

# 077/2018

Question Booklet  
Alpha Code

A

Question Booklet  
Serial Number

Total No. of Questions: 100

Maximum : 100 Marks

Time : 75 Minutes

## INSTRUCTIONS TO CANDIDATES

1. The question paper will be given in the form of a Question Booklet. There will be four versions of question booklets with question booklet alpha code viz. A, B, C & D.
2. The Question Booklet Alpha Code will be printed on the top left margin of the facing sheet of the question booklet.
3. The Question Booklet Alpha Code allotted to you will be noted in your seating position in the Examination Hall.
4. If you get a question booklet where the alpha code does not match to the allotted alpha code in the seating position, please draw the attention of the Invigilator IMMEDIATELY.
5. The Question Booklet Serial Number is printed on the top right margin of the facing sheet. If your question booklet is un-numbered, please get it replaced by new question booklet with same alpha code.
6. The question booklet will be sealed at the middle of the right margin. Candidate should not open the question booklet, until the indication is given to start answering.
7. Immediately after the commencement of the examination, the candidate should check that the question booklet supplied to him contains all the 100 questions in serial order. The question booklet does not have unprinted or torn or missing pages and if so he/she should bring it to the notice of the Invigilator and get it replaced by a complete booklet with same alpha code. This is most important.
8. A blank sheet of paper is attached to the question booklet. This may be used for rough work.
9. **Please read carefully all the instructions on the reverse of the Answer Sheet before marking your answers.**
10. Each question is provided with four choices (A), (B), (C) and (D) having one correct answer. Choose the correct answer and darken the bubble corresponding to the question number using Blue or Black Ball-Point Pen in the OMR Answer Sheet.
11. **Each correct answer carries 1 mark and for each wrong answer 1/3 mark will be deducted. No negative mark for unattended questions.**
12. No candidate will be allowed to leave the examination hall till the end of the session and without handing over his/her Answer Sheet to the Invigilator. Candidates should ensure that the Invigilator has verified all the entries in the Register Number Coding Sheet and that the Invigilator has affixed his/her signature in the space provided.
13. Strict compliance of instructions is essential. Any malpractice or attempt to commit any kind of malpractice in the Examination will result in the disqualification of the candidate.

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**077/2018**

Maximum : 100 Marks

Time : 1 hour and 15 minutes

1. Which of the following is a natural anticoagulant ?  
(A) EDTA (B) Double oxalate  
(C) ACD (D) Heparin
2. Ideal time for collecting blood sample for detection of filarial worm is  
(A) 2 pm – 4 pm (B) 10 pm – 2 am  
(C) 6 am – 8 am (D) 10 am – 2 pm
3. Which of the following is an example of an enrichment media ?  
(A) MacConkey agar (B) Nutrient Agar  
(C) Peptone water (D) Selenite F broth
4. Name the parasite causing Malaria.  
(A) *Plasmodium vivax* (B) *Wuchereria bancrofti*  
(C) *Brugia malayi* (D) *Leishmania donovani*
5. Which of the following antibody can cross the placenta ?  
(A) Ig M (B) Ig E  
(C) Ig A (D) Ig G
6. Which of the following is a RBC diluting fluid ?  
(A) Hinglemann's fluid (B) Tuerk's fluid  
(C) Dacies fluid (D) Rees – Ecker solution
7. Bacteria which require oxygen for their growth is  
(A) Aerobic bacteria (B) Carboxyphilic bacteria  
(C) Anaerobic bacteria (D) Obligate anaerobes
8. Who discovered ABO blood group system ?  
(A) Weiner (B) Karl Landsteiner  
(C) William Harvey (D) Denis

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**[P.T.O.]**

9. Which of the following is not a Romanowsky stain ?  
(A) Leishman's stain (B) Geimsa stain  
(C) Jenner stain (D) Crystal violet
10. The cell present in normal CSF (cerebrospinal fluid)  
(A) Plasma cell (B) Neutrophils  
(C) Lymphocytes (D) Monocytes
11. Staining method used for detecting Mycobacterium tuberculosis is  
(A) Leishman's staining (B) Zeihl-Neelsen's staining  
(C) Simple staining (D) Gram's staining
12. Urinometer is used to measure which of the following property of Urine ?  
(A) Reaction (B) Transparency  
(C) Volume (D) Specific gravity
13. Identify a Renal function test from the following tests.  
(A) Blood sugar (B) Serum bilirubin  
(C) Blood urea (D) Total cholesterol
14. The accurate method for estimation of haemoglobin is  
(A) Sahlis method (B) Cyanmeth haemoglobin method  
(C) Spencer method (D) Dare method
15. Solidifying agent used for preparation of solid culture media is  
(A) DPX (B) Meat extract  
(C) Agr (D) Peptone
16. Post-Prandial Blood Sugar (PPBS) sample is taken  
(A) 2 hr after intake of food  
(B) ½ hr after intake of food  
(C) after 12 hrs of fasting  
(D) at anytime after intake of food

17. Round shaped bacterias are called  
(A) Bacilli (B) Vibrios  
(C) Actinomycetes (D) cocci
18. Normal value of bleeding time by Dukes method is  
(A) 3-8 minutes (B) 2-6 minutes  
(C) 3-8 seconds (D) 2-6 seconds
19. Size of a normal red blood cell is  
(A) 10-15 micro metre (B) 15-20 micro metre  
(C) 6-8 micro metre (D) None of these
20. The dilution that can be made using an RBC pipette is  
(A) 1/200 (B) 1/10  
(C) 1/50 (D) 1/20
21. Major plasma protein is  
(A) Globulin (B) Albumin  
(C) Bence Jones Protein (D) Fibrinogen
22. Leucocytosis is seen in  
(A) Systemic lupus erythematosus (B) Rheumatoid arthritis  
(C) Leukemia (D) Aplastic anaemia
23. Which blood group is known as “Universal Donor” ?  
(A) O group (B) A group  
(C) B group (D) AB group
24. Staining method used in cytology is  
(A) Haematoxylin and eosin staining  
(B) Negative staining  
(C) Leishman’s staining  
(D) Papanicolaou staining

25. Temperature used for storing blood in a blood bank refrigerator is  
(A) 4-6 °C (B) 8-10 °C  
(C) 10-12 °C (D) 0-1 °C
26. Which of the following step is not included in tissue processing ?  
(A) Dehydration (B) Fixation  
(C) Oxidation (D) Clearing
27. Length of an ideal blood smear is  
(A) 1-2 cm (B) 5-6 cm  
(C) 6-7 cm (D) 3-4 cm
28. Gmelin's test is used for detecting which of the following compound in urine ?  
(A) Sugar (B) Ketone bodies  
(C) Bile salts (D) Bile pigment
29. VDRL test is used for detecting which of the following disease ?  
(A) Rabies (B) Syphilis  
(C) Typhoid (D) Weils disease
30. Normal platelet count is  
(A) 1.5-4.5 lakhs/mm<sup>3</sup> of blood (B) 50,000-1 lakhs/mm<sup>3</sup> of blood  
(C) 5000-11000 cells/mm<sup>3</sup> of blood (D) 5-6 lakhs/mm<sup>3</sup> of blood
31. Which of the following compound is a normal constituent of urine ?  
(A) Sugar (B) Bile salt  
(C) Urea (D) Ketone bodies
32. Colour code used for EDTA anticoagulant bottles  
(A) Green (B) Grey  
(C) Purple (D) Red
33. Commonly used fixative in histopathology is  
(A) Alcohol (B) Carnoys fixative  
(C) Alcohol-ether mixture (D) 10% formalin

34. In Leishman's staining fixation is done by  
(A) Eosin (B) Methyl alcohol  
(C) Distilled water (D) Acetone
35. Which of the following test is included in IMViC Reaction test ?  
(A) Nitrate test (B) Citrate test  
(C) Coagulase test (D) Catalase test
36. Which of the following anticoagulant is also known as Versene ?  
(A) Heparin (B) Double oxalate  
(C) ACD (D) EDTA
37. Volume of ACD solution used to collect 100 ml of blood is  
(A) 16 ml (B) 30 ml  
(C) 28 ml (D) 5 ml
38. Automatic tissue processing machine is called  
(A) Microtome (B) Histokinete  
(C) Cryostat (D) Coulter counter
39. Which white blood cell shows fine violet coloured granules after Leishman's staining ?  
(A) Neutrophils (B) Eosinophils  
(C) Lymphocytes (D) Monocyte
40. Melitorea refers to the presence of  
(A) Sugar in urine (B) Protein in urine  
(C) Blood in urine (D) Ketone bodies in urine
41. Cob-web appearance of CSF is seen in  
(A) Syphilis (B) Tubercular meningitis  
(C) Malaria (D) Hepatitis

42. Hyponatremia is the term used to denote  
(A) low potassium level in blood (B) low sodium level in blood  
(C) low calcium level in blood (D) low bicarbonate level in blood
43. Method used for the estimation of total protein in blood is  
(A) GOD-POD method (B) CHOD-PAP method  
(C) Biuret method (D) Jaffe method
44. The test used to detect CSF protein is  
(A) Hay's test (B) Smith's test  
(C) Pandy's test (D) Hart's test
45. Area of an improved Neubauer counting chamber is  
(A)  $3 \text{ mm}^2$  (B)  $6 \text{ mm}^2$   
(C)  $4 \text{ mm}^2$  (D)  $9 \text{ mm}^2$
46. Autoclave is an example of which of the following method of sterilization ?  
(A) Moist heat method (B) Dry heat method  
(C) Filtration method (D) Radiation method
47. Erythropoiesis is the development of  
(A) Red blood cells (B) Granulocytes  
(C) Agranulocytes (D) Platelets
48. Colony colour of lactose fermenting bacteria on MacConkey agar  
(A) Colourless (B) Pink  
(C) Green (D) Black
49. Father of Microbiology is  
(A) Robert Koch (B) Joseph Lister  
(C) Edward Jenner (D) Louis Pasteur
50. Van den Bergh reaction is used for estimation of  
(A) Total protein (B) Serum creatinine  
(C) Serum Bilirubin (D) Serum uric acid



51. Among basic forces exist in nature the weakest is  
(A) Gravitational force (B) Electromagnetic force  
(C) Strong nuclear force (D) Nuclear weak force
52. Unit of power is  
(A) Watt (B) Joule  
(C) Kilowatt hour (D) Newton
53. The property by which a body opposes the change in rotatory motion of a body about an axis  
(A) Angular momentum (B) Torque  
(C) Inertia (D) Moment of inertia
54. Zero degree Celsius is equal to \_\_\_\_\_ degree Fahrenheit.  
(A) 28 (B) 32  
(C) 38 (D) 42
55. Sound waves travel faster through  
(A) Solid (B) Liquid  
(C) Gas (D) Vacuum
56. Light can pass along the optical fibre by mechanism  
(A) Refraction (B) Interference  
(C) Total internal reflection (D) Diffraction
57. Heat radiations lies in the  
(A) Microwave region (B) Ultraviolet region  
(C) Infra-red region (D) Visible region
58. Laws of electromagnetic induction was developed by  
(A) Einstein (B) Faraday  
(C) Newton (D) Heisenberg
59. No magnetic flux lines passes through  
(A) Ferromagnetic material (B) Paramagnetic material  
(C) Ferri magnetic material (D) Dia magnetic material
60. Lens used to correct short sight of an eye  
(A) Plane glass (B) Cylindrical lens  
(C) Convex lens (D) Concave lens

61. Two electrons in the same atomic orbital is distinguished by their  
 (A) Principal quantum number (B) Azimuthal quantum number  
 (C) Magnetic quantum number (D) Spin quantum number
62. Which of the following species have minimum size ?  
 (A)  $O^{2-}$  (B)  $Mg^{2+}$   
 (C)  $F^-$  (D)  $Al^{3+}$
63. According to V.S.E.P.R. theory the shape of  $PCl_4^-$  molecule is  
 (A) Trigonal bipyramidal (B) Tetrahedral  
 (C) Seesaw (D) Square planar
64. One method to remove temporary hardness is  
 (A) Using washing soda (B) By Calgon process  
 (C) Clark's method (D) Permutit method
65. The group of elements which does not belong to Dobereiner triads is  
 (A) (Li, Na, K) (B) (C, Si, Ge)  
 (C) (P, As, Sb) (D) (Cl, Br, I)
66. Name the crystal system in which all the sides and all the angles are different.  
 (A) Orthorhombic (B) Monoclinic  
 (C) Triclinic (D) Hexagonal
67. Artificial graphite is prepared by  
 (A) Acheson's process (B) Deacon's process  
 (C) Dow's process (D) Hall – Herault's process
68. Kaolinite is the ore of  
 (A) Copper (B) Iron  
 (C) Aluminium (D) Zinc
69. An electron transits from 7<sup>th</sup> orbit to 3<sup>rd</sup> orbit of  $Li^{2+}$  ion. The spectrum will occur in  
 (A) U-V region (B) Visible region  
 (C) Far Infra-red region (D) Near Infra-red region
70. Among the following which is not an interhalogen compound ?  
 (A)  $ClF_3$  (B)  $BrF_5$   
 (C)  $ICl_3$  (D)  $FBr_3$

71. Large empty cells found in the adaxial epidermis in grasses  
 (A) Lerticel (B) Bulliform cell  
 (C) Subsidiary cell (D) Mesophyll cell
72. Diabetes insipidus is caused due to  
 (A) Deficiency of insulin (B) Excess of insulin  
 (C) Hyposecretion of ADH (D) Hypersecretion of ADH
73. Excretory organ in insects is  
 (A) Green gland (B) Malpighian tubules  
 (C) Nephrida (D) Protonephrida
74. Identify the 5 Carbon compound  
 (A)  $\text{CO}_2$  (B) NADPH  
 (C) RUBP (D) PEP
75. Canary grass experiment related hormone  
 (A) Auxin (B) Gibberellin  
 (C) ABA (D) Ethylene
76. Joint between Atlas and Axis  
 (A) Pivot joint (B) Hing joint  
 (C) Ball and Socket joint (D) Hinge joint
77. Downs Syndrome is related to  
 (A) Nullisomy (B) Monosomy  
 (C) Trisomy (D) Tetrasomy
78. Biological glue is  
 (A) Ligase (B) Restriction  
 (C) DNA polymerates (D) Permeate
79. Other than Green house gas  
 (A)  $\text{CO}_2$  (B)  $\text{CH}_4$   
 (C)  $\text{NO}_2$  (D)  $\text{NH}_4$
80. Basic unit of classification is  
 (A) Family (B) Genes  
 (C) Species (D) Order

81. 'International Migration Day' by United Nations Department of Economic and Social Affairs observed on
- (A) December 28 (B) December 18  
(C) December 6 (D) December 16
82. Name of the Capital city, through which the equator passes
- (A) Kinshesa (B) Nairobi  
(C) Quito (D) Bogota
83. Author of the work 'The Other Side of Silence', which deals with the atrocities during the partition of India.
- (A) Rajendar Singh Bedi (B) Urvashi Butalia  
(C) Bhishma Sahni (D) Amitav Ghosh
84. The reformer who organised "Kallumala Prakshobam" movement against the restriction of using ornaments by the untouchables
- (A) Ayyankali (B) Ayya Vaikunda Swamikal  
(C) Chattambi Swamikal (D) Sree Narayana Guru
85. The place known as "The Gateway to Kerala"
- (A) Wayanad (B) Palakkad  
(C) Cochin (D) Tiruvananthapuram
86. The main chemicals in air pollution that causes acid rain
- (A) Sulphur dioxide and Nitrogen (B) Sulphur dioxide and Oxygen  
(C) Carbon dioxide and Sulphur (D) Nitrogen and Carbon dioxide
87. Percentage of alluvial soil in India
- (A) 18.5% (B) 15%  
(C) 28% (D) 43%

88. The food for work programme was later renamed as  
(A) IRY (B) IRDP  
(C) NREP (D) RLEGP
89. The Chairman of the committee on innovation and entrepreneurship setup by NITI Aayog  
(A) Swathi Piramal (B) Rajive Bajaj  
(C) Vishal Shika (D) Tarun Khanna
90. The river that originates in the Anaimudi Hills, flowing to Tamil Nadu  
(A) Bhavani (B) Pambar  
(C) Khabani (D) Chaliar
91. 'Poorna Swaraj' declared by Indian National Congress at  
(A) Lahore Session (B) Lucknow Session  
(C) Bombay Session (D) Allahabad Session
92. An organisation formed by Vagbhadanantha to fight against caste system and idol worship  
(A) Samatva Samajam  
(B) Athmavidya Sangam  
(C) Sadhujana Paripalana Sangam  
(D) Athmabhimana Prasthanam
93. The organisation established by Abdul Khader Moulavi for the social upliftment of Muslim society in Kerala  
(A) Muslim Education Society  
(B) Jamiyyathul Ulama  
(C) Kerala Mujahideen  
(D) Travancore Muslim Mahasabha
94. The priest who introduced the idea of "One school for one Church" (oru pallik oru Pallikkodam) in the Kerala Sabha 1864  
(A) Aagustinose Thevarparambil  
(B) Mariyam Theresa Chiramel  
(C) Blessed Kuriakos Elias Chavara  
(D) Devasahayam Pillai

95. Name the combined operation of Navy, Army and Airforce to rescue the Okhi victims
- (A) Operation Synergy
  - (B) Operation Chain protection
  - (C) Operation Flying Eagle
  - (D) Operation Seashore
96. The play of V.T. Bhattathiripad which brought about revolutionary changes in the Brahmin society
- (A) Athma Vidya Kahalam
  - (B) Sarasayya
  - (C) Akilathirut
  - (D) Adukkalayil ninnu Arangathekku
97. K.P. Ramanunni bagged 'The Kendra Sahitya Academy' for his work
- (A) Agraharathile Poocha
  - (B) Arachar
  - (C) Daivathinte Pustakam
  - (D) Sufi Paranja Katha
98. Name the satellite, which launched by ISRO as its 100<sup>th</sup> satellite from Satheesh Dhawan Space Centre, Sreeharikotta on 12<sup>th</sup> January, 2018
- (A) IRNSS – 1H
  - (B) Cartosat 2C
  - (C) GSAT – 117
  - (D) PSLV – C40
99. Parent department of National Disaster Management Authority (India) abbreviated NDMA
- (A) Ministry of Defence
  - (B) Ministry of Agriculture
  - (C) Ministry of Home Affairs
  - (D) Ministry of Public Grievances
100. Panchayath Raj System of local self-government is incorporated in
- (A) The Directive Principles of the State Policy
  - (B) The Fundamental Rights
  - (C) National Development Council
  - (D) A plan for Economic and Rural Development in India

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