

Question Booklet Series Code : **A**

Question Book Serial No : **200669**

Time Allowed : **02.00 hours**

LT-2021

Maximum Marks : **100**

ସର୍ବାଧିକ ମାର୍କ : **100**

ନିର୍ଦ୍ଧାରିତ ସମୟ : **02.00 ଘଣ୍ଟା**

Read the following instructions carefully before you begin to answer the questions.
This Booklet contains 100 objective type questions with multiple choice answers in three Parts.

Each question carries **one mark**.

There shall be negative marking @0.25 mark for each wrong answer / multiple answers.

Part-I contains 10 questions on Arithmetic which are available in both English and Odia version. In the case of discrepancy in meaning, the English version will prevail.

Part-II contains 05 questions on English.

Part-III contains 85 questions on **Medical Laboratory Technology** course which includes questions based on practical skill to assess the practical skill of the candidates.

All questions are compulsory.

ପ୍ରଶ୍ନଗୁଡ଼ିକର ଉତ୍ତର କରିବାପୂର୍ବରୁ ନିମ୍ନ ପ୍ରଦତ୍ତ ନିର୍ଦ୍ଦେଶାବଳୀ ଯତ୍ନସହକାରେ ପଢ଼ନ୍ତୁ। ଏହି ପୁସ୍ତିକାରେ ତିନିଗୋଟି ଭାଗରେ 100ଟି ବିବିଧ ଉତ୍ତର ଯୁକ୍ତ ସଂକ୍ଷିପ୍ତ ପ୍ରଶ୍ନ ରହିଛି । ପ୍ରତ୍ୟେକ ପ୍ରଶ୍ନର ସଠିକ ଉତ୍ତର ପାଇଁ ଏକ ମାର୍କ ରହିଛି ।

ପ୍ରତ୍ୟେକ ଭୁଲ ଉତ୍ତର ପାଇଁ କିମ୍ବା ଏକାଧିକ ଉତ୍ତର ପାଇଁ 0.25 ମାର୍କ ଲେଖାଏଁ ବିୟୋଗ କରାଯିବ ।

ପ୍ରଥମ ଭାଗରେ ଗଣିତର 10ଟି ପ୍ରଶ୍ନ ରହିଛି ଯେଉଁଥିରେ ଇଂରାଜୀ ରୁ ଓଡ଼ିଆକୁ ଭାଷାନ୍ତର ଉପଲବ୍ଧ । ଅର୍ଥବୋଧରେ କିଛି ତାରତମ୍ୟ ଥିଲେ ଇଂରାଜୀ ଭାଷା ବଳବତ୍ତର ରହିବ ।

ଦ୍ୱିତୀୟ ଭାଗରେ ଇଂରାଜୀରେ 05ଟି ପ୍ରଶ୍ନ ରହିଛି ।

ତୃତୀୟ ଭାଗରେ **Medical Laboratory Technology** ବିଷୟରେ (practical skill based ପ୍ରଶ୍ନ ସହିତ) 85ଟି ପ୍ରଶ୍ନ ରହିଛି ।

ସମସ୍ତ ପ୍ରଶ୍ନ ବାଧ୍ୟତାମୂଳକ ।

INSTRUCTIONS FOR CANDIDATES

- Before answering any question, check the Booklet and ensure that it contains **12** pages and no page is missing, mutilated or repeated. In case of any such defect, get it replaced immediately.
- The Invigilator shall supply you the blank Two Part carbonless OMR Answer Sheet separately. Enter your Roll Number, Question Booklet Serial Number and Question Booklet Series Code and darken the corresponding circle/oval provided on the Answer Sheet at the appropriate space carefully by black/blue ball point pen only. You must write the name, date and centre of examination and put your full signature in the appropriate space provided therein before answering any question.
- A machine will read the coded information furnished by you in the OMR Answer Sheet. If the information so furnished by you are incomplete or different from what you have given in the application form, you shall be awarded Zero marks.
- Answer must be given by completely blackening one of the four circles/ovals representing the correct answer given on the Answer Sheet corresponding to the relevant question by using Black/Blue ball point pen only. Answers not shown by properly darkening in black/blue ball point pen, no marks shall be awarded.
- No Rough work should be done on the OMR Answer Sheet. Space for rough work has been provided in the Question Booklet itself.
- Correcting fluid, eraser, blade, books, textual material, scripts, notes/loose paper, calculator, docupen, slide rules, log tables, electronic watches, smart watch, cell phone, pager, other electrical/electronic devices etc. are not allowed inside the examination hall. In case the candidate is found to be in possession of any of the above, he/she shall be expelled from the examination without any enquiry whether the same was/were used by the candidate or not.
- These instructions must be complied with fully, failing which your Answer Sheet shall not be evaluated and Zero marks will be awarded.
- After the examination is over, candidates must ensure to fold the OMR Answer Sheet at the perforation and separate the Original Copy and Candidate's Copy of the Two Part OMR Answer Sheet in the presence of the Invigilator and handover the **Original Copy** to the Invigilator. The **Candidate's Copy** of the OMR Answer sheet may be taken by the candidate. Failure to hand over the original copy of the OMR Answer Sheet to the Invigilator before leaving the examination hall/room shall make the candidate liable for penal action.
- Failure to comply with any of the above instructions shall be considered as adopting unfair means and action as deemed proper shall be taken.

ପ୍ରାର୍ଥୀମାନଙ୍କ ପାଇଁ ନିର୍ଦ୍ଦେଶାବଳୀ

- କୌଣସି ପ୍ରଶ୍ନର ଉତ୍ତରଦେବା ପୂର୍ବରୁ ପୁସ୍ତିକାଟିକୁ ତନଖି ଦେଖନ୍ତୁ କି ଏଥିରେ ୧୨ ପୃଷ୍ଠା ଅଛି ଓ କୌଣସି ପୃଷ୍ଠା ନଷ୍ଟ, ପୁନରାବୃତ୍ତି କିମ୍ବା ଛାଡ଼ି ହୋଇନାହିଁ। କୌଣସି ତ୍ରୁଟିଥିଲେ ତାକୁ ତୁରନ୍ତ ବଦଳ କରାଇନିଅନ୍ତୁ ।
- ନିରୀକ୍ଷକ ଆପଣଙ୍କୁ ପୃଥକଭାବେ ଓଏମଆର୍ ଉତ୍ତରପତ୍ର (Two Part carbonless OMR Answer Sheet) ଦେବେ । ଉତ୍ତରପତ୍ରର ଯଥା ସ୍ଥାନରେ ଆପଣଙ୍କ ରୋଲନମ୍ବର, ପ୍ରଶ୍ନପୁସ୍ତିକା କ୍ରମିକନମ୍ବର ଏବଂ ପ୍ରଶ୍ନପୁସ୍ତିକା ସିରିଜ କୋଡ୍ ଉଲ୍ଲେଖ କରନ୍ତୁ ଏବଂ ତା ପାଇଁ ଉଦ୍ଦିଷ୍ଟ ବୃତ୍ତ / ଅଣ୍ଟାକୃତିକୁ କେବଳ କଳା / ନୀଳ କାଳିର ବଲପଏଣ୍ଟ କଲମ ଦ୍ୱାରା କାଳି କରନ୍ତୁ । ସେଠାରେ ପ୍ରଦତ୍ତ ନିର୍ଦ୍ଦେଶ ସ୍ଥାନରେ ପରୀକ୍ଷାର ନାମ, ତାରିଖ ଓ ପରୀକ୍ଷା କେନ୍ଦ୍ରର ନାମ ନିଶ୍ଚିତ ଭାବେ ଲେଖନ୍ତୁ ଏବଂ କୌଣସି ପ୍ରଶ୍ନର ଉତ୍ତରଦେବା ଆଗରୁ ଯଥାସ୍ଥାନରେ ଆପଣଙ୍କ ପୂରା ଦସ୍ତଖତ କରନ୍ତୁ ।
- ଓଏମଆର୍ ଉତ୍ତରପତ୍ରରେ ଆପଣ ଉଲ୍ଲେଖ କରିଥିବା ସାଂକେତିକ ତଥ୍ୟକୁ ଗୋଟିଏ ଯନ୍ତ୍ର ପଢ଼ିବ । ତେଣୁ ଆପଣଙ୍କର ଏହି ପ୍ରଦତ୍ତ ତଥ୍ୟ ଯଦି ଦରକାରୀ ସ୍ଥାନରେ ଦିଆଯାଇଥିବା ତଥ୍ୟଠାରୁ ପୃଥକ କିମ୍ବା ଅସଂପୂର୍ଣ୍ଣ ହୁଏ, ଆପଣଙ୍କୁ ଶୂନ୍ୟ ମାର୍କ ପ୍ରଦାନ କରାଯିବ ।
- ଉତ୍ତରପତ୍ରରେ ଥିବା ସମସ୍ତ ପ୍ରଶ୍ନର ଉତ୍ତର ପାଇଁ ଉଦ୍ଦିଷ୍ଟ ବୃତ୍ତ / ଅଣ୍ଟାକୃତିକୁ କେବଳ କଳା / ନୀଳ କାଳିର ବଲପଏଣ୍ଟ କଲମ ଦ୍ୱାରା କାଳିକରି ଉତ୍ତର ଦିଅନ୍ତୁ । କଳା / ନୀଳ ବଲ ପଏଣ୍ଟ କଲମ ଦ୍ୱାରା ସଠିକ୍ ଭାବେ କାଳି କରାଯାଇନଥିବା ଉତ୍ତର ପାଇଁ କୌଣସି ମାର୍କ ଦିଆଯିବ ନାହିଁ ।
- ଓଏମଆର୍ ଉତ୍ତରପତ୍ରରେ ରତ୍ନ କାମ କରନ୍ତୁ ନାହିଁ । ପ୍ରଶ୍ନପୁସ୍ତିକାରେ ରତ୍ନ କାମପାଇଁ ଖାଲିଜାଗା ଦିଆଯାଇଅଛି ।
- କୌଣସି ଧଉଳାଭବା ରଙ୍ଗ, ରବର, ଲେଡ୍, ବହି, ଛାପା / ହାତଲେଖାକାଗଜ, କାଲକୁଲେଟର, ଡକ୍ୟୁମେଣ୍ଟ, ସ୍କାଇଡ ରୁଲ, ଲଗ ଟେବୁଲ୍, ଇଲେକଟ୍ରୋନିକ ଘଣ୍ଟା, ସ୍ମାର୍ଟ ଘଣ୍ଟା, ମୋବାଇଲ ଫୋନ, ପେଜର, ଅନ୍ୟ ବୈଦ୍ୟୁତିକ/ଇଲେକଟ୍ରୋନିକ ଉପକରଣାଦିକୁ ଉପର ପରୀକ୍ଷା ହଲ / କୋଠରୀ ଭିତରକୁ ନେଇ ପାରିବେ ନାହିଁ । ଯଦି ଉପରୋକ୍ତ ଆପଣ ପରୀକ୍ଷା ହଲ / କୋଠରୀ ଭିତରକୁ ନେଇ ପାରିବେ ନାହିଁ । ଯଦି ଉପରୋକ୍ତ କୌଣସି ଉପକରଣ ଆପଣଙ୍କ ପାଖରୁ ଉଦ୍ଧାର କରାଯାଏ, ବ୍ୟବହାର କରିଥାନ୍ତୁ ବା ନ କରିଥାନ୍ତୁ, ବିନା ତଦନ୍ତରେ ଆପଣଙ୍କୁ ତୁରନ୍ତ ପରୀକ୍ଷାରୁ ବାସସ୍ଥ କରାଯିବ ।
- ଏହି ନିର୍ଦ୍ଦେଶାବଳୀକୁ ସଂପୂର୍ଣ୍ଣଭାବେ ନିଶ୍ଚିତ ପାଳନକରନ୍ତୁ, ଅନ୍ୟଥା ଆପଣଙ୍କ ଉତ୍ତରପତ୍ରର ମୂଲ୍ୟାୟନ କରାଯିବ ନାହିଁ ଏବଂ ଶୂନ୍ୟ ମାର୍କ ପ୍ରଦାନ କରାଯିବ ।
- ପରୀକ୍ଷା ସରିବା ପରେ ପରୀକ୍ଷା ହଲ ଛାଡ଼ିବା ପୂର୍ବରୁ ଆପଣଙ୍କ Two Part carbonless OMR Answer Sheet ଉତ୍ତରପତ୍ରର Original Copy ଓ Candidate's Copy ନିରୀକ୍ଷକଙ୍କ ଉପସ୍ଥିତିରେ ଟିକ୍ ହୁଏ ସ୍ଥାନରେ ସଠିକ୍ ଭାବେ ଭାଙ୍ଗ କରି ଟିକି ପୃଥକ କରନ୍ତୁ ଓ Original Copyଟିକୁ ନିରୀକ୍ଷକଙ୍କୁ ହସ୍ତାନ୍ତର କରନ୍ତୁ । ଅନ୍ୟଥା ପରୀକ୍ଷାର୍ଥୀ ଆଇନାନୁଯାୟୀ ଦଣ୍ଡନୀୟ ହେବେ । ଓଏମଆର୍ ଉତ୍ତରପତ୍ରର ପ୍ରାର୍ଥୀଙ୍କ ପାଇଁ ଉଦ୍ଦିଷ୍ଟପତ୍ର କପିଟିକୁ (Candidate's Copy) ପରୀକ୍ଷାର୍ଥୀ ନେଇଯିବେ ।
- ଉପରୋକ୍ତ ନିର୍ଦ୍ଦେଶାବଳୀରୁ କୌଣସି ନିର୍ଦ୍ଦେଶର ଅନୁପାଳନରେ ଖୁଲାପକଲେ ଏହାକୁ ଅସତ ଉପାୟ ଅବଲମ୍ବନ କରିଛନ୍ତି ବୋଲି ବିବେଚନା କରାଯିବ ଏବଂ ପରୀକ୍ଷାର୍ଥୀଙ୍କ ବିରୁଦ୍ଧରେ ଯଥୋଚିତ କାର୍ଯ୍ୟାନୁଷ୍ଠାନ ଗ୍ରହଣ କରାଯିବ ।

Part-I
ARITHMETIC : 10 Marks

Instructions: Each Question under this Part carries One mark. Please read the questions carefully and answer them by selecting correct answer out of the multiple answers given below each as A, B, C and D. **There shall be negative marking @ 0.25 mark per question for wrong/multiple answers.**

1. Which number should replace both the '*' s in $\left(\frac{*}{18}\right) \times \left(\frac{*}{162}\right) = 1$?

$\left(\frac{*}{18}\right) \times \left(\frac{*}{162}\right) = 1$ ରେ କେଉଁ ସଂଖ୍ୟାଟି ଉଭୟ '*' ର ସ୍ଥାନ ନେଇପାରିବ ?

- (A) 18 (B) 54 (C) 162 (D) 2916
2. If $\sqrt{5625} = 75$, then find the value of $\sqrt{5625} + \sqrt{56.25} + \sqrt{0.5625}$

ଯଦି $\sqrt{5625} = 75$ ହୁଏ, ତେବେ $\sqrt{5625} + \sqrt{56.25} + \sqrt{0.5625}$ ର ମୂଲ୍ୟ କେତେ ?

- (A) 56.25 (B) 832.5 (C) 8.325 (D) 83.25
3. The H.C.F. of two numbers is 9. Which one of the following numbers can never be their L.C.M.?
ଦୁଇଟି ସଂଖ୍ୟାର ଗ.ସା.ଗୁ 9 ଅଟେ । ନିମ୍ନଲିଖିତ ସଂଖ୍ୟାଗୁଡ଼ିକ ମଧ୍ୟରୁ କେଉଁଟି ସେମାନଙ୍କର ଲ.ସା.ଗୁ ହୋଇପାରିବ ନାହିଁ ?

- (A) 36 (B) 54 (C) 66 (D) 81

4. Find the value of $\frac{0.67 \times 0.67 - 2 \times 0.67 \times 0.52 + 0.52 \times 0.52}{0.67 - 0.52}$

$\frac{0.67 \times 0.67 - 2 \times 0.67 \times 0.52 + 0.52 \times 0.52}{0.67 - 0.52}$ ର ମୂଲ୍ୟ କେତେ ?

- (A) 0.15 (B) 1 (C) 1.19 (D) 0.30
5. Of the three numbers, second is twice the first and is also thrice the third. If the average of the three numbers is 33, the largest number is:

ତିନୋଟି ସଂଖ୍ୟା ମଧ୍ୟରୁ ଦ୍ୱିତୀୟ ସଂଖ୍ୟାଟି ପ୍ରଥମ ସଂଖ୍ୟାର ଦୁଇଗୁଣ ଏବଂ ତୃତୀୟ ସଂଖ୍ୟାର ତିନିଗୁଣ ଅଟେ । ଯଦି ତିନୋଟି ସଂଖ୍ୟାର ହାରାହାରି 33 ହୁଏ, ତେବେ ବୃହତ୍ତମ ସଂଖ୍ୟାଟି କେତେ ?

- (A) 18 (B) 27 (C) 54 (D) 81
6. If the side of a square is increased by 40%, its area is increased by:

ଯଦି ଗୋଟିଏ ବର୍ଗକ୍ଷେତ୍ରର ବାହୁକୁ ଶତକଡ଼ା 40 ବୃଦ୍ଧି କରାଯାଏ, ତେବେ ଏହାର କ୍ଷେତ୍ରଫଳ କେତେ ବୃଦ୍ଧି ହେବ ?

- (A) 100% (B) 96% (C) 80% (D) 60%

7. Two numbers are in the ratio 4:5. If 24 is added to each number, the ratio becomes 6:7. The sum of the number is:

ଦୁଇଟି ସଂଖ୍ୟାର ଅନୁପାତ 4:5 ଅଟେ । ଯଦି ପ୍ରତ୍ୟେକ ସଂଖ୍ୟାରେ 24 ଯୋଗ କରାଯାଏ, ତେବେ ଅନୁପାତ 6:7 ହୁଏ । ତେବେ ସଂଖ୍ୟା ଦୁଇଟିର ଯୋଗଫଳ କେତେ ?

- (A) 81 (B) 90 (C) 99 (D) 108

8. A grocer sells rice at a profit 20% and uses a weight which is 20% less. Find out overall gain percentage.

ଜଣେ ଦେଢ଼ରାତି ଦୋକାନୀ ଶତକଡ଼ା 20 ଲାଭରେ ଚାଉଳ ବିକ୍ରି କରନ୍ତି ଏବଂ ଶତକଡ଼ା 20 କମ୍ ଓଜନ ଥିବା ବଟକରା ବ୍ୟବହାର କରନ୍ତି । ତେବେ ସର୍ବମୋଟ ଶତକଡ଼ା କେତେ ଲାଭ ହେବ ?

- (A) 50% (B) 40% (C) 30% (D) 20%

9. A man takes as much time in running 16 metres as a car takes in covering 64 metres. The ratio of the speeds of the man and the car is:

ଗୋଟିଏ କାର୍ 64 ମିଟର ଅତିକ୍ରମ କରିବାକୁ ଯେତିକି ସମୟ ନିଏ, ଜଣେ ପୁରୁଷ 16 ମିଟର ଅତିକ୍ରମ କରିବାକୁ ସେତିକି ସମୟ ନିଅନ୍ତି । ତେବେ ପୁରୁଷ ଏବଂ କାର୍‌ର ବେଗର ଅନୁପାତ କେତେ ?

- (A) 2 : 3 (B) 4 : 1 (C) 1 : 4 (D) 3 : 4

10. 17 men can do a piece of work in 5 days. How many men would be required to do the same work in $8\frac{1}{2}$ days?

17 ଜଣ ପୁରୁଷ ଗୋଟିଏ କାର୍ଯ୍ୟକୁ 5 ଦିନରେ ଶେଷ କରିପାରନ୍ତି । ତେବେ କେତେ ଜଣ ପୁରୁଷ ସେହି କାର୍ଯ୍ୟକୁ $8\frac{1}{2}$ ଦିନରେ କରିପାରିବେ ?

- (A) 8 (B) 10 (C) 12 (D) 15

Part-II

ENGLISH : 05 Marks

Instructions: Each Question under this Part carries **One** mark. Please read the instructions carefully and answer the questions by selecting the most appropriate answer out of the multiple answers given below each as A, B, C and D.

There shall be negative marking @ 0.25 mark per question for wrong/multiple answers.

11. The teacher said, "Honesty is the best policy".
(Transform the sentence into Indirect speech.)

- (A) The teacher said that honesty is the best policy.
(B) The teacher said that honesty was the best policy.
(C) The teacher said that honesty would be the best policy.
(D) The teacher said that honesty will be the best policy.

12. Cut your coat according to your cloth.
(Choose the correct meaning in Odia of the English proverb.)

- (A) ଧୂର ପାଣି ପଥର କାଟେ (B) ଆକାଶ କଇଁଆ ଚିଲିକା ମାଛ (C) ଆୟୁ ଦେଖି ବ୍ୟୟ କର (D) ଗରଜିଲା ମେଘ ବରଷେ ନାହିଁ

13. The Ganges _____ a holy river.
(Fill in the blank with appropriate verb.)

- (A) are (B) is (C) am (D) were

14. Haste makes waste.
(Choose the correct part of speech of the underlined word.)

- (A) noun (B) pronoun (C) Adjective (D) Adverb

15. The boy is devoid _____ common sense.
(Fill in the blanks with appropriate preposition)

- (A) from (B) into (C) of (D) in

Part-III

MEDICAL LABORATORY TECHNOLOGY : 85 Marks

Instructions: Each Question under this Part carries **One** mark. Please read the instructions carefully and answer the questions by selecting the most appropriate answer out of the multiple answers given below each as A, B, C and D.

There shall be negative marking @ 0.25 mark per question for wrong/multiple answers.

16. When performing a venipuncture bright red blood spurts into the tube. This means:

- (A) An arterial puncture (B) High hemoglobin (C) High blood pressure (D) High blood ph

17. Outer-cortex of kidney is _____ in colour.

- (A) Blue-black (B) Reddish-brown (C) Yellowish-green (D) Orange-red

18. Smear should be prepared and fixed immediately for cytology because:

- (A) Exfoliated cells degenerate rapidly (B) Exfoliated cells may be blown away
(C) The nuclei of the cells get extruded from the cell (D) Cytoplasm develops granularity

19. Which part of central nervous system is present in the vertebral canal.
 (A) Cerebrum (B) Mid brain (C) Cerebellum (D) Spinal cord
20. Which skin test is done to demonstrate circulating diphtheria antitoxin.
 (A) Petroff's method (B) Mantoux test (C) Schick's test (D) Lepromin skin test
21. Which of the following is a substitute for crystal violet used in gram-staining procedure?
 (A) Methylene blue (B) Bromocresol green (C) Safranin (D) Phenolphthaleine
22. Which chondroitin sulphate is present in bone and cornea.
 (A) Chondroitin sulfate A (B) Chondroitin sulfate C
 (C) Chondroitin sulfate B (D) All options
23. Which of the following items are examples of storage devices?
 (A) Floppy / hard disks (B) CD-ROMs (C) Tape devices (D) All of the above
24. What is the name of the computer terminal which gives paper printout?
 (A) Display screen (B) Soft copy terminal (C) Hard copy terminal (D) Plotter
25. The respiratory gases that are present in plasma are
 (A) Helium and oxygen (B) Nitrogen and oxygen
 (C) Oxygen and carbon dioxide (D) Hydrogen and oxygen
26. In the human body, the largest endocrine gland is called.
 (A) Parathyroid gland (B) Thyroid gland (C) Pituitary gland (D) Adrenal gland
27. Largest virus is:-
 (A) Parvo Virus (B) Herpes Virus (C) Pox Virus (D) Mycoplasma
28. Cholesterol is synthesized mainly in which part of the body.
 (A) Heart (B) Lung (C) Liver (D) Kidney
29. Glycosylated hemoglobin is performed on the following sample:
 (A) Serum (B) Plasma (C) Whole blood (D) Urine
30. _____ is secreted by posterior pituitary gland.
 (A) Vasopressin (B) Luteinizing Hormone
 (C) Growth Hormone (D) Follicle Stimulating Hormone
31. For electron microscopy study, dehydration of tissue is started with _____ percent alcohol.
 (A) 40% (B) 50% (C) 60% (D) 70%
32. Which solvent is not flammable:
 (A) Ether (B) Ethanol (C) Methanol (D) Saline
33. During section cutting if paraffin wax is too soft, then section is
 (A) Crumbled (B) Thick (C) Thin (D) None option
34. Which piece of histology equipment is not temperature dependant:
 (A) Wax (B) Microtome (C) Embedding center (D) Water bath
35. Neuromuscular transmission is mediated by
 (A) Acetylcholine (B) Lipoprotein (C) Triglyceride (D) Nitroglycerine

36. Knott concentration method is used for demonstration of

- (A) Malarial parasite in blood film (B) Microfilariae in peripheral blood film
(C) Leishmania donovani in bone marrow aspirate (D) Trypanosoma cruzi in blood.

37. Antioxidant property of vitamin C is due to :

- (A) Phenolic hydroxyl group (B) Sulfhydryl group
(C) Active reducing group (D) Alcoholic group

38. Catalase production is negative in which of the following?

- (A) Streptococcus (B) Salmonella (C) Proteus (D) Staphylococcus

39. Which of the following is cytological fixative.

- (A) Flemming's fluid (B) Carnoy's fluid (C) Gendre's fluid (D) None option

40. _____ is the longest bone.

- (A) Hip bone (B) Scapula (C) Tarsal bone (D) Femur

41. When virus antigen is abundant in lesions, then it can be detected by which method.

- (A) Complement fixation test (B) Immunofluorescence test
(C) Neutralization test (D) All options

42. Osteoporosis occurs as a result of _____ mineral deficiency.

- (A) Sodium (B) Iodine (C) Calcium (D) Iron

43. In which condition, there is no increase in blood glucose level.

- (A) Hyperglycemic glycosuria (B) Renal glycosuria
(C) Alimentary glycosuria (D) All options

44. Which of these amino acids are essential for infants?

- (A) Methionine (B) Arginine and Histidine
(C) Valine (D) Lysine and Leucine

45. Section cutting is best after.

- (A) Heating the block (B) Cold treatment (C) Room temperature (D) At 37°C

46. The eosin solution used in H and E stains are prepared from _____.

- (A) Eosin Y (B) Eosin Z (C) Eosin C (D) Eosin R

47. Find the INCORRECT statement about the biological functions of lipids.

- (A) Storage form of metabolic fuel
(B) Have a protective function in bacteria, plant and insect
(C) The structural component of membranes
(D) Exhibit increased catalytic activity

48. How many types of tissues are present in Human Muscular System?

- (A) 3 (B) 5 (C) 4 (D) 2

49. Which fixative is used in PAP stain.

- (A) Formalin (B) Alcohol-ether (C) Carnoy's fluid (D) Bovin's fluid

50. Animal cells are interconnected by

- (A) Plasma membrane (B) Cell wall (C) Desmosomes (D) Plasmodesmata

51. What is the purpose of CSSD?
 (A) Storage of clean equipment
 (B) Providing sterile equipment to the operation theater
 (C) Storing sterile equipment
 (D) Pharmacy of the operation theatre
52. The general formula of polysaccharides is
 (A) $(C_6H_{10}O_5)_n$ (B) $(C_6H_{12}O_5)_n$ (C) $(C_6H_{10}O_6)_n$ (D) $(C_6H_{12}O_6)_n$
53. The tablet used for glucose testing in urine is:
 (A) Clinitest (B) Ictotest (C) Ace test (D) TCA
54. Chicken-pox is caused by
 (A) Herpes simplex virus (B) Varicella virus
 (C) Adenovirus (D) None option
55. Which simple protein is soluble in dilute alcohol but not in absolute alcohol.
 (A) Scleroprotein (B) Histones (C) Prolamines (D) Protamines
56. The agents which prevent multiplication of bacteria is known as
 (A) Bactericidal (B) Disinfectant (C) Germicidal (D) Bacteriostatic
57. Which alcohol is most frequently used as skin disinfectant.
 (A) Methyl alcohol (B) Industrial alcohol (C) Isopropyl alcohol (D) All options
58. Which method is used for cultivation of viruses.
 (A) Animal inoculation (B) Inoculation of embryonated eggs
 (C) Tissue culture method (D) All options
59. By which tube, middle ear communicates anteriorly with nasopharynx.
 (A) Trachea (B) Eustachian tube (C) Oesophagus (D) None option
60. Before performing an R & M on a specimen, the urine would be:
 (A) Filtered (B) Brought to room temperature
 (C) Centrifuged (D) Well-mixed
61. Which of the following enzyme is a sensitive marker of alcoholic liver disease
 (A) Alanine transaminase (B) Aspartate transaminase
 (C) Alkaline phosphatase (D) Gamma-Glutamyltransferase
62. Absorption of calcium is enhanced by:
 (A) Vitamin A (B) Vitamin E (C) Vitamin D (D) Vitamin L
63. _____ is not a salivary gland
 (A) Submandibular gland (B) Sublingual gland (C) Parotid gland (D) Thyroid gland
64. Inability to write is known as
 (A) Alexia (B) Aphasia (C) Agraphia (D) Myopia
65. Section cutting machine is also known as:
 (A) Microtome (B) Histomat (C) Histocut (D) Histoform
66. Which hormone is a polypeptide.
 (A) TSH (B) Insulin (C) Both A & B (D) None option

67. Which type of phospholipid is found in brain tissues.

- (A) Phosphatidyl ethanolamine
(C) Phosphatidyl serine

- (B) Phosphatidyl choline
(D) Plasmalogens

68. In animals, carbohydrate is stored in which part of the body.

- (A) Liver (B) Muscles (C) Both A & B (D) Intestine

69. Immunoglobulins are which type of Protein in Nature ?

- (A) Alpha Globulin (B) Beta Globulin (C) Gamma Globulin (D) Delta Globulin

70. Fallopian tubes in females has

- (A) An uterine end (B) An ampulla (C) A fimbrial end (D) All options

71. The secretion from the lungs which is tested for malignant cells is called:

- (A) Spit (B) Semen (C) Saliva (D) Sputum

72. Which technique is used in histology for immediate diagnosis.

- (A) Paraffin technique (B) Frozen section technique
(C) Celloidin section technique (D) None option

73. Which converts the user data into machine readable form?

- (A) Input unit, output unit, control unit (B) Central processing unit
(C) Output unit (D) Decoder unit

74. Commonest bacteria in milk

- (A) Bacillus cereus (B) Lactobacilli (C) Coliform bacilli (D) Proteus vulgaris

75. The most common cause of bacterial sore throat is

- (A) Streptococcus pyogenes (B) Haemophilus influenzae
(C) Both A & B (D) Mycoplasma pneumonia

76. Which unit converts user data into machine readable form?

- (A) Input unit (B) Output unit (C) ALU (D) Control Unit

77. Iron in tissue is detected by which reaction.

- (A) Silver impregnation method (B) Prussian blue reaction
(C) Uranyl nitrate method (D) Toluidine blue method

78. Silver methenamine stain is used for detection of

- (A) Bacteria (B) Parasite (C) Fungi (D) All options

79. Large intestine has all parts except _____.

- (A) Caecum (B) Sigmoid colon (C) Ascending colon (D) Jejunum

80. In which type of stain, the organism is stained in a different shade of colour from that of the stain.

- (A) Indirect stain (B) Negative stain
(C) Metachromatic stain (D) Spore stain

81. Which part supplies nutrients from maternal blood to the foetus.

- (A) Uterus (B) Placenta (C) Fallopian tubes (D) Vagina

82. What is the responsibility of the logical unit in the CPU of a computer?
- (A) To produce result (B) To compare numbers
(C) To control flow of information (D) To do math's works
83. What reagent is mutagenic/clastogenic:
- (A) Crystal violet (B) Picric acid (C) Zenker's fluid (D) Brazil fixative
84. Commercially available ELISA kits are used for the detection of _____
- (A) Rotavirus (B) Hepatitis B surface antigen
(C) Anti-HIV antibodies (D) All of these
85. How many ribs are present in a human body?
- (A) 12 (B) 12 pairs (C) 24 pairs (D) 14
86. Which acid increases staining intensity of eosin.
- (A) Hydrochloric acid (B) Acetic acid (C) Nitric acid (D) Trichloroacetic acid
87. Name the structure analog of vitamin K, which is used as anticoagulant?
- (A) Warfarin (B) Tocopherol (C) Ergocalciferol (D) β -carotene
88. Somatic Nervous system consists of _____ pairs of cranial nerves.
- (A) 12 (B) 18 (C) 65 (D) 8
89. Which type of radiations are used for sterilizing syringes & catheters.
- (A) Ultraviolet radiations (B) Infrared radiations
(C) Gamma radiations (D) X-rays
90. Which enzyme is more active between pH 8 and 10.
- (A) Amylase (B) Lipase
(C) Alkaline phosphatase (D) Acid phosphatase
91. Which type of Microscope is mostly used for routine microbiological work?
- (A) Phase-contrast Microscope (B) Brightfield Microscope
(C) Electron Microscope (D) Fluorescence Microscope
92. Which part of the brain controls intellectual ability?
- (A) Frontal lobe (B) Parietal lobe (C) Temporal lobe (D) Occipital lobe
93. An organ or structure that is not a component of the urinary system.
- (A) Urethra. (B) Urinary bladder. (C) Ureter (D) Adrenal gland.
94. Which method is most commonly used for uric acid estimation.
- (A) Berthelot method (B) Caraway method
(C) Diacetyl Monoxime method (D) Sulphosalicyclic acid test
95. Most naturally occurring antigens are
- (A) Proteins (B) Lipids (C) Polysaccharides (D) Nucleic acids
96. Which biochemical test is done for identification of Pseudomonas, Neisseria and Vibrio groups.
- (A) Gluconate test (B) Oxidation-fermentation test
(C) Urease test (D) Oxidase test

97. Cramp is involuntary, painful and localized _____ of muscles.

- (A) Contraction (B) inflammation (C) Relaxation (D) Infection

98. Which mineral is required for the synthesis of DNA, RNA and phospholipids.

- (A) Sodium (B) Calcium (C) Potassium (D) Phosphorus

99. In essential pentosuria, urine contains

- (A) D-Ribose (B) D-Xylulose (C) L-Xylulose (D) D-Xylose

100. Which enzyme is present mainly in the prostate and increased in prostatic cancer.

- (A) Alkaline phosphatase (B) Isocitrate dehydrogenase
(C) Acid phosphatase (D) Amylase

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