

Question Bank for practical Virology

Type 1 Questions: Fill in the following GAPS with suitable words.

Set 01

- 1- Several specialized techniques have been developed for the cultivation of viruses. These techniques are -----, ----- and -----.
- 2- RIA is based on the same principle as ELISA, except that a ----- is used instead of an -----.
- 3- Open the blunt end of the egg for harvesting, harvested fluids are tested in the -----, while harvested of CAM after washing in saline, inspected for -----.
- 4- Dispersion of cells is done with ----- which digest cement material that bind the cells together in a tissue
- 5- Latex particles allow visual observation of the ----- reaction.
- 6- ----- test is based on the inhibition of viral by a specific antibody (Ab); this test is used to detect indirectly the presence of haemagglutinin virus.
- 7- During diagnosis of HBV, ----- used as a general marker of infection. While ----- used to document recovery and/or immunity to HBV infection

Set 02

- 1- -----is a buffered medium used to maintain the viability of viruses during their transport to a virology laboratory.
- 2- First candling is carried out on the 3rd day of incubation to show whether-----.
- 3- ----- is a type of medium which is used to maintain the cell in a healthy state without cell growth at an appropriate Temperature and gas mixture
- 4- When the cell cultures are used as indicator, system titer expressed as -----, while when experimental animals or embryonated eggs are used, titer expressed as -----.
- 5- ----- test is an interaction, adsorb or adhere of virion or Antigen-derived from them with receptor sites of various species of animals or birds erythrocytes (RBCs), as a result the RBCs agglutinate.
- 6- The most common causes of viral hepatitis are -----, -----, -----, -----, -----.

Type 2 Questions: Indicate whether each of the following statements is TRUE or FALSE.

Set 01

1. Samples for the detection of the viruses should be collected before the appearance of symptoms.
2. The “choice” between a lytic, nonproductive infection and a lysogenic, productive infection depends on environmental conditions.

3. During harvesting of embryonated egg, harvested fluids are tested in the haemagglutination test, while harvested of CAM after washing in saline, inspected for –lesion.
4. First candling is carried out on the 3rd day of incubation to show whether the embryo dead or live.
5. Maintenance medium is a type of medium which is used to maintain the cell in a healthy state without cell growth at an appropriate Temperature and gas mixture

Set 02

1. ELISA is based on the same principle as RIA, except that a radiolabeled Ab is used instead of an enzyme linked Ab
2. Third candling is done after 2-3 days of inoculation to see whether the embryo is dead or not.
3. Trypan blue is used for dispersing and harvesting tissue cells from organs or cells sheet grown in vitro.
4. The cells are obtained from normal tissue can be sub-cultured forever.
5. It is necessary to be sure that antibiotic is incorporated in hen's diet when the eggs are used for inoculation of viruses.
6. Latex particle allow visual observation of the antigen-antibody reaction during agglutination test.

Type 3 Questions: Answer the following questions.

Set 01

1. When is it the best time to collect viral sample? Why?
2. Why it is necessary to be sure that antibiotic is not incorporated in hen's diet when the eggs are used for inoculation of viruses?
3. Why turning of eggs is important during incubation of eggs for cultivation of viruses?
4. Why should we chill the eggs at 4°C for 4-6 hrs prior to harvesting the allantoic or amniotic fluids?
5. What is the purpose of using of trypsin in primary cell culture?

Set 02

Find the result of HBV if know the reading is dual filter and the absorbance of the following

sample = 0.480

negative control= 0.115

positive control= 0.310

blank= 0.105