

Крок1 (2011-2021)
СПЕЦІАЛЬНІСТЬ 226 «ФАРМАЦІЯ, ПРОМИСЛОВА ФАРМАЦІЯ»
ДЛЯ ПІДГОТОВКИ ФАХІВЦІВ ДРУГОГО (МАГІСТЕРСЬКОГО) РІВНЯ ВИЩОЇ
ОСВІТИ З ДИСЦИПЛІНИ «МІКРОБІОЛОГІЯ З ОСНОВАМИ ІМУНОЛОГІЇ»

I семестр

1. Different structures of a bacterial cell perform different functions. What dispensable component of a cell ensures its survival within hostile environment?

- *Spores
- Flagella
- Capsule
- Cilia
- Inclusions }

2. Microbe survival within environment is facilitated by spore formation. What microorganisms of those listed below are spore formers:

- *Clostridia
- Bacteroides
- Staphylococci
- Peptococci
- Peptostreptococci

3. What drug should be administered for individual prevention of malaria?

- *Chingamin
- Rifampicin
- Ampicillin
- Gentamicin
- Biseptol (Co-Trimoxazole)

4. Bacterial culture obtained from patient DOES NOT grow when exposed to oxygen. Conditions suitable for bacterial culture growth can be created in:

- *Anaerobic culture jar
- Serum-supplemented medium
- Pasteuroven
- Krotov apparatus
- Oxidative medium

5. In the course of long-term treatment of an infectious patient with penicillin, the pathogen transformed into the L-form. What change occurs in the pathogen cell in case of L-transformation?

- *Absence of a cell wall
- Absence of flagella
- Absence of a capsule
- Absence of a spore
- Absence of inclusions

6. Employees of an enterprise were vaccinated with "Influvac" for specific prevention of influenza. What type of immunity will develop in those vaccinated?

- *Artificial active
- Innate congenital
- Artificial passive
- Natural active
- Natural passive

7. Pharmacy has received viricides. Choose the viricide for influenza treatment from the list given

below:

*Rimantadine
Metisazone
Levamisole
Azidothimidine
Acyclovir

8. A pharmaceutical enterprise offers wide range of antimicrobial agents. Select the broad spectrum antimicrobial agent:

*Tetracycline
Rimantadine
Nystatin
Griseofulvin
Phthalazolum

9. Aurococcus culture was obtained from the nasal cavity of a child suffering from chronic tonsillitis. Causative agent's sensitivity towards a number of antibiotics was tested to choose the optimal drug. What drug WAS NOT included in antibiotic susceptibility testing?

*Nystatin
Ampicillin
Tetracycline
Levomycetin (Chloramphenicol)
Erythromycin

10. Interferons are natural antiviral and antitumor agents. What is their mechanism of action?

* Protein
Protein synthesis inhibitor
Replication activation
Transcription activation
Repair activation

11. Sedimentation analysis has been applied for assessment of air purity in aseptic unit of a pharmacy. The test resulted in growth of these small colonies with areas of hemolysis. What medium was used for inoculation?

* Blood agar
Levine's agar (Eosin Methylene Blue agar)
Endo agar
Ploskirev's agar
Egg-yolk agar

12. A dry-heat box is used for sterilization of various materials and instruments in a bacteriological laboratory. This sterilization method can be applied to the following objects:

* Glass test tubes
Rubber gloves
Simple nutrient medium
Wire inoculating loops
Physiological solution

13. What enzyme allows for synthesis of various genes from template-RNA to DNA in genetic engineering (this enzyme catalyzes the process discovered in RNA-viruses)?

*Reverse transcriptase
Exonuclease
DNA-ligase
Helicase

Endonuclease

14. A factory producing typhoid fever vaccine cultivates bacteria of virulent strain in optimal nutrient medium. Then the cells are separated from culture fluid by means of centrifugation and processed with formalin. What type of vaccine is it?

- * Inactivated
- Attenuated
- Chemical
- Anatoxin
- Autovaccine

15. During influenza epidemic a patient with severe case of disease developed hacking cough and chest pain; signs of focal pneumonia were visible on X-ray. Microscopy of sputum detected large number of pneumococci. What type of infection is it?

- * Secondary
- Superinfection
- Abortive
- Relapse
- Reinfection

17. A sample of water used in drug production has been sent to a laboratory for sanitary and virological analysis. Presence of what virus group will be indicative of faecal contamination of water and, thus, the need for its additional purification?

- * Picornaviridae
- Herpesviridae
- Orthomyxoviridae
- Retroviridae
- Flaviviridae

18. After examination, newborn was diagnosed with congenital rubella syndrome. Name the route of disease transmission in this case:

- * Vertical
- Fecal-oral
- Parenteral
- Vector-borne
- Airborne droplet

19. In a child-rearing facility there was an outbreak of measles. What specific urgent prophylaxis should be administered to contact UNVACCINATED children?

- * Gamma globulin against measles
- Measles virus vaccine live
- DPT vaccine
- Medical screening of the children
- Isolation and treatment of infected children

20. What enzyme allows for synthesis of various genes from template-RNA to DNA in genetic engineering (this enzyme catalyzes the process detected in RNA-viruses)?

- * reverse transcriptase
- exonuclease
- DNA-ligase
- Helicase
- endonuclease

21. A drug solution sterilized by means of boiling was tested for sterility. Inoculation on Kitt-Tarozzi medium revealed clostridia. Clostridia survived the boiling because they

Are:

*Spore-formers

Thermophilic

Prototrophic

Acid-fast

Anaerobic

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Vector-borne

Airborne droplet

23. The following microorganisms have been detected in the hand lavage of a kindergarten cook: colibacilli, ray fungi,

staphylococci, bacilli, mold fungi. What microbes indicate a fecal contamination of the hands?

* Colibacilli

Ray fungi

Mold fungi

Bacilli

Staphylococci