutical history?
A) Tolbutamide
B) Thalidomide
C) Diethystilbestrol
D) Propylthiouracil

24. How much PPF (procaine penicillin fortified) will be discarded from the last vial if 600,000 IU of the drug is administered Bid for 7 days. The IU of the drug is 4 MIU.
A) 0.4 MIU
B) 5.4 MIU
C) 3.6 MIU
D) None

25. Indicate which of the following interactions might be expected to lead to an increased drug absorption:
A. Adsorption of drugs onto antacids and charcoal
B. Interaction of bile salts with neomycin, kanamycin, and nystatin
C. Complexation of Itraconazole with hydroxypropyl-β-cyclodextrin
D. Chelation of tetracyclines with dicalcium phosphate in tablet dosage form
E. Complexation of Phenobarbitone and polyethylene glycol 4000

26. Which one of the following statements is *wrong* about tetracyclines?
A. They are ionized over entire GI pH
B. They are too large to pass through aqueous filled pores in membrane.
C. Polyvalent cations such as Fe^{+2} and Mg^{+2} and anions such as the trichloracetate or phosphate interfere with absorption.
D. Interaction with oppositely charged endogenous organic ions form ion-pair whose overall charge is neutral and ion-pair diffuses more easily across lipoidal cell membrane.
E. None

27. All of the following characteristics are commonly shared with active transport and efflux of drugs from intestine *except*
A. work against concentration gradient
B. competitively inhibited by structural analogues
C. inhibited by inhibitors of cell metabolism
D. detrimental on drug bioavailability
E. saturable processes

28. The rate of diffusion through the cell membrane will increase if
A. The particle size of the drug increases.
B. The surface area of the membrane decreases.
C. The thickness of the membrane increases.
D. The membrane transport uphill against concentration gradient.
E. None of the above.

29. Which of the following statements is not correct?
A. The half-life of first order kinetics is concentration independent and it is a constant value.
B. Aminoglycosides and pencillins can be prescribed together for their synergestic effect though they undergo chemical incompatibility if administered at a time or infused together.

C. A patient presenting with phenobarbital (weak acid) overdose can be given bicarbonate, which alkalinizes the urine and keeps the drug ionized, thereby decreasing its reabsorption.
D. All drugs first undergo phase I reactions followed by glucuronidation which is a phase II reaction in enzymatic biotransformation process.

30. Which of the following is wrong statement?
    A. Grapefruit juice inhibits CYP3A4 and, thus, drugs such as amlodipine, clarithromycin, and indinavir, which are metabolized by this system, have greater amounts in the systemic circulation leading to higher blood levels
    B. The process of metabolism transforms polar drugs into more lipophilic and readily excretable products
    C. The oxidation proceeds by the drug binding to the oxidized form of cytochrome P450, and then oxygen is introduced through a reductive step, coupled to NADPH: cytochrome P450 oxidoreductase
    D. Rifampin, an antituberculosis drug, significantly decreases the plasma concentrations of human immunodeficiency virus (HIV) protease inhibitors, diminishing their ability to suppress HIV virion maturation.
31. A 40 year old hypertensive patient while taking anti-hypertensive drugs suffered from a precipitous fall in blood pressure and fainting on initial administration. It is commonly seen with:
    a. Nifedipine b. Prazosin c. Atenolol d. Verapamil
32. In a patient of hypertension, the dose of propranolol that normalized blood pressure, reduced resting heart rate to 50/min. Which of the following β blockers will be most suitable for him as an alternative so that heart rate is not markedly reduced:
    A. Pindolol b. Labetalol c. Bisoprolol d. Atenolol
33. A 45 years old male takes simvastatin for hypercholestrolemia; however, his cholesterol level remains above target at maximal doses. Cholestyramine is added to the therapeutic regimen. What drug- Drug interactions can occur?
    A. The combination will not lower cholesterol more than either agent alone
    B. The combination causes elevated very low density lipoprotein
    C. Cholestyramine inhibits GI absorption of simvastatin
    D. Simvastatin is a direct antagonist of Cholestyramine
34. JC is an 8 year old boy who is brought to the Emergency Department by his parents after suffering from an asthmatic attack. Which of the following would be LEAST likely to reverse bronchoconstriction in this situation?
    A. cromolyn sodium by nebulizer
    B. epinephrine s.c.
    C. ipratropium aerosol
    D. terbutaline, s.c.
    E. theophylline i.v
35. A case of poisoning has been brought to the emergency department of a hospital with weakness, fainting, uncontrolled passage of urine and stools, profuse sweating, salivation, watering from nose and eyes. The most likely cause of poisoning:
    A. Atropine
    B. Phenylephrine
    C. Malathion
    D. None of the above
    E.

36. A 48 years old man presents with a blood pressure of 146/95mmHg. He is treated with a diuretic at a dose of 25mg once daily. While his blood pressure is under control, he later develops hypokalemia. Which of the following diuretics has been most likely prescribed to the patient?
    A. Acetazolamide
    B. Amiloride
    C. Eplerenone
    D. Hydrochlorothiazide
37. A 65-year-old male is brought to the emergency department due to shortness of breath. He is diagnosed with pulmonary edema due to acute decompensated heart failure. He is started on a diuretic to improve his congestion. The most likely diuretic for this condtion?
    A. Chlorthalidone
    B. Furosemide
    C. Mannitol
    D. Triamterene
38. A 60 year old male has been placed on a diuretic to control his high blood pressure.However, after a few weeks, he develops an acute gouty attack. If the gouty attack is precipitated by the diuretic therapy, which of the following drugs has he most likely been taking?
    A. Acetazolamide
    B. Eplerenone
    C. Hydrochlorothiazide
    D. Torsemide
39. A 60-year-old female with deep vein thrombosis is prescribed a drug that inhibits the enzyme that converts the inactive vitamin K 2,3-epoxide into the active, reduced form of vitamin K. Which of the following drugs is she most likely given?
    A. Aspirin
    B. Warfarin
    C. Prasugrel
    D. Tinzaparin
40. A 65 years old male develops severe thrombocytopenia in response to treatment with an anticoagulant. Which of the following drugs is most likely responsible for this patient’s thrombocytopenia?
    A. Dabigatran
    B. Dipyridamole
    C. Prasugrel
    D. Unfractionated heparin
41. A 35-year-old man has severe schizophrenia. He is institutionalized and maintained on antipsychotic medication. Which of the following drugs is most likely to cause parkinsonian adverse effects?
    A. Clozapine
    B. Risperidone
    C. Haloperidol
    D. Olanzapine
    E. is usually started concurrently with phenobarbital therapy
42. Drug X is an antimycobacterial agent that inhibits other bacteria as well as poxviruses. However, it should not be used as a single agent because resistant mutants frequently form. The responsible mutation may alter the site of action of drug X [i.e., the deoxyribonucleic acid (DNA)–dependent ribonucleic acid (RNA) polymerase]. What is drug X?
    A. INH
    B. Rifampin
    C. Pyrazinamide
    D. Ethambutol
43. A 50-year-old male farm worker is brought delayed to the emergency room. He was found confused and since then has lost consciousness. His heart rate is 45, and his blood pressure is 80/40 mm Hg. He is sweating and

salivating profusely. He has also diarrhea, Miosis and shortness of breath, Which of the following treatments is indicated?

A. Atropine
B. Adrenaline
C. Bethanecol
D. Pralidoxime
E. methadone

44. A 50-year-patient with edema of the ankles develops gynecomastia and erectile dysfunction while being treated with which of the following agents?

A. Hydrochlorothiazide
B. Spironolactone
C. Metolazone
D. Amiloride

45. A 44-year-old obese male has a significantly high level of plasma triglycerides. Following treatment with one of the following agents, his plasma triglyceride levels decrease significantly to almost normal. By which of the following agents is it possible to get this reduction?

A. Neomycin
B. Cholestyramine
C. Lovastatin
D. Gemfibrozil

46. A 9-year-old child is having learning difficulties at school. He has brief lapses of awareness with eyelid fluttering that occur every 5-10 min. EEG studies reveal brief 3-Hz spike and wave discharges appearing synchronously in all leads. Which drug would be effective in this child without the disadvantages of excessive sedation or tolerance development?

A. Clonazepam
B. Diazepam
C. Ethosuximide
D. Phenytoin
E. Phenobarbital

47. Mr. Y is a 35 year old who came to your clinic and treated with ampicillin 500mg qid for 10 days. Six days later, he presents with sever skin rash as a result of ampicillin and you wish to change his medication. Which drug is most likely will not be your preferred option?

A. Gentamicin
B. Clindamycin
C. Ceftriaxone
D. Erythromycin

48. A patient with a *P. aeruginosa* infection is receiving intravenous gentamicin. The aminoglycoside blood levels are well above the minimum inhibitory concentration (MIC), but the clinical response is not satisfactory. A new medication order calls for adding penicillin, administered in a separate IV line to avoid a physical incompatibility. If this order is carried out, which of the following is most likely to occur?

A. The patient is likely to develop *Clostridium difficile* colitis
B. The penicillin will act synergistically with the aminoglycoside
C. The penicillin will decrease the risk of aminoglycoside nephrotoxicity
D. The risk of inducing resistance to both drugs increases dramatically

49. Mr. X, who is an accountant, is HIV positive and is on multidrug ARV regimen. After taking his medication for one month he complained that he is unable to sleep and concentrate on his routine activities. The most probable medication which is responsible for this untoward effect is:

A. Nevirapine
B. Zidovudine
C. Efavirenz
D. Indinavir

50. Adera is a 70-year-old asthmatic man comes in for a checkup and complains that he is having some difficulty in starting to urinate. Physical

examination indicates that the man has a blood pressure of 165/105 mm Hg and a slightly enlarged prostate. Which of the following medications might be responsible for the occurrence of the two conditions?

a. Isoprenaline
b. Prazosin
c. Timolol
d. Phentolamine

51. A 55-year-old patient has been referred to you. She complains about a skin rash and a cough. In the course of history taking, she tells you that she takes high blood pressure medication but she doesn't remember the name. You suspect drug toxicity. Which of the following antihypertensive agents is the patient most likely taking?

a. Captopril
b. Prazosin
c. Nifedipine
d. losartan

52. A 28-year-old woman with schizoid affective disorder and difficulty sleeping would be most benefited by which of the following drugs?

a. Aripiprazole.
b. Haloperidol.
c. Ziprasidone
d. Chlorpromazine.
e. Risperidone.

53. A 48 year old male is diagnosed with tuberculosis and has been treated for 2 months with isoniazid and rifampicin with good response. But the patient develops numbness and paresthesias in the extremities. What will you most likely do next?

A. Add pyridoxine
B. Stop isoniazid
C. Add vitamin
D. Replace rifampin with ethambutol
E. Replace isoniazid with streptomycin

54. Which of the following is true about NSAIDs?

A. They are effective analgesics for mild to moderate pain
B. They are recommended for inflammatory pain
C. They are used as opioid sparing agents in controlling severe pain
D. All of the above

55. Which of the following is the preferred rescue therapy for moderate to severe migraine and cluster headaches?

A. Aspirin 600mg po prn
B. Paracetamol 1g po 4-6hrly
C. Sumatriptan 6mg sc at attack
D. Propranolol 80mg/day po tid

56. Abrupt discontinuation of these drugs usually causes rebound HTN.

A. Frusemide and Atenolol
B. Fosinopril and Atenolol
C. Amlodipine and Clonidine
D. Atenolol and spironolactone
E. Atenolol and Clonidine

57. In patients with chronic kidney disease which of the following is important in reducing both the progression of renal disease in chronic kidney disease (CKD) and the risk for cardiovascular disease.

A. Furosemide
B. Nifedipine
C. Indomethacin
D. Enalapril

58. TK is a 63-year old, 70 kg man with intrinsic AKI secondary to ischemia after cardiac surgery. Three days later, his urine output is 350 mL in the last 24 hrs. His estimated creatinine clearance is 20 mL/min. He has signs of volume overload including 2+ pedal edema, rales, weight gain, and increased jugular venous pressure. Which of the following would be a reasonable diuretic for management of edema to patient?
    A. Hydrochlorothiazide 50mg po daily
    B. Furosemide 5 mg/h IV infusion
    C. Spironolactone 50mg po daily
    D. Metolazone 10 mg po daily
59. Which of the following statements is false regarding the white blood cell count (WBC) and differential?
    A. left shift is defined as an increase in immature neutrophils or bands
    B. Leukopenia may occur secondary to certain medications.
    C. The WBC is always elevated in response to infection
    D. The WBC differential is key to determining whether an infection is present.
    E. The WBC differential is the percentage of each type of WBC
60. AB was admitted to medical ward of Zewuditu Hospital before a week with diagnosis of cirrhosis. Associated with this he developed ascites. Which of the following diuretic regimen is recommended initial for the management of ascites in AB?
    A. Furosemide 40mg daily
    B. Spironalctone 100mg daily + Furosemide 40mg daily
    C. Furosemide 100mg daily + Spironalctone 4mg daily
    D. It is difficult to recommend based provided information
61. The drug used for the treatment of hyperkalemia to stabilize cellular membranes is:
    A. Dextrose in water + Regular Insulin
    B. $NaHCO_3$
    C. Calcium gluconate
    D. Furosemide
62. Which of the following is the correct coagulation monitoring goal for a patient with acute coronary syndrome receiving warfarin?
    A. Activated partial thromboplastin time (aPTT) 2.0 to 3.0 times control
    B. aPTT 50 to 70 seconds
    C. Activated clotting time less than 32 seconds
    D. International normalized ration of 2-3
63. A 78-year-old man is admitted to the hospital following an automobile accident for hip fracture surgery. Which of the following should be initiated to prevent VTE in this patient's?
    A. Heparin 7500 u SC bid
    B. Warfarin 5 mg once a day
    C. Aspirin 81 mg once a day
    D. Heparin 17500 U SC bid plus warfarin 5 mg daily
    E. None of the above
64. Which drug regimen you would be recommended to treat newly diagnosed TB?
    A. INH, RIF, PZA x 8 weeks, then INH, RIF x 18 weeks

B. INH x 9 months
C. INH + RIF x 9 months
D. INH + RIF + EMB + FQ x 8 wks, then INH + RIF x 18 wks
E. INH + RIF + EMB + PZA x 8 wks, then INH + RIF x 18 wks

65. Which of the following treatment regimen is/are preferred in case of nosocomial pneumonia with microbial cause of pseudomonans aeruginosa?
A. Vancomycin plus Ceftazidime
B. Ampicillin-sulbactam plus moxifloxacin
C. Cefepime plus amikacin
D. Cefotaxime plus Gemifloxacin
E. A and C

66. In patients infected with human immunodeficiency virus (HIV), which of the following symptoms is /are likely to be the clinical stage three manifestation of being infected.
A. Pulmonary Tuberculosis
B. Cryptococcal meningitis
C. Herpes simplex virus infection
D. CNS toxoplasmosis
E. None of the above

67. Mr. B 30 years old man who was tested HIV/AIDS positive. He was counseled and become ready to initiate antiretroviral therapy. Which of the following is not true?
A. Preferred first line therapy in Ethiopia is TDF/3TC/DTG
B. All patients tested positive should be started on ART regardless of CD4 count and WHO staging
C. ART should be started when CD4 count is below 350
D. ART improves CD4 count and decreases Viral load
E. Cautious monitoring of early side effects, adherence assessment is required after ART initiation

68. Which of the two agents are most frequently used for the treatment of induction therapy in Acute Myelogenous Leukemia?
A. Cytarabine and daunorubicin
B. Vincristine and asparaginase
C. Doxorubicin and cyclophosphamide
D. Methotrexate and vincristine
E. None of the above

69. Patients must receive dexamethasone and antihistamines as premedication prior to receiving paclitaxel to decrease the likelihood of:
A. Cardiotoxicity
B. Myelosuppression
C. Neurotoxicity
D. Renal failure
E. Hypersensitivity reactions

70. Treatment of hematologic malignancies is associated with high risk of tumor lysis syndrome. This problem is prevented by giving:
A. Prednisone
B. Allopurinol
C. Mesna
D. Adequate hydration

71. Which group of patients should receive ampicillin as empirical antibiotic therapy to have coverage on Listeria monocytogenes in cases of presumed meningitis?
A. Immunocompromised patients
B. Elderly patients
C. Infants
D. All of the above

72. Which statement is CORRECT about treatment of cryptococcal meningitis in HIV infected patients?
   A. Amphotericin B IV 0.6-1 mg/Kg/day with flucytosine for 2 weeks followed by fluconazole 400 mg daily for 8 weeks or until CSF sterile.
   B. Fluconazole 400-800mg mg daily for 8 weeks or until CSF sterile
   C. Fluconazole 200mg daily is recommended till CD4+ count >200 cells/uL for 3-6 months
   D. CSF drainage for increased intracranial pressure

73. D.A., a 35-year-old man with stage IV Hodgkin's disease, is receiving CHOP (cyclophosphamide 750 mg/m^2 IV day 1, doxorubicin 50 mg/m^2 IV day 1, vincristine 2 mg IV day 1, and prednisone 100 mg PO days 1– 5) and concurrent radiation therapy to a large mediastinal mass. He comes to the clinic to receive his fifth cycle of CHOP and complains of tachycardia, shortness of breath (SOB), and a nonproductive cough. Physical examination reveals neck vein distention, pulmonary rales, and ankle edema. What is the most likely agent that causes D.A.'s cardiotoxicity symptoms?
   A. Cyclophosphamide
   B. Doxorubicin
   C. Vincristine
   D. Prednisolone
   E. Radiation therapy

74. A 60-year-old woman was hospitalized in Minillik II General Hospital for pneumonia and treated with an intravenous antibiotic. On day three, she develops severe diarrhea. stool is positive for Clostridium difficile toxin. What is the best treatment?
   A. Metronidazole 500mg tid 10 days
   B. Doxycycline 100mg daily 10 days
   C. Ceftriaxone 1g daily for 7 days
   D. Azithromycin 500mg for 3 days

75. Which of the following anti-TB medication is not associated with hepatotoxicity?
   A. Isoniazid
   B. Rifampin
   C. Ethambutol
   D. Pyrazinamide

76. Which of the following patient is best candidate for Systemic corticosteroids use
   A. Chronic asthma presenting with symptoms of asthma
   B. Moderate persistent chronic asthmatic patient
   C. Acute exacerbation of asthma not responding completely to short acting B-agonists
   D. All of the above

77. Which of the following patients is at highest risk for acute renal failure?
   A. A 22-yo with sickle cell trait
   B. A 32-yo with type 1 diabetes receiving contrast dye for a CT scan
   C. A 72-yo with heart failure (EF = 35%), taking lisinopril 5 mg daily
   D. A 56-year-old with chronic obstructive pulmonary disease, taking theophylline 300 mg daily

78. A 56 yo patient who is being treated at Minillik II Hospital has been ordered for radiographic imaging (MRI), however the resident was concerned for contrast dye induced acute kidney injury (AKI) since the patient was diabetic

taking glyburide and meformin. Which of the following prevention strategies should be employed for this patient?

A. IV infusion of 0.9% NaCl at 150 mL/h before administering a dye
B. Tight glycemic control with insulin (blood sugars 80–110 mg/dL)
C. Discontinue metformin at least two days before contrast dye use
D. All of the above

79. J.S., a 65-year-old, 110-kg man was critically ill patient was admitted to the medical ICU of TASH and has been on mechanical ventilation. What would be preferred in this patient to prevent stress induced mucosal upper GI bleeding?

A. Cimetidine 200mg IV bid
B. Omeprazole 40 mg IV bid
C. Patoperazole 30 mg PO bid
D. Antacid 30 mL PO/NG every 1–2 hours

80. Which of the following is the most frequent late side effect associated with daunorubicin?

A. Constipation
B. Hyperglycemia
C. Renal toxicity
D. Cardiotoxicity
E. None of the above

81. S.E., a 66-year-old white woman, recently had a routine CBC drawn during her annual checkup. Her CBC showed a WBC count of 60,000 cells/μL with 90% neutrophils, a hematocrit of 32%, and a platelet count of 300,000 cells/μL. The only pertinent physical finding was splenomegaly. On further workup, a bone marrow aspirate revealed a hypercellular marrow with less than 10% blasts. Cytogenetic analysis confirmed a diagnosis of Philadelphia chromosome–positive CML. What would be the treatment option for this patient?

A. Hydroxyurea for initiation reduction of leukocyte count
B. Imatinib mesylate (400 mg PO daily) for the treatment of patients with CML
C. CM initiate Allopurinol to prevent tumor lysis syndrome
D. All of the above

82. The drug of choice for treatment of mixed type of absence seizure in children older than 2 years

A. Ethosuximide
B. Phenytoin
C. Valproic acid
D. Lamotrigine

83. The best treatment of opioid induced constipation is:

A. Prevention with the proper intake of fluids, fiber, and stimulant laxatives
B. Prevention by using propoxyphene
C. Concomitant use of acetaminophen with the opioid
D. Concomitant use of aspirin
E. All the above

84. The opiod of choice for treat acute pain associated with myocardial infarction

A. Meperidine
B. Morphine

C. Diclofenac D. Tradamol

85. The following drug would be preferred when treating mild pain in a 30-year-old male with no significant medical history and who is taking no medications:
    A. Nalbuphine
    B. Acetaminophen
    C. Propoxyphene
    D. Codeine with acetaminophen
86. Alemu is a 52-year-old man who was recently diagnosed with primary hypertension. His comorbidities include diabetes and dyslipidemia. A recent urinalysis revealed proteinuria. Which of the following antihypertensives would be most appropriate for this patient?
    A. Furosemide B. Hydralazine C. Lisinopril D. Metoprolol succinate E. Verapamil
87. Which of the following drugs is/are the cornerstone of pharmacotherapy for patients with chronic heart failure, Except:
    A. Loop diuretics
    B. ACE inhibitors
    C. Calcium channel Blocker
    D. β – blockers
    E. None of the above
88. Community-acquired pneumonia is most commonly associated with
    A. Staphylococcus aureus
    B. Listeria monocytogenes
    C. Legionella species
    D. Streptococcus pneumoniae
89. A patient on warfarin therapy was admitted to hospital due to bleeding and INR has been 11.6. how should treated?
    A. Vitamin K intravenous
    B. Switch to heparin therapy
    C. Discontinue warfarin
    D. Continue warfarin therapy and monitor
90. Which of the following is false about metformin?
    A. All patients with type II DM should take it unless contraindicated
    B. Its major side effects are weight gain and hypoglycemia
    C. It reduces hyperglycemia by sensitizing insulin receptors
    D. It helps to lose weight
91. Which of following is False regarding management of diabetic ketoacidosis (DKA)
    A. Fluid replacement (N/S) of 1-2 liters in the first 1-3 hrs
    B. Regular Insulin should be initiated rapidly regardless of the electrolyte abnormality
    C. Supplementation of potassium should be made, although it is in normal range [$K > 3.5$]
    D. Close monitoring of vital signs, electrolytes and plasma glucose are necessary
92. SR is 23 yrs old woman had unsafe sex with her boyfriend last night. Now she came to your pharmacy to avoid unintended pregnancy. Which of the following is drug is appropriate for SR
    A. Yasmin (EE 30mg + drospirenone 3mg) daily for 21days
    B. Levora (EE 30 mcg Levonorgestrel 0.15 mg) daily continuously
    C. Two tablets 0.75 mg of levonorgestrel take 12hrs apart
    D. Depot MPA 150 mg Injection

E. All of the above

93. Which of the following regimen is appropriate for treatment of iron deficiency anemia using ferrous sulphate containing 20% elemental iron?
   A. 500mg tid for 3-6mths
   B. 325 mg tid for 3-6mths
   C. 650mg bid for 3-6mths
   D. 425mg tid for 3-6 mths

94. Which of the following statement best describes interpersonal communication?
   A. Talking to colleagues about a recent workshop experience
   B. Listening to a co-worker about an upcoming assignment she is leading
   C. Sending and receiving information between two individuals.
   D. Providing lecture presentation at national pharmacy workshop
   E. All of the above

95. Within the communication process, numerous barriers exist that may disrupt or even eliminate interpersonal interaction. Which of the following is the common barriers for pharmacist- patient communication?
   A. Environmental barriers
   B. Personal barriers
   C. Administrative barriers
   D. Time barrier
   E. All of the above

96. Which of the following statements are true about verbal and nonverbal communication?
   A. When they are incongruent, the verbal message will most likely be the one received
   B. When they are incongruent, the nonverbal message will most likely be the one received.
   C. Meanings to messages are mainly assigned from verbal communication than nonverbal one
   D. Nonverbal communication is not as powerful as verbal communication

97. Which of following is not pharmacist related personal barriers in pharmacist patient communication?
   A. Pharmacists lack of confidence and lack of eye contact with patient
   B. Patient perception on the pharmacist's knowledge and trustworthiness
   C. Pharmacists ignorance of cultural differences while communicating patient
   D. Pharmacist speaks too loudly for privacy
   E. None of the above

98. When interviewing patients on their medication use, the appropriate questions to initiate communications is:
   A. How long have you taken this medication before?
   B. Do you understand how to take it?
   C. Do you have any questions about the medicine?
   D. How are you taking your medication?

99. Body posture can have a major influence on how well a communication progresses or even if it gets started at all. One of the following can shorten or halt the productive communication (Closed posture), Except:
    A. Legs crossed at knees
    B. Legs comfortably apart, not crossed
    C. Head facing downward
    D. Eyes looking at the floor

100. The following behaviors is appropriate when a pharmacist conduct interview session:
    A. Making recommendation during information gathering phase
    B. Keeping the goals in mind during interview
    C. Frequently shifting from one subject to another even though the subject isn't covered
    D. Jumping to conclusion when the patient thought is longer.
    E. All of the above

101. The head of your local pharmacy calls and asks you to serve as chairman of a new committee. You are interested in the committee but are not sure you have the time to chair it. Which of the following responses would be the best assertive way to answer:
    A. "Well, I'd really like to. I guess I could if it doesn't take too much time."
    B. "Why don't you ask Mr X? He'd be good. If you can't find anyone else, maybe I could do it."
    C. "I'm interested in the committee, but I'm not sure I have time. Let me think about it tonight and I'll call you in the morning with my decision."
    D. "I've given enough time to this organization. Everyone always comes to me. Let someone else do some work for a change."

102. The most effective strategy for conflict resolution through cooperation of both parties as they strive to understand each other's concerns and work to find a mutually satisfying solution is:
    A. Withdrawal
    B. Confrontational
    C. Accommodation
    D. Compromise

103. As a pharmacist, you must be a good listener to your patient and it is your responsibility to provide your patients with the sense that you understand their feelings well; is
    A. Summarizing
    B. Paraphrasing
    C. Emphatic response
    D. Feedback

104. Which of the following is True about Tertiary resources of drug information?
   A. Resources that are the original articles
   B. Resources are mostly on World Wide Web (electronic)
   C. Resources that should be utilized in answering a DI question
   D. All of the above
105. Which of the following is a primary source of drug information?
   A. An original research articles
   B. Reference books for pharmacotherapeutics
   C. Pubmed database
   D. A review articles
106. Which of the following medicine information material is used as a powerful tool to guide the rational development of a drug formulary?
   A. Newsletter
   B. Drug Alert
   C. Monograph
   D. Brochures and fliers
107. Referring to the hierarchy of evidence which study designs are the least useful?
   A. Meta-analysis
   B. Cohort studies
   C. Randomized Double Blind Studies
   D. Case reports
108. Which of the following is issues should be considered during of preparing to writing?
   A. Knowing the purpose of writing
   B. Knowing the audience
   C. Knowing the publisher’s requirements
   D. All of the above
109. In developing newsletter or website which of the following should be considered
   A. Appearance is more important than content
   B. Keeping the publication constant
   C. Using the same template
   D. All of the above
110. The following are true about the preparation and dissemination of drug information except
   A. Putting oneself in the readers position is one of the rules to apply in the preparation of drug information
   B. The prepared material should be disseminated periodically
   C. Newsletter or drug alert are the major DIC materials to inform new updates
   D. Any response to a query should constitute an Introduction, Methods, Results, and Discussion.
111. A pharmaceutical company wanted to use a diluent for moisture sensitive drug which will not interact with amine drug. Which one of the following would you recommend?
   A. Magnesium stearate
   B. Lactose

C. Aspartame D. Dicalsium phosphate

112. A hard gelatin capsule shell formulation consists of gelatin, methyl paraben, FD and C certified dye and titanium dioxide. The purpose of methyl paraben and titanium dioxide in this formulation is-------- & ----------, respectively.
   A. Preservative& antioxidant C. Preservative &Opacifier
   B. Plasticizer&Opacifier D. Plasticizer & Colorant

113. A company decided to shift its tablet coating operation from sugar coating to film coating. What could be the advantages that the latter renders for the manufacturer when compared to the former?
   A. Shorter processing time C. can put logo on tables
   B. Can formulate controlled release tablets D. All

114. A pharmaceutical industry wants to formulate a liquid formulation of cyclosporine, an immunosuppressive agent and fill it into soft gelatin capsules. Which one of the following solvents is not the best choice for dissolving this drug?
   A. corn oil C. water
   B. coconut oil D. propylene glycol

115. If capping and lamination occurred during tablet compression, which one of the following measures does not solve the defect?
   A. Reducing percent of fines of granules
   B. Optimizingmoisture level of granules
   C. Using flat punches instead of deep concave punches
   D. Setting the tooling so that lower punch remains below the face of the dieduring ejection

116. Tablets are the most popular dosage forms. That is because tablets are
   A. Easy to tamper
   B. Easier to formulate
   C. Easier to manufacture
   D. None

117. One of the following is not true about tableting by direct compression method
   A. Agglomeration step is necessary before tableting
   B. Popular method because it reduces the number of unit operations
   C. Tablets may disintegrate faster into primary dug particles
   D. It is not a universal method
   E. None of the above

118. One of the following is not true about tableting by wet granulation method
   A. Useful for fluffy powders
   B. Ideal for Powders that may generate a lot of static charge
   C. Lots of experience in the industry
   D. Multiple steps and lots of equipments
   E. None of the above

119. Dry granulation disadvantage does not include

A. The energy input can alter crystal form of active ingredients
B. Makes very hard granules – disintegration and dissolution can be affected
C. May generate static charge which results in poor powder flow
D. None of the above

120. The rational for the use of SGC does not include
A. Improved drug absorption
B. Increased patient compliance
C. Adaptability for pellet filling
D. Product stability
E. None of the above

121. A pharmaceutical company needs to manufacture Aspirin tablets. It is known that aspirin is moisture sensitive and has poor flow and compression property. The company has no directly compressible diluents. What method would you recommend the company to use?
A. Wet granulation
B. Dry granulation
C. Direct compression
D. A & B could be used

122. Which one of the following methods can be used to detect telescopic defect of filled hard gelatin capsules?
A. Leakage test
B. Visual inspection
C. Dissolution test
D. Weight variation test

123. When compared to capsule manufacturing, tablet manufacturing:
A. Require fewer unit operations
B. Is slower process
C. Has higher production rate
D. Needs fewer equipments
E. Enable putting of logo on tables
F. All

124. Which of the following is <u>not</u> used primarily as a diluent in tablet formulations?
A. Magnesium stearate
B. Lactose
C. Starch
D. Dicalsium phosphate

125. A pharmacist fills 250mg of a drug into number 2 capsules and finds that the capsule is too small to accommodate the powder. She may select to use:
A. A number 4 capsule
B. A number 0 capsule
C. A number 3 capsule
D. A number 5 capsule

126. Excipients used in the manufacturing of hard gel capsules filled with powder drug and their primary functions are given. Choose the one which is <u>mismatched</u>.
A. Lactose- binder
B. Magnesium stearate- lubricant
C. Sodium starch glycolate- disintegrant
D. Sodium lauryl sulphate- surfactant

127. The <u>correct order</u> in the manufacturing of Empty hard gel capsules is:
A. Stripping – dipping –spinning –Drying – cutting –joining
B. Dipping –spinning –Drying – Stripping -cutting –joining

C. spinning -Dipping ––Drying – Stripping -cutting –joining
D. rectification-Dipping ––Drying – Stripping -cutting –joining

128. The correct order in the manufacturing of filled hard gel capsules is:
   A. Filling- capping-ejection-rectification
   B. Capping- rectification- filling-ejection
   C. Rectification-filling- capping-ejection
   D. Filling-ejection-rectification-capping
129. As per GMP Validation should be necessary when:
   A. Any new master formula is adopted
   B. New method of preparation is adopted
   C. New equipment is used
   D. All
130. Which one of the following statement is correct about GMP?
   A. GMP is a part of QC aimed at ensuring that products are consistently manufactured to a quality appropriate to their intended use
   B. QA is laboratory based process
   C. All containers and equipment should bear labels
   D. Testing is part of GMP, and alone it provides a good level of quality assurance
131. EPHARM a pharmaceutical company wants to manufacture Tinidazole tablet (500mg) using 100kg Tinidazole active ingredient. After the granulation and dry mixing total impute of all material was 120 kg. What should be the average weight of paracetamol for compressions?

A. 500mg B. 600mg C. 700mg D. None

132. A pharmacist is facing Tablet Dissolution problem while Developing a poorly water soluble drug. Which excipient is suggested to be added to resolve the problem?
   A. Parabens
   B. Lactose
   C. Magnesium stearate
   D. Sodium lauryl Sulphate
133. Evaluation of empty gelatin capsule does not include
   A. Moisture content test
   B. Disintegration test
   C. Wight lose on drying
   D. General appearance
   E. Dissolution test

134. The rationales for the preference of soft gels are
   A. improved drug absorption
   B. increased patient compliance
   C. adaptability for oily drugs filling
   D. Enhanced accuracy
   E. All

135. As per GMP self-contained facilities must not be available for
   A. production of cephalosporin
   B. production of tetracycline's
   C. production of hormones
   D. production of cytotoxic materials
   E. production of penicillins
136. The correct order in the manufacturing of Tablet manufacturing by RMG(Rapid Mixer Granulator) is
   A. Wet granulation – FBD Drying – Milling – Dry mixing -Compression
   B. FBD Grabulation -FBD Drying – Milling Dry mixing –Compression
   C. Dry mixing- granulation – milling - compression
   D. Granulation- Milling – tray drying – dry mixing – compression
137. Which methods of drug manufacturing is used when the drugs are moisture sensitive and sensitive with high temperature?
   A. Dry granulation
   B. Wet granulation
   C. Pulverization
138. During tablet compression a production pharmacist encounter tablet sticking on the dye cavity. Which remedial action is not correct
   A. Dry the granules properly. Make moisture analysis to determine limits.
   B. Increase or change lubricant.
   C. Increase the amount of binder or use a different type of binder.
   D. Modify granulation and compress under controlled humidity.
139. During tablet compression a production pharmacist encounter tablet Picking on the a punch face.. Which remedial action is not correct?
   A. Increase lubrication
   B. Add high melting-point materials. Use high meting point lubricants.
   C. Reduce the amount of binder, change the type or use dry binders.
   D. Use Embossing or engraving letters on punch faces such as B, A, O, R, P, Q, G.
   E. Plate the punch faces with chromium to produce a smooth and non-adherent face.
   F. Reduce depths and sharpness of Bevels or dividing lines which are too deep
140. One of the following is not true about tablets quality control
   A. Friability test is used to determine the mechanical strength of tablets
   B. Tablets disintegration test better explains the quality of tablets than dissolution test does
   C. Friability test is conducted by putting tablets in a rotating drum and then by measuring the percentage of weight loss
   D. None of the above
141. One of the following implies the difference between soft gel and hard gel manufacturing
   A. In both cases the capsules are filled in place

B. In both cases capsule shells must contain plasticizers
C. The filling operation is more precise in the case hard gels than that of soft gels
D. Hard gel capsules shells may contain flavors and sweeteners.
E. none of the above

142. During separation of empty hard gelatin capsule components (cap and body)
A. The cap and the body pass through a bushing (upper and lower) which are later separated for filling
B. The capsules rectify themselves through a rectification channel , i.e. body-end downward
C. Vacuum is utilized to trap the cap to the lower bushing
D. Narrow tubes effect cap and body separation
E. All of the above
F. A and B

143. If a prescription reads “Augmentin 875 mg po bid x 10 days,” how many cc of Augmentin 250 mg/5 cc are required to fill a ten-day supply?
A. 350 cc
B. 17.5 cc
C. 35 cc
D. 5 cc

144. If a QC analyst checks a test method for the effects of excipient in a placebo tablet. The AMV parameters is he is doing is…….
a. Accuracy
b. Specificity
c. Linearity
d. Repeatability

145. Due to un availability of material a production pharmacist wanted use to starch in place of lactose as a tablet diluent which QA documentation system he has to fill to comply with QA requirements
a. Deviation control
b. Change control
c. Corrective action control
d. Document control

146. In a QC lab the analyst was not able to get consistent HPLC readings up on using different concentration of the sample. For which analytical method verification /Validation/ challenge test he should run in order to make sure the method is suitable for the intended purpose.
a. Accuracy
b. Specificity
c. Linearity
d. Repeatability

147. A QA department is planning to validate tablet compression process by involving and evaluating past experience of production which includes the results of in-process and final control tests are then evaluated. Such kind of process validation is regarded as. a. a.

a. Retrospective
b. Prospective
c. Adaptive
d. Concurrent

148. Which method validation parameters is more specifically used in test method validation of impurities. Please write in the space……
    a. Method's Specificity
    b. Method's Linearity
    c. Method's Limit of quantification
149. If a QC analyst checks a test method for recovery of known samples. The Analytical Method Validation parameters is he is doing is…….
        a. Accuracy
        b. Specificity
        c. Linearity
        d. Repeatability
150. In AMV 10x $\frac{Standared\,Deviation}{mean}$ used to calculate
        a. Limit of detection
        b. Specificity
        c. Limit of quantification
        d. Repeatability
151. Which of the following is the principle of beneficence?
    a. promoting health c. removing a pain or suffering
    b. preventing diseases d. all
152. Which principle defines the obligation to treat all clients in an equal and fair way?
    a. Justice c. veracity
    b. autonomy d. informed consent
153. When can we say an informed consent has been obtained from a patient?
    a. when patient has been provided with all relevant information
    b. when patient understands the information
    c. if patient is capable of understanding the information
    d. when there is no coercion in the consent
    e. all
154. If a physician discloses about the HIV test status of his patient to his friends, he is possibly violating the principle of;
    a. confidentiality c. veracity
    b. non-maleficence d. fidelity
155. Which of the following does not contain a macro element in ethical dilemma?
    a. abortion c. organ transplant
    b. assisted suicide d. dispensing a controlled substance without a prescription
156. At which condition is abortion justified in Ethiopia?

a. rape c. risk for mother's health
b. pregnancy from a relative d. all

157. What could be the basis for development of ethical principles in healthcare practices?
a. the Belmont report (1979) c. c. Violations during Nazi war crimes
b. The Nuremburg code (1947) d. Violations during the Tuskegee syphilis study
e. all

158. Which of the following can be regarded as a good behavior of a pharmacist?
a. Recommending a medical practitioner to a patient
b. enter in a secrete arrangement with a medical practitioner
c. collaborate in malpractice with a patient or a health professional
d. treating all patients equally irrespective of any background
e. all except d

159. A pharmacist in relation to his/her trade;
a. should not promote medicines unethically
b. should promote fair distribution of pharmaceuticals
c. obtain pharmaceuticals from genuine source
d. all

160. Which of the following does not show adulteration of a medicine?
a. presence of decomposed substance
b. packed under insanity condition
c. manufactured or processed under conditions that do not comply with GMP standards
d. contain poisonous or deleterious substances
e. quality control tests are the same with package labels

161. What are the reasons for conducting a drug use evaluation study?
a. To describe and compare current pattern of medicines use
b. To identify drug use problems
c. To monitor medication use over time
d. All

162. Which is an example of prescribing indicators?
a. Percent of encounters prescribed by generic
b. Percent of encounters with antibiotics prescribed
c. Percent of encounters with injections prescribed
d. All
e. None

163. When is consumption method of drug quantification appropriate?
A. if there is accurate consumption data
B. if drug supply is consistent
C. if there is appropriate stock management system
D. if wastage and expiry are excessive
E. all except D

164. Which is not the disadvantage of consumption method?

A. does not encourage morbidity recording
B. Requires less detailed calculation
C. not reliable if there have been long stock outs
D. may not be appropriate for rapidly expanding service

165. Morbidity method of drugs quantification is appropriate if;
   A. available consumption data are incomplete
   B. prescribing patterns are not cost effective
   C. budget is not adequate
   D. all of the above
166. One is not part of a procurement principle
   A. procure by generic
   B. procure from essential drug list
   C. procure in smaller quantity
   D. apply transparent and written procedure
167. Which method of procurement has the list price
   A. open tender
   B. restricted tender
   C. direct procurement
   D. competitive negotiation
168. When should stock records be updated?
   A. whenever stock movement occurs
   B. during every physical inventory
   C. in cases of losses
   D. every day
   E. all except D

169. The stock level that is kept tor reserve to prevent stock outs is termed as;
   A. buffer stock
   B. safety sock
   C. reorder stock level
   D. A and B

170. Which of the following is less likely to affect rational use of drugs?
   A. prescribing practice
   B. dispensing practice
   C. patient adherence
   D. good manufacturing practice (GMP)
   E. all of the above
171. A person with Lactose intolerance is not recommended to take
   A. Honey B. milk C. bread D. avocado
172. Which one of the following is resulted merely from protein deficiency?
   A. Kwashiorkor B. marasmus C. marasmic- kwashiorkor D. all are answers
173. You eat 2400 calories in a day and want to find out how much is from protein when you take in 60 g of protein, what would it be?

A. 5% B. 10% C. 15% D. 20%

174. *One would be likely to see positive protein balance in all of the following conditions except*
   A. Recovery from surgery
   B. Growth
   C. Starvation
   D. Pregnancy

175. Which method of protein quality assessment refers to the amount of weight gained by a growing animal per gram protein ingested?
   A. Protein Efficiency Ratio (PER)
   B. Net protein Utilization (NPU)
   C. Biological Value
   D. Protein-energy malnutrition (PEM)

176. Which one of the following foods is not considered as Low Glycemic Index food?
   A. White bread B. oatmeal C. grapefruit *D. lentils*

177. Based on the Net protein Utilization method of protein quality assessment,which one of the following has the best quality of protein?
   A. Eggs B. Milk C. Brown rice D. Meats

178. *Which one of the following is not a clinical feature of Marasmus?*
   A. Severe wasting of muscle tissue
   B. Stunted physical growth
   C. Stunted brain development
   D. Bilateral pitting edema

179. The adequate intake of protein per a day for an adult with a body weight of 55 kg who engages in light physical activity is
   A. 50 gram B. 44 gram C. 48 gram D. 54 gram

180. Which of the following hormones corrects a hyperglycemic state?
   A. Insulin
   B. Glucagon
   C. Epinephrine

181. Job security, health insurance benefits are ---------- needs
   a. Ego needs
   b. Physiologic needs
   c. Safety and security needs
   d. Social needs

182. Which one the following is differ from other
   a. Dissatisfies
   b. Hygiene
   c. extrinsic factors
   d. motivator

183. which one of the following is false about Guideline for effective discipline
   a. Get the fact before act
   b. Act while you are angry
   c. Do not suddenly tighten your enforcement
   d. Do not apply penalties inconsistently

184. Which service gave more attention to rural areas through construction of health centers and health stations
    a. Vertical Health Services
    b. Integrated Health Services
    c. Primary health care
    d. Basic Health Services
185. All are advantage of traditional healers, except
    a. They are accepted and people trust them
    b. They are easily accessible
    c. Some traditional practices are harmful
    d. Some treatments are effective
186. What was the major problem in the implementation of PHC in Ethiopia
    a. Absence of clear guidelines or directives on how to implement PHC.
    b. Absence of infrastructure at the district level
    c. Difficulty in achieving inter-sectoral collaboration
    d. All
187. Which one of the following is not Role of the government in money management
    a. Financial allocator
    b. Regulator
    c. Facilitator
    d. Acceptor
188. Which of the following is false about program budgeting
    a. used by large organization
    b. Money can be used in areas of importance in the organization
    c. It is provided to you in the form of breakdown
    d. Flexible decisions
189. If you want to buy a reagent/drug of 5000 Birr ---------will be used.
    a. Model 33
    b. Model 6
    c. Model 21
    d. Model 30:
190. ---------- used for intermittent, irregular, variable events and includes the place where the events take place
    a. Time table
    b. Year calendar
    c. Schedule
    d. Roster
191. The two factory theory of motivation is contributed by:
A. Elton Mayo B. Taylor C. F. Mintezberg D. B.F. Skinner
192. The principle that different jobs that require compare skills and knowledge deserves is_____
A. payment. A equal act B Civil Rights Act C comparable worth D affirmative
193. When sport coaches listen to players' suggestions and feedback during game intermission, they are using what type of leadership?

A. Free-rein B. Autocratic C. General D. Participating

194. Training on UCD insertion and removal is example of ____type of training
A. on the job training B. Vestibule training
C. Behaviorally experienced training D. Interpersonal skills training.

195. Of the following rating method one is the most common.
A. Manager's rating B. Group of managers rating
C. Group of peers rating D. Employees' rating of bosses

196. _____is means of supplying materials from stores to the various workshops or departments of an organization.
A. ordering B. Purchasing C. issuing D .requesting

197. All of the following would be considered a separation except a(n)
A. demotion. B. layoff. C. retirement. D. firing.

198. The primary purposes of staffing include all of the following except
A. disciplining employees. B. finding employees. C. hiring employees. D. rewarding employees.

199. Affirmative action is defined as
A. any employment decision that harms one individual more than any other.
B. any employment decision that is based upon sexual conduct.
C. a law that requires employers to make an extra effort to employ protected groups.
D. any employment decision that harms one group more than another.

200. Which one of the following controlling method is highly give emphasize on activities?
A. Supervision B. Evaluation C. Monitoring D. motivation

Answer Sheet

Name _____ Id. No _____Section_____

MCQ

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