



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Biological Sciences

Class: XI

Date: 26 .06.2020

(Unit -I) Ch-3- Bacteria and Cyanobacteria

FM: 15

WORKSHEET – 11 (ANSWERS)

(1x15=15)

- i) The scientist who first demonstrated the procedure for Gram staining was
(1) **Christian Gram** (2) John Gram (3) Albert Gram (4) Simon Gram
- ii) The primary stain in the Gram staining procedure is
(1) Safranin (2) Iodine (3) **Crystal Violet** (4) Eosin
- iii) The fixation process in Gram staining was done with
(1) 1% Iodine (2) **0.5% Iodine** (3) 0.9% Iodine (4) 3% Iodine
- iv) Which of the following is not a Gram positive Bacteria?
(1) *Staphylococcus* (2) *Bacillus* (3) *Streptococcus* (4) ***Salmonella***
- v) Which of the stain is retained by the Gram positive bacteria?
(1) **Crystal Violet** (2) Iodine (3) Safranin (4) All of them
- vi) Which of the following layers is absent in Gram negative bacteria?
(1) Lipopolysaccharide (2) Peptidoglycan (3) **Teichoic Acid** (4) Outer membrane
- vii) Which of the following layers help in retention of the primary stain in Gram positive bacteria?
(1) Lipopolysaccharide (2) Plasma membrane (3) **Peptidoglycan** (4) Periplasmic space
- viii) *E. coli* is less susceptible to antibodies because of -
(1) Cell wall (2) Cell membrane (3) **Outer membrane** (4) All of these
- ix) The central part of the cytoplasm where the naked circular DNA lies is known as
(1) Protoplasm (2) **Centroplasm** (3) Nucleoplasm (4) Chromoplasm
- x) The thick walled cells which are present in the filamentous cyanobacteria is
(1) Endospore (2) **Heterocyst** (3) Akinete (4) Hormogonia
- xi) Which of the following is not a type of phycobillin?
(1) Phycocyanin (2) Allophycocyanin (3) Phycoerythrin (4) **Chlorophyll a**
- xii) The lipoprotein cell membrane becomes folded at some places in cyanobacteria which are called
(1) Mesosomes (2) Ribosomes (3) **Lamellosomes** (4) Polyribosomes
- xiii) If the trichome filament has undifferentiated cells, it is called-
(1) **Homocystous** (2) Heterocystous (3) Equicystous (4) Semicystous
- xiv) Gaidukov phenomenon shown by some of the organisms of cyanobacteria is a phenomenon of _____ adaptation
(1) **Chromatic** (2) Morphological (3) Ecological (4) Genetic
- xv) Which of the following character in cyanobacteria is unlike bacteria?
(1) 70S ribosomes (2) Nucleoid (3) **Phycobillins** (4) Presence of slime layer
