Azra Naheed Medical College

Annual Examination, [redacted]

MBBS 3rd Year (2nd Entry)

(Pathology-Objective Part)

2nd Page

Time Allowed: 1 hour Total Marks: 60 Roll No: _____

Instructions:

1. All objective questions are to be attempted on the paper and returned to the invigilator within specified time after you have received the question paper.
2. Any cuttings or over writing in answering the objective part will not be accepted and no marks will be given even if the answer is correct.

Choose the best answer. 01 mark for each MCQ.

1. Squamous metaplasia occurs typically in:
   a) Bronchi of chronic smokers
   b. Skin exposed to sunlight
   c. A callus
   d. Barrett esophagus
   e. Chronic gastritis

(1)

2. On histological examination of the tissue sample, disorganized arrangement of cells is seen, pleomorphism and hyperplastic cells. It is most likely to be:
   a. Anaplasia
   b. Metaplasia
   c. Malignancy
   d) Dysplasia
   e. Hyperplasia

3. Which is a characteristic feature of malignancy?
   a. Abnormal cell size
   b. Abnormal mitotic figures
   c. Invasion
   d.) Metastasis
   e. None of the above

4. The following best explain the mechanism of cancer:
   a. Over expression of tumour suppressor genes
   b. Over expression of protooncogenes
   c. Chromosomes deletion
   d. Chromosome duplication
   e. None

5. What does pleomorphism mean?
   a. Uncontrolled mitosis
   b. Variability in shape and size
   c. Multiple nuclei
   d. The cells are different from where they arose from
   e. None

6. What is the term that means "new growth"?
   a. Neoplasia
   b. Anaplasia
   c. Metaplasia
   d. Hyperplasia
   e. None

7. Healing with minimal or No residual defect is known as:
   a. Intentional Healing
   b. Healing by first intention
   c. Healing by second intention
   d. Superficial healing
   e. Healing by malunion

8. Movement between two broken ends of leg bone will result in:
   a. Pain
   b. Excessive callus
   c. Slow tissue union
   d. a and c
   e. a, b and c

9. The growth of M. tuberculosis in serpentine strands is due to:
   a. Tween 80 in the medium
   b. Serpentine growth factor in the medium
   c. Egg yolk lipids in the medium
   d. All of the above (a-c)
   e. None of the above (a-c)

10. PPD is an antigen derived from:
   a. Mycobacterium tuberculosis
   b. Mycoplasma pneumoniae
   c. Pseudomonas aeruginosa
   d. Yersinia pestis
   e. None of the above (a-d)

11. Gram positive, catalase positive, coagulase negative and Novobiocin sensitive:
   a. Staph. Epidermidis
   b. Staph. Saprophyticus
   c. Staph. Aureus
   d. Enterccoccus faecalis
   e. None of the above

12. Which enzyme produced by staph. Aureus result in invasion of normal healthy skin:
   a. Hyaluronidase
   b. Fibrinolysins
   c. Lipases
   d. All of the above (a-c)
   e. Only a & c are true

13. Strep. Viridians is best distinguished from staph. epidermidis by the:
   a. Cell size
   b. Coagulase test
   c. Catalase test
   d. Gram stain
   e. Peptidoglycan thickness

14. Clostridium difficile:
   a. Is anaerobic bacillus
   b. Causes pseudomembranous colitis
   c. It is spore former
   d. It produces D-glutamic acid capsule
   e. All of the above (a-c)

15. Factors favouring the growth of anaerobic bacteria in a wound include:
   a. Concomitant contamination of the wound by other bacteria
   b. Low oxidation reduction potential (Eh)
   c. Tissue necrosis
   d. All of the above (a-c)
   e. Only b & c are true

16. Gram positive catalse negative cocci in chains, grows in the presence of bile and 6.5% NaCl:
   a. Enterococci
   b. Staph. Saprophyticus
   c. Streptococcus agalactiae
   d. Strep. Viridians
   e. None of the above (a-d)

17. Acute gingivostomatitis is caused by:
   a. HSV-I
   b. Adenovirus
   c. JC Virus
   d. Cytomegalovirus
   e. Respiratory syncytial virus

18. Which statement is false for hepatitis E but true for hepatitis B:
   a. Produces antibodies to capsid antigen
   b. Route of infection is fecal-oral
   c. Produces viremia
   d. Never produce carrier state
   e. Contains an envelope

19. Which virus have an envelope:
   a. JC Virus
   b. Calciviruses
   c. Togaviruses
   d. Rhinoviruses
   e. None of the above (a-d)

(غلط envelope)

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envelope

20. Which virus infects both epithelial cells and B-lymphocyte around oropharynx:
    a. Poliovirus
    b. Cytomegalovirus
    c. Coxsackievirus
    d. Epstein-Barr virus
    e. None of the above

21. What disease is caused by double stranded DNA virus:
    a. Adult T-cell leukemia
    b. Madcow disease
    c. Infectious mononucleosis
    d. None of the above (a-c)
    e. All of the above

22. Method of choice for sterilization is:
    a. Gluteraldehyde (2%)
    b. Hot air oven
    c. Radiation
    d. Autoclave
    e. Filtertion

23. Which of the following statements regarding cell wall of spirochetes is true?
    a. Rigid cell wall
    b. Wall less
    c. Periplasmic space is present
    d. Thick cell wall
    e. Thin flexible cell wall

24. Which of the following is the commonest commensal of skin?
    a. *Staphylococcus aureus*
    b. *Diphtheroids*
    c. *Micrococcus*
    d. *Staphylococcus epidermidis*
    e. *Streptococcus pyogenes*

25. Which of the following factors determine the likeliness of a bacterium to cause disease?
    a. Number of the infecting organisms
    b. Presence of capsule
    c. Number and virulence of the infecting organisms
    d. Virulence of the organisms
    e. Ability to produce IgA protease

26. Which of the following pathogens is a risk factor for (MALT) mucosal associated lymphoid tissue?
    a. Vibriocholerae
    b. Campylobacter
    c. H. pylori
    d. Morganella
    e. Serratia

MALT
H. pylori

34. Fungal infections are classified as:
   a. Cutaneous, subcutaneous, systemic and opportunistic
   b. Superficial, subcutaneous and deep
   c. Superficial, cutaneous and systemic
   d. Cutaneous, subcutaneous and deep
   e. Cutaneous, subcutaneous and supeerficial

35. The most commonly used media for fungal culture is:
   a. MacConkey's agar
   b. EMB agar
   c. Blood agar
   d. Serum dextrose agar
   e. Sabouraud dextrose agar

36. One month after an appendicectomy, a 20 years old man palpates a small nodule at the site of healed incision. The nodule is excised and microscopic examination shows macrophages, collagen, lymphocytes and multi-nucleated giant cells. A refractile material is also seen. Which of the following complications best accounts for these findings?
   a. Chronic inflammation
   b. Oedema
   c. Abscess formation
   d. Suture granuloma
   e. Ulceration

Repeat

37. A 70 years old woman had myocardial infarction. Lab findings showed serum creatine kinase of 600 U/L. Patient received therapy. Which of the following findings would most likely to be seen in the heart one month later?
   a. Abscess
   b. Complete resolution
   c. Coagulative necrosis
   d. Nodular regeneration
   e. Fibrous scar

38. Morphological changes seen in chronic non specific inflammation include an increase in:
   a. Lymphocytes, Neutrophils and Liquefactive necrosis
   b. Neutrophils, macrophages and fibrosis
   c. Lymphocytes, plasma cells and fibrosis
   d. Giant cells, macrophages and coagulative necrosis
   e. Granulomatous reaction and fibrosis

PFL

9. Which of the following is the most efficient killing mechanism of neutrophils?
   a. Collagenase
   b. Reactive oxygen species
   c. Protease
   d. Myeloperoxidase
   e. Defensins

10. A 55-year-old man has had increasing dyspnea for 6 years. He has no cough or fever. He was inhaling silica dust for many years in his job. A chest x-ray now shows increased interstitial markings and parenchymal 1 to 3 cm nodules. His pulmonary problems are most likely to be caused by which of the following inflammatory processes?
   a. Neutrophilic infiltration with release of leukotrienes
   b. Histamine release by mast cells
   c. Foreign body giant cell formation
   d. Plasma cell production of immunoglobulin
   e. Release of growth factors by macrophages

41. Complement fixation refers to:
   a. The ingestion of C3b coated bacteria by macrophages
   b. The destruction of complement by serum
   c. The binding of complement components by antigen antibody complexes
   d. The interaction of C3b with mast cells
   e. None of the above

42. Natural killer cells are:
   a. B cells that can kill without complement
   b. Cytotoxic T cells
   c. Increased by immunization
   d. Able to kill virus infected cells
   e. Positive immune response

43. The class of immunoglobulin present in highest concentration in the blood of the human newborn is:
   a. IgA
   b. IgM
   c. IgD
   d. IgE
   e. IgG

44. Antigen presenting cells that activate helper T cells must express which of the following on their surface?
   a. IgE
   b. Gamma interferon
   c. Class I MHC antigen
   d. Class II MHC antigen
   e. NK cells

45. The main advantage of passive immunization over active immunization is that:
   a. It can be administrated orally
   b. It provides antibody more rapidly
   c. Antibody persists for a longer period
   d. It contains primarily IgM
   e. None of the above

44. Which antibody participates in host defense against certain parasites?
a. IgA
b. IgM
c. IgD
d. IgE
e. IgG

45. Which category of hypersensitivity best describes hemolytic disease of newborn caused by Rh incompatability?
a. Atopic
b. Anaphylactic
c. Cytotoxic
d. Immune complex
e. Delayed

46. An AIDS patient visits his physician with 2 weeks history of watery non-bloody diarrhea. His stool reveals weakly acid fast bacilli on microscopy. What is his most likely diagnosis?
a. Mycobacterium tuberculosis
b. Actinomyces
c. Cryptosporidium
d. Nocardia
e. Yeast

47. A woman who recently returned from Africa complains of attacks of fever, chills and shivering, recurring after 36-48 hours. His stained blood specimen revealed crescent like/banana like forms in the red blood cells. Which is the most likely infecting organism?
a. Plasmodium falciparum
b. Plasmodium vivax
c. Trypanosoma
d. Wucheria bancrofti
e. Schistosoma mansoni

48. Which one of the following is the definitive host of Ecchinococcus granulosus?
a. Cow
b. Man
c. Dog
d. Mosquito
e. Snail

49. A man travels abroad and consumes raw fish daily for two weeks. Six months after returning home, he was found to be anemic on his routine checkup. His vitamin B12 level was below normal. Which one of the following is the most likely cause of his vitamin B12 deficiency?
a. Cysticercosis
b. Infection with Parvovirus B19
c. Yersinia infection
d. Diphyllobothrium latum
e. H.nana

50. Which of the following roundworm is also known as thread worm or pin worm?
   a. Enterobius vermicularis
   b. Trichuris
   c. Ascaris lumbricoides
   d. Ancy ostoma dudenale
   e. Strongyloides

51. Which of the statement is not true regarding reversible cell injury?
   a. Swelling of entire cell
   b. Increased glycolysis
   c. Decreased pH
   d. Decreased ATP production by mitochondria
   e. Nuclear pyknosis, karyolysis, karyorrhexis

52. Pyogenic bacterial infections and ischaemic brain infarcts most characteristically produce which one of the listed types of necrosis?
   a. Caseous necrosis
   b. Coagulative necrosis
   c. Fat necrosis
   d. Liquefactive necrosis
   e. Fibrinoid necrosis

Brain infarcts Liquefactive

53. Accumulation of which of the following substance indicates aging at a cellular level?
   a. Bilirubin
   b. Hemosidrin
   c. Lipofuscin
   d. Beta carotene
   e. Melanin

54. The epithelium of the respiratory tract of a 35 year old habitual smoker, is most likely to show:
   a. Stratified squamous metaplasia
   b. Simple squamous metaplasia
   c. Mucus hyperplasia
   d. Smooth muscular hyperplasia
   e. Squamous cell anaplasia

55. Which of the following converts plasma protein fibrinogen into the insoluble fibrous protein fibrin?
   a. Thrombin
   b. Prothombin
   c. Fibrinogen
   d. Fibrinonectin
   e. Epinephrine

56. Endothelial injury ,stasis or turbulence of blood flow and blood hypercoagubility form so called:
   a. Coagulation cascade
   b. Extrinsic pathway
   c. Intrinsic pathway
   d. Virchows triad
   e. Plasminogen plasma system

57. If the blood supply of an organ is compromised, minimum how much time is required to show demonstrable histologic findings?
   a. 0-60 sec
   b. 2-4 hrs
   c. 4-12 hrs
   d. 12-24 hrs
   e. 24-36 hrs

58. Which of the following is mechanism of edema in patients with congestive hear failure?
   a. Decreased plasma oncotic pressure
   b. Increased hydrostatic pressure
   c. Endothelial damage
   d. Lymphatic obstruction
   e. Increased vascular permeability

59. Down's syndrome is:
   a. Trisomy 15
   b. Trisomy 22
   c. Trisomy 21
   d. Trisomy 17
   e. Trisomy 19

21-Trisomy

60. Turner's syndrome has:
   a. 45 chromosomes
   b. 47 chromosomes
   c. 44 chromosomes
   d. 48 chromosomes
   e. 49 chromossomes

45 T