

EPIDEMIOLOGY OF COMMUNICABLE DISEASES

1. Global eradication of smallpox occurred in
 - a. May 1980
 - b. May 1982
 - c. June 1970
 - d. March 1975

Ans: a. May 1980

2. The period of communicability of patients with varicella is estimated to range from
 - a. 1 to 2 days before the appearance of rash, and 4 to 5 days thereafter
 - b. 5 days before appearance of rash and 4 to 7 days there after
 - c. 5 days before appearance of rash
 - d. 1 to 2 days after appearance of rash

Ans: a. 1 to 2 days before the appearance of rash, and 4 to 5 days thereafter

3. A characteristic feature of the rash in chickenpox is
 - a. Single stage rashes
 - b. Zonal inflammation
 - c. **Pleomorphism**
 - d. All of the above

Ans : c. **Pleomorphism.** All stages of the rash(papules, vesicles and crusts) may be seen simultaneously one time, in the same area is called **Pleomorphism**

4. Recommendation for prevention of chickenpox in exposed susceptible individual is to administer
 - a. MMRV vaccine given within 72 hours of exposure
 - b. **Varicella-Zoster** Immunoglobulin (VZIG) given within 72 hours of exposure.
 - c. Varicella-Zoster vaccine given within 72 hours of exposure
 - d. MMRV vaccine given within 24 hours of exposure

Ans : b. **Varicella-Zoster** Immunoglobulin (VZIG) given within 72 hours of exposure.

5. The most common complication of chickenpox in neonates, adults and immunocompromised patients is
 - a. Varicella haemorrhage not common
 - b. **Varicella pneumonia**
 - c. Chorioretinitis

- d. Disseminated varicella-zoster virus disease

Ans: b. **Varicella pneumonia.** Varicella haemorrhage is a complication but not common. Maternal varicella during pregnancy causes chorioretinitis . Disseminated varicella-zoster virus disease is a complications of varicella in children with leukaemia.

6. Primary varicella infection is commonly followed by a latent infection called
 - a. Shingles
 - b. Shigella
 - c. Measles
 - d. Small pox

Ans : a. Shingles. Infection in the cranial nerves, sensory, ganglia, and spinal dorsal root ganglia, often for decades, without clinical manifestations. When the cell-mediated immunity wanes with age or following immuno-suppressive therapy, the virus may reactivate, resulting in herpes zoster/ shingles.

7. The period of communicability of measles infection is approximately
 - a. At the time of eruption of rash.
 - b. During the post measles stage.
 - c. **4 days before and 4 days after the appearance of the rash.**
 - d. 1 to 2 days after the appearance of the rash.

Ans : c. **4 days before and 4 days after the appearance of the rash.** Measles is highly infectious during the prodromal period and at the time of eruption.

8. The most common life-threatening complication in measles
 - a. **Pneumonia**
 - b. Meningitis
 - c. VAPP
 - d. Subacute sclerosing pan-encephalitis (SSPE)

Ans : a. **Pneumonia**

9. A rare complication which develops many years after the initial measles infection
 - a. Rubeola
 - b. Meningitis
 - c. VAPP

- d. **Subacute sclerosing** pan-encephalitis (SSPE)

Ans : d. Subacute sclerosing pan-encephalitis (SSPE)

10. After reconstitution, the measles vaccine must be
- Used within 8 hours.
 - Used within one day.
 - Used** within 4 hours.
 - Till the vaccine used completely

Ans : c. Used within 4 hours. Measles vaccine is a freeze-dried vaccine which must be stored in a the dark at 2-8°C otherwise lose its potency.

11. Which of the following complication occur when measles vaccine is contaminated or the same vial is used for more than one session on the same day or next day
- Pneumonia.
 - Toxic shock** syndrome (TSS).
 - Subacute sclerosing** pan-encephalitis (SSPE)
 - Pancarditis.

Ans : b. Toxic shock syndrome (TSS).

12. Infection in early pregnancy may result in
- Does not affect the foetus
 - congenital** defects and including death of the foetus
 - growth retardation of the foetus.
 - death of the mother.

Ans : b. congenital defects and including death of the foetus. The virus can cross the placenta (vertical transmission) and infect the foetus in utero.

13. If the newborn baby has IgM rubella antibodies shortly after birth it indicates
- Congenital rubella syndrome
 - Congenital** defects
 - Teratogenicity
 - Cardiac malformations

Ans : a. Congenital rubella syndrome. As IgM antibodies do not cross the placenta, their presence indicate that they must have been synthesized by the infant in utero.

14. The classic triad of congenital defects in congenital rubella syndrome are

- Otitis media, epilepsy and glaucoma
- Retinopathy, microcephaly, deafness
- Deafness, cardiac malformations and cataracts.
- Deafness, encephalitis and blindness.

Ans : Deafness, cardiac malformations and cataracts. Other resulting defects are glaucoma, retinopathy, microcephaly, IUGR, cerebral palsy etc

15. Which vaccine is administered for preventing rubella?

RA 27/3 ain a single dose of 0.5 ml subcutaneously

16. A contraindication to ubella vaccination is Pregnancy. The recipients of the vaccine should be advised not to become pregnant over the next 3 months.

Females of reproductive age group

17. The period of maximum infectivity in Mumps is just before and at the onset of parotitis. Once the swelling of the glands has subsided the case may be regarded as no longer

18. In case of mumps the presence of maternal antibodies will provide immunity upto the age of

- 1 year
- 4 months
- 10 months
- 6 months**

Ans : d. 6 months

19. Major reservoir of influenza virus is

- Animals** and birds
- Human beings
- Soil and decaying materials
- Rodents

Ans : a. Animals and birds

20. A rare and severe complication of type B influenza is

- Purulent bronchitis
- Otitis media
- Reye syndrome
- Pneumonia

Ans : c. Reye syndrome. Reye syndrome is fatty liver with encephalopathy. Frequent complication are acute sinusitis, purulent bronchitis, otitis media and pneumonia.

21. The live-attenuated influenza vaccine is administered as
- 2 doses as IM injection
 - Single dose as intranasal spray**
 - Single dose as subcutaneous injection
 - 3 doses as oral solution.

Ans : b. **single** dose as intranasal spray. Live-attenuated influenza vaccine is a trivalent vaccine but killed vaccine is administered by the subcutaneous or intramuscular route.

22. Avian influenza viruses that primarily affect birds are
- H5N1**
 - H2N2
 - H3N2
 - H1N1.

Ans : a. **H5N1**. H2N2, H3N2, H1N1 are species affecting human being.

23. Incubation period of influenza A H1N1
- 1 week
 - 4-7 days
 - 1 day
 - 2-3 days**

Ans : d. **2-3 days**

24. Drug of choice for treatment and chemoprophylaxis of influenza is
- Rimantadine
 - Zanamivir
 - Oseltamivir**
 - Amantadine`

Ans : c. **Oseltamivir**. For adults the recommended oral dose is 75 mg twice daily for 5 days. Zanamivir is an alternative antiviral drug, if **Oseltamivir** is not available or not possible to use, or if the virus is resistant to oseltamivir, Virus is resistant to the M2 inhibitors eg: rimantadine Amantadine`.

25. A thick, blue-white to grey-black, pseudo membrane that may cover posterior pharynx or the entire tonsil, may spread to cover the soft and hard palates is present in
- Measles
 - Mumps
 - Diphtheria
 - Tuberculosis

Ans : c. Diphtheria

26. Every cases of moderate diphtheria should be treated with antitoxin in a dose of
- 20,000-40,000
 - 40,000-60,000**
 - 60,000- 80,000
 - 80,000-100,000

Ans : b. **40,000-60,000**. Antitoxin should be given without delay by IM or IV route , the dose is 20,000-40,000 units for mild early disease, 40,000-60,000 units for moderate disease, 80,000-100,000 units for severe disease.

27. The carriers of diphtheria should be treated with
- Oral erythromycin
 - IM penicillin
 - Oral azithromycin
 - IV taxim

Ans : a. Oral erythromycin. 10 days course of oral erythromycin, which is the most effective drug for the treatment of carriers.

28. The drug of choice for treatment of pertussis is
- Erythromycin
 - Ampicillin
 - Sepran
 - Tetracycline.

Ans : a. Erythromycin is the drug of choice at a dose of 30-50 mg/kg of body weight in 4 divided doses for 10 days. Other drugs are possible alternatives.

29. In case of meningococcal meningitis is the drug of choice is
- Ceftriaxone
 - Erythromycin
 - Penicillin
 - Chloramphenicol

Ans : c. Penicillin. In penicillin-allergic patients, ceftriaxone, chloramphenicol is used for treatment of epidemic meningococcal meningitis.

30. TB involving the lung parenchyma or the tracheobronchial tree.is
- Pulmonary TB
 - Bovine TB
 - Extrapulmonary TB
 - MDR TB

Ans: a. Pulmonary TB. Clinically diagnosed case of TB involving organs other than the

lungs, e.g. pleura, lymph nodes, abdomen, genitourinary tract, skin, joints and bones, meninges is extrapulmonary TB. MDRTB is multi drug resistant TB. TB affecting animals like cattle is known as bovine tuberculosis

31. Patients who have previously been treated for TB, were declared cured or treatment completed at the end recent course of treatment, and are now diagnosed with a recurrent episode of TB
- Relapse patients
 - Default patients
 - Failure patients
 - Resistant patients

failure patients are those who have previously been treated for TB and whose treatment failed at the end of their most recent course of treatment. default

patients are those have previously been treated for TB and were declared lost to follow up at the end of their most recent course of treatment

32. A TB patient who is having resistance to at least both isoniazid and rifampicin will come under category of
- Polydrug resistance
 - Multidrug resistance
 - Monoresistance
 - Extensive drug resistance

Ans : b. Multidrug resistance. Monoresistance is resistance to one first-line anti-TB drug only. Polydrug resistance is resistance to more than one firstline anti-TB drug (other than both isoniazid and rifampicin). Multidrug resistance is resistance to at least both isoniazid and rifampicin. Extensive drug resistance is resistance to any fluoroquinolone (Ciprofloxacin, Ofloxacin, Levofloxacin) and at least one of three second-line injectable drugs (capreomycin, kanamycin and amikacin), in addition to multidrug resistance.

33. Definitive diagnosis of tuberculosis is by
- Radiography
 - Chest X-rays
 - Sputum culture
 - Mantoux test

Ans : c. Sputum culture.

34. Sputum smear microscopy for tubercle bacilli is positive when there are at least
- 10,00 organisms present per ml of sputum.
 - 10,000** organisms present per ml of sputum.
 - 50,000 organisms present per ml of sputum.
 - 10,0000 organisms present per ml of sputum.

Ans : b. **10,000** organisms present per ml of sputum.

35. In TB patients sputum should be collected
- early in the morning
 - at any time of day
 - after having break fast
 - before going to bed

Ans : a. early in the morning. Early morning sputum sample is more likely to contain TB bacilli than one taken later in the day.

36. The only means of estimating the prevalence of TB infection in a population is
- Radiography
 - Chest X-rays
 - Sputum culture
 - Tuberculin test**

Ans : d. **Tuberculin test.** Positive reaction to the test is generally accepted as evidence of past or present infection by M. tuberculosis.

37. The Mantoux test is carried out by injecting
- 10 TU of PPD in 0.1 ml intradermally on the extensor surface of the left forearm
 - 1 TU of PPD in 0.1 ml intradermally** on the flexor surface of the left forearm
 - 1 TU of PPD in 0.1 ml subcutaneously on the flexor surface of the left forearm
 - 1 TU of PPD in 0.5 ml intradermally on the flexor surface of the right forearm

Ans : b. **1 TU of PPD in 0.1 ml intradermally** on the flexor surface of the left forearm. Tuberculin reaction consist of erythema and induration. The injection should produce a pale wheal of the skin, 6 to 10 mm in diameter.

38. The result of the tuberculin test is read after
- 24-48 hours

- b. 48-96 hours
- c. 12 hours
- d. 72 hours**

Ans : d. 72 hours

In tuberculin test induration exceeding 10 mm is considered as

- a. Positive**
- b. Negative
- c. Doubtful
- d. Zero

Ans : a. **Positive**. Those less than 6 mm are considered negative. Those between 6 and 9 mm are considered doubtful. If there is no induration, the result should be recorded as O.

39. Which of the following anti TB drug is not bactericidal in nature?
- a. Rifampicin
 - b. Streptomycin
 - c. Ethambutol**
 - d. Pyrazinamide

Ans : c. **Ethambutol**. Bactericidal(kills bacteria) :- Rifampicin(R), Streptomycin(S), Pyrazinamide(Z), Isoniazid(H). Bacteriostatic(inhibits its growth and multiplication) :- **Ethambutol(E)**

40. Rifampicin should be taken
- a. along with food
 - b. **one hour** before or 2 hours after food
 - c. along with milk or diary products
 - d. along with citrous fruit juices

Ans : b. **one hour** before or 2 hours after food. Because absorption of rifampicin is reduced by food intake.

41. The addition of pyridoxine along with isoniazid helps prevent the occurrence of
- a. Gastrointestinal irritation
 - b. Blood dyscrasias
 - c. Liver damage.
 - d. **Peripheral neuropathy**
 - e. Ans : d. **Peripheral neuropathy**. 10-20 mg daily pyridoxine(vit B6) is administered along with INH. It helps to maintain the health of nerves.

42. Which of the following anti TB drug leads to reddish discolouration of urine?
- a. **Rifampicin**
 - b. Streptomycin

- c. Ethambutol
- d. Pyrazinamide

Ans : a. **Rifampicin**, because it diffuses into body fluids.

43. Which of the following anti TB drug leads to vestibular damage and nystagmus rather than deafness?
- a. Rifampicin
 - b. Streptomycin**
 - c. Ethambutol
 - d. Pyrazinamide

Ans: b. **Streptomycin**. It causes ototoxicity.

44. Which of the following anti TB drug is used for treatment of tuberculous meningitis?
- a. Rifampicin
 - b. Streptomycin
 - c. Ethambutol
 - d. Pyrazinamide**

Ans : d. **Pyrazinamide**. Pyrazinamide crosses BBB and achieves high levels in CSF.

45. Which of the following anti TB drug is contraindicated in pregnancy?
- a. Rifampicin
 - b. Streptomycin
 - c. Ethambutol
 - d. Pyrazinamide**

Ans : b. Streptomycin .Streptomycin is contraindicated in pregnancy because it may cause congenital deafness.

46. BCG vaccine is available in
- a. freeze-dried form**
 - b. liquid form
 - c. oil form
 - d. solid form

Ans : a. **freeze-dried form**. The vaccine should refrigerated at a temperature below 10 deg C and must be protected from exposure to light during storage (wrapped up in a double layer of red or blackcloth) and in the field. Normal saline is recommended as a diluent for reconstituting the vaccine, as distilled water may cause irritation. The reconstituted vaccine may be used up within 3 hours, and the left-over vaccine should be discarded.

47. How to transporting stool samples to laboratory for analyzing presence of polio vaccine?

- In a airtight clean plastic container
- Between frozen ice packs at 4-8°C in a cold box.
- In sterile container at 20 deg C
- In a sterile container at room temperature.

Ans : b. Between frozen ice packs at 4-8°C in a cold box. Stool specimens have to be sealed in containers and stored immediately inside a refrigerator or packed between frozen ice packs at 4-8°C in a cold box, in order to avoid destruction of viruses.

48. Most important but rare adverse effect of polio vaccine is

- Vaccine-associated paralytic poliomyelitis (VAPP)
- Polio induced anaphylaxis
- Peripheral neuropathy
- Vaccine associated viscerotropic disease

Ans : a. Vaccine-associated paralytic poliomyelitis (VAPP). Vaccine associated viscerotropic disease is associated with yellow fever vaccine and Peripheral neuropathy with JE vaccine.

49. Which serotypes of polio virus causes Vaccine-associated paralytic poliomyelitis (VAPP)?

- Serotype 1
- Serotype 2
- Serotype 3**
- serotype 4

Ans : c. **Serotype 3**. Being living viruses, the vaccine virus particularly type 3 do mutate in the course of their multiplication in vaccinated children, and rare cases of vaccine-associated paralytic polio have occurred.

50. Polio vaccine used to immunize children with HIV infection and pregnant women is

- Salk vaccine**
- Sabin vaccine
- Mono valent vaccine
- Bivalent vaccine

Ans : a. **Salk vaccine**. Live polio (sabin - OPV) vaccines are not usually given to immunocompromised individuals and may pose danger to a pregnant mother or developing foetus. Salk is the killed vaccine - IPV.

51. Polio vaccine should be stored at

- 2-8 deg C
- 20 deg C**
- 1 to -5 deg C
- 1deg C

Ans : b. **-20 deg C**. Polio vaccine should be stored at -20 deg C in a deep freezer until used to maintain its potency as it decreases as a result of exposure to heat.

52. Acute bloody diarrhoea is also called as

- Malena
- Hematochezia
- Acute diarrhoea
- Dysentery**

Ans : d. **dysentery**

54. The most common cause of bloody diarrhoea is

- V. Cholerae
- Shigella**
- Coli bacteria
- Rotavirus.

Ans: b. **Shigella**. Other pathogens usually cause acute watery diarrhea. **Shigella** is also a most common cause of severe cases and accounts for a high percentage of mortality due to diarrhoeal disease.

53. Major killer of children under 5 years of age is

- Diarrhea
- Chicken pox
- Diphtheria
- Measles

Ans : a. Diarrhea. Diarrhea and related dehydration leads to death in children.

55. Leading cause of severe, dehydrating diarrhoea in children aged <5 years is

- V. Cholerae
- E. Coli bacteria
- Rotavirus
- Shigella**

Ans : d. **Shigella**

54. Components of ORS includes all except

- a. Sodium chloride
- b. Glucose, anhydrous
- c. **Sodium** bicarbonate
- d. Potassium chloride

Ans : c. **Sodium** bicarbonate. Inclusion of trisodium citrate in place of sodium bicarbonate made the product more stable and it resulted in less stool output, probably because of direct effect of trisodium citrate in increasing intestinal absorption of sodium and water.

Components of recently improved ORS formulation are:-

- Sodium chloride - 2.6 grams / litre
- Glucose, anhydrous - 13.5 grams / litre
- Potassium chloride - 1.5 grams / litre
- Trisodium citrate dehydrate - 2.9 grams / litre

55. Which component of ORS given orally enhances the intestinal absorption of salt and water?

- a. Sodium
- b. chlorine
- c. **Glucose**
- d. sodium bicarbonate

Ans : c. glucose. When given orally enhances the intestinal absorption of salt and water and is capable of correcting the electrolyte and water deficit.

56. The oral rehydration solution should be used within

- a. 12 hours
- b. **24 hours**
- c. 8 hours
- d. 48 hours

Ans : b. **24 hours**. Oral rehydration solution should be made fresh daily and used within **24 hours**

57. How to make ORS if commercially prepared one is not available ?

- a. 2 teaspoon salt and 3 teaspoon sugar in one litre of drinking water.
- b. **1 teaspoon** salt and 6 teaspoon sugar in one litre of drinking water.
- c. 1 pinch salt and 1 teaspoon sugar in one litre of drinking water.

d. 1 teaspoon salt and 6 teaspoon sugar in one glass of drinking water.

Ans : b. **24 hours**. Simple mixture consisting of table salt (one level teaspoon) and sugar (6 level teaspoon) dissolved in one litre of drinking water may be safely used.

58. The solution recommended for dehydration related to diarrhea by WHO for intravenous infusion is

- a. Normal saline
- b. DNS
- c. Ringer's lactate
- d. 5% dextrose

Ans : c. Ringer's lactate. It is a mixture of sodium, chloride, potassium, lactate and calcium and supplies adequate concentrations of sodium and potassium and the lactate yields bicarbonate for correction of the acidosis. Diarrhoea Treatment Solution (DTS) is also recommended by WHO for intravenous infusion. It contains in one litre, sodium chloride 4 g sodium acetate 6.5 g potassium chloride 1 g and glucose 10 g.

59. The drug of choice of diarrhoea due to cholera is

- a. **Ciprofloxacin**
- b. Pencillin
- c. Ampicillin
- d. **Tetracycline**

Ans : d. **tetracycline**. Drug of choice of diarrhoea due to cholera is doxycycline, tetracycline, TMP-SMX and erythromycin.

60. The drug of choice of diarrhea due to *shigella* is

- a) **Ciprofloxacin**
- b) TMP-SMX
- c) Ampicillin
- d) Ttetracycline

Ans : a. **Ciprofloxacin**. Shigella is usually resistant to ampicillin and TMP-SMX

61. Why zinc supplement is given during an episode of acute diarrhea?

- a. reduces irritation of rectal mucosa
- b. **reduces the** episode's duration and severity

- c. replaces fluid loss due to diarrhea
- d. reduces abdominal pain and cramping

Ans : b. **reduces the** episode's duration and severity

62. The Rotarix™ vaccine is administered as
- a) orally 2-doses at 2 and 4 months
 - b) I/M
 - c) S/C
 - d) I/D

Ans : a. orally 2-doses at 2 and 4 months. Rotarix™ vaccine schedule to infants of approximately 2 and 4 months. For RotaTeq™, the recommended schedule is 3 oral doses at ages 2, 4 and 6 months.

63. How to administer ORS solution to children aged 2 up to 10 years?
- a. 50-100 ml of fluid after each loose stool
 - b. 100-200 ml after each loose stool
 - c. 200-300 ml after each loose stool
 - d. as much fluid as they want

Ans : b. **100-200 ml after each loose stool.** As a general guide, after each loose stool, give - children under 2 years of age : 50-100 ml of fluid; children aged 2 up to 10 years : 100-200 ml ; and older children and adults : as much fluid as they want.

64. Which of the following is formerly known as infectious hepatitis or epidemic jaundice?
- a. Hepatitis A
 - b. Hepatitis B
 - c. Hepatitis C
 - d. Hepatitis D

Ans : a. **Hepatitis A**

65. An effective disinfectant for hepatitis A contaminated faeces and fomites is
- a. 5 per cent bleaching powder
 - b. 10 per cent formalin
 - c. 0.5 per cent sodium hypochlorite
 - d. 10 per cent crude phenol

Ans : c. **0.5 per cent sodium hypochlorite.** Others are agents suitable for disinfection of urine and faeces but not for hepatitis A/B contaminated one.

66. Amount of residual chlorine that should be used for destruction of hepatitis A virus in water is
- a. 1 mg/L of free residual chlorine
 - b. 10 mg/L of free residual chlorine
 - c. 0.5 mg/L of free residual chlorine
 - d. 5 mg/L of free residual chlorine

Ans : a. **1 mg/L of free residual chlorine** can cause destruction of the virus in 30 Minutes.

67. The diagnosis of hepatitis A in an acutely infected patient is confirmed by detection of
- a. Anti-HAV IgE
 - b. Anti-HAV IgM
 - c. Anti-HAV IgA
 - d. Anti-HAV IgG

Ans : b. **Anti-HAV IgM.** Anti-HAV IgM appears during the acute phase, peaking about 2 weeks after elevation of liver enzymes. Anti-HAV IgM usually declines to non-detectable levels within 3-6 months. Anti-HAV IgG appears soon after the onset of disease and persists for decades.

68. Inactivated Hepatitis A vaccine is administered
- a. Intramuscularly
 - b. Intravenously
 - c. Intradermally
 - d. Subcutaneously

Ans : a. **Intramuscularly.** Vaccination schedule consists of 2 dose administration into the deltoid muscle. The interval between the first (primary) dose and second (booster) dose is commonly 6-12 months. Protective efficacy is about 94 per cent. The live attenuated vaccine is administered as a single subcutaneous dose. Immunization will generate long-lasting, possibly life-long, protection.

69. Administration of HAV immune globulin {Ig} will provide protection for
- a. Life long
 - b. 15 years
 - c. 1-5 months
 - d. 2 years

Ans : c. **1-5 months.** The duration of protection is limited upto 1-2 months and 3-5 months following administration of IgG at dose of 0.02 and 0.06 ml/kg body weight respectively.

70. Hepatitis B is a
- water borne disease
 - food borne disease
 - mosquito borne disease
 - blood borne disease

Ans : d. Blood borne disease

71. The only reservoir of hepatitis B infection is
- Man
 - Blood
 - Water
 - Animals

Ans : a. Man, either as carriers or from cases. In approximately 5 to 15 percent of cases, HBV infection fails to resolve and the affected individuals then become persistent carriers of the virus.

72. The dose of hepatitis b vaccine for adults is
- 1-5 micrograms initially and again at 1 and 3 months.
 - 5-10 micrograms initially and again at 3 and 6 months.
 - 10-20 micrograms initially and again at 6 months.
 - 10-20 micrograms initially and again at 1 and 6 months.

Ans : d. 10-20 micrograms initially and again at 1 and 6 months. Children under 10 years of age should be given half of the adult dose at the same time intervals. Deltoid muscle is preferred for site of injection in adult and vastus lateralis in children under 2 years. Under immunization programme a four dose schedule is incorporated where the dose at birth is followed by three additional doses at 6, 10 and 14 weeks.

73. In case of exposure to HBsAg positive blood immediate protection is offered by administering
- Hepatitis B vaccine
 - HAV IgG
 - HBIG

Ans : c. HBIG. The HBIG should be given as soon as possible after an accidental inoculation (ideally within 6 hours and not later than 48 hours). Risk group includes surgeons, nurses or laboratory workers, newborn infants of carrier

mothers. The recommended dose is 0.05 to 0.07 ml/kg of body weight, two doses should be given 30 days apart. HBIG provides short-term passive protection which lasts approximately 3 months. The simultaneous administration of HBIG and hepatitis B vaccine is more efficacious than HBIG alone.

74. The hepatitis C virus is most commonly transmitted through
- uncleaned hands and fingers
 - exposure to infectious blood
 - breast milk, food or water
 - casual contact such as hugging, kissing

Ans : b. Exposure to infectious blood. This can occur through receipt of contaminated blood transfusions, blood products and organ transplants, injections given with contaminated syringes and needle-stick injuries in health-care settings, injection drug use and being born to a hepatitis C-infected mother.

75. The mainstay of hepatitis C treatment is
- Ans : Combination antiviral therapy (telaprevir and boceprevir) with interferon and ribavirin.**

There is no vaccine for hepatitis C. Immunoglobulin is not widely available and not very efficient in preventing infection after exposure.

76. Hepatitis E is a
- water borne disease
 - food borne disease
 - mosquito borne disease
 - blood borne disease

Ans : a. water borne disease

77. A complication of hepatitis C that occurs more frequently during pregnancy is
- Anicteric hepatitis
 - Hepatocellular carcinoma
 - Chronic liver disease
 - Fulminant hepatitis

Ans : d. Fulminant hepatitis. It is acute liver failure where there is massive necrosis of liver parenchyma. Pregnant women are at greater risk of obstetrical complications and mortality from

hepatitis E. Anicteric hepatitis is more common in hepatitis A. Hepatocellular carcinoma is seen in hepatitis B. Chronic liver disease is seen in hepatitis C.

78. The immediate source of Infection in case of disease cholera is
- sputum
 - Stools
 - Blood
 - Urine

Ans : b. Stools. The immediate sources of infection are the stools and vomit of cases and carriers. Large numbers of vibrios (about 10⁷-10⁹ vibrios per ml of fluid) are present in the watery stools of cholera patients.

79. The most important vehicle of transmission of cholera is
- water
 - stool
 - vomitus
 - blood

Ans : a. water

80. In cholera stool specimen will be collected directly into a transport (holding) media called
- Peptone Water Tellurite (PWT) medium
 - Bile Salt Agar medium
 - Venkatraman-Ramakrishnan (VR) medium
 - Cary Blair medium

Ans : c. Venkatraman-Ramakrishnan (VR) medium. The stools specimen collected by rubber catheter should be transported in sterilized McCartney bottles, 30 ml capacity containing alkaline peptone water or VR medium. The specimen should be transported in alkaline peptone water or Cary Blair medium if it is collected by a rectal swab.

81. The most effective disinfectant for cholera virus is
- Formaldehyde
 - Coal tar disinfectant
 - Bleaching powder
 - Crude phenol

Ans : b. coal tar disinfectant (phenol, cresol)

82. First line of treatment of cholera is
- IV fluids
 - ORS
 - Antibiotics
 - Antidiarrhoeals

Ans : b. ORS. Antibiotics should be given usually after 3 to 4 hours of oral rehydration.

83. The commonly used group of drug for the treatment of cholera is
- antibiotics + antidiarrhoeals
 - antidiarrhoeals + antiemetics
 - antibiotics only
 - antidiarrhoeals + antispasmodics

Ans : c. antibiotics. Oral antibiotics should be given as soon as vomiting has stopped. The commonly used antibiotics like flouroquinolones, tetracycline, azithromycin, ampicilline and Trimethoprim(TMP)-Sulfamethoxazol(SMX). No other medication should be given to treat cholera, like antidiarrhoeals, antiemetics, antispasmodics, cardiotonics and corticosteroids.

84. Drug of choice for chemoprophylaxis of cholera is
- Tetracycline
 - Doxycycline
 - Azithromycin,
 - Ampicilline

Ans : a. Tetracycline is the drug of choice. Dose 500 mg for adults, 125 mg for children aged 4-13 years, and 50 mg for children aged 0-3 years (bd for 3days). A single oral dose of doxycycline (300 mg for adults and 6 mg/kg for children under 15 years) has proved to be effective.

85. How many doses are there for monovalent cholera vaccine for adult?
- 3 oral doses
 - 3 IM doses
 - 2 oral doses
 - 2 IM doses

Ans : c. 2 oral doses. Two types of killed oral cholera vaccines are available : Dukoral and Sanchol.

✚ Dukoral is a killed monovalent vaccine. The vaccine is provided in 3 ml

single-dose together with the bicarbonate buffer. Vaccine and buffer are mixed in 150 ml of water for persons aged >5 years and in 75 ml of water for children aged 2-5 years. 2 oral doses are given ≥ 7 days apart {but <6 weeks apart) for adults and children aged ≥ 6 years. Children aged 2-5 years should receive 3 doses. 1 booster dose is also recommended.

✚ Sanchol is a bivalent oral cholera vaccine administered orally in 2 liquid doses 14 days apart for individuals aged >1 year. A booster dose is recommended after 2 years.

86. Why cholera vaccine is provided together along with the bicarbonate buffer?

- a. To enhance its absorption in the body
- b. To prevent destruction of toxin B subunit
- c. To increase the effectiveness of vaccine
- d. To reduce the adverse effect of vaccine

b. To prevent destruction of toxin B subunit. Bicarbonate buffer (effervescent granules) protect the toxin B subunit from being destroyed by gastric acid.

87. The term enteric fever includes

Ans : both typhoid and paratyphoid fevers

88. Primary sources of infection in typhoid is

- a. Water
- b. Milk
- c. Faeces
- d. Food

Ans : c. Faeces. Primary sources of infection is faeces and urine of cases or carriers; the secondary sources contaminated water, food, fingers and flies. There is no evidence that typhoid bacilli are excreted in sputum or milk. Man is the only known reservoir of infection (cases and carriers).

89. A Serious complication of typhoid is

- a. Urinary retention
- b. Pneumonia

- c. Thrombophlebitis
- d. Intestinal haemorrhage

Ans : d. Intestinal haemorrhage is manifested by a sudden drop in temperature and signs of shock, followed by dark or fresh blood in the stool. Intestinal perforation is most likely to occur during the third week. Less frequent complications are urinary retention, pneumonia, thrombophlebitis, myocarditis, psychosis, cholecystitis, nephritis and osteomyelitis.

90. Most specific laboratory test for diagnosis of typhoid is

- a. Typhidot
- b. Widal test
- c. Typhidot-M
- d. IDL Tubex® test

Ans : b. Widal test. Alternatives to the Widal test include Typhidot-M, Typhidot, IDL Tubex test and dipstick test.

91. Drug of choice for the treatment of typhoid fever is

- a. chloramphenicol
- b. ampicillin
- c. amoxicillin
- d. fluoroquinolones

Ans : d. fluoroquinolones 15mg/kg (ofloxacin or ciprofloxacin). They are inexpensive, well tolerated and more rapidly effective than the former first-line drug seg: chloramphenicol, ampicillin, amoxicillin and trimethoprim - sulfamethoxazole (TMP-SMX).

92. Agent used for disinfecting stools and urine of typhoid patient is

- a. 5 per cent cresol for at least 2 hours.
- b. 2 per cent chlorine for at least 2 hours
- c. 5 per cent formalin for at least 2 hours
- d. 10 per cent bleaching powder for at least 2 hours

Ans : a. 5 per cent cresol for at least 2 hours. Stools and urine are the sole sources of infection. They should be received in closed containers and disinfected with 5 per cent cresol for at least 2 hours. All soiled clothes and linen should be soaked in a solution of 2 per cent chlorine and steam-sterilized.

93. Most successful approach for the treatment of carriers state in case of typhoid is.....

Ans : Cholecystectomy with concomitant ampicillin therapy. Another option is intensive course of ampicillin or amoxicillin (4-6 g a day) together with probenecid (2 g/day) for 6 weeks.

94. Live attenuated anti-typhoid vaccine is administered

- a. subcutaneously
- b. intramuscularly
- c. orally
- d. intradermally

Ans : c. Orally. The Vi polysaccharide vaccine or subunit vaccine is administered (1 dose) subcutaneously or intramuscularly. Ty2 la vaccine is a live attenuated vaccine administered orally which is available as enteric coated capsules. A 3-dose regimen is recommended on 1, 3 and 5th day.

95. An extremely common form of food poisoning is

- a. Salmonella food poisoning
- b. Botulism
- c. Cl. Perfringens food poisoning
- d. Staphylococcal food poisoning

Ans : a. Salmonella food poisoning

96. Primary source of salmonellosis is

- a. Man
- b. Stool
- c. Food
- d. Animals

Ans : d. Animals. Man gets the infection from farm animals and poultry – through contaminated meat, milk and milk products, sausages, custards, egg and egg products.

97. The foods involved in staphylococcal food poisoning are.....

Ans : salads, custards, milk and milk products which get contaminated by staphylococcus aureus

98. Most serious but rare form of food poisoning is

- a. Salmonella food poisoning

- b. Botulism
- c. Cl. Perfringens food poisoning
- d. Staphylococcal food poisoning

Ans : b. Botulism. Condition is frequently fatal, death occurring 4-8 days later due to respiratory or cardiac failure.

99. The foods most frequently responsible for botulism are

- a. home preserved and home made foods
- b. milk and milk products
- c. meat and poultry
- d. egg and egg products

Ans : a. home preserved and home made foods such as home-canned vegetables, smoked or pickled fish, homemade cheese and similar low acid foods.

100. The prophylaxis of botulism is mainly by administering

- a. Vaccine
- b. Antibiotic
- c. Antitoxin
- d. Immunoglobulin

Ans : c. Antitoxin. When a case of botulism has occurred, antitoxin should be given to all individuals partaking of the food. The dose varies from 50,000 to 100,000 units IV. Active immunization with botulinum toxoid to prevent botulism is also available.

101. The foods most frequently responsible for Cl. perfringens food poisoning are.....

Ans : ingestion of meat, meat dishes and poultry.

102. The only reservoir of E. histolytica infection is.....

Ans : Man. The immediate source of infection is the faeces containing the cysts.

103. Symptomatic cases of amoebiasis should be treated with

- a. Metronidazole
- b. Tinidazole
- c. Albendazole
- d. Ampicillin

Ans : a. Metronidazole orally. It is an antibiotic and antiprotozoal drug. The dose is 30

mg/kg of body weight/day, divided into 3 doses after meals, for 8-10 days. Tinidazole can be used instead of metronidazole. Asymptomatic carriers should be treated with oral diiodohydroxyquin, 650 mg TDS (adults) or 30-40 mg/kg of body weight/day (children) for 20 days, or oral diloxanide furoate, 500 mg TDS for 10 days (adults).

104. Intestinal complication of ascariasis includes.....

Ans : The adult roundworm aggregate masses cause **volvulus, intestinal obstruction or intessusception** and wandering worm can cause **bowel perforation** in the ileocolic region.

105. Reservoir of infection in case of ascariasis is

- a. Soil
- b. Man
- c. Worm
- d. Feces

Ans : **d. Man** is the only reservoir. Infective material is faeces containing the fertilized eggs.

106. The hook worm larva enters the body through the

- a. skin
- b. feces
- c. soil
- d. water

Ans : **a. skin**. Larva reaches the by piercing the skin most commonly through the feet.

107. A complication of hookworm infection is

- a. intestinal obstruction
- b. bowel perforation
- c. iron-deficiency anaemia
- d. intessusception

Ans : **c. iron-deficiency anaemia**. Hookworm infection causes chronic blood loss and depletion of body's iron stores leading to iron-deficiency anaemia.

108. In case of worm infestation effective drugs available for the treatment of the human reservoir are

Ans : Albendazole :400 mg as a single dose.
 Mebendazole : 100 mg twice daily for 3 days

Levamisole : 2.5 mg/kg of body weight as a single dose

Pyrantel: 10 mg/kg of body weight as a single dose

109. Drug used for mass treatment of ascariasis is

- a. Levamisole
- b. Pyrantel
- c. Albendazole
- d. Mebendazole

Ans : **a. Levamisole**

110. Another name of rabies is

Ans : **hydrophobia**

111. Rabies in man is called.....

Ans : **hydrophobia**

112. First aid for dog bite is

- a. Administering antisera
- b. Administering IG
- c. Administering vaccine
- d. Washing with soap and water

Ans : **d. Washing with soap and water** preferably under a running tap, for at least 15 minutes minimize the risk of contracting rabies.

113. Chemical used to treat wound related to dog bite is

- a. Normal saline
- b. Povidone iodine
- c. Hydrogenperoxide
- d. Chlorhexidine

Ans : **b. Povidone iodine**. Residual virus remains in the wound after cleansing, should be inactivated by irrigation with virucidal agents either alcohol (400-700 ml/litre), tincture or 0.01 % aqueous solution of iodine or povidone iodine.

114. Category of rabies exposure in which immediate vaccination is needed are all except

- a. Category I
- b. Category II
- c. Category III
- d. Category IV

Ans : **a. Category I**

Categories of contact with suspect Category Post-exposure prophylaxis rabid animal

measures

Category I - touching or feeding animals, None

licks on intact skin

Category II - nibbling of uncovered skin, Immediate vaccination and local treatment minor scratches or abrasions without of the wound bleeding

Category III - single or multiple transdermal Immediate vaccination and administration of bites or scratches, licks on broken skin, mucous rabies immunoglobulin; local treatment of the contamination of mucous membrane with wound

saliva from licks, contacts with bats.

115. Intradermally administrated post-exposure prophylaxis rabies vaccine regimen is.....

Ans : 2-site regimen prescribes injection of 0.1 ml at 2 sites (deltoid or thigh) on days 0, 3, 7 and 28.

Post-exposure prophylaxis for previously vaccinated individuals is either 1 dose delivered intramuscularly or 2 doses delivered intradermally on days 0 and 3.

116. Rabies immunoglobulin for passive immunization is administered

- a. intramuscularly
- b. intradermally
- c. into or around the wound site
- d. subcutaneously

ans : c. into or around the wound site.

Administered only once, preferably at, or as soon as possible after, the initiation of post-exposure vaccination. The dose of human rabies immunoglobulin is 20 IU/kg body weight should be administered into or around the wound site or sites. The remaining immunoglobulin, if any, should be injected intramuscularly. PrEP schedule requires intramuscular doses of 1 ml or 0.5 ml, or intradermal administration of 0.1 ml volume per

site (one site each day) given on days 0, 7 and 21 or 28.

117. Reservoir of yellow in forest area is mainly

- a. bats and birds
- b. monkeys and forest mosquitoes
- c. fox and raccoons
- d. rat and ants

ans : b. monkeys and forest mosquitoes. In urban areas, the reservoir is man and Aedes aegypti mosquitoes.

118. Mosquito causing yellow fever is

- a. Anopheles
- b. Aedes aegypti
- c. Culexaedes
- d. Aibopictus

Ans : b. Aedes aegypti

119. The most effective and only control strategy for yellow fever is administering.

- a. Vaccine
- b. Immunoglobulin
- c. Anti sera
- d. Antibiotic

Ans : a. Vaccine. 17D vaccine, it is a live attenuated vaccine administered subcutaneously at deltoid in a single dose of 0.5 ml. It has to be stored between +5 and -30 deg.C, preferably below zero deg. There is no specific treatment.

120. Yellow fever vaccine will not be administered if a person have.....

Ans : severe allergies to egg protein