
PHARMACY INDIA
RRB PHARMACIST
2024
MODEL PAPER -26
TIME:-
9 P.M
40 QUESTIONS
WITH DETAILED EXPLANATION
SUBJECT -
HEALTH EDUCATION & COMMUNITY PHARMACY
VIDEO DEKHNE KE LIYE BANNER PAR CLICK KARE

1.Who is universally known as the father of microbiology

(a) Leeuwenhoek
(b) Carl Linnaeus
(c) Howard Florey
(d) Ernest Everett

1.Who is universally known as the father of microbiology

(a) Leeuwenhoek

(b) Carl Linnaeus

(c) Howard Florey

(d) Ernest Everett

SCIENTIST AND THEIR CONTRIBUTION

SCIENTIST	ASSOCIATED WITH
Fracastorius	Proposed a contagium vivum (cause of infectious disease)
Von Plenciz	Suggested that each disease is caused by a separate agent
Augustino Bassi	Earliest discovery of pathogenic microorganism
Davaine and Pollender	Observed anthrax bacilli in blood of animal
Louis Pasteur	Father of modern microbiology
Rebert Koch	Father of medical microbiology Discovered M. tuberculosis and V. cholera Introduced staining techniques methods of obtaining bacteria in pure culture on solid media Suggested Koch's postulate
Joseph Lister	Father of Aseptic surgery Proved that sepsis could be prevented by Hand hygiene
Antony Van Leeuwenhoek	Invented microscope (Father of compound microscope) Father of Bacteriology and Microbiology
Edward Jenner	Father of Immunology, Discovery of small pox vaccine
Peyton Rous	Isolated virus causing sarcoma in fowl
Von Behring & Kitasato	Described antibody

2. Entamoeba histolytica belongs to class

(a) Bacteria

(b) Virus

(c) Protozoa

(d) Fungus

2. Entamoeba histolytica belongs to class

(a) Bacteria

(b) Virus

(c) Protozoa

(d) Fungus

Protozoa Classification

Class	Examples
1. Mastigophora or Flagellated protozoans	Trypanosoma, Trichomonas, Giardia, Leishmania, etc.
2. Sarcodina or Amoeboids	Amoeba, Entamoeba, etc.
3. Sporozoa or Sporozoans	Plasmodium, Myxidium, Nosema, Globidium, etc.
4. Ciliophora or Ciliated protozoans	Paramecium, Vorticella, Balantidium, etc.

3. Which of the following organisms has different strains that make almost 200 different antibiotics

(a) Ashbya gossypii
(b) Streptomyces hygroscopicus
(c) Trichoderma viride
(d) Aspergillus niger

3. Which of the following organisms has different strains that make almost 200 different antibiotics

(a) Ashbya gossypii

(b) Streptomyces hygroscopicus

(c) Trichoderma viride

(d) Aspergillus niger

Streptomyces hygroscopicus produces many antibiotics, including:

- **Geldanamycin**
- **Hygromycin B**
- **Nigericin**
- **Mannopeptimycins α, β, γ, δ, and ε**
- **Carriomycin etc.**

4. The rod-shaped bacteria are

(a) Coccus

(b) Spirilla

(c) Bacillus

(d) Vibrio

4. The rod-shaped bacteria are

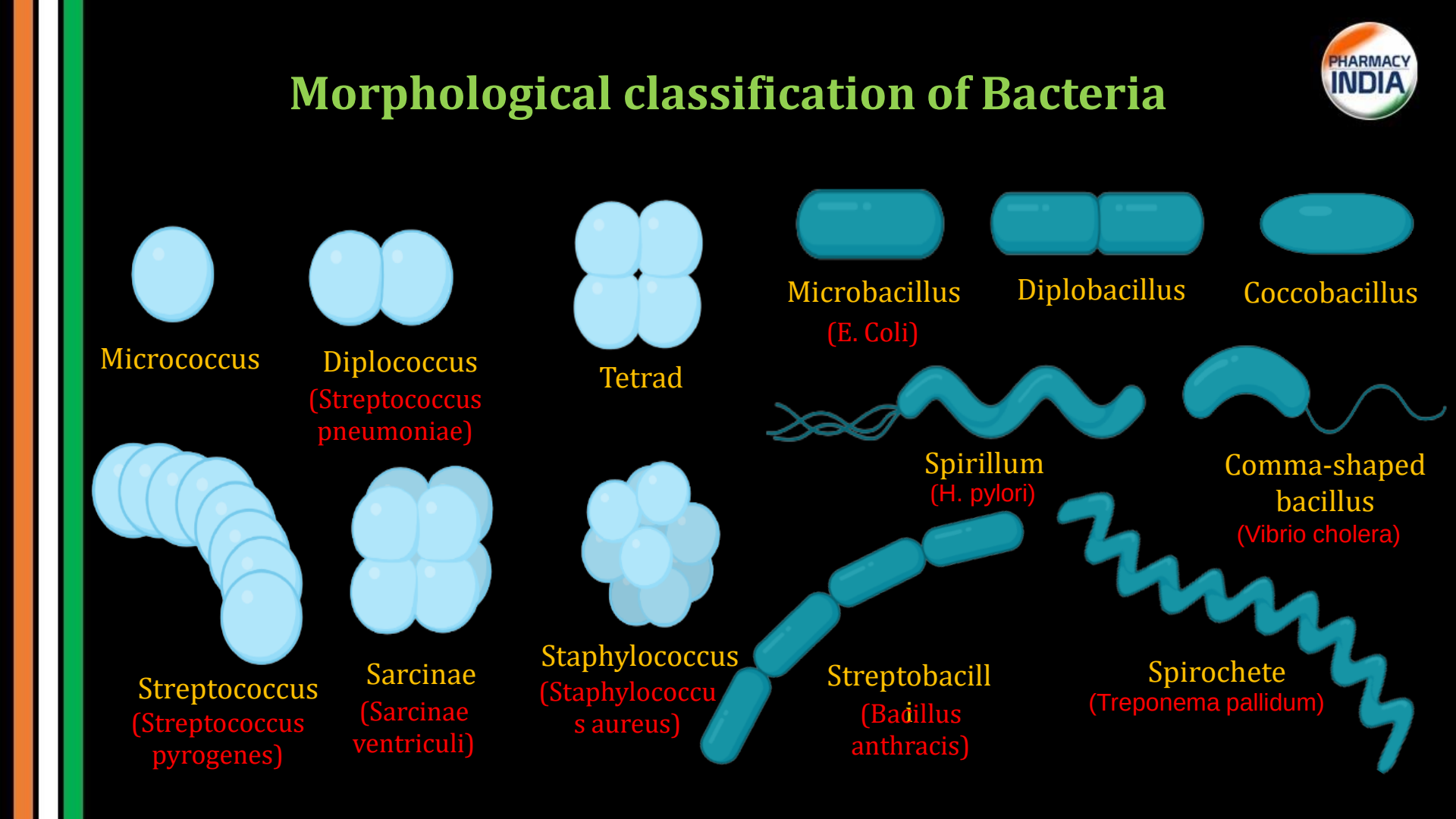
(a) Coccus

(b) Spirilla

(c) Bacillus

(d) Vibrio

Morphological classification of Bacteria



5. Among the given which is considered as the best indicator of water pollution

(a) Bacillus

(b) Clostridium

(c) E. coil

(d) Pseudomonas

5. Among the given which is considered as the best indicator of water pollution

(a) Bacillus

(b) Clostridium

(c) E. coil

(d) Pseudomonas

Escherichia coli (E. coli) is a common indicator organism used to detect water pollution caused by fecal matter. E. coli is a type of coliform bacteria that's often found in sewage and can provide clear evidence of recent fecal contamination in water.

6. Sabouraud's medium is used to selectively isolate

(a) Coliform bacteria

(b) Yeast

(c) Acid fast organism

(d) Gram positive bacteria

6. Sabouraud's medium is used to selectively isolate

(a) Coliform bacteria

(b) Yeast

(c) Acid fast organism

(d) Gram positive bacteria

Sabouraud Dextrose Agar (SDA) is a semi-selective plating medium used to isolate and cultivate pathogenic and non-pathogenic fungi and yeasts.

7. Pyrogens which cause a rise in body temperature when injected intravenously are structurally

(a) Bacterial phospholipids
(b) Bacterial lipopolysaccharides
(c) Viral DNA
(d) Bacterial glycosides

7. Pyrogens which cause a rise in body temperature when injected intravenously are structurally

(a) Bacterial phospholipids

(b) Bacterial lipopolysaccharides

(c) Viral DNA

(d) Bacterial glycosides

Pyrogens are fever-inducing substances usually derived from microorganisms [endotoxins or lipopolysaccharide (LPS)] and when present systemically in sufficient quantity can lead to severe signs of inflammation, shock, multiorgan failure, and sometimes even death in humans.

8. Which of these is used for the preparation or bacterial culture

(a) Agar
(b) Tragacanth
(c) Algin
(d) Pectin

8. Which of these is used for the preparation or bacterial culture

(a) Agar

(b) Tragacanth

(c) Algin

(d) Pectin

The main gelling agent used in solid culture media is agar. However, some limits have been observed in the use of agar because of some extremely oxygen-sensitive bacteria that do not grow on agar media, and other alternatives were proposed and tested.

9. Bacteria which can derive the it nutritional requirements and energy from simple inorganic source are called

(a) Autotrophic
(b) Heterotrophic
(c) Parasite
(d) Saprophyte

9. Bacteria which can derive the it nutritional requirements and energy from simple inorganic source are called

(a) Autotrophic

(b) Heterotrophic

(c) Parasite

(d) Saprophyte

NUTRITIONAL TYPES OF BACTERIA

- On the basis of carbon and energy sources for growth, bacteria are broadly divided into two:

1. **Autotrophic bacteria:**
   - The bacteria which are able to synthesize their own organic food from inorganic substances supplied from environment are called autotrophic bacteria and thus mode of nutrition as autotrophy or autotrophic nutrition.
   - These bacteria can be distinguished further into two types as follows:

     a. Photoautotrophic Bacteria: These bacteria utilize solar energy to synthesize their organic metabolites as they possess photosynthetic pigments in membrane bound lamellae or thylakoids.

     b. Chemoautotrophs or Chemosynthetic Bacteria: These are non-photosynthetic bacteria which manufacture organic compounds from inorganic raw materials and utilize energy liberated from the oxidation of these inorganic substances.

- On the basis of carbon and energy sources for growth, bacteria are broadly divided into two:

2. **Heterotrophic bacteria:**
   - The bacteria which are unable to manufacture their own organic food and hence are dependent on external source are called heterotrophs and the mode of nutrition as heterotrophy or heterotrophic nutrition.
   - These bacteria can be further distinguished into two groups:

   a. **Photoheterotrophs:** They are considered to be intermediate between photoautotroph's and chemoheterotrophs because they posses unique feature of utilizing light energy (like photoautrophs) in synthesizing their food from organic raw materials absorbed from environment. They therefore, do not use inorganic raw materials to synthesize their food.

   b. **Chemohetrotrophs:** Since they cannot synthesize their own food (organic substances), they obtain it directly from external environment using organic compounds.

10. Which is the ability of the infectious agents to cause disease

(a) Immunity
(b) Susceptibility
(c) Virulence
(d) Attenuation

10. Which is the ability of the infectious agents to cause disease

(a) Immunity

(b) Susceptibility

(c) Virulence

(d) Attenuation

Pathogenicity refers to the ability of an agent to cause disease, given infection, and virulence is the likelihood of causing severe disease among those with disease. Virulence reflects structural and/or biochemical properties of an infectious agent.

PREPARING FOR PHARMACIST EXAM

Best PYQ Book for Question Practice

COD Available

Order करने के लिए बैनर पर क्लिक करें

DAILY UPDATES

जुड़िए PHARMACY INDIA के साथ.....

WHATSAPP & TELEGRAM SE JUDNE KE LIYE ICONS PAR CLICK KARE

WhatsApp

Mobile Phone Par Click karein

11. Yeasts come under a group of

(a) Bacteria

(b) Fungi

(c) Protozoa

(d) Virus

11. Yeasts come under a group of

(a) Bacteria

(b) Fungi

(c) Protozoa

(d) Virus

CLASSIFICATION OF FUNGI

Morphological classification: **Yeasts, Yeast like fungi, Molds, Dimorphic fungi.**

Taxonomical classification: Zygomycetes, Ascomycetes, Basidiomycetes, Deuteromycetes

12. Bacterial cell walls are composed of

(a) Peptidoglycan

(b) Polysaccharides

(c) Sterols

(d) Proteins

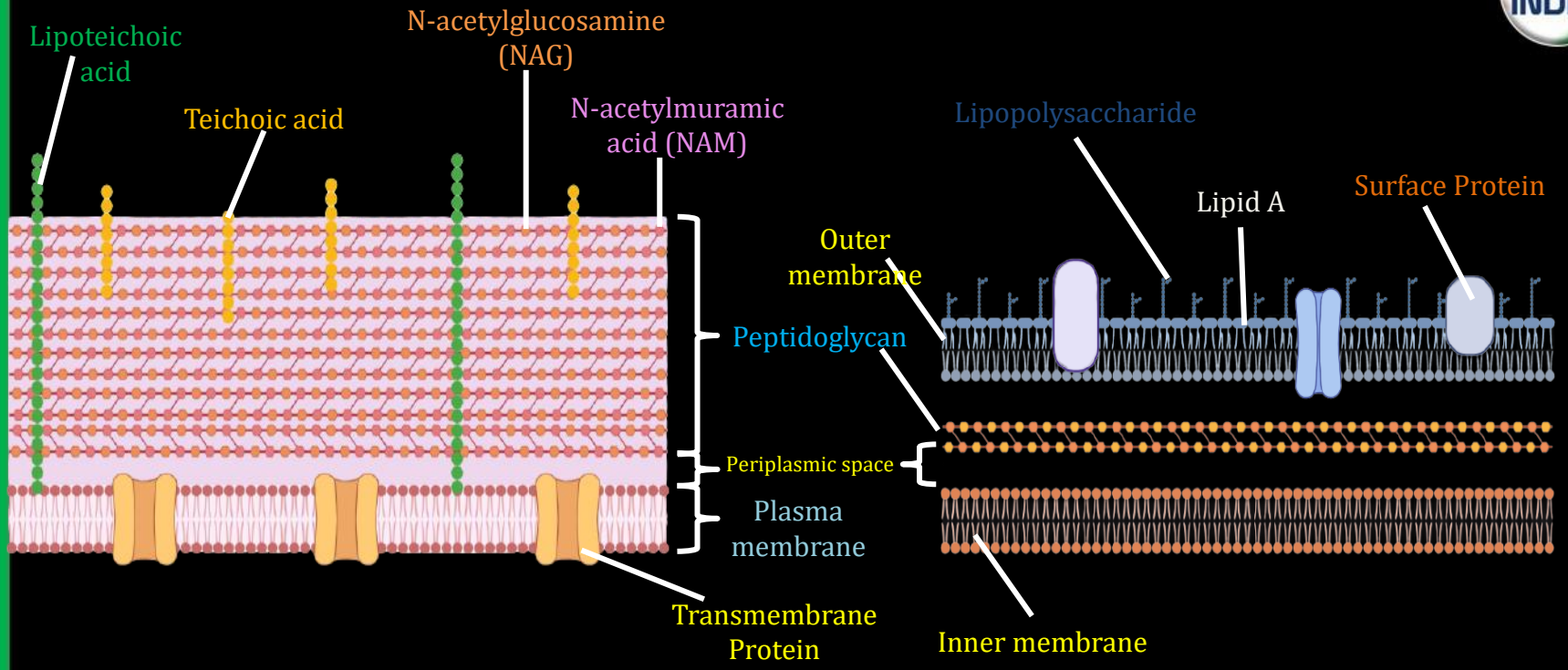
12. Bacterial cell walls are composed of

(a) Peptidoglycan

(b) Polysaccharides

(c) Sterols

(d) Proteins



Gram +ve Bacteria Cell wall

Gram -ve Bacteria Cell wall

13. Which of the following microorganisms multiplies by the process of budding rather than fission

(a) Virus
(b) Fungi
(c) Mycoplasma
(d) Rickettsia

13. Which of the following microorganisms multiplies by the process of budding rather than fission

(a) Virus

(b) Fungi

(c) Mycoplasma

(d) Rickettsia

REPRODUCTION IN FUNGI

Budding is a type of asexual reproduction, which is most commonly associated in both multicellular and unicellular organisms. Bacteria, yeast.

14. The causative viral organism responsible for measles is

(a) Variola
(b) Varicella
(c) Ebola
(d) Rubeola

14. The causative viral organism responsible for measles is

(a) Variola

(b) Varicella

(c) Ebola

(d) Rubeola

The rubeola virus, also known as measles, is the causative viral organism responsible for measles.

Measles is a highly contagious, acute viral illness that causes a rash, fever, and cough.

It's an RNA virus that belongs to the genus Morbillivirus and the family Paramyxoviridae. Measles is transmitted through droplet nuclei.

15. The full meaning of MMR vaccine is

(a) Measles Mumps and Rabies

(b) Measles Mumps and Rotavirus

(c) Mononucleusis, Molluscum and Rotivirus

(d) Measles, Mumps and Rubelb

15. The full meaning of MMR vaccine is

(a) Measles Mumps and Rabies

(b) Measles Mumps and Rotavirus

(c) Mononucleusis, Molluscum and Rotivirus

(d) Measles, Mumps and Rubella

MMR

MMR stands for Measles, Mumps, and Rubella. The MMR vaccine is a combination of live vaccines that protects children from these three diseases. The MMR vaccine is very safe and effective, and it's much safer than getting the diseases themselves.

16. Which of the following organism is used in heterogeneous fermentation of lactic acid

(a) Leuconostoc mesenteroides

(b) Lactobacillus bulgaricus

(c) Bacillus oriza

(d) Bacillus cereus

16. Which of the following organism is used in heterogeneous fermentation of lactic acid

(a) Leuconostoc mesenteroides

(b) Lactobacillus bulgaricus

(c) Bacillus oriza

(d) Bacillus cereus

Fermentation of Lactic acid

Lactic acid bacteria are a heterogeneous group of Gram-positive bacteria that produce lactic acid as a major end-product of their fermentative metabolism. Lactobacillus, Lactococcus, Streptococcus, Pediococcus, Enterococcus, and Carnobacterium are the main genera of lactic acid bacteria.

17. In Prophase, the phage vectors are used for transduction of recombinant of phase genome

(a) Virus

(b) Enzyme

(c) Bacteria

(d) Vectors are bacteriophage T_7 and lambda

17. In Prophase, the phage vectors are used for transduction of recombinant of phase genome

(a) Virus

(b) Enzyme

(c) Bacteria

(d) Vectors are bacteriophage T_7 and lambda

Transduction

It is a less common method. In this, the plasmid DNA enclosed in a bacteriophage is transferred to another bacterium of same species. It is seen in StaphylococcI Streptococci.

Transformation - It is the least clinical problem Free DNA is picked up from the environment (i.e. From a cell belonging to closely related or same strain.

It is a form of gene transfer that takes place in bacteriophages. Bacteriophages are viruses that infect bacteria. Temperate phages like lambda phage carry out specialised transduction.

18. Exotoxins are

(a) Are pyrogens

(b) Are water soluble and can pass through the protein layer

(c) Are lipopolysaccharide, protein

(d) Are much less toxic to endotoxin

18. Exotoxins are

(a) Are pyrogens

(b) Are water soluble and can pass through the protein layer

(c) Are lipopolysaccharide, protein

(d) Are much less toxic to endotoxin

Exotoxins

Exotoxins are a group of soluble proteins that are secreted by the bacterium, enter host cells, and catalyze the covalent modification of a host cell component(s) to alter the host cell physiology.

19. Which of the following does NOT contain mitochondria

(a) Flatten fungi
(b) Bacteria
(c) Protozoa
(d) Yeast

19. Which of the following does NOT contain mitochondria

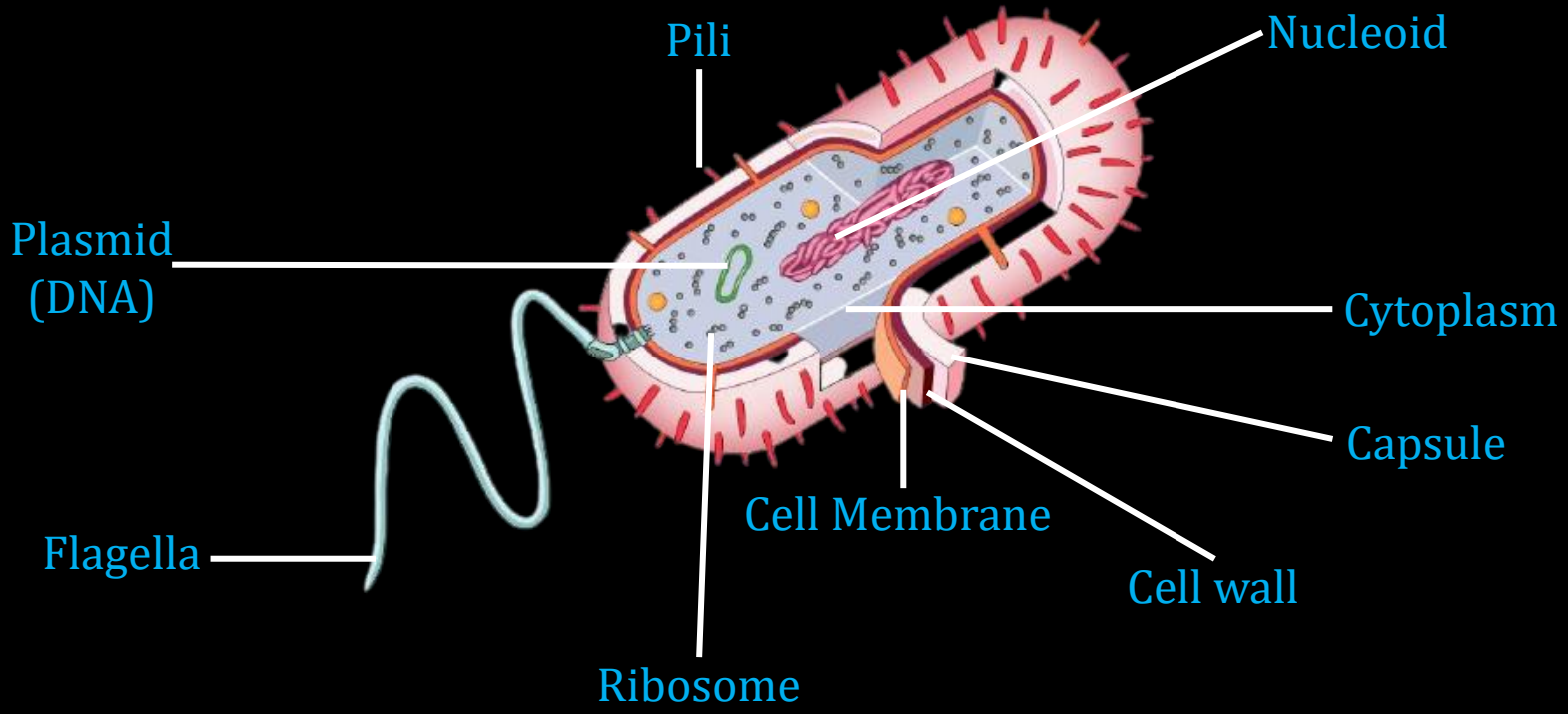
(a) Flatten fungi

(b) Bacteria

(c) Protozoa

(d) Yeast

Structure of Bacteria



20. Viruses are -

(a) Obligate parasites

(b) Obligate saprophytes

(c) Partial parasites

(d) Facultative parasite

20. Viruses are -

(a) Obligate parasites

(b) Obligate saprophytes

(c) Partial parasites

(d) Facultative parasite

Viruses

As obligate intracellular parasites, viruses are completely dependent upon a host cell for their replication. They use energy generated by the host cell, and they exploit the host's machinery to manufacture viral proteins.

PREPARING FOR PHARMACIST EXAM

Best PYQ Book for Question Practice

COD Available

Order करने के लिए बैनर पर क्लिक करें

DAILY UPDATES

जुड़िए PHARMACY INDIA के साथ.....

WHATSAPP & TELEGRAM SE JUDNE KE LIYE ICONS PAR CLICK KARE

WhatsApp

Mobile Phone Par Click karein

21. Antibiotics are mostly obtained from

(a) Bacteria

(b) Viruses

(c) Angiosperms

(d) Fungi

21. Antibiotics are mostly obtained from

(a) Bacteria

(b) Viruses

(c) Angiosperms

(d) Fungi

Antibiotics

Antibiotics are compounds which might be produced through an organism and inhibit the increase of any other organism. They are generally obtained from microorganisms like bacteria.

22. The bacteria that commonly live in animal and human intestine is

(a) Vibrio cholera
(b) Bacillus anthracis
(c) Corynebacterium
(d) Escherichia coli

22. The bacteria that commonly live in animal and human intestine is

(a) Vibrio cholera

(b) Bacillus anthracis

(c) Corynebacterium

(d) Escherichia coli

Gut Bacteria

Escherichia coli (E. coli) is a type of bacteria that commonly lives in the intestines of healthy humans and most warm-blooded animals. Most E. coli strains are harmless and live in the gut, or gastrointestinal tract, of animals and humans.

23. The following is NOT a bacterial disease

(a) Plague

(b) Typhoid

(c) Catheter

(d) Cholera

23. The following is NOT a bacterial disease

(a) Plague

(b) Typhoid

(c) Catheter

(d) Cholera

DISEASE CAUSED BY BACTERIA AND ITS CAUSATIVE AGENTS

S.N.O	DISEASE	CAUSATIVE AGENT
1.	Tetanus	Clostridium tetani
2.	Botulism	Clostridium botulinum
3.	Leprosy	Mycobacterium laprae
4.	Brucellosis	Group of bacteria from the genus Brucella
5.	Gas gangrene	Clostridium perfringens
6.	Diphtheria	Corynebacterium diphtheria
7.	Tuberculosis	Mycobacterium tuberculi
8.	Pneumonia	Streptococcus Pneumococci
9.	Epidemic typhus	Rickettsia prowazekii
10.	Whooping cough	Bordetella pertussis
11.	Cholera	Vibrio cholera
12.	Typhoid fever	Salmonella typhi
13.	Syphilis	Treponema pallidum
14.	Gonorrhea	Neisseria gonorrhea
15.	Cutaneous anthrax	Bacillus anthracis
16.	Plague	Pasteurella pestis/ Yersinia pestis
17.	Tuberculosis	Mycobacterium tuberculosis
18.	Food poisoning	Clostridium botulinum
19.	Scarlet fever	Staphylococcus scarlatinae
20.	Meningitis	Staphylococcus scarlatinae
21.	Gonorrhea	Neisseria gonorrhoeae
22.	Cold like symptom	Haemophilus influenza

24. "Capsid" is present in

(a) Bacteria

(b) Fungi

(c) Virus

(d) Protozoa

24. "Capsid" is present in

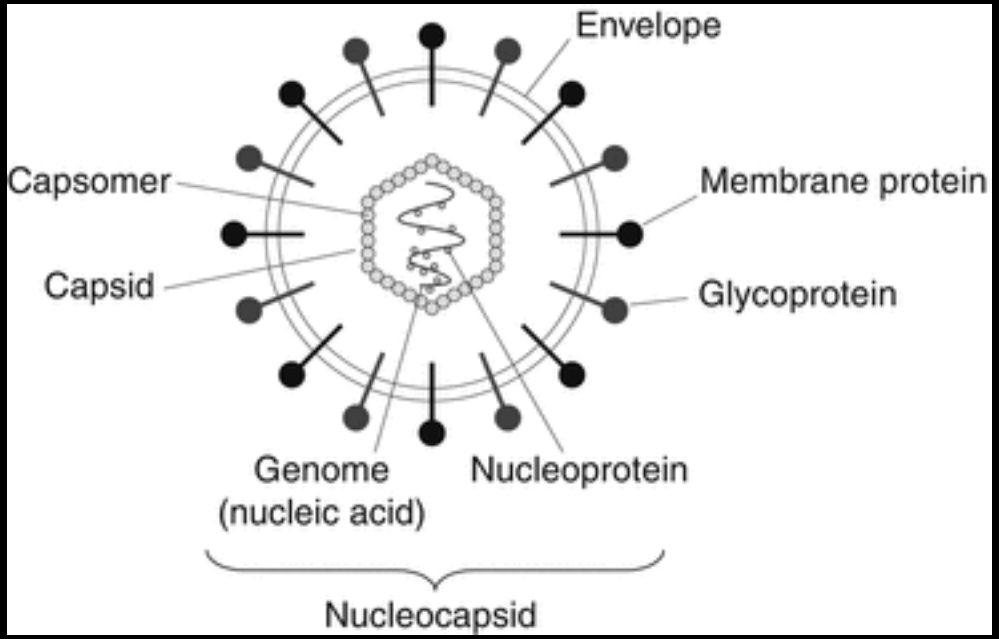
(a) Bacteria

(b) Fungi

(c) Virus

(d) Protozoa

Structure of Virus



25. Classification of bacteria as heterotrophs is based on

(a) Oxygen requisite
(b) Growth temperature
(c) Energy source
(d) Nutrition requisite

25. Classification of bacteria as heterotrophs is based on

(a) Oxygen requisite

(b) Growth temperature

(c) Energy source

(d) Nutrition requisite

NUTRITIONAL TYPES OF BACTERIA

- On the basis of carbon and energy sources for growth, bacteria are broadly divided into two:

1. **Autotrophic bacteria:**
   - The bacteria which are able to synthesize their own organic food from inorganic substances supplied from environment are called autotrophic bacteria and thus mode of nutrition as autotrophy or autotrophic nutrition.
   - These bacteria can be distinguished further into two types as follows:

     a. Photoautotrophic Bacteria: These bacteria utilize solar energy to synthesize their organic metabolites as they possess photosynthetic pigments in membrane bound lamellae or thylakoids.

     b. Chemoautotrophs or Chemosynthetic Bacteria: These are non-photosynthetic bacteria which manufacture organic compounds from inorganic raw materials and utilize energy liberated from the oxidation of these inorganic substances.

- On the basis of carbon and energy sources for growth, bacteria are broadly divided into two:

2. **Heterotrophic bacteria:**
   - The bacteria which are unable to manufacture their own organic food and hence are dependent on external source are called heterotrophs and the mode of nutrition as heterotrophy or heterotrophic nutrition.
   - These bacteria can be further distinguished into two groups:

   a. **Photoheterotrophs:** They are considered to be intermediate between photoautotroph's and chemoheterotrophs because they posses unique feature of utilizing light energy (like photoautrophs) in synthesizing their food from organic raw materials absorbed from environment. They therefore, do not use inorganic raw materials to synthesize their food.

   b. **Chemohetrotrophs:** Since they cannot synthesize their own food (organic substances), they obtain it directly from external environment using organic compounds.

26. Gram positive bacteria typically contains

(a) Cell walls that lack peptidoglycans

(b) Repeating units of arabinogalactan and mycolates in their cell walls

(c) Peptidoglycan muramic acid and D amino acids in their cell walls

(d) Cell walls containing predominantly polysaccharides and glycoproteins

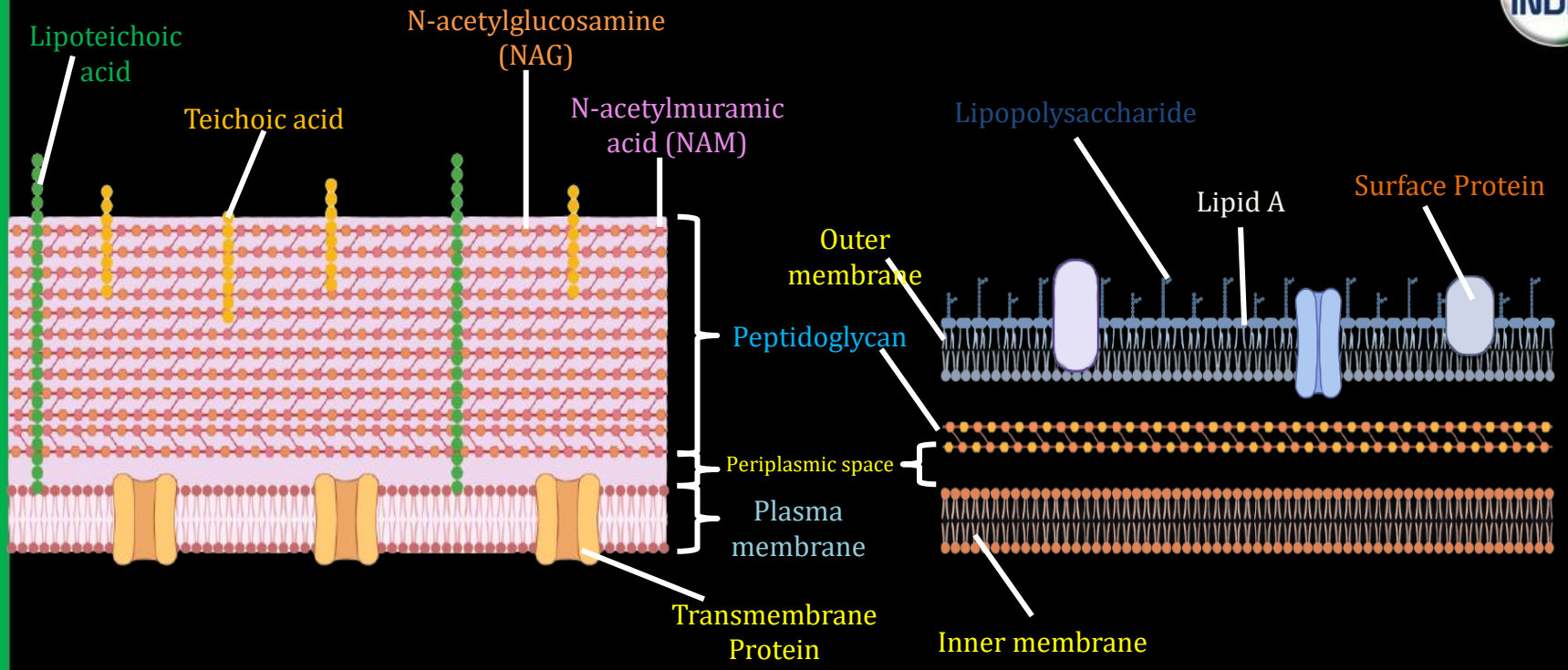
26. Gram positive bacteria typically contains

(a) Cell walls that lack peptidoglycans

(b) Repeating units of arabinogalactan and mycolates in their cell walls

(c) Peptidoglycan muramic acid and D amino acids in their cell walls

(d) Cell walls containing predominantly polysaccharides and glycoproteins



Gram +ve Bacteria Cell wall

Gram -ve Bacteria Cell wall

27. Acid fastness in acid-fast staining is due to the abundance of

(a) Mycolic acid
(b) Squalene
(c) Ergosterol
(d) Peptidoglycan

27. Acid fastness in acid-fast staining is due to the abundance of

(a) Mycolic acid

(b) Squalene

(c) Ergosterol

(d) Peptidoglycan

Staining Techniques	Reagents/observation	Result/used
Ziehl Neelsen/ Acid Fast Staining	Reagents: (i) Primary dye (Carbol fuchsin) (ii) Decolorizer (20% H_2SO_4) (iii) Counter stain (Methylene Blue) Acid fast bacteria give red to purple due to retain carbol fuchsin and give color. Acid fast: Bright red to intensive purple Non-acid fast: Blue color	Acid fast stains are used to differentiate acid fast bacteria (M. Tuberculosis and Leprae) due to presence of mycolic acid.

28. Spherical shaped bacteria are termed as

(a) Bacilli

(b) Cocci

(c) Spirochaetes

(d) Vibrio

28. Spherical shaped bacteria are termed as

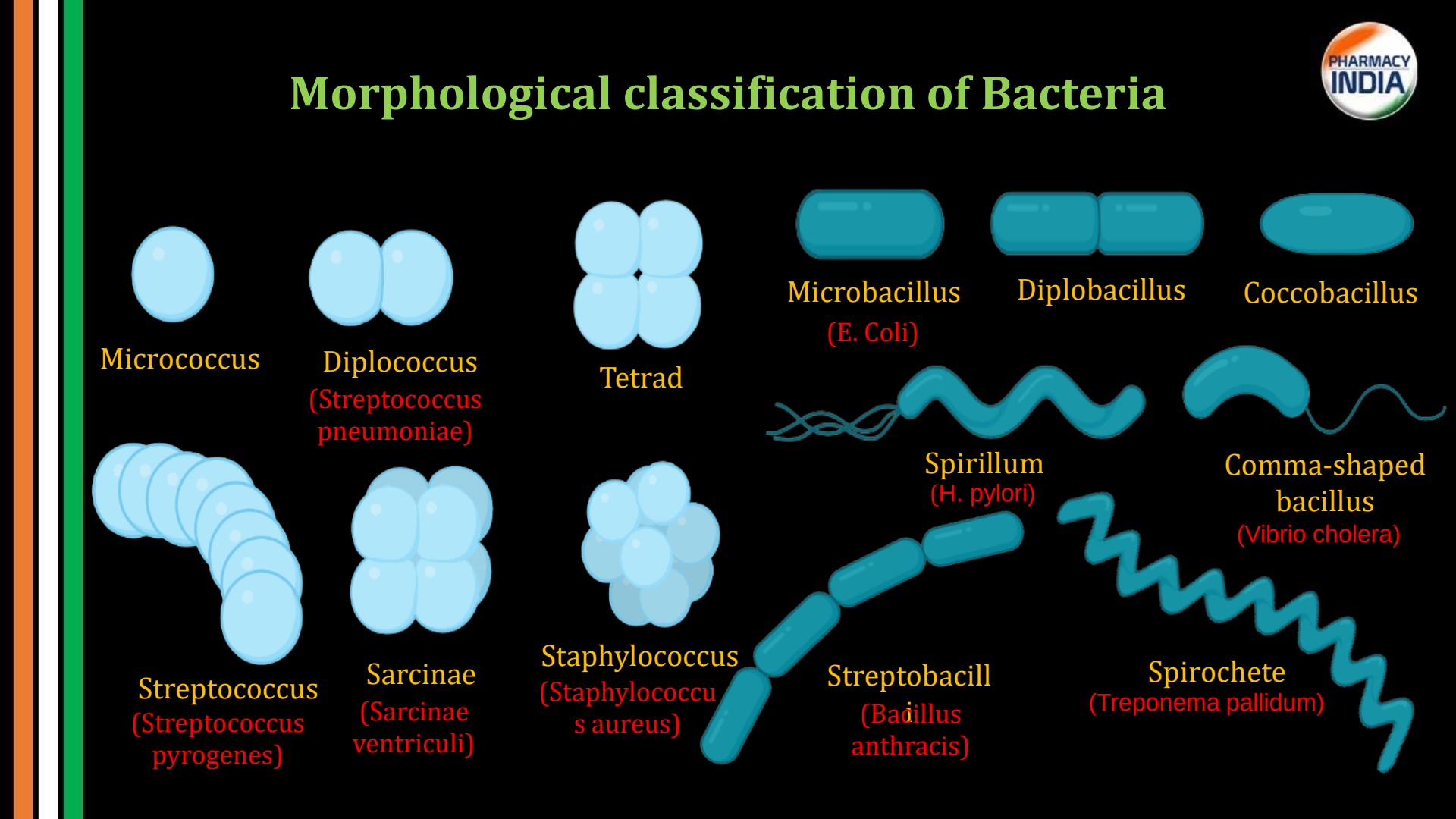
(a) Bacilli

(b) Cocci

(c) Spirochaetes

(d) Vibrio

Morphological classification of Bacteria



29. Ziehl Neelson method is used to identify

(a) Corynebacterium Diphtheriae

(b) M. Tuberculosis

(c) Vibrio Cholera

(d) Salmonella typhi

29. Ziehl Neelson method is used to identify

(a) Corynebacterium Diphtheriae

(b) M. Tuberculosis

(c) Vibrio Cholera

(d) Salmonella typhi

Staining Techniques	Reagents/observation	Result/used
Ziehl Neelsen/ Acid Fast Staining	Reagents: (i) Primary dye (Carbol fuchsin) (ii) Decolorizer (20% H_2SO_4) (iii) Counter stain (Methylene Blue) Acid fast bacteria give red to purple due to retain carbol fuchsin and give color. Acid fast: Bright red to intensive purple Non-acid fast: Blue color	Acid fast stains are used to differentiate acid fast bacteria (M. Tuberculosis and laprae) due to presence of mycolic acid.

30. Concentration of alcohol most effective as bactericidal is

(a) 99%
(b) 50%
(c) 70%
(d) 10%

30. Concentration of alcohol most effective as bactericidal is

(a) 99%

(b) 50%

(c) 70%

(d) 10%

CHEMICAL DISINFECTANTS

Chemical Disinfectant	Mode of action	Uses
Alcohol (70%)	Protein denaturation and damage lipid complexes	Surface disinfectants, preservatives and antiseptics
Phenol	Disruption of cell membrane and pptn. Of cell protein	Disinfectant, antiseptics
Mercury compounds	Coagulation of cytoplasmic proteins	Surface disinfectants antiseptics and antiseptics
Silver nitrate	Protein denaturation	antiseptics and bactericidal
lodine	Protein inactivation	Skin disinfectant & water or air
Chlorine	Inhibit cellular oxidation process	Disinfectant in water treatment, antiseptic
Glutaraldehyde	Denaturation of proteins	Sterilization of heat sensitive instrument

PREPARING FOR PHARMACIST EXAM

Best PYQ Book for Question Practice

COD Available

Order करने के लिए बैनर पर क्लिक करें

DAILY UPDATES

जुड़िए PHARMACY INDIA के साथ.....

WHATSAPP & TELEGRAM SE JUDNE KE LIYE ICONS PAR CLICK KARE

WhatsApp

Mobile Phone Par Click karein

31. All antibodies are

(a) Lipoprotein in nature

(b) Immunoglobulin

(c) Croprotein in nature

(d) Globulin in nature

31. All antibodies are

(a) Lipoprotein in nature

(b) Immunogiobulin

(c) Croprotein in nature

(d) Globulin in nature

Antibodies

All antibodies, also known as immunoglobulins (Ig), are Y-shaped proteins produced by the immune system to fight disease and infection. They are constructed from paired heavy and light polypeptide chains in the same way, and are classified based on their antigen specificity rather than structure.

32. The causative organism of trench fever is

(a) R. akari

(b) R. quintana

(c) R. tsutsugamushi

(d) R. rickettsii

32. The causative organism of trench fever is

(a) R. akari

(b) R. quintana

(c) R. tsutsugamushi

(d) R. rickettsii

Trench fever is an infection caused by the fastidious aerobic gram-negative rod bacterium Bartonella quintana, formerly known as Rickettsia quintana.

33. Which of the following is an oncogenic virus

(a) Herpes simplex virus

(b) Poliomyelitis virus

(c) Varicella zoster virus

(d) Human papilloma virus

33. Which of the following is an oncogenic virus

(a) Herpes simplex virus

(b) Poliomyelitis virus

(c) Varicella zoster virus

(d) Human papilloma virus

Oncogenic viruses are viruses that can cause cancer by transforming cells through genetic changes. Some examples of oncogenic viruses include:

- Epstein-Barr virus (EBV)
- Hepatitis B virus (HBV)
- Human papillomavirus (HPV)
- Kaposi sarcoma-associated herpesvirus (KSHV)

34. Which of the following microorganism is prokaryotic

(a) Virus
(b) Protozoa
(c) Bacteria
(d) Fungi

34. Which of the following microorganism is prokaryotic

(a) Virus

(b) Protozoa

(c) Bacteria

(d) Fungi

Prokaryotes

- Prokaryotes (Greek : pro – before; karyon – nucleus) lack a well defined nucleus and possess relatively simple structure.
- Examples -

Bacteria Rickettsiae Chlamydiae

35. Rhodophycophyta is also known a algae

(a) Red

(b) Brown

(c) Golden

(d) Yellow-green

35. Rhodophycophyta is also known a algae

(a) Red

(b) Brown

(c) Golden

(d) Yellow-green

The Rhodophycophyta (Rhodophyta), or red algae, includes about 4000 species of primarily marine plants. Only about 2% of this total inhabit freshwater.

36. Ancylostoma duodenale is a

(a) Nematode

(b) Amoeba

(c) Protozoan

(d) Fungus

36. Ancylostoma duodenale is a

(a) Nematode

(b) Amoeba

(c) Protozoan

(d) Fungus

Ancylostoma duodenale, the human hookworm (Nematode), is the most common parasitic infection in countries with poor access to adequate water, sanitation, and hygiene.

Anclyostoma duodenale along with other soil-transmitted helminths (STH) are transmitted through contact with contaminated soil.

37. Principal structural component of the cell wall in the bacteria is made up of

(a) Complex polysaccharide

(b) Simple protein

(c) Glycoprotein

(d) Peptidoglycan

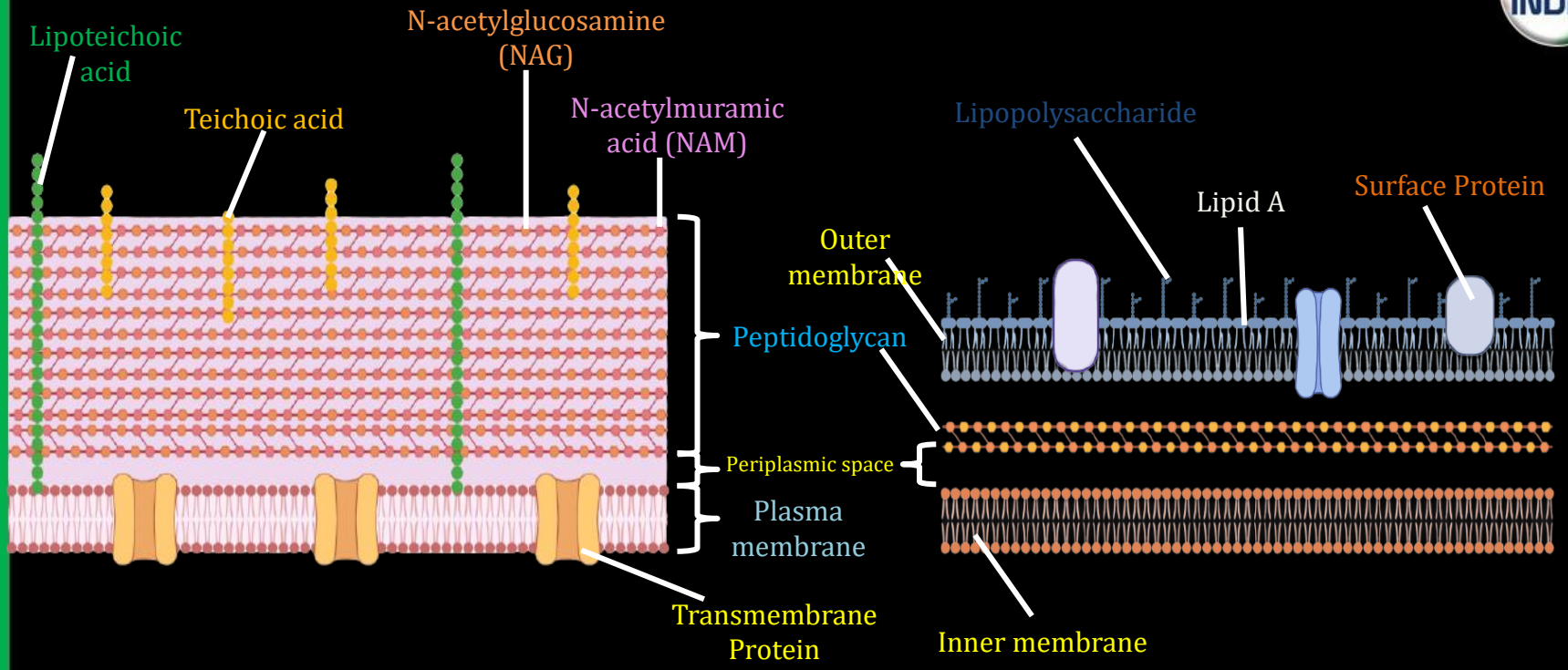
37. Principal structural component of the cell wall in the bacteria is made up of

(a) Complex polysaccharide

(b) Simple protein

(c) Glycoprotein

(d) Peptidoglycan



Gram +ve Bacteria Cell wall

Gram -ve Bacteria Cell wall

38. All of the following are single RNA viruses EXCEPT

(a) Rotavirus
(b) Influenza virus
(c) Rabies virus
(d) Polio virus

38. All of the following are single RNA viruses EXCEPT

(a) Rotavirus

(b) Influenza virus

(c) Rabies virus

(d) Polio virus

S. No.	Group	Family	Examples
1.	ds DNA	Papilloma viruses	HPVS
		Adeno viruses	Adeno viruses
		Herpes viruses	HSV-1 & 2, VZV, EBV, CMV
		Pox viruses	Smallpox (Variola) and Vaccinig
2.	SS DNA	Par voviruses	Parvo virus
3.	Ds RNA	Reo viruses	Rota virus
4.	+ss RNA	Picorna viruses	Polio virus, Rhino viruses, Hepatitis A
		Corona viruses	SARS
		Flavi viruses	Yellow Fewer, West Nile, Hepatitis C
5.	- ss RNA	Rhabdo viruses	Rabies
		Paramyxo viruses	Measles and Mumps
		Orthomyxo viruses	Influenza A and B
		Bunya viruses	Hanta virus
		Arena viruses	Lassa
6.	RNA rev.	Retro viruses	HIV and HTLV
7.	DNA rev.	Retro viruses	HIV and HTLV

39. The microorganism that can enter the body only through an injury is

(a) Salmonella typhi

(b) Clostridium tetani

(c) Clostridium botulinum

(d) Streptococcus pyogenes

39. The microorganism that can enter the body only through an injury is

(a) Salmonella typhi

(b) Clostridium tetani

(c) Clostridium botulinum

(d) Streptococcus pyogenes

- Clostridium tetani (C. tetani) bacteria can enter the body through an open wound or injury, usually caused by broken skin.
- C. tetani bacteria are found in soil, animal feces, and the human intestine, and can remain dormant in the soil for more than 40 years.
- When the bacteria enter a wound, the cells become active and release a toxin that impairs the nerves that control muscles. This toxin causes tetanus, a serious infection also known as lockjaw.

40.Gram positive bacteria retain which type colour in gram staining

(a) Red

(b) Violet

(c) Green

(d) Yellow

40. Gram positive bacteria retain which type colour in gram staining

(a) Red

(b) Violet

(c) Green

(d) Yellow

- Gram-positive microorganisms have higher peptidoglycan content whereas gram negative organisms have higher lipid content
- With the dissolution of the lipid layer gram negatives lose the primary stain.
- All bacteria take up crystal violet however with the use of solvent the lipid layer from gram negative organism is dissolved with the dissolution of the lipid layer, gram negative lose the primary stain.

S.NO.	CHARACTERISTIC	GRAM POSITIVE	GRAM NEGATIVE
1.	Number of layers	One layer	Two layers
2.	Thickness	Thick (20-50 nm)	Thin (8-10nm)
3.	Outer membrane	Absent	Present
4.	Periplasmic	Present in some cell	Present in all cell
5.	Chemically cell wall	Peptidoglycan, Teichoic acid and lipoteichoic present	Lipopolysaccharide and Lipoprotein present
6.	Protein	Absent	Present
7.	Lipid	Less	More
8.	Permeability	More	Less
9.	Resistance	Less	More

PREPARING FOR PHARMACIST EXAM

Best PYQ Book for Question Practice

COD Available

Order करने के लिए बैनर पर क्लिक करें

PHARMACY INDIA

Course check करने के लिए बैनर पर क्लिक करें

6395596959

Connect for admission related queries

DAILY UPDATES

जुड़िए PHARMACY INDIA के साथ.....

WHATSAPP & TELEGRAM SE JUDNE KE LIYE ICONS PAR CLICK KARE

WhatsApp

Mobile Phone Par Click karein