

## Micro Repro (Bacterial, Viral, In pregnancy)

### Past Y Exams

<p><b>1- In Vagina, the main flora</b></p> <ul style="list-style-type: none"><li>a. Doderlein's bacili (Aerobic Lactobacill)</li><li>b. E.coli</li><li>c. staph &amp; strept</li><li>d. candida</li><li>e. proteus</li></ul>	<b>A</b>
<p><b>2- One of the following is true about chlamydis</b></p> <ul style="list-style-type: none"><li>a. Obligate intracellular bacteria</li><li>b- Elementary body (EB): Non replicating</li><li>c- Reticulate body (RB): Non infectious</li><li>d- Cause regional lymph node involvement (buboes).</li><li>e. All of the above</li></ul>	<b>E</b>
<p><b>3- All the following are Venereal diseases EXCEPT</b></p> <ul style="list-style-type: none"><li>a. Gonorrhoea</li><li>b. Pseudomonas pyocanea</li><li>c. Lymphogranuloma venereum</li><li>d. AIDS.</li><li>e Chlamydia</li></ul>	<b>B</b>
<p><b>4-N. Gonorrhoea causes all the following EXCEPT</b></p> <ul style="list-style-type: none"><li>a. Acute urethritis, characterized by profuse purulent discharge in male</li><li>b. Cervicitis in female</li><li>c. Ophthalmia neonatorum in neonate</li><li>d. Chancroid in male</li></ul>	<b>D</b>

<p><b>5- All the following are true about N. Gonorrhoea EXCEPT</b></p> <ul style="list-style-type: none"> <li>a. kidney-shaped diplococci</li> <li>b. Grow on Chocolate agar</li> <li>c. Grow on Thayer-Martin media</li> <li>d. Grow on Ordinary media</li> <li>e. Oxidase test is positive</li> </ul>	<p>D</p>
<p><b>6- Which of the following is TRUE about N. gonorrhoea?</b></p> <ul style="list-style-type: none"> <li>a. They are gram negative anaerobic bacteria</li> <li>b. Ferment Glucose &amp; maltose</li> <li>c. They are oxidase positive</li> <li>d. They arranged in long chain</li> </ul>	<p>C</p>
<p><b>7- Thayer martin medium is the media of choice for isolation of</b></p> <ul style="list-style-type: none"> <li>a. E. coli</li> <li>b. Neisseria</li> <li>c. Bacillus</li> <li>d. Vibrio</li> </ul>	<p>B</p>
<p><b>8- Which one of the following is correct regarding Gonococci</b></p> <ul style="list-style-type: none"> <li>a. Demonstrated using dark field microscopic</li> <li>b. Easily cultured on simple media</li> <li>c. Gram positive</li> <li>d. Non motile</li> </ul>	<p>D</p>
<p><b>9- Each of the following statements concerning Neisseria is Correct EXCEPT</b></p> <ul style="list-style-type: none"> <li>a. are gram-ve diplococci</li> <li>b. They produce IgA protease as virulence factor</li> <li>c. They are oxidase positive</li> <li>d. They grow best under anaerobic condition</li> </ul>	<p>D</p>

<p><b>10- All the following are true about T. pallidum EXCEPT</b></p> <ul style="list-style-type: none"> <li>a. Slender, spiral coils (regular)</li> <li>b. Microaerophilic</li> <li>c. Grow at 30 to 37°C</li> <li>d. Pathogenic treponemes have been cultured in vitro</li> <li>e. The cells have high lipid content (cardiolipin, cholesterol).</li> </ul>	D
<p><b>11- One of the following is true about T. pallidum</b></p> <ul style="list-style-type: none"> <li>a. Cause chancroid</li> <li>b. 2nd syphilis characterized Gumma granulomatous-like lesion</li> <li>c. 3rd syphilis Characterized by Chancre</li> <li>d. Less than 10 organisms are capable of producing infection</li> </ul>	D
<p><b>12- Each of the following statement concerning Syphilis is CORRECT EXCEPT:</b></p> <ul style="list-style-type: none"> <li>a- The disease caused by T. palidum</li> <li>b- Transmitted by sexual contact</li> <li>c-Organisms penetrate mucous membranes or enter minute breaks in the skin</li> <li>d-Needs more than 10 organisms to be capable of producing infection</li> </ul>	D
<p><b>13- 1ry syphilis is characterized by</b></p> <ul style="list-style-type: none"> <li>a. associated with joint pain</li> <li>b. Multiple cutaneous lesions</li> <li>c.-ve dark field examination</li> <li>d. Painless indurated ulcer</li> <li>e. possible diagnosis by Weil-Felix test</li> </ul>	D
<p><b>14- Which of the following is true about Treponemal antigen tests</b></p> <ul style="list-style-type: none"> <li>a. Detect specific antibodies</li> <li>b. The treponemal tests often remain reactive for life</li> <li>c. contain: Fluorescent Tepalidum antibody absorption</li> <li>d. contain: Microhemagglutination for T. pallidum</li> <li>e. all of above</li> </ul>	E

<p><b>15- Which of the following is false about Non-treponemal antigen tests</b></p> <ul style="list-style-type: none"> <li>a. Detect non specific antibodies</li> <li>b. Complement fixation test (Wasserman reaction).</li> <li>c. Venereal Disease Research Laboratory (VDRL).</li> <li>d. Results of non-treponemal tests usually not parallel to extent of infection</li> <li>e. Titers tend to be highest during secondary syphilis</li> </ul>	<p>D</p>
<p><b>16- Venereal disease caused by Chlamydiae</b></p> <ul style="list-style-type: none"> <li>a. Psittacosis</li> <li>b. Trachoma</li> <li>c. Inclusion conjunctivitis</li> <li>d. Lymph granuloma venereum</li> <li>e. Pneumonia</li> </ul>	<p>D</p>
<p><b>17- Each of the following statement concerning Chlamydia trachomatis is CORRECT EXCEPT:</b></p> <ul style="list-style-type: none"> <li>a- It is an important cause of non gonococcal urethritis</li> <li>b- It is the cause of lymphogranuloma venereum</li> <li>c-It is an important cause of subacute bacterial endocarditis</li> <li>d-It is an important cause of conjunctivitis</li> </ul>	<p>C</p>
<p><b>18- Each of the following statements concerning chlamydiae is CORRE EXCEPT:</b></p> <ul style="list-style-type: none"> <li>a. Chlamydiae are obligate intracellular parasites</li> <li>b- Chlamydiae possess both DNA and RNA</li> <li>c- Chlamydia trachomatis has multiple serotypes</li> <li>d-Chlamydiae can be cultivated on ordinary media</li> </ul>	<p>D</p>
<p><b>19- One of the following is true about chlamydiae</b></p> <ul style="list-style-type: none"> <li>a. Obligate intracellular bacteria</li> <li>b- Elementary body (EB): Non replicating</li> <li>c- Reticulate body (RB): Non infectious</li> <li>d- Cause regional lymph node involvement (buboes).</li> <li>e. All of the above</li> </ul>	<p>E</p>

## Past Years Written Q

### Give short account

#### 1- Virulence factor of *N. Gonorrhoea*

- ✓ Pili (fimbriae) and outer membrane proteins: adhesion.
- ✓ Endotoxin: Lipooligosaccharides.
- ✓ IgA proteases: inactivate human IgA.

#### 2- Clinical manifestations of *N. Gonorrhoea*

- ☑ **Male:** Acute urethritis: Characterized by profuse purulent discharge
- ☑ **Female:**
  - Cervicitis Characterized by profuse vaginal mucopurulent discharge & sometimes acute urethritis & dysuria.
  - Vulvovaginitis: Occurs in girls 2-8 years of age.
- ☑ **Newborn:** Ophthalmia neonatorum: Occur in newborns who are exposed to infected secretions in the birth canal.

#### 3- Laboratory diagnosis of *N. Gonorrhoea*

##### 1- Sample:

- ☑ **In acute disease:** profuse pus & secretions from the urethra or cervix.
- ☑ **In chronic disease:** (Scanty or no discharge)
  - In males: 1- morning drop from the urethra
  - In females: cervical secretion is obtained after cervical irritation.

2- Direct film stained with Gram stain: Detection of **intracellular Gram negative diplococci** is **diagnostic**

##### A- Media: complex requirements:

- Ordinary media: **No** growth
- Enriched media: **Chocolate agar:** Grow
- Selective media: **Thayer Martin medium:** Grow

B- Requirements:- Aerobic, 37C, 10% Co<sub>2</sub>

3- Oxidase test: **positive.**

4- Sugar fermentation: *N. gonorrhoea* ferment glucose only (with acid production only)

#### 4- 1ry syphilis

- ☑ Painless, indurated ulcer >> develops at the site of inoculation and associated with regional lymphadenopathy.
- ☑ This lesion is filled with treponemes and is, therefore, highly contagious

#### 5- 2nd syphilis

- ☑ Mucocutaneous rash. mucous patches on mucous membranes and wart-like lesions called condyloma lata in moist intertriginous areas.
- ☑ All these lesions are highly contagious.

#### 6- 3ry syphilis

- ☑ Characterized by long-term complications: gumma (granulomatous-like lesion), cardiovascular and neurosyphilis.
- ☑ Can affect all areas of the body and be fatal.

#### 7- Direct film of *T. pallidum*

- A- Unstained 'fresh wet' film Examined with dark field microscope for motile treponemas
- B- Direct immune fluorescence (IF) Using fluorescein-labelled anti-treponemal antibodies examined by fluorescent microscope

#### 8- Serological tests of *T. pallidum*

- ☑ **1st (specific):** reacts only with treponemal **antigens**
  - FTA-ABS
  - TPI
  - MHA-TP
- ☑ **2nd (Non specific):** reagin **antibodies** react with lipid antigense.g., **cardiolipin**
  - VDRL
  - RPR
  - Wassermann test

### 9- Chlamydia bacteria not virus?

- ✓ Have DNA, RNA, ribosome.
- ✓ Have Inner and outer membrane & cell wall.
- ✓ Susceptible to Antibiotics
- ✓ Multiply by binary fission.

### 10- Lab Diagnosis of Chlamydia?

#### 1. Specimens:

- ✓ Scraping from the urogenital tract.
- ✓ Urethral or Cervical exudates.

**2. Microscopic examination:** Inclusion bodies in scraped tissue cells are detected by staining with Giemsa or iodine or by staining with fluorescent monoclonal antibodies.

#### 3. Culture:

- a) On McCoy cells: after incubation, typical cytoplasmic inclusions are seen.
- b) Yolk sac of embryonated egg: have been used to isolate Chlamydia

## 2- Complete

Non-treponemal antigen test	Treponemal antigen Test
Measure Nonspecific antibodies	Detect Specific antibodies
<ul style="list-style-type: none"><li>• VDRL</li><li>• RPR</li><li>• Wassermann test</li></ul>	<ul style="list-style-type: none"><li>• FTA-ABS</li><li>• TPI</li><li>• MHA-TP</li></ul>

Elementary body (EB)	Reticulate body (RB)
Small	Large
Extracellular	Intra-cytoplasmic
Infectious	Non Infectious
Non Replicating	Metabolically active & Replicating

<p><b>1- Which of the following viruses may become letent at sacral ganglia?</b></p> <p>a- CMV b- EMV c- HIV d- HSV-1 e- HSV-2</p>	<p><b>E</b></p>
<p><b>2- Latency is characteristic phenomenon after infection of which of the following virus</b></p> <p>a- corona virus b- Herpsviruses c- Paramyxovirus d- Polioviruses e-Rhinoviruses</p>	<p><b>B</b></p>
<p><b>3- Which statement is false about herpes simplex virus</b></p> <p>a- It is ssDNA non enveloped virus b- Latency may occur in trigeminal or sacral ganglia c- Acyclovir is the drug of choice and has no effect on latency and recurrence d- There are two distinct types (type 1 and 2)</p>	<p><b>A</b></p>
<p><b>4- Each of the following pathogens is likely to establish chronic or latent infection EXCEPT:</b></p> <p>a- Cytomegalovirus. b- Hepatitis A virus, c- Hepatitis B virus, d- Herpes simplex</p>	<p><b>B</b></p>

<p><b>5- Which statement is correct for diagnosis of virus infection?</b></p> <p>a. Detection of virus particle by light microscope.</p> <p>b. Detection of virus inclusion bodies by light microscope and Virus genome by PCR.</p> <p>c. IgG detection which indicates recent infection.</p> <p>d. Elevates specific virus IgM which indicate past infection.</p> <p>e. Samples can be cultivated on blood agar.</p>	<p><b>B</b></p>
<p><b>6- All the following are true about HSV-1 EXCEPT</b></p> <p>a. Transmitted by Saliva</p> <p>b. characterized by vesicular lesion</p> <p>c. Cause Orofacial lesions mainly.</p> <p>d. Cause Genital lesions mainly.</p> <p>e. Cause Herptic whitlow</p>	<p><b>D</b></p>
<p><b>7-Herptic whitlow</b></p> <p>a. Pustular lesion of the skin of finger or hand</p> <p>b. mainly in medical personnel</p> <p>c. caused by HSV-1</p> <p>d. All of the above</p>	<p><b>D</b></p>
<p><b>8- All the following are true about HSV EXCEPT</b></p> <p>a. HSV-1 latent in Trigeminal ganglia</p> <p>b. HSV-2 latent in Sacral ganglia</p> <p>c. Reactivation occur in HSV-1 more than HSV-2</p> <p>d. Reactivation occur d.2 common colds, hormonal changes &amp; sunlight</p>	<p><b>C</b></p>
<p><b>9- Mechanism of action of acyclovir in treatment herpes virus</b></p> <p>a. Prevent recurrence</p> <p>b. Affect on Latent state</p> <p>c. Shortens the duration of the lesion &amp; decreases shedding</p> <p>d. Not drug of choice</p>	<p><b>C</b></p>

<p><b>10- All the following are true about HSV-2 EXCEPT</b></p> <ul style="list-style-type: none"> <li>a. Transmitted by Sexual</li> <li>b. characterized by vesicular lesion</li> <li>c. Cause Neonatal infection &amp; may Aseptic meningitis</li> <li>d. Cause Genital lesions mainly.</li> <li>e. Related ganglia is Trigeminal ganglia</li> </ul>	<p><b>E</b></p>
<p><b>11- All the following are true about Papilloma virus EXCEPT</b></p> <ul style="list-style-type: none"> <li>a. more than 100 different types of HPV</li> <li>b. Icosahedral, ds DNA, circular, enveloped</li> <li>c. Transmission by sexual contact</li> <li>d. Serology: rarely done</li> </ul>	<p><b>B</b></p>
<p><b>12-HPV-1 cause</b></p> <ul style="list-style-type: none"> <li>a- Planter wart</li> <li>b- Skin warts</li> <li>c- Carcinoma (cervix, penis)</li> <li>d- Anogenital condylomas</li> <li>e- laryngeal papilloma</li> </ul>	<p><b>A</b></p>
<p><b>13-HPV-2,4 cause</b></p> <ul style="list-style-type: none"> <li>a- Planter wart</li> <li>b- Skin warts</li> <li>c-Carcinoma (cervix, penis)</li> <li>d- Anogenital condylomas</li> <li>e-laryngeal papilloma</li> </ul>	<p><b>B</b></p>
<p><b>14-HPV-16,18 cause</b></p> <ul style="list-style-type: none"> <li>a- Planter wart</li> <li>b- Skin warts</li> <li>c- Carcinoma (cervix, penis):</li> <li>d- Anogenital condylomas</li> <li>e- laryngeal papilloma</li> </ul>	<p><b>C</b></p>

<p><b>15-HPV-6,11 cause</b></p> <ul style="list-style-type: none"> <li>a- Planter wart</li> <li>b- Skin warts</li> <li>c- Carcinoma (cervix, penis)</li> <li>d- Anogenital condylomas &amp; laryngeal papilloma</li> </ul>	<p>D</p>
<p><b>16- All the following are true about lab diagnosis of HPV EXCEPT</b></p> <ul style="list-style-type: none"> <li>a. Virus isolation isolated in cell line</li> <li>b. Serology: rarely done (large number of serotypes).</li> <li>c. Pap smear: Screening by for all women above 30 in USA. (kolloocytes)</li> <li>d. PCR: to detect virus DNA is available.</li> </ul>	<p>A</p>
<p><b>17- The role of Imiquimod in treatment HPV</b></p> <ul style="list-style-type: none"> <li>a. Prevent recurrence</li> <li>b. Affect on Latent state</li> <li>c. Shortens the duration of the lesion &amp; decreases shedding</li> <li>d. Not drug of choice</li> <li>e. stimulates the production of interferon</li> </ul>	<p>E</p>
<p><b>18- All the following are true about treatment of HPV EXCEPT</b></p> <ul style="list-style-type: none"> <li>a. Topical medication is Imiquimod</li> <li>b- Cryotherapy or surgery</li> <li>c- Electrocauterization &amp; carbon dioxide laser therapy.</li> <li>d- Most HPV infections not resolve spontaneously.</li> </ul>	<p>D</p>

## 1. Give short account

### 1- Structure of Herpes Virus

- **Virion:** icosahedral.
- **Genome:** Double-stranded DNA, linear.
- **Envelope:** Contains glycoprotein spikes.

### 2- $\beta$ group & $\gamma$ group of herpes family

<input checked="" type="checkbox"/> <b>Beta:</b> <ul style="list-style-type: none"><li>• CMV</li><li>• HHV6</li><li>• HHV7</li></ul>	<input checked="" type="checkbox"/> <b>Gamma</b> <ul style="list-style-type: none"><li>• EPV</li><li>• Kaposi sarcoma associated herpes virus</li></ul>
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### 3- HSV-1

- **Transmission:** Primarily in saliva (kissing)
- **Site:** Mainly orofacial lesions
- **vesicular lesion:** Herpes labialis (cold sores) & Herpetic whitlow

### 4- HSV-2

- **Transmission:** By sexual contact
- **Site:** Genital lesions
- **vesicular lesion:** Genital herpes & Neonatal herpes

### 5- Cold sores

- Herpes labialis caused by HSV1 transmitted by kissing

### 6- Herpetic whitlow

is a pustular lesion of the skin of finger or hand of medical personnel.

### 7- Genital herpes:

vesiculo-ulcerative lesions on external genitalia as well as the cervix.

### 8- Neonatal infection by HSV-2

Originates chiefly from contact with vesicular lesions within the birth canal.

### 9-Latency & Reactivation of HSV-1 & HSV-2

	HSV-1	HSV-2
Latency	Trigeminal ganglia.	Sacral ganglia.
Reactivation	In response to stimuli as common colds, hormonal changes and sunlight.	

### 10- Lab Diagnosis of HSV

- Sample: vesicular fluid.
- Detection of viral particles by electron microscope.
- Detection of viral antigens by immunofluorescence in vesicular fluid.
- Detection of HSV DNA by PCR.
- Virus isolation from herpetic lesions.
- Serologic diagnosis (Detection of IgM or 4-folds rising titer of IgG).
- Histological staining (Giemsa stain) of scrapings or swabs from the base of skin lesions.

### 11- Vaccine of HPV

- Virus-like particle (VLP) vaccine (L1 and/ Or L2 protein).
- There are 3 versions of the L1-only HPV vaccine.
- Gardasil: HPV16, 18, 6 and 11.
- Cervarix: HPV 16, 18.
- Gardasil9: HPV16, 18, 6, 11, 31, 33, 45, 52, and 58.
- Given to females 10 -25 years of age.

## 12-Treatment of HPV

- Most HPV infections resolve **spontaneously**.
- **Topical** medications:
  - ✓ imiquimod(which stimulates the production of interferon).
- **Cryotherapy or surgery**, but these approaches are less effective for genital warts than for other types of warts.
- **Electro cauterization** and carbon dioxide **laser therapy**.

## 13- Role of Pap smear in HPV

- ☑ Screening by Pap smear for all women above 30 in USA (koilocytes).
- ☑ enlarged nuclei and hyperchromasia (darkly stained nuclei) typical of HPV-infected koilocytes.

## 2. Complete

HPV	Clinical lesion	Benign / malignant
Type 1	Planter wart.	Benign
Type 2,4	Skin warts.	Benign
Type 16, 18	Carcinoma (cervix, penis) (70%).	Malignant
Type 6, 11	Anogenital condylomas (90%) and laryngeal papilloma.	Low oncogenic potential

<p><b>1. Which virus is most commonly associated with intrauterine infections?</b></p> <p>a) HIV b) Rubella c) CMV d) HSV</p>	<p>C</p>
<p><b>2. What is the structure of Cytomegalovirus (CMV)?</b></p> <p>a) Icosahedral, ssRNA b) Icosahedral, dsDNA c) Helical, ssRNA d) Complex, dsDNA</p>	<p>B</p>
<p><b>3. The "TORCH" complex includes all of the following EXCEPT:</b></p> <p>a) Rubella b) Cytomegalovirus c) Hepatitis B d) Toxoplasma</p>	<p>C</p>
<p><b>4. Parvovirus B19 primarily affects which type of cells?</b></p> <p>a) Immature erythroid cells b) Immune cells c) Hepatocytes d) Neurons</p>	<p>A</p>
<p><b>5. What is the common clinical syndrome associated with parvovirus B19 in children?</b></p> <p>a) Roseola b) Hand, foot, and mouth disease c) Measles d) Fifth disease</p>	<p>D</p>

<p><b>6. What does "Owl's eye" inclusion refer to in histological diagnosis?</b></p> <p>a) HSV b) Parvovirus B19 c) Rubella d) CMV</p>	<p>D</p>
<p><b>7. Which test is most sensitive for detecting CMV DNA in body fluids?</b></p> <p>a) ELISA b) Culture c) PCR d) Latex agglutination</p>	<p>C</p>
<p><b>8. Which of the following is NOT a congenital infection caused by rubella?</b></p> <p>a) Deafness b) Cardiac defects c) Blindness d) Hepatomegaly</p>	<p>D</p>
<p><b>9. What is a key preventive measure against rubella infection?</b></p> <p>a) Acyclovir prophylaxis b) Blood transfusion c) MMR vaccination d) Ganciclovir therapy</p>	<p>C</p>
<p><b>10. CMV latency is maintained in:</b></p> <p>a) Erythrocytes b) Monocytes and macrophages c) Hepatocytes d) Skin cells</p>	<p>B</p>

<p><b>11. Which of the following is a Beta herpesvirus?</b></p> <p>a) CMV b) HHV-6 c) HSV-1 d) VZV</p>	<p>A</p>
<p><b>12. Parvovirus B19 causes hydrops fetalis due to:</b></p> <p>a) CNS abnormalities b) Hepatic dysfunction c) Severe anemia d) Cardiac arrhythmia</p>	<p>C</p>
<p><b>13. What is the genome type of Parvovirus B19?</b></p> <p>a) dsDNA b) ssDNA c) ssRNA d) dsRNA</p>	<p>B</p>
<p><b>14. Rubella virus is classified under which family?</b></p> <p>a) Retroviridae b) Flaviviridae c) Herpesviridae d) Togaviridae</p>	<p>D</p>
<p><b>15. Which period is most dangerous for rubella infection in pregnancy?</b></p> <p>a) First trimester b) Second trimester c) Third trimester d) Postpartum</p>	<p>A</p>

<p><b>16. Which confirmatory test should be done after detecting CMV IgG and IgM?</b></p> <p>a) Hemagglutination  b) PCR  c) VDRL  d) Complement fixation</p>	<p><b>B</b></p>
<p><b>17. Which herpesvirus is responsible for infectious mononucleosis but with heterophil-negative antibodies?</b></p> <p>a) EBV  b) HSV  c) CMV  d) HHV-6</p>	<p><b>C</b></p>
<p><b>18. The most common route of CMV transmission in children is via:</b></p> <p>a) Blood  b) Saliva  c) Transplacental  d) Breast milk</p>	<p><b>B</b></p>
<p><b>19. Which virus is a common co-factor needed by dependo-parvoviruses for replication?</b></p> <p>a) Rubella  b) HSV  c) CMV  d) Adenovirus</p>	<p><b>D</b></p>
<p><b>20. Rubella infection spreads initially through:</b></p> <p>a) Lymph nodes and oropharynx  b) Liver  c) CNS  d) GI tract</p>	<p><b>A</b></p>

<p><b>21. The first clinical sign of congenital rubella syndrome is often:</b></p> <ul style="list-style-type: none"> <li>a) Rash</li> <li>b) Deafness</li> <li>c) Low birth weight</li> <li>d) Cataract</li> </ul>	<p><b>C</b></p>
<p><b>22. The average incubation period of rubella is:</b></p> <ul style="list-style-type: none"> <li>a) 3-7 days</li> <li>b) 1-2 days</li> <li>c) 28-35 days</li> <li>d) 14-25 days</li> </ul>	<p><b>D</b></p>
<p><b>23. Which is the preferred treatment for CMV in immunocompromised individuals?</b></p> <ul style="list-style-type: none"> <li>a) Acyclovir</li> <li>b) Ganciclovir</li> <li>c) Oseltamivir</li> <li>d) Zidovudine</li> </ul>	<p><b>B</b></p>
<p><b>24. What percent of infants infected with rubella in the first trimester show congenital rubella syndrome?</b></p> <ul style="list-style-type: none"> <li>a) 85%</li> <li>b) 50%</li> <li>c) 30%</li> <li>d) 10%</li> </ul>	<p><b>A</b></p>
<p><b>25. What is a key general preventive measure against CMV infection in pregnancy?</b></p> <ul style="list-style-type: none"> <li>a) Hygiene practices</li> <li>b) Antibiotic prophylaxis</li> <li>c) Vaccination</li> <li>d) Regular ultrasound</li> </ul>	<p><b>A</b></p>

## Past Years Written Q

### **(1) Enumerate the TORCH infections?**

- **T** - Toxoplasma gondii
- **O** - Other (e.g., Syphilis, Varicella-Zoster, HIV, Parvovirus B19, Zika)
- **R** - Rubella
- **C** - Cytomegalovirus (CMV)
- **H** - Herpes simplex virus (HSV)

### **(2) List the modes of transmission for congenital viral infections.**

- **Prenatal** (transplacental)
- **Perinatal** (via vaginal secretions or blood during delivery)
- **Postnatal** (via breast milk or close contact)

### **(3) Enumerate the outcomes of congenital viral infections?**

- Spontaneous abortion
- Premature birth
- Intrauterine growth retardation (IUGR)
- Central nervous system abnormalities
- Vision or hearing loss
- Cardiac and skeletal abnormalities

**(4) List three clinical features of congenital cytomegalic inclusion disease?**

- Mental retardation
- Microcephaly
- Blindness
- Deafness

**(5) Enumerate preventive strategies against rubella and CMV infections in pregnancy?**

**☒ Rubella:**

- MMR vaccination (before pregnancy)

**☒ CMV:**

- Avoid sharing utensils with children
- Proper hand hygiene
- Avoid kissing young children on the mouth
- Regular follow-ups for affected infants