

5. MARKS: 05

Allowed: 04 minutes

**6. For Candidate:**

7.

**8. Task NO 10:**

9.

10. Calculate the dose of amoxicillin for a child of 3 years  
11. (adult dose = 500mg 8 hourly)

**12. Key:**

13.  
14. Youngs formula = adult dose  $\times$  age (years) / age + 12 02

15.  
16. So dose of amoxicillin for 3 years child would be

17.  
18. Dose for 3 years =  $500 \times 3 / 3 + 12$  02

19. =  $500 \times 3 / 15$

20. =  $500 \times 1 / 5$

21. = 100mg

22.  
23. So dose of 3 years child is = 100mg 8 hourly

24.  
25.  
01

### **For Candidate:**

A 35 years old known alcoholic male presented in the OPD now with complaints of griping abdominal pain and 4 – 5 stools in a day with mucus and blood; stool examination also reveals presence of entamoeba histolytica.

### **Task NO 3:**

**Carefully read and answer the following question:**

1. Name TWO Nitroimidazoles along with doses and duration of the therapy, which are luminal and tissue amebicides.
2. Name any two luminal amebicide drugs which can be combined with tissue amebicides also.
3. What instructions would you advise to this patient regarding his alcohol intake during the treatment

### **Key:**

1.
  - a. Metronidazole 750mg TID for 10 days
  - b. Tinidazole 2g Once for 3 days(2)
2.
  - a. Diloxanide furoate
  - b. Iodoquinol(2)
3. Metronidazole has disulfiram like reactions with alcohol, so to avoid nausea & vomiting, etc alcohol intake should be stopped during this therapy. (1)



# Unobserved Station 1

Marks: 05  
allowed: 04 minutes

Time

For Candidate:

## Task NO 1:

Calculate the plasma half-life ( $t_{1/2}$ ) of a drug when its volume of distribution ( $V_d$ ) is 70L and its clearance (Cl) is 3.5L/hour.

Key:

$$\text{Plasma Half Life } (t_{1/2}) = \frac{0.693 \times V_d}{Cl} \quad (2)$$

In this case  $V_d = 70\text{L}$ , while  $Cl = 3.5\text{L/hr}$ , so putting these values in the given formula

$$t_{1/2} = \frac{0.693 \times 70}{3.5}$$
$$48.51 / 3.5 = 13.86 \text{ hr}$$

So plasma half-life of this drug is 13.86 hour (which is about 14 hr)

Marks: 05  
Allowed: 04 minutes  
**For Candidate:**

Time

**Task NO 2:**

Carefully read and answer the following question:

Write down prescription for acute pulmonary edema

**Key:**

Doctor name: Dr ABC, MBBS

Mohafiz Town Lahore  
Phone No: 042-3456789

(1/2)

Patient Name: Mr. Abdullah Akhtar, Sex: male

Date 29-11-15

(

Age: 20 year, Address: 123, A block,  
Delta Town, Lahore

1/2)

R<sub>v</sub>

1. Injection Furosemide 20 mg

(3)

2 ampules I/V stat

Monitor out put

Repeat 4 ampule I/V

Monitor Na<sup>+</sup>, K<sup>+</sup> levels

2. Injection Morphine Sulphate 10mg S/C stat

Signature of  
Doctor  
(1)

Registration No: P  
- 0001

**Task NO 6:**

**Carefully read and answer the following question:**

Write down a prescription for chloroquine resistant malaria

**Key:**

Doctor name: Dr Ahmad, MBBS

01-12-2015

(1/2)

Awan Town Lahore

Phone No: 042-3456789

Patient Name: Mr Rehan Akhtar, Sex: male

(1/2)

Age: 20 year,

Address: 123, A block,

Township, Lahore

**R/**

Tab quinine sulphate 300mg

(3)

2 tab 3 times a day for 3-5 days

Cap doxycycline 100 mg

1 cap 2 times a day for 7 days

Signature of  
Doctor (1)

Registration No: P - 0001

**Task NO 4:**

Carefully read and answer the following question:

$$\sum d^2 = 288$$

$$n = 9$$

Calculate Standard Error of Mean (SEM)

**Key:**

$$\text{SEM} = \sqrt{\frac{\sum d^2}{n(n-1)}} \quad (1)$$

$$= \sqrt{\frac{288}{9(9-1)}} \quad (1)$$

$$= \sqrt{\frac{288}{9(8)}} \quad (1)$$

$$= \sqrt{\frac{288}{72}} \quad (1)$$

$$= \sqrt{4} \quad (1/2)$$

$$= 2 \quad (1/2)$$

Marks: 05  
Allowed: 04 minutes  
**For Candidate:**

Time

**Task No. 0.**

**Carefully read and answer the following question:**

An 18 years old boy has H/O fever for last 10 days with abdominal discomfort and pain.

His temperature has risen in a step ladder pattern. he is diagnosed to be suffering from enteric fever .What treatment would you give to this patient

**Key:**

R/

1. Tab ciprofloxacin 500mg  
1 tab BD for ten days
2. Tab paracetamol 500 mg  
1 tab TDS

## For Candidate:

A 55 years old known hypertensive patient suffered from an attack of atrial fibrillation due to which he has now congestive heart failure

### Task NO 9:

Carefully read and answer the following question:

1. Name the P-drug which can be useful for both CCF and Atrial Fibrillation (01)
2. What will be your choice if the patient is only suffering from CCF (without any Atrial Fibrillation)?  
1/2+1/2
3. Name drugs / groups which are useful in decreasing mortality in CCF (02)
4. Which drug is useful in CCF but carry the increased risk of sudden death? (01)

### Key:

1. P-drug for CCF with Atrial Fibrillation is Digoxin 01
2. Other choice for CCF only:
  - a. Spironolactone (aldosterone antagonist),
  - b. Captopril (ACE - inhibitor)1/2 + 1/2
3. Other drugs / groups useful in decreasing mortality in CCF:

- a. Spironolactone,
- b. Captopril,
- c. Carvedilol,
- d. Isosorbide dinitrate

4. Drug useful in CCF but carry the increased risk of sudden death 1/2 X 4



Task No 3:

If a drug is given I/V, its **Vd is 40** litre and target concentration is **15mg/litre**. calculate the loading dose of that particular drug.

For Examiner:

Key:

Formula to calculate loading dose

$$\text{Loading dose} = \frac{Vd \times \text{desired plasma concentration}}{\text{Bioavailability}}$$

(3)

$$= \frac{40 \times 15}{1}$$

(1)

$$= 600 \text{ mg}$$

(1)

**Task NO 7:**

A 50 years old female comes to OPD with complaint of suffocating chest pain attacks which begins with exertion and disappears quickly after she stops work. A diagnosis of angina on effort is made.

**Carefully read and answer the following question:**

1. What is P drug? (2)
2. Why you prefer this drug in this scenario? (1)
3. what various groups of drugs can be used in this patient. (2)

**Key:**

1. Tab nitroglycerine 5mg ,sublingual SOS
2. immediate relief of chest pain by sublingual route
3. GROUPS.
  - a. calcium channel blockers
  - b. beta blockers