

Government Unani Medical College, Ganderbal.

**QUESTION CUM ANSWER BOOKLET**

[Time: 60 Minutes]

[Maximum Marks: 60]

Name of the Candidate

Parentage

Residence

Roll Number

Date of Examination:-

24<sup>th</sup> December, 2022.

Post Applied For

: Laboratory Technician

**Number of Questions in Booklet = 60**

\*\*\*\*\*

**Important Instructions**

**Please read the following instruction carefully**

1. Write down the above entries carefully in the question cum answer booklet in (BLOCK LETTERS) and sign at the appropriate place.
2. Each objective question is followed by four responses. You have to choose the most appropriate/correct response and write it in the box adjacent to each question.
3. Please mark the right response only with **BLUE/BLACK** ball point pen. Use of pencil and Gel Pen is not allowed.
4. Candidates are not allowed to carry any Paper, Notes, Books, Mobile Phones, Scanning Devices, Pagers, Electronic Gadgets, etc. to the Examination Hall. Any candidate found using or in possession of such unauthorized material, including in copying or impersonation or adopting unfair means, is liable to be disqualified.
5. After finishing the examination, handover the booklet to the Invigilator/Hall Superintendent. **DO NOT** carry Question-Answer booklet or any part of it outside the Examination Hall.
6. All questions are compulsory. There will be no negative marking.
7. No break is permitted during the test.
8. In case you finish answering all the questions well before the allotted time, you can review your answers in the remaining time. However, you can't leave the Centre before completion of the allotted time.
9. In case of any defect, misprint, missing questions or duplication of questions; get the question-answer booklet changed. No complaint shall be entertained after the test.
10. Do not use eraser, fluid pen, blades, etc. otherwise your answer/response(s) will be rejected.
11. **Scratching, overwriting, tick-marks and multiple answers will be considered wrong & no credit will be given for such answers.**
12. Please sign each page of this booklet at the space earmarked for your signatures.

<b>Signature of Candidate</b>	<b>Signature of Invigilator</b>	<b>Signature of Evaluator</b>
-------------------------------	---------------------------------	-------------------------------

Disease that affects many people at different countries is termed as:  
 a. Epidemic  
 b. Pandemic  
 c. Endemic  
 d. Endemic

B

The colonies produced by Pseudomonas on MacConkey's medium are  
 a. Pink coloured  
 b. Lactose fermenting  
 c. Non-lactose fermenting  
 d. None

C

Dengue fever is caused by  
 a. Bacteria  
 b. Virus  
 c. Fungi  
 d. Rickettsia

B

One flagellum at one end of the organism is called –  
 a. Monotrichate  
 b. Amphitrichate  
 c. Lophotrichate  
 d. Peritrichate

A

Brucella melitensis causes  
 a. Pertussis  
 b. Plague  
 c. Brucellosis  
 d. None of these

C

Tuberculosis is a  
 a. Water borne disease  
 b. Air borne disease  
 c. Food borne disease  
 d. Arthropod borne disease

B

7. The ability of Microscope to distinguish two objects into two separate objects, is called  
 a. Resolving power  
 b. Wave length  
 c. Refractive index  
 d. Magnification

A

8. Which of these specimens is not the ideal sample for lab diagnosis of dermatophytes  
 a. Nail clipping  
 b. Skin scraping  
 c. Blood  
 d. Hair

C

9. Primary stain for Gram staining is  
 a. Fast green  
 b. Haematoxylin  
 c. Crystal violet  
 d. Safranin

C

10. Which of the following are acid fast structures?  
 a. Mycobacteria  
 b. Bacterial spores  
 c. Nocardia  
 d. All of these

D

11. What is the function of bacterial capsule?  
 a. Protection of organism from phagocytosis  
 b. Helps in adherence of bacteria to surface in its environment  
 c. Both a and b  
 d. None of these

C

12. Ziehl-Neelsen stain is a  
 a. Simple stain  
 b. Counter stain  
 c. Differential stain  
 d. None of them

C

13. Screening test for AIDS is

- a. Western blot test
- b. Rapid tests/ ELISA
- c. Both a and b
- d. VDRL test

B

14. Acid fast bacteria are

- a. Neisseria
- b. Staphylococci
- c. Mycobacteria
- d. All of the above

C

15. Gram negative bacteria appear as

- a. Pink
- b. Violet
- c. both a & b
- d. None of these

A

16. Gram positive bacteria appear as

- a. Pink
- b. Violet
- c. both a & b
- d. None of these

B

17. Cell-wall is

- a. Thick in Gram positive than Gram negative
- b. Thick in Gram negative than Gram positive
- c. Equal in both
- d. In Gram negative cell-wall is absent

A

18. Which of the following organisms can infect humans if improperly cooked meat is used?

- a. Giardia lamblia
- b. Taenia saginata
- c. Taenia solium
- d. Both b and c

D

19. Clear-zones formation around antibiotic in Kirby bauer test is due to

- a. Growth of the bacterium surrounding of the disc
- b. Inhibition of bacterial growth
- c. The destruction of paper disc (antibiotic)
- d. None of these

B

20. Thin & thick blood smears are used to identify

- a. Plasmodium spp
- b. chlamydia spp
- c. acanthamoeba spp
- d. none

A

21. Candidiasis is caused by

- a. Aspergillus spp.
- b. E. floccosum
- c. M. audouinii
- d. candida albicans

D

22. The causative agent of tetanus is

- a. Clostridium botulinum
- b. Cl. tetani
- c. Cl. Welchii
- d. Cl. Perfringens

B

23. The micro-organism useful for fermentation are

- a. Bacteria
- b. Yeast
- c. Fungi
- d. None of these

B

24. Father of antiseptic surgery is

- a. Pasteur
- b. Jenner
- c. Joseph Lister
- d. A.L.Hock

C

Sig. of the candidate: \_\_\_\_\_

25. Virus will contain

- a. Cell membrane  
b. Cell wall  
c. ribosome  
d. DNA or RNA

D

26. The coagulase is done to differentiate

- a. Staphylococcus aureus from Staphylococcus epidermidis  
b. Staphylococcus epidermidis from Neisseria meningitidis  
c. Streptococcus pyogenes from Enterococcus faecalis  
d. Streptococcus pyogenes from Staphylococcus aureus

A

27. Which of the following bacteria is a non-lactose fermenter?

- a) Klebsiella spp  
b) Salmonella spp  
c) Enterobacter spp  
d) Escherichia coli

B

28. Nitroglycerin has long been administered to human patients suffering from angina. This medication works because it

- a) mimics the action of signal receptors  
b) is broken down into hormones that affect the heart  
c) interferes with chemical cascades that trigger contraction of heart muscle  
d) breaks down into nitric oxide, which increases blood flow to the heart

D

29. Genomic libraries are made from

- a) genomic DNA of an organism  
b) genomic RNA of an organism  
c) genomic cDNA of an organism  
d) genomic mRNA of an organism

A

30. Which of the following statements about the ketone bodies, acetoacetate and -hydroxybutyrate is correct?

- a) Muscles produce ketone bodies from fatty acids.  
b) Adipose tissue can produce ketone bodies from its fat stores.  
c) The liver produces acetoacetate and -hydroxybutyrate from fatty acids.  
d) Acetoacetate is metabolised to acetate in peripheral tissues.

C

31. Which of the following statements about the integration of fat and carbohydrate metabolism control is correct?

- a) High insulin /glucagon ratio inhibits lipogenesis in liver.  
b) High insulin/glucagon ratio activates lipolysis in muscle  
c) Low insulin/glucagon ratio activates lipolysis in adipocytes.  
d) Insulin-depen dent glucose transporters are recruited to functional membrane site when insulin levels are low.

C

32. The endocrine gland which corresponds to setting up of the body's biological clock is

- a) Pituitary gland  
b) Thymus gland  
c) Pineal Gland  
d) Thyroid gland

C

33. Approximately 30-60 minutes after being bitten by a "bug", a 28-year-old man noticed a localized swelling and erythema in the affected area. The edema is most likely the result of:

- a) Altered plasma oncotic pressure  
b) Increased arterial hydrostatic pressure  
c) Increased vascular permeability  
d) Lymphatic obstruction

C

Sig. of the candidate: \_\_\_\_\_

34. Which of the following statements about the formation of uric acid is correct?  
 a) Uric acid levels are reduced by a deficiency of hypoxanthine-guanine phosphoribosyltransferase  
 b) Uric acid levels are increased by a deficiency of hypoxanthine-guanine phosphoribosyltransferase  
 c) Uric acid levels are reduced by increasing the activity of the *de novo* pathway.  
 d) Uric acid levels are increased by increasing the activity of the salvage pathway. (B)
35. A segment of image is magnified by the eyepiece(ocular). What is the best resolving power ?  
 A. 0.1 nM  
 B. 0.4 mm  
 C. 0.2 uM  
 D. 3.0 uM (C)
36. How thick should paraffin embedded sections be cut ?  
 A. 2-5 uM  
 B. 2-5 nM  
 C. 2-5 mm  
 D. 2-5cm (A)
37. What staining is best for lipid detection ?  
 A. Sudan III IV  
 B. Berlin blue  
 C. Feulgen nuclear reaction  
 D. Colloid gold (A)
38. Urine osmolality is related to :  
 a) pH  
 b) Filtration  
 c) Specific Gravity  
 d) volume (C)
39. The identification of Bence Jones proteins is best accomplished by:  
 a) Sulfosalicylic acid test  
 b) urine reagent strips  
 c) immunofixation electrophoresis  
 d) immunoelectrophoresis (C)
40. In order to prepare 100ml of 15mg/dl BUN working standard from a stock standard containing 500mg/dl of Urea Nitrogen, the amount of stock solution that should be used is:  
 a) 3ml  
 b) 5ml  
 c) 33ml  
 d) 75ml (A)
41. The principle of occult blood test depends on:  
 a) Coagulase activity of blood  
 b) Oxidative power of atmospheric oxygen  
 c) Hydrogen peroxides in hemoglobin  
 d) Peroxidase like activity of hemoglobin (D)
42. All are true regarding Frozen sections except?  
 A. Shrinkage of tissue  
 B. It is impossible to prepare thin sections of 1 um  
 C. Enzyme Studies  
 D. Sections may be stained with many methods (A)
43. What is the proper pH for the buffered solution used to perform serum protein electrophoresis?  
 a) 5.6  
 b) 7.6  
 c) 8.6  
 d) 9.6 (C)
44. What is the temperature of the paraffin the tissue is placed in?  
 A. 76 c  
 B. 35 c  
 C. 56 c  
 D. 70 c (C)

Sig. of the candidate: \_\_\_\_\_

45. What color will Haemotoxylins stain the nuclei?  
 A. Red  
 B. Dark Blue  
 C. Green  
 D. Reddish
46. Indirect coomb's test can be performed by.  
 a. 1 tube procedure  
 b. 2 tube procedure  
 c. 3 tube procedure  
 d. Both a and b
47. FFP can be preserved/ utilized till  
 a. 35 days  
 b. 6 hours  
 c. 12 hours  
 d. 1 year
48. Which is best stain for reticulocyte count....\*  
 a. Alcian blue  
 b. Leishmans  
 c. Toluidine blue  
 d. New methylene blue
49. Tissues for Routine histopathology are Fixed in\*  
 a. 10% buffered formalin  
 b. Normal saline  
 c. 2% glutaraldehyde  
 d. Carnoy's fixative
50. Which of the following is the formula for calculating the mean corpuscular volume (MCV)  
 a.  $(Hb \times 10) / RBC$   
 b.  $Hb / Hct$   
 c.  $(Hct \times 10) / RBC$   
 d.  $RBC / Hct$
51. The precision of an instrument is validated by  
 a. running the same sample multiple times  
 b. performing serial dilutions  
 c. processing unknown samples  
 d. monitoring normal and abnormal controls
52. Which is the Most Common Laboratory Error?  
 A. Analytical  
 B. Postanalytical  
 C. Preanalytical  
 D. None Of The Above
53. Using increasing strengths of alcohol ,tissues get .  
 a) Breakdown  
 b) Rehydrate  
 c) Dehydrates  
 d) Clear
54. Which of the following anticoagulant is recommended for routine haematological investigation  
 a) heparin  
 b) EDTA  
 c) Sodium citrate  
 d) sodium fluoride
55. Which of the following is used as WBC diluting fluid for manual estimation of TLC  
 a) Turk's fluid  
 b) New methylene blue  
 c) Hayems fluid  
 d) 1% ammonium oxalate
56. A material or device with known quantitative/qualitative characteristics (Concentration, activity, intensity, reactivity) and which is used to standardize the instrument is known as :  
 A. LJ chart  
 B. Analyzer  
 C. Control  
 D. Calibrator

Sig. of the candidate: \_\_\_\_\_

57. Reagent which is not required to test prothrombin time :  
a. Platelet poor citrate plasma  
b. Calcium chloride  
c. Thromboplastin reagent  
d. Fibrinogen

D

58. Which of the following biomedical wastes is put in the RED colored bin :  
a. Dressing material  
b. Gloves  
c. Broken glass  
d. Cotton waste

B

59. Which of the following blood components must be prepared within 8 hours of Phlebotomy:  
a. Platelet rich plasma  
b. Fresh frozen plasma  
c. Red blood cells  
d. Leukoreduced blood

B

60. With reference to Westgard rules, all of the following results require Rejection of run except:  
a. 12S  
b. 13S  
c. 41S  
d. 22S

A

Sig. of the candidate: \_\_\_\_\_