

IQRA NATIONAL UNIVERSITY
DEPARTMENT OF ALLIED HEALTH SCIENCES

Final-Term Examination 2020

Course Title: microbiology and pathology DPT 4th

Instructor: Dr. Imran khan

Time: 6 hours

Total Marks: 50

Name:Maaz Rahim

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ID...15182.....

Q1. What do you know about healing and repair. Explain (15)

Ans1:-**Healing**:- The process of returning to health ,the restoration of structure and function of injured or disease tissues. Healing process includes blood clotting,tissue mending and wound healing.

2)**Repair**:-The physical or mechanical restoration of damaged tissue especially the replacement of dead or damage cells in a body tissue or organ by healthy new cells.

Q2. What are hemodynamic disorders? Explain any 3 (10)

Ans2:- 1) Edema .

2) Hypermia and congestion

3) Hemorrhage thrombosis embolism

Infraction

Edema:- increase in interstitial tissue space

Causes:-

Increase hydrostatic pressure

Decrease plasma oncotic pressure

Sodium retention
Lymphatic obstruction
Inflammation

Types:-

Anasarca
Dependent edema
Pulmonary edema
Renal edema pitting edema
Periorbital edema

2) **Hyperemia and congestion :-**

Def increase in volume of blood in a particular tissue
In both increase volume and pressure of blood in a tissue is associated with capillary dilation and potential for fluid extravasation

3) **Hemorrhage** ..extravasation of blood due to vessel rupture
Types hematoma..purpura..hemothorax

Q3. What is renewal and regeneration? (10)

Ans3:- **Definition**:- growth of cell to replace lost tissue

Examples:-

Growth of amputated leg in amphibians
Regeneration of liver after resection or necrosis

Types of regeneration

Reparative

Restorative

Mechanism

Occurs by proliferation of cells that survive the injury
Retain the capacity to proliferate

In rapidly dividing epithelium of skin intestine and liver in other cases tissue stem cell contribute to regeneration.

Factors influence regeneration:- regeneration

Cell cell interaction

Growth factors

Extracellular matrix

Factors affecting regeneration

Vitamin c

Diabetes

Chronic disorders

Infection

Blood disorders

Hormones

Steroids

Q4. Write a detailed note on staphylococcus and streptococcus (15)

Ans4:-Staphylococcus

Family..Micrococcea

Genus ..staphylococcus

Robert koch first time see it in pus

Sir alexander ongaston named it

Classification

On base of pathology

Pathogenic e.g s.aureus

Non pathogenic e.g s.albus s.citrus s.homins

On base of coagulase production

Coagulase positive e.g s.aureus

Coagulase negative s.epidermides

On base of pigment

Golden yellow pigment..e.g s.aueus

White colonies e.g s.albicans

Lemon yellow e.g s.citrus

Laboroty test..total leukocyte

Blood culture

Pus culture

Diseases

Cutaneous infecton

Deep infection

Toxic shock syndrome

Food posionig

Steptococcus

Are gram positive oraganisms

Are arrange in chains or pairs

Part of normal flora

Classificaton

Brown classification

Alpha hemolytic e.g viridians

Beta hemolytics e.g pyogenes aglacticia

Gamma hemolytic e.g enteantibody.

Lancefied classification

Group A e.g streptococcus pyogenes

Group B e.g streptococcus aglactica

Group c e.g steptococcus equsimils

Griffth classification

Diseases

Respiratory skin and gential infections

Meningitis

Endocarditis

Pneumonia

Laboratory tests

Throat swab

Culture blood and swabs

Gram staining

Aso titre

Anti DNAase antibody.