Anatomy (Medical)

Part B

[35X1=35]

1. Laryngeal oedema is usually confined to the larynx above the vocal folds because:
   a. Here are numerous mucous glands in the vestibular folds
   b. The mucosa covering the vocal folds is tightly attached to underlying tissues
   c. Fluid will drain rapidly into the thorax below the vocal folds
   d. The mucosa above the vocal folds is more vascular than that below the vocal folds

2. Following a cranio-maxillofacial trauma, a patient suffers from superior orbital fissure syndrome. Which of the following symptoms he might not experience?
   a. Ophthalmoplegia
   b. Complete ptosis
   c. Dilatation pupil
   d. Constriction of pupil

3. Patient suffers from low-pitched voice and on examination there is loss of tension of vocal cord. The nerve responsible is:
   a. External laryngeal
   b. Internal laryngeal
   c. Superior laryngeal
   d. Recurrent laryngeal

4. A malignant tumour is damaging the patient's glossopharyngeal nerve. They will experience:
   a. Loss of taste over the anterior two-thirds of the tongue
   b. Loss of somaesthetic sensation over the anterior two thirds of the tongue
   c. Loss of taste and somaesthetic sensation over the posterior third of the tongue
   d. Paralysis of the muscles of the tongue

5. After myringotomy with injury to handle of malleus, the patient will experience:
   a. Loss of balance
   b. Deafness
   c. Impaired taste
   d. Facial asymmetry

6. The nucleus concerned with the secretion of parotid gland:

a. Superior salivatory nucleus
b. Inferior salivatory nucleus
c. Dorsal nucleus of vagus
d. Nucleus ambiguous

7. Virchow's lymph node is ------
a. Left supraclavicular
b. Left infraclavicular
c. Right supraclavicular
d. Right infraclavicular

8. Passavant's ridge is formed by _____
a. Palatopharyngeus
b. Salpingopharyngeus
c. Stylopharyngeus
d. Thyropharyngeus

9. Calcitonin is secreted by
a. Follicular cells of thyroid
b. Chief cells of thyroid
c. Oxyphil cells of parathyroid
d. Parafollicular cells of parathyroid

10. Which is a branch of first part of maxillary artery
a. Greater palatine
b. Deep temporal
c.Deep auricular
d. Pharyngeal

11. Pterion corresponds to all except
a. Anterior pole of Insula
b. Middle meningeal artery
c. transverse sinus
d. Lateral cerebral sulcus

12. The outer surface of the tympanic membrane is lined with:
a. Simple columnar epithelium.
b. Pseudo stratified squamous epithelium
c. Stratified squamous epithelium
d. simple cuboidal epithelium

13. A patient had had chronic ear discharge and pain over mastoid process. Which venous sinus

is related to it?

a. transverse sinus
b. sigmoid sinus
c. traight sinus
d. confluence of sinus

14. Chorionic villi are designated as secondary chorionic villi when they:
a. Contact the deciduas basalis
b. Are covered by syncytiotrophoblast
c. Develop a mesenchymal core
d. Give rise to branch villi

15. Which one of the structure is represented as remnant of notochord in the adult:
a. Primitive streak
b. Nucleus pulposus
c. Prochordal plate
d. Body of vertebra

16. Which of the following structure is believed to be a primary organizer or inducer during organogenesis ?
a. Somites
b. Notochord
c. Metanephricblastema
d. Lens placode

17. In which stage the zonapellucida dissolves (disappears):
a. Primary oocyte
b. Morula
c. Zygote
d. Blastocyst

18. Myoblasts from occipital myotomes are believed to give rise to the muscles of :
a. Eye
b. Face
c. Ear
d. Tongue

19. A chromosomal abnormality that causes a man to have feminine body contours
With large breasts; small penis, testes, and prostate gland; relatively little body hair, and sterility is:
a. XYY syndrome
b. Klinefelter syndrome
c. Turner syndrome
d. Down's syndrome

20. Following are the single gene disorders **EXCEPT**;
    a. Duchene muscle dystrophy
    b. spina bifida
    c. haemophilia
    d. sickle cell anemia

21. Arrangement of chromosomes in the order of decreasing length is termed
    a. Pedigree
    b. Eugenetics
    c. Idiogram
    d. Dysengenics

22. Gene mutation in chromosome 4 leads to
    a. Hemochromatosis
    b. Hemoglobinopathies
    c. Huntingtons disease
    d. Heamophilia

23. Perichondrium is absent in:

    a. Fibrocartilage
    b. Hyaline cartilage
    c. Elastic cartilage
    d. Epiphyseal cartilage.

24. The Haversion system is found in-
    a. Diaphysis of long bone
    b. Cancellous bone
    c. Epiphysis
    d. Spongy bones of children

25.Superior ulnar collateral artery is a branch of which artery?
    a. Brachial
    b. Ulnar
    c. Common interosseous
    d. Ulnar recurrent

26. Which ligament transmits the weight of the upper limb to the clavicle?
    a. Acromioclavicular
    b. Coracoclavicular
    c. Costoclavicular
    d. Coracoacromial

27.Which carpal bone will undergo dislocation most commonly
a. Lunate
b. Pisiform
c. Trapezium
d. Scaphoid

28.Which nerve is entrapped in cubital tunnel syndrome?
a. Ulnar nerve
b. Median nerve
c. Radial nerve
d. Musculocutaneous nerve

29. Ligament of Struther's cause compression of which nerve
a. Median nerve
b. Radial nerve
c. Ulnar nerve
d. Musculocutaneous nerve.

30. Which sesamoid bone develops in the tendon of flexor carpi ulnaris?
a. Capitate
b. Lunate
c. Pisiform
d. Scaphoid.

31. In fracture of the surgical neck of humerus , artery that is commonly injured is
a. Subscapular artery
b. Posterior circumflex humeral artery
c. Profunda brachii artery
d. Circumflex scapular artery

32. Example of hybrid muscle is
a. Brachialis
b. Biceps brachii
c. Triceps
d. Corocobrachialis

33. Which muscle is pierced by posterior interosseus nerve?
a. Supinator
b. Pronator teres
c. Brachioradialis
d. Biceps brachii

34. A 47-year-old male, a known case of carcinoma of glans penis was admitted in surgery clinic. Which among the following entity will favour metastasis in this scenario?
    a. Lateral horizontal superficial nodes
    b. Medial horizontal superficial nodes
    c. Vertical superficial nodes
    d. Deep inguinal nodes

35. A 45- year- old female was diagnosed with femoral hernia. Which structure has to be borne in mind while dividing lacunar ligament during surgery ?
    a. Ilioinguinal nerve
    b. Genitofemoral nerve
    c. Obturator artery
    d. Abnormal obturator artery

Biochemistry (Medical)

Part B

[35X1=35]

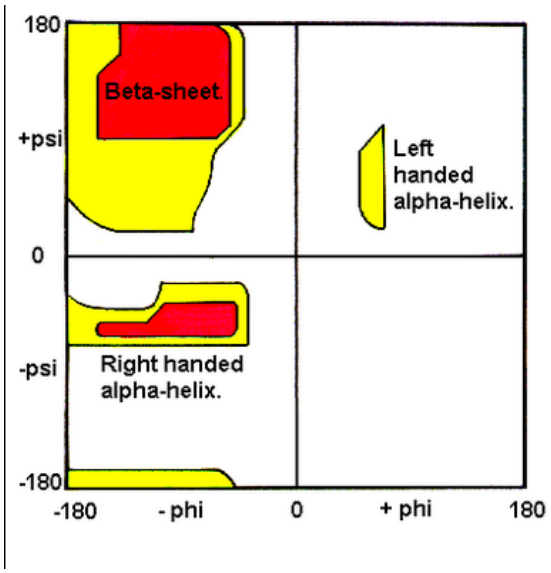
1. The normal range of pH in arterial blood of humans is 7.35 to 7.45. The pH of a patient is 7.10. What is your interpretation
   A. Acidosis
   B .Alkalosis
   C .Neutral
   D .Normal

2. Which of the following amino acids is the smallest and achiral amino acid?
   A. Alanine
   B .Glycine
   C .Lysine
   D .Ornithine

3. Which of the following is NOT a peptide hormone?
   A. Antidiuretic hormone
   B .Insulin
   C .Glucogon
   D .Progesterone
4. "Arrangement of subunits and their functional interaction in a protein having more than one polypetide chain". This defines which hierarchy level of protein structure?
   A. Primary Structure
   B .Secondary Structure
   C .Tertiary Structure
   D .Quaternary Structure

5. The isoelectric pH of a protein is 9.0. The protein is rich in which of the following amino acids on the surface of the molecule?
   A .Alanine and Valine
   B .Leucine and Isoleucine
   C .Aspartate and Glutamate
   D .Lysine and Arginine

6. Identify the following graph.



A.Phi Psi Plot
B .Lineweaver Burk Plot
C .Oxygen dissociation curve
D .Ramachandran Plot

7. In controlling the muscle contraction, Ca 2+ ion will bind to which of the proteins in a muscle fibre?
   A. Actin
   B .Myosin
   C .Tropomyosin
   D .Troponin C

8. Trypsin belongs to which class of enzyme?
   A. Oxidoreductase
   B .Transferase
   C .Hydrolase
   D .Lyase

9. Which of the following statements is true for an enzyme catalyzed reaction?
   A .Enzyme catalyzes forward reaction only
   B .Enzyme catalyse both forward and reverse reaction
   C .Side products are formed
   D .Only proteins can function as enzyme

10. 65year old man with difficulty in passing urine. Serum Acid Phosphatase is elevated. What is the probable diagnosis?
    A. Renal stone
    B .Ureteric stone
    C .Carcinoma urinary bladder
    D .Benign hypertrophy of prostate

11. In a patient with elevated Alkaline Phosphatase level, disorder of which of the following tissue/organ should be considered?
    A .Bone
    B .Brain
    C .Heart
    D .Prostate

12. How many of the following molecules have beta glycosidic bonds?
    Starch, Maltose, Lactate, Glucogon, Sucrose, Cellulose, Chitin, Collagen, Hyaluronic acid, Trehalose
    A .1
    B .2
    C .3
    D .4

13. Ceramide consists of
    A. Glycerol
    B .Sphingosine
    C .Sphingosine and fatty acid
    D .Glycerol and choline

14. Which of the following is not a key enzyme of gluconeogenesis?
    A. Glucokinase
    B .Fructose 1,6 Bisphosphatase
    C .Pyruvate carboxylase
    D .Phosphoenolpyruvate carboxykinase

15. Which of the following statements is TRUE?
    A .Km value of Glucokinase is much lower than Hexokinase
    B .Pyruvate kinase step of glycolysis is reversed in gluconeogenesis in single step
    C .Fructose 2, 6 bisphosphate is produced as an intermediate in glycolysis in RBC
    D .Glucose 6 phosphatase is present in endoplasmic reticulum

16. First 5 glucose residues of glycogen are joined by the enzyme
    A . Glycogen Phosphorylase
    B .Glycogen Synthase
    C .Glycogenin
    D .Branching enzyme

17. Which of the following metabolite is not formed directly from pyruvate?
    A. Oxaloacetate
    B .Acetyl CoA
    C .Alanine
    D .Valine

18. Rate limiting step of beta oxidation is
    A. Fatty acid to Acyl CoA by Acyl CoA synthase
    B .Carnitine transport
    C .Acyl CoA dehydrogenase
    D .Thiolase

19. Following are the products formed from glycine EXCEPT
    A .Purine
    B .Pyrimidine
    C .Creatine
    D .Heam

20. All of the following are enzymes with tetrahydrobiopterin EXCEPT
    A. NO synthase
    B .Tyrosine hydroxylase
    C .Tryptophan hydroxylase
    D .Dopamine beta hydroxylase

21. The following vitamins are directly related to metabolism of homocysteine EXCEPT
    A .B Biotin
    B .B6 Pyridoxine
    C .B Folic acid
    D .B12 Methylcobalamin

22. Which one of the following statements is FALSE?
    A. Electron transport chain create proton motive force
    B .Proton motive force is used to synthesize ATP
    C .Hydrogen of NADH and FADH2 are burned to water in electron transport chain
    D .Cyanide inhibits Complex V

23. Which of the following statements is FALSE?
    A .Prostaglandins are synthesized from arachidonic acid
    B .PG E2 have two double bond outside the ring
    C .PG F2 alpha is the slow reacting substance of anaphylaxis
    D .Lipoxygenase pathway produce Leukotrienes

24. Which of the following is an 18 carbon steroid?
    A .Androstenediol
    B .Cortisol
    C .Estradiol
    D .Cortisone

25. "Macrocytic anemia not responding to B12 and Folate". This description suits
    A .Cysteinuria
    B .Fructosuria
    C .Glycosuria
    D .Orotic aciduria

26. Which of the following statements is FALSE regarding secretion of insulin by Beta cells of islets of Langerhans?
    A .GLUT 2 and Glucokinase helps to respond to a wider range of glucose level
    B .Blocking ATP sensitive K+ channel cause depolarisation
    C .Glucagon like peptide - 1 is an incretin
    D .Incretin inhibits insulin secretion

27. Which of the following is not a component of core histone?
    A .H1
    B .H2A
    C .H3
    D .H4

28. GATC endonuclease is involved in
    A .Mismatch repair
    B .Base excision repair
    C .Nucleotide excision repair
    D .Double strand break repair

29. Capping, tailing and splicing converts
    A .hnRNA to mRNA
    B .snRNA to scRNA
    C .snRNA to snoRNA
    D .siRNA to miRNA

30. Which of the following is NOT required for splicing
    A .Upstream Splice Site
    B .Downstream Splice Site
    C .Branch Site
    D .Joining Site

31. Which of the following is related to the function of Beta Clamp in DNA synthesis?
    A .Initiation
    B .Processivity
    C .Proofreading
    D .Nucleotide selection
32. The relative forward movement of Ribosome with respect to mRNA in translation is due to
    A. IF1-Initiation factor 1
    B .EF2-Elongation factor 2
    C .NF-kB-Nuclear factor kappa B
    D .TNFa - Tumour necrosis factor alpha

33. A 50y old male patient with jaundice. Serum Bilirubin Total 6.0mg/dL Direct 3.4mg/dL, Alkaline phosphatase 270 IU/L, ALT 2010 IU/L, AST 1400 IY/L The probable diagnosis is
    A. Physiologic Jaundice
    B .Prehepatic jaundice
    C .Hepatic jaundice
    D .Post hepatic jaundice

34. Apoptosis pathway usually DO NOT involve this molecule
    A. Death receptor
    B .Caspases
    C .CytC
    D .Tyrosine kinase

35.Which of the following is NOT a component of gamma globulin?
    A .CRP - C reactive protein
    B .IgG
    C .IgM
    D .C4 of Complement system

Microbiology (Medical)

Part B

[35X1=35]

1. The method of sterilization that required three consequent days is
    a. Moist heat sterilization
    b. Dry heat sterilization
    c. Radiation sterilization
    d. Tyndallization

2. Biological Control to check the efficacy of autoclave.
    a. *Bacillus subtilis*
    b. *Bacillus cereus*
    c. *Bacillus stereothermophilus*
    d.Bacillus anthracis

3. Cork Screw motility is found among.
    a. *Vibrio*
    b. *Leptospira*
    c. *Listeria*
    d. *Mycoplasma*

4. What is the principle of VDRL test for detection syphilis?
    a. Slide flocculation
    b. Precipitation
    c. Agglutination
    d. Coagulation

5. Which of the following iodine solution is unsuitable for parasitic iodine staining?
    a. Weak iodine
    b. Lugol's iodine
    c. D'Antoni's iodine
    d. Gram' iodine

6. Which of the following protozoa cause eye infection?
    a. Giardia
    b. Microsporidia
    c. Acanthamoeba
    d. Balantidium

7. How much time after consuming contaminated food, patients develops staphylococcal food poisoning?
    a. 1-2 hours
    b. 2-6 hours
    c. 5-9 hours
    d. 9-14 hours

8. Which toxin is called Panton-Valentine toxin?
    a. Leucocidin
    b. Haemagglutinin
    c. B-lysin
    d. Enterotoxin

9. The transport medium used for *Neisseria meningititis* is
    a. VR medium
    b. Egg yolk broth
    c. Thayer- Martin medium
    d. Stuart's medium

10. The nonmotile clostridia is
    a. *Clostridium tetani*
    b. *Clostridium septicum*
    c. *Clostridium perfringens*
    d. *Clostridium novyi*

11. Haemolytic uraemic syndrome is caused by
    a. Enteropathogenic *E. coli*
    b. Verotoxigenic *E. coli*
    c. Enteroinvasive *E. coli*
    d. Enterotoxigenic *E. coli*

12. Who first isolated the genus *Shigella*?
    a. Kiyoshi Shiga
    b. Louis Shiga
    c. Jeniffer Shiga
    d. Boyed Shiga

13. The production of aminoaceto phenone by *Pseudomonas* emit
    a. Muddy odour
    b. Chocolate odour
    c. Rotty odour
    d. Fruity odour

14. Which of the following is water borne helminthes
    a. *Balantidium coli*
    b. *Isospora belli*
    c. *Ascaris lumbricoides*
    d. *Giardia lamblia*

15. The capsulated fungi is
    a. *Saccharomyces cerevisiae*
    b. *Cryptococcus neoformans*
    c. *Candida albicans*
    d. *Aspergillus niger*

16. Negri bodies are seen in
    a. Rabies virus
    b. Vaccinia virus
    c. Fowlpox virus
    d. Molluscum contagiosum

17. How many copies of DNA obtained at the end of PCR?
    a. 10^3
    b. 10^{12}
    c. 10^{10}
    d. 10^6

18. The prefix of international system of unit of 10^{-9} is
    a. Micro
    b. Milli
    c. Nano
    d. Pico

19. Which of the following bacillus is called as Klebs-Loeffler bacillus?
    a. *Klebsiella*
    b. *Corynebacterium*
    c. *Salmonella*
    d. *Bordetella*

20. Which of the following is not immediate hypersensitivity disease?
    a. Graulomatous reactions
    b. Atopic dermatitis
    c. Good Pasture disease
    d. Myasthenia gravis

21. Disease associated with common body antigen is
    a. Sjogren's disease
    b. Male sterility
    c. Multiple sclerosis
    d. Rheumatoid arthritis

22. The pigment of *Pseudomonas* exhibit yellowish green colour is
    a. Pyocynin
    b. Pyorubin
    c. Fluorescein
    d. Pyomelanin

23. Semple vaccine is widely used against
    a. Influenza
    b. Rabies
    c. Hepatitis
    d. Dengue
24. When host harbors parasite exhibiting no development but this parasite remains viable
    a. Paratenic host
    b. Natural host
    c. Reservoir host
    d. Definitive host

25. The roundworm (*Ascaris lumbircoides*) lives in the lumen of
    a. Ileum
    b. Duodenum
    c. Caecum
    d. Jejunum
26. Gut bacteria release
    a. Vitamin A
    b. Vitamin D
    c. Vitamin K
    d. Vitamin C

27. Gastritis and dyspepsia are the classical symptoms for
    a. Hepatitis A
    b. *Helicobacter pylori*
    c. Rota virus
    d. Mobilincus
28. The state of DNA as transfer agent for transformation is
    a. Naked DNA
    b. Bacteriophage
    c. Prophage
    d. DNA via cytoplasm
29. The chemical mediator – histamine is synthesized by
    a. Monocytes
    b. Neutrophils
    c. Eosinophils
    d. Basophils

30. Which of the bacteria produce the membrane protein – internalin that escapes the phagocytic vesicles?
    a. *Pseudomonas*
    b. *Klebsiella*
    c. *Listeria*
    d. *Legionella*

31. Which of the virus cause penile cancers of squamous cells?
    a. EB virus
    b. Papilloma virus
    c. Corona virus
    d. Hepatitis A

32. Who are the target populations included for the primordial level of disease prevention?
    a. Total population
    b. Healthy individuals
    c. Patients
    d. Family members of patients

33. The example of nominal data is
    a. Grade of breast cancer
    b. Temperature scale
    c. Blood pressure
    d. Blood group

34. The normal Corona outbreak occur in 2019 and outbreak of SARS in
    a. 2013
    b. 2007
    c. 2003
    d. 2001

35. An infection spread by ticks causing skin rash, cardiac and neurological diseases is
    a. Leptospirosis
    b. Lyme disease
    c. AIDS
    d. Tularemia

Community Medicine

Part B

[35X1=35]

1. Which of the following condition tends to increase the prevalence of a particular disease?
   A. High cure rate
   B. Low case fatality ratio
   C. Short duration
   D. Emigration of patients

2. Which of the following is an way of doing social science research?
   A. Case study
   B. Game study
   C. Plan study
   D. Process study

3. The scientific study of the historical back ground of the events to determine its bearing on the present conditions is called
   A. Philosophical research
   B. Action research
   C. Experimental research
   D. Historical research

4. Objective or unbiased observation is most vital in
   A. All walks of life
   B. Performing experiments
   C. Normal behavior
   D. Research methods

5. Which of the following have a direct bearing on research tools and techniques?
   A. Concepts
   B. Knowledge
   C. Aspirations
   D. Interest

6. In which of the following selection depends on chance?
    A. Probability selection
    B. Purposive method
    C. Mixed sample
    D. Sample

7. What do you mean by synopsis of a research project?
    A. The blue print of research
    B. Extracts from the research observations
    C. A plan of the research
    D. Summary of the findings of the research

8. Where is the objective observation used?
    A. In conducting experiments
    B. In research
    C. In normal behavior
    D. In almost all the situations

9. A hypothesis is a
    A. Tentative statement whose validity is still to be tested
    B. Supposition which is based on the past experiences
    C. Statement of fact
    D. Future experiences

10. In case of destructive testings, the best method of research is
    (A) Sampling
    (B) Complete enumeration
    (C) Census survey
    (D) SRS data

11. Which of the following is a non-probability sampling method?
    A. Simple random sampling
    B. Systematic sampling
    C. Cluster sampling
    D. Quota sampling

12. What is the appropriate epidemiologic measure to determine the burden of a disease in terms of number of cases present in a specified geographical area at a specific point in time?
    A. Cumulative Incidence
    B. Point Prevalence
    C. Incidence rate
    D. Case fatality ratio

13. Which one of the following is useful to measure the burden or magnitude of a disease or risk factor?
    A. Case-control study
    B. Cross-sectional study
    C. Case report
    D. Case series

14. Which of the following is wrong about descriptive study designs?
    A. Describe the study outcome for 1 group
    B. Compare the study outcomes for 2 group
    C. Calculate the incidence for surveillance data
    D. Calculate prevalence for cross sectional study

15. Advantage of the ecological study is
    A. Relate rate of disease and exposure
    B. Useful to test hypothesis
    C. Useful to study rare diseases
    D. Identify the disease
16. A researcher can assess the following by conducting a descriptive study EXCEPT
    A. Population in which the disease was prevalent
    B. Period in which the disease occurred
    C. Risk factors of the disease
    D. Place distribution of the disease

17. Which of the following study design will be helpful if the department of health wants to know the burden of a particular disease?
    A. Ecological study
    B. Cross sectional survey
    C. Case series
    D. Case report

18. A clinician comes across an unusual presentation of a particular neurological disorder. If the clinician describes this single case in detail and publishes the same in a journal, then it will be called
    A. Analytical study
    B. Case report
    C. Cross sectional survey
    D. Ecological study
    E. None of the above

19. One of the major limitations of a cross sectional study is that
    A. It is time consuming
    B. It has lower validity
    C. It does not establish disease etiology
    D. It requires a large sample size

20. Relative risk of more than 1 indicates
    A. Incidence in unexposed is higher than exposed
    B. Incidence in exposed and unexposed is same
    C. Incidence in exposed is higher than unexposed
    D. Relative risk is significant

21. What is an appropriate measure of statistical association in a cohort study?
    A. Prevalence ratio
    B. Risk ratio
    C. Odds ratio
    D. Pearson's correlation coefficient

22. One of the cornerstones of the randomized controlled trials is
    A. Recruitment
    B. Randomization
    C. Blinding
    D. Placebo

23. Randomized clinical trials can be best described as
    A. Experimental studies
    B. Analytic studies
    C. Descriptive studies
    D. Observational studies

24. A pharmacologically inactive agent that investigators administer to participants in the control group of a trial
    A. Comparator drug
    B. Placebo
    C. Conjugate
    D. Drug under investigation

25. Double-blinding in a clinical trial involves
    A. Participants before and after study
    B. Participants and investigators
    C. Investigators and analysts
    D. Participants and analysis

26. Which phase of a clinical trial is referred to as post-marketing surveillance?
    A. Phase 1
    B. Phase 2
    C. Phase 3
    D. Phase 4

27. Which of the following is NOT a method of dealing with confounding during the design stage?
    A. Restriction
    B. Stratification
    C. Matching
    D. Randomization

28. Which of the following study designs can be used as a tool a generate ideas/hypotheses?
    A. Qualitative study
    B. Case-control study
    C. Experimental study
    D. Cohort study

29. The research method which is best suited for collection of information regarding highly sensitive matters such as alcohol use
    A. Focus Group Discussions
    B. Participant Observation
    C. In-Depth Interview
    D. Group discussions

30. Which of the following is not the utility of qualitative research
    A. To provide insight to why people behave in a certain way
    B. To estimate the prevalence of disease
    C. To help understand the results of a quantitative study
    D. For developing a questionnaire
31. Most commonly used measure of central tendency is
    A. Mode
    B. Median
    C. Mean
    D. Range
32. A researcher measures the height of 100 school going children for his study. What type of variable is 'height'?
    A. Nominal
    B. Ordinal
    C. Continuous
    D. Discrete
33. Sampling based upon equal chance of selection is called
    A. Stratified random sampling
    B. Simple random sampling
    C. Systematic sampling
    D. Subjective sampling
34. The recommended minimum level of power for an analytical study
    A. 5%
    B. 95%
    C. 80%
    D. 0.05%

35. Which of the following can be used to represent the duration, timeline and sequence of activities and milestones of a research project?
    A. Bar chart
    B. Histogram
    C. Gantt chart
    D. Pie chart

Pathology (Medical)

Part B

[35X1=35]

1. Erythropoietin is produced from
   a) Heart
   b) Bone marrow
   c) Kidney
   d) Spleen

2. Peripheral resistance is decreased in which type of shock

   a) Anaphylacticshock
   b) Cardiogenic Shock
   c) Neurogenic shock
   d) Hypovolemic shock

3. A test for mutagenic carcinogen
   a) Casonis test
   b) Ames test
   c) IMVIC test
   d) Frie test

4 .Secondary Amyloidosis is seen in all Except

   a) TB
   b) Multiple myeloma
   c) RCC
   d) RA

5. True about Fragile X Syndrome
   a) Chromosome breakage
   b) Centromere absent
   c) Mitochondrial Mutation
   d)Triple nucleotide repeat sequence

6.Cherry red spots in Retina were seen in

a) Pompedisease
b) Tay Sachs disease
c) Von Gierke disease
d) Gaucher's disease

7.Cysticerci is found in all the following organs except

a) Muscle
b) Brain
c) Heart
d) Spleen

8.The most potent carcinogen in cigarette smoke that causes Lung Carcinoma

a) Polycyclic Hydrocarbons
b) 4-Aminobiphenyl
c) NNN
d) Nitrosamine

9.What is affected in HbS

a) Affinity
b) Function
c) Stability
d) Solubility

10.Leukaemia cutis is a feature of

a) AML M5
b) AML M1
c) AML M3
d) AML M7

.

11.. AIHA is diagnosed by detecting autoantibodies by

a)Direct Coombs
b)Indirect Coombs
c)IF
d)ELISA

12 . Formation of granuloma is:

a) Type I hypersensitivity reaction
b). Type II hypersensitivity reaction
c). Type III hypersensitivity reaction
d). Type IV hypersensitivity reaction

13)A woman who is allergic to cats visits a neighbor who has several cats. During the visit, she inhales cat dander, and within minutes, she develops nasal congestion with abundant nasal secretions. Which of the following substances is most likely to produce these findings?

a) Bradykinin
(b) Complement C5a
(c) Histamine
(dTumor necrosis factor

14. For the past 2 days, a 41-year-old man has had a severe headache, and he now has a temperature of 39.2°C. A lumbar puncture is performed, and the cerebrospinal fluid obtained has a WBC count of 910/mm3 with 94% neutrophils and 6% lymphocytes. Which of the following substances is the most likely mediator for the fever observed in this patient?

(A) Bradykinin
(B) Leukotriene B4
(C) Tumor necrosis factor
(D) Myeloperoxidase

15)A 5-year-old child has a history of recurrent bacterial infections, including pneumonia and otitis media. Analysis of leukocytes collected from the peripheral blood shows a deficiency in myeloperoxidase. Which of the following is the most likely cause of this child's increased susceptibility to infections?

(A) Defective neutrophil degranulation
(B) Defective production of prostaglandins
(C) Failure to produce hydroxy-halide radicals ($HOCl^-$)
(D) Decreased oxygen consumption after phagocytosis

16)The directional movement of a cell or organism in response to a chemical gradient is best called

A. Diapedesis.
B. Emigration.
C. Cytopempsis.

D. Chemotaxis

17)A 26-year-old woman has a lump in the left breast. On physical examination, the physician finds an irregular, firm, 2-cm mass in the upper inner quadrant of the breast. No axillary adenopathy is noted. A fine-needle aspirate of the mass shows carcinoma. The patient's 30-year-old sister was recently diagnosed with ovarian cancer, and 3 years ago her maternal aunt was diagnosed with ductal carcinoma of the breast and had a mastectomy. Which of the following genes is most likely to have undergone mutation to produce these findings?

(A) BCL2 (anti-apoptosis gene)
(B) BRCA1 (DNA repair gene)
(C) EGF (epidermal growth factor gene)
(D) ERBB2 (growth factor receptor gene)

18. A 5-year-old child has difficulty with vision in the right eye. On physical examination, there is leukokoria of the right eye, consistent with a mass in the posterior chamber. MR imaging shows a mass that nearly fills the globe. The child undergoes enucleation of the right eye. Molecular analysis of the neoplastic cells indicates the absence of both copies of a tumor suppressor gene that controls the transition from the G1 to the S phase of the cell cycle. Which of the following genes is most likely to have the mechanism of action that produced this neoplasm?

(A) BCR-ABL
(B) RB
(C) hMSH2
(D) K-RAS

19 Hamartoma refers to:

A. Tumour differentiating towards more than one cell line
B. Tumour arising from totipotent cells
C. Mass of disorganized but mature cells indigenous to the part
D. Mass of ectopic rests of normal tissue

20.p53:

A. Activates cyclins
B. Activates BAX
C. Activates CDKs
D. Activates bcl2

21) An epidemiologic study is performed to assess risks for cervical carcinoma. The cells from cervical lesions in a population of women are analyzed. The binding of certain viral proteins to pRB is found in patients in whom dysplastic cells are present. Viral proteins from which of the following are most likely to bind pRB, increasing the risk for dysplasia?

(A) Cytomegalovirus
(B) Epstein-Barr virus
(C) Herpes simplex virus
(D) JC papovavirus

22) A 32-year-old woman has experienced dull pelvic pain for the past 2 months. Physical examination shows a right adnexal mass. An abdominal ultrasound scan shows a 7.5-cm cystic ovarian mass. The mass is surgically excised. The surface of the mass is smooth, and it is nonadherent to surrounding pelvic structures. On gross examination, the mass is cystic and filled with hair. Microscopically, squamous epithelium, tall columnar glandular epithelium, cartilage, and fibrous connective tissue are present. Which of the following is the most likely diagnosis?

(A) Adenocarcinoma
(B) Fibroadenoma
(C) Teratoma
(D) Hamartoma

23) In Apoptosis cytochrome -C acts through

a) Apaf-1
b) BCL-2 c
c) FADD
d) TNF

24) Metastatic calcification is most often seen in

a) Lungs
b) Lymphnodes
c) Liver
d) Spleen

25) CD-95 is a marker of

a) Death receptor
b) MHC complex
c) NK cells
d)T Helper cell

26) Touton type of giant cells are seen in

a) Neurofibroma
b) Sarcoidosis
c) Cat Scratch disease
d) Xanthomas

27)White Infarct is seen in

a) Ovary
b) Intestine
c) Liver
d) Lung

28)Excesssivefibrocollagenous stroma formation within tumor is called as

a) Metsplasia
b) Anaplasia
c) Dysplasia
d) Desmoplasia

29)Which of the following is called as a gatekeeper of colon carcinoma

a) p53
b) RB
c) APC
d) PTEN

30) Major fibril protein in Primary Amyloidosis is

a) AA
b) AL
c) Transthyretin
d) Procalcitonin

31)Marker of B Lymphocyte

a) Cd4
b) Cd68
c) Cd19
d) Cd34

32 Which of the following is a DNA repair defect

a) Tuberous Sclerosis
b) Aplastic Anaemia
c) Bloom syndrome
d) Incontinentiapigmenti

33)Fat burning molecule is

a) Peptide YY
b) Ghrelin
c) Leptin
d) Adiponectin

34)Megaloblastic Anaemia occurs due to infection by

a) Streptococcus
b) E coli
c) Hook worm
d) Diphylobothriumlatum

35)Popcorn cells are seen in which type of Hodgkins Lymphoma

a) Mixed type
b) Lymphocyte predominant
c) Nodular sclerosis
d) Lymphocyte depleted