

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 dinitriate

4. Drug useful in CCF but carry the increased risk of sudden death is Digoxin
01

5. Marks: 05

Allowed: 04 minutes

Time

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.

20. =500 \times 3/15

21.

22. =500 \times 1/5

23.

24. =100mg

25.

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

01

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 (1/2)

Mohafiz Town Lahore
Phone No: 042-3456789

Patient Name: Mr. Abdullah Akhtar, Sex: male

Date 29-11-15

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

1/2)

R_y

1. Injection Furosemide 20 mg (3)

2 ampules I/V stat
Monitor out put

Repeat 4 ampule I/V
Monitor Na⁺, K⁺ levels

2. Injection Morphine Sulphate 10mg S/C stat

Signature of
Doctor
(1)
Registration No: P
- 0001

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

Task NO 4:

Carefully read and answer the following question:

$$\Sigma d^2 = 288$$

$$n = 9$$

Calculate Standard Error of Mean (SEM)

Key:

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

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

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

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

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

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

Time

Marks: 05

Allowed: 04 minutes

For Candidate:

Task NO 5:

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

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

(3)

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

(1)

$$= 600 \text{ mg}$$

(1)

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

Task No 8:

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