

**PRACTICE QUESTIONS
(COMMUNITY) - 0001**

- Japanese encephalitis (JE) is a
 - water-borne disease.
 - mosquito-borne disease.
 - blood-borne disease.
 - vector-borne disease.

Ans : b. mosquito-borne disease. Vector of the disease is culicine mosquito. These mosquitoes generally breed in irrigated rice fields, shallow ditches and pools. The rice fields are probably the most important breeding places.

- The JE vaccine available in India and an integral part of Universal Immunization Programme in 83 endemic districts of India is
 - mouse brain-derived purified and inactivated vaccine
 - purified cell-culture vaccine
 - cell culture-derived live attenuated vaccine
 - cell culture-derived inactivated vaccine

Ans : c. Cell culture-derived live attenuated vaccine. Three types of JE vaccines are in large-scale use. They are :

- 1) mouse brain-derived purified and inactivated vaccine
- 2) cell culture-derived live attenuated vaccine
- 3) cell culture-derived inactivated vaccine

When immunizing children 1-3 years of age the mouse brain-derived vaccine provides adequate protection throughout childhood following 2 primary doses 4 weeks apart, and boosters after 1 year and subsequently at 3-yearly intervals until the age of 10-15 years. The vaccine is given subcutaneously in doses of 0.5 ml for children under 3 years and one ml for children more than 3 years of age. But vaccine widely available and used in India is cell-culture based, live attenuated vaccine (SA-14-14-2) single dose followed by a single booster given at an interval of about 1 year. Purified cell-culture vaccine is used for rabies.

- Kyasanur forest disease is also called as

Ans : monkey disease as deaths of monkeys are considered as heralders of this disease in endemic areas.

- Kyasanur forest disease is a
 - water-borne disease.
 - tick-borne disease.
 - blood-borne disease.
 - vector-borne disease.

Ans : b. tick-borne disease. Vector of the disease hard ticks of the genus Haemaphysalis.

- Main reservoirs of the KFD virus is
 - rats and squirrels
 - birds and bats
 - monkeys
 - hard ticks

Ans : a. rats and squirrels. Small mammals particularly rats and squirrels are the main reservoirs of the KFD virus.

- Second phase of Kyasanur forest disease is characterized by
 - pancarditis
 - meningoencephalitis
 - meningitis
 - encephalopathy

Ans : b. mild meningoencephalitis. It is manifested by a return of fever, severe headache followed by neck stiffness, coarse tremors, abnormal reflexes and mental disturbances.

- Most important step in control of KFD is
 - vaccination
 - identification of new cases
 - control of monkey
 - control of ticks

Ans : d. control of ticks. Control of ticks in forests, by dispensing carbaryl, fenthion, naled or propoxur at 2.24 kg of active ingredient per hectare. The spraying must be carried out in "hot spots", i.e. within 50 metres around the spot of the monkey deaths.

- KFD vaccine is a vaccine.

Ans : killed vaccine.

- Most effective chemical used as larvicide in case of chickengunya is
 - Methoprene
 - Abate
 - carbaryl
 - kerosene

Ans : b. Abate an organophosphorus insecticide, is increasingly being used as larvicide. In case of an epidemic anti-adult measures like aerosol spray of ultra low-volume (ULV) quantities of malathion or sumithion (250 ml/hectare) has been found to be effective in interrupting transmission and stopping of chickengunya.

- West Nile fever transmitted by certain species of
 - Culex mosquitoes

- b. Anopheles mosquito
- c. Culicine mosquito
- d. Aedes aegypti mosquito

Ans : a. Culex mosquitoes. An acute febrile illness caused by a group B arbovirus and transmitted by certain species of Culex mosquito. Anopheles mosquito causes, Culicine mosquito causes JE, Aedes aegypti mosquito causes yellow fever.

11. Vaccine against brucellosis commonly used for young animals is
- a. B.melitensis strain19
 - b. B.suis strain19
 - c. B.canis strain19
 - d. B. abortus strain 19

Ans : d. abortus strain 19. B.abortus is primarily a disease of cattle, B.suis chiefly infects pigs, B.canis is a parasite of dogs.

12. Antibiotic of choice in uncomplicated cases of brucellosis is
- a. Doxycycline
 - b. Tetracycline
 - c. Ampicillin
 - d. vancomycin

ans : b. Tetracycline. For adults in the acute stage, the dose is 500 mg every 6 hours for about 3 weeks. In patients with skeletal or other complications, intramuscular streptomycin 1 g daily in addition to tetracycline is effective. Human live vaccine of B. abortus strain 19-BA is available.

Arthropod borne viruses are also known as arbovirus

13. Source of infection in leptospirosis is
- a. Stool
 - b. Urine
 - c. Blood
 - d. Mucous

Ans : b. urine. Source of infection is the urine of infected animals. Reservoirs are wild and domestic animals especially rodents such as rats, mice.

14. The severe form of leptospirosis is
- a. Plague
 - b. rat bite fever
 - c. Weil's disease
 - d. lymphocytic choriomeningitis

Ans: c. Weil's disease. A severe form of leptospirosis when it affects heart, lung, brain, kidney and liver.

15. The drug of choice for treating leptospirosis is
- a. penicillin

- b. tetracycline
- c. doxycycline
- d. ciprofloxacin

Ans : a. Penicillin is the drug of choice but other antibiotics (tetracycline or doxycycline) are also effective. The dosage of penicillin is 6 million units daily intravenously. Vaccines are available but not widely used.

16. The reservoir of infection in plague is
- a. domestic rat
 - b. wild rodents
 - c. domestic animals
 - d. infected fleas

Ans : b. Wild rodents. In india, the wild rodent, tatera indica is the main reservoir, not the domestic rat. Infected rodents and fleas are source of infection.

17. The commonest and the most efficient vector of plague is
- a. dog flea
 - b. cat flea
 - c. rat flea
 - d. human flea

Ans : c. rat flea. X. cheopis, but other fleas may also transmit the infection, e.g., human flea (X. astia, X. brasiliensis and Pulex irritant)

18. In northern India, the "plague season"
- a. starts from June until August
 - b. starts from September until May
 - c. starts from January until May
 - d. starts from May until December

Ans : b. starts from September until May. The disease tends to die out with the onset of hot weather.

19. The most common type of the disease plague is
- a. Septicaemic plague
 - b. Bubonic plague
 - c. Pneumonic plague

Ans : b. Bubonic plague. It is the primary infection, another two forms are coming as secondary infection following bubonic plague.

20. Highly infectious form of plague which spreads from man to man is
- a. Septicaemic plague
 - b. Bubonic plague
 - c. Pneumonic plague

Ans : c. Pneumonic plague spreads from man to man is by droplet infection. The plague bacilli are present in the sputum. Bubonic plague cannot spread from person to person as the bacilli are locked up in the buboes.

21. The drug of choice in plague is

- streptomycin
- gentamycin
- tetracycline
- doxycycline

Ans: a. streptomycin (30 mg per kg) administered intramuscularly in two divided doses for 7 to 10 days. Tetracycline orally (30-40 mg per kg) is an alternative drug, and is sometimes given in combination with streptomycin. Gentamycin administered as a 2 mg/kg body wt loading dose, then 1.7 mg/kg body wt. every 8 hours intravenously is effective.

22. The drug of choice of chemoprophylaxis for plague is

- streptomycin
- gentamycin
- tetracycline
- doxycycline

Ans : c. tetracycline. For adults, the dose is 500 mg 6-hourly for 5 days. A cheaper alternative is sulphonamide, 2 to 3 gram daily for 5 to 7 days.

23. The route for administering plague vaccine

- Intramuscularly
- Subcutaneously
- Intradermally
- Orally

Ans : b. Subcutaneously. It is a killed vaccine which is given subcutaneously in two doses of 0.75ml and 1.0ml for females and 1ml and 1.5ml for males at an interval of 7 to 14 days. Booster doses are recommended six-monthly for persons at continuing risk of infection. In an emergency, a single injection is recommended, the dose should be double the second dose, that is, 3 ml for adult males.

24. The drug of choice for specific treatment of all rickettsial diseases is

- tetracycline
- streptomycin
- gentamycin
- doxycycline

Ans : a. Tetracycline is drug of choice for specific treatment of all rickettsial diseases. Long-acting antibiotics (doxycycline, minocycline) now make single dose treatment possible.

25. Of the diseases caused by rickettsiae in man, the most widespread one is

- murine typhus
- scrub typhus
- indian tick typhus
- Q fever

Ans : a. scrub typhus

26. The true reservoir and vector of scrub typhus infection is the

Ans : trombiculid mite

27. Reservoir of infection in murine typhus is

Ans : Rats (Rattus rattus and R.norvegicus).

28. Vector of infection in murine typhus is

Ans : rat fleas

29. Murine typhus is also called as.....

Ans : endemic or flea-borne typhus

30. The reservoir and vector of Indian tick typhus infection is.....

Ans : ticks

31. Which act as vectors as well as reservoir in Q fever?

Ans : Ticks

32. The drug of choice for chronic Q fever

- tetracycline
- streptomycin
- gentamycin
- doxycycline

Ans : d. Doxycycline is the drug of choice. Chronic Q fever requires prolonged treatment for 18 months or longer.

33. Coxiella vaccine for Q fever is a

- Inactivated vaccine
- Live vaccine
- Purified protein derivative
- Sub unit vaccine

Ans : a. Inactivated vaccine. Coxiella vaccine mainly to protect occupationally exposed workers.

34. Vector and reservoirs in epidemic typhus is and

Ans : rat fleas and wild rodents.

35. In humans, the organisms can persist for many years and epidemic typhus may appear later as

- Weil's disease
- Brill-Zinsser disease
- Zolinger Ellison syndrome

Ans : b. Brill-Zinsser disease. In humans, the organisms can persist for many years as latent infection without any symptoms, and the disease may appear later as Brill-Zinsser

disease affecting CVS, CNS, presence of rash(rose papular) and mental changes.

36. The most serious risk of T. solium infection is
- Meningitis
 - appendicitis
 - cysticercosis.
 - appendicitis cholangitis.

Ans : c. cysticercosis. Affects brain, muscle and other tissues(formation of cyst in body)

37. Effective drug available for the treatment of taeniasis is
- niclosamide
 - albendazole
 - mepacrin
 - memendazole

Ans : a. Niclosamide and praziquantel and are effective drugs. Praziquantel is given in a 50 mg/kg/day in three divided doses. A single dose of 4 tablets (2 grams) of niclosamide is also effective. This drug is given in the morning-empty stomach.

38. Effective drug available for the treatment of cysticercosis is
- niclosamide and albendazole
 - mepacrin and albendazole
 - albendazole and praziquantel
 - niclosamide and mepacrin

ans : c. albendazole and praziquantel, both are effective in treatment.10-15 mg/kg body wt/day of albendazole is given twice daily with a fatty meal. Praziquantel is given in 50 mg/kg/day in three divided doses for 15 days.

39. Most common site of occurrence of cyst in hydatid disease is
- hypothalamus
 - right lobe of the liver
 - left lobe of the liver
 - right lung

Ans : b. Right lobe of the liver. More than 70 per cent ocysts become located in the right lobe of the liver, and the rest in lungs, brain, peritoneum, long bones and kidney.