

# INI CET Nov 2020 Recall Questions

## PSM

**Q1 Best study design to establish causality out of all research study designs**

- (A) RCT
- (B) Cohort
- (C) Meta analysis
- (D) Systematic review

**Q2 Discrete probability distribution that expresses probability of a given number of events in a particular time frame ?**

- (A) Normal distribution
- (B) Skewed distribution
- (C) Poissons distribution
- (D) None of the above

**Q3 Which of the following device is used to tell the status of heat exposure to vaccine ?**

- (A) VMV
- (B) VVM
- (C) VCV
- (D) VVC

**Q4 Difference between highest and lowest level in data is known as ?**

- (A) Co-efficient of variation
- (B) Interquartile range
- (C) Range
- (D) Variance

**Q5 In which of the following conditions, hand sanitizer can be used?**

- A. Before examining a patient
- B. After examining a patient

C. After touching patients surroundings

D. Hands are visibly soiled

(A) A,b,d

(B) A,b,c,d

(C) A,b,c

(D) A,b

**Q6 You are the medical officer of a PHC. A girl < 18 year old approaches to you, who has history of sexual assault. The female was brought by parents to the hospital but they refused any medical examination to be conducted by the doctor. What should you do next as a medical practitioner?**

(A) Inform police

(B) Conduct examination with consent from victim

(C) Collect swabs without consent

(D) Document refusal

**Q7 Which among the following has the highest case fatality rate?**

(A) Rabies

(B) Ebola

(C) Nipah

(D) Influenza

**Q8 In steroid dependent nephrotic syndrome , select the best option with reference to vaccines**

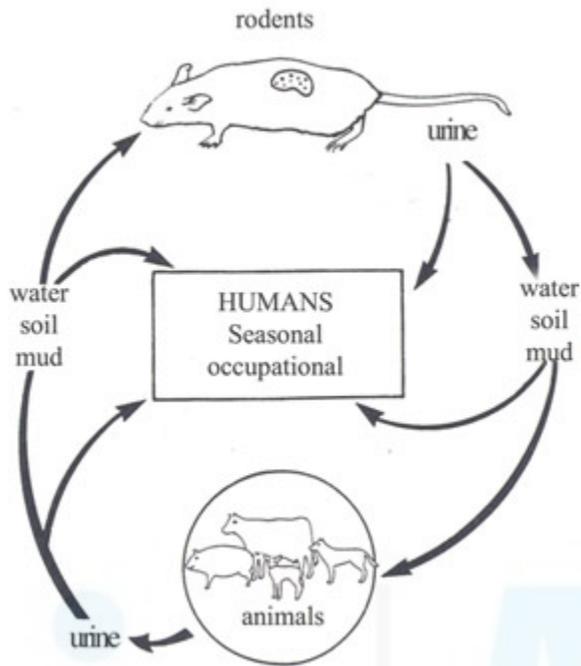
(A) All live vaccines can be given

(B) Both live and killed vaccines can be given

(C) All killed vaccines can be given

(D) None of the above

Q9 Identify the life cycle:



- (A) Ebola virus disease
- (B) Plague
- (C) Leptospirosis
- (D) Nipah virus

Q10 You are the medical officer of a PHC. What would you prefer for mass prophylaxis program / mass treatment of anemia

- (A) Ferrous sulphate
- (B) Ferrous sulphate + Vit B12 and folic acid
- (C) Inj ferrous sulphate
- (D) Inj ferrous fumarate

## ANSWERS

### 1. Ans (C) Meta analysis

Explanation :

In evidence based medicine :

Case report < case series < ecological < cross-sectional < case control < prospective cohort < retrospective cohort < RCT < systematic review < meta-analysis

\*RCT- Randomized controlled trial

### 2. Ans (C) Poissons distribution

Explanation:

Suppose , average number of people who visit restaurants in 7 days is 500. By POISSON'S distribution we can find out the number of diners who visit the restaurant on a particular day.

### 3. Ans (B) VVM

Explanation :

VVM : Vaccine vial monitor

Marker of Cold Chain maintenance

VVM has:

1. Outer blue circle
2. Inner white square

This is grade 1

If temperature is not properly maintained then the inner white square changes color in sequence:

1. inner square becomes light blue ( grade 2)
2. inner square becomes same as outer circle ( grade 3)
3. inner square becomes darker ( grade 4)

According to WHO recommendations:

1. Grade 1 and 2 vials are usable
2. Grade 3 and 4 vials are not usable, should be discarded

#### 4. Ans (C) Range

Explanation :

Co-efficient of variation is =  $[\text{SD}/\text{mean}] \times 100$

Variance =  $[\text{SD}]^2$

Interquartile range :

Q3-Q1 (difference between 75th percentile and 25th percentile)

#### 5. Ans (C) A, B, C

Hand sanitizer should contain minimum 60% alcohol

Hand sanitizer is not recommended when people are handling food.

Hand sanitizer should be used before and after examining a patient, as well as after touching patient's surroundings.

Visibly soiled hands should be, preferably washed with soap and water.

#### 6. Ans (A) Inform police

Explanation :

The victim is a minor , so consent should be taken from parent/parents.

If parents refuse to give consent for examination, it has to be documented.

Swab collection without consent cannot be done.

Informing the police is mandatory as this is a medico-legal case.

#### 7. Ans (A) Rabies

Explanation :

Case Fatality Rate (CFR) =  $[\text{number of deaths due to a disease}/\text{total number of cases}] \times 100$

Its actually a proportion.

1. CFR for rabies = 100%
2. Average CFR for Ebola = 50%
3. [for Zaire Ebola CFR=90%]

CFR Nipah = 40-75%

4. CFR influenza= 0.5%

### **8.Ans (C) All killed vaccines can be given**

Explanation :

Live vaccines will precipitate further immunosuppression.

Corticosteroids are themselves immunosuppressants .

Similarly, in pregnancy( another immunosuppression state), all live vaccines are contraindicated except yellow fever.

In asymptomatic HIV, live vaccines are not contraindicated.

In symptomatic HIV, all live vaccines are contraindicated except Varicella , MMR/MR

### **9.Ans (C) Leptospirosis**

Explanation :

Leptospirosis is caused by Leptospira interrogans.

-It is secreted in urine of infected animals.

-From urine- it can contaminate water and soil.

-So, via the feco-oral route- it can be transmitted to grazing animals and humans.

### **10.Ans (B) Ferrous sulphate + Vit B12 and folic acid**

This is given as a part of Anaemia Mukht Bharat/ iNIPI (National Iron Plus Initiative for anemia control).

UNDER ANEMIA MUKT BHARAT PROGRAM

## Under Anaemia Mukht Bharat Program:(slide number 403)

Age group	Dose
Children 0-59 months	Biweekly 1 ml Iron and FA syrup [Each ml iron and FA syrup contains 20 mg iron + 100 mcg FA]
Children 5-9 years	Weekly , 1 Iron and FA tablet. [Each tab contains 45 mg iron + 400 mcg FA , sugar coated , <b>pink color</b> ]
School going Adolescent girls and boys , 10-19 years , Out of school adolescent girls	Weekly , 1 Iron and FA tablet. [Each tab contains 60 mg Iron + 500 mcg FA , sugar coated, <b>blue color</b> ]
Women of Reproductive age (non-pregnant, non-lactating) 20-49 years	Weekly , 1 Iron and FA tablet. [Each tab contains 60 mg iron + 500 mcg FA , sugar coated, <b>red color</b> ]
Pregnant women and lactating mother (0-6 months)	Daily, 1 Iron and FA tablet starting from 4 <sup>th</sup> month of pregnancy continued upto 180 days post partum. [each tab contains 60 mg iron + 500 mcg FA , sugar coated, red color]