

Lucknow Cantonment Board

Question Paper for X-ray Technician

Date: 05.02.2023

Time: 1.30 am to 03.00 pm

- An objective type of exam where candidates must mark the correct choice of answer in an OMR answer sheet.
- This question paper consists of 12 pages.
- The question paper for written test is in English only and the 100 questions carrying equal marks is of Objective type. Duration of exam is 90 minutes. Answer to the questions must be marked on OMR answer sheet. **There is 0.33 Negative marking for wrong answers.**
- In the answer sheet, use BLACK BALL POINT pen only for Name, name of the post, Roll number, application number, answers, sign, etc.
- If the answer sheet is **NOT** numbered, immediately get the answer sheet replaced from the invigilator.
- Answer sheet will have space for sign/initials of the candidate and the invigilator.
- Immediately after the exam starts, please check if the question paper has any unprinted or torn or missing pages or items. In such a case, you must get the complete question paper replaced.
- Space is provided for rough work in the question paper on last page.
- The answer sheet is **NOT** supposed to be folded or mutilated in any way.
- You are also **NOT** supposed to write anything on the reverse of the answer sheet.
- The OMR is going to be evaluated by a computer. So, you must take extreme caution while marking in the answer sheet. Since you cannot erase the answers once marked (with a black ball point), please take care to mark it carefully.
- The questions will be printed in the question paper. It contains questions under each of which four choices will be given. You must mark the answer in the Answer Sheet (OMR Sheet) against the appropriate serial number.
- You must mark the correct answer choice in the answer sheet by completely darkening the circle against the correct choice (a/b/c/d) with a black ball point pen-only.
- Candidate must handover OMR answer sheet to invigilator after completion of exam. Before handing over OMR answer sheet to invigilator, please check admit card number correctly entered or **NOT**.

Sr. no.	Question details
1	A micron is _____ times smaller than a millimetre. A. 250 B. 500 C. 1000 D. 2000
2	G-CSF is produced by A. Lymphocytes B. Stromal cells of the marrow C. Granulocytes D. Stem cells
3	Acid phosphatase is demonstrated by an azo dye coupling techniques that depends upon the hydrolysis of a substrate containing: A. a-Naphthol phosphate B. NAD C. NADPH D. G ₆ PD
4	Zenker's solution is recommended for the fixation of small pieces of which type of tissue. A. Liver B. Spleen C. Both a & b D. None Option
5	Name the gas used in preparation of bleaching powder: A. Chlorine B. Hydrogen C. Nitrogen D. None option
6	Heat will accelerate the process of: A. Mounting B. Dehydration C. Demineralization D. Clearing
7	Which endocrine gland secrete insulin and glucagon hormone? A. Adrenal gland B. Thymus gland C. Pituitary gland D. Pancreas
8	Which disease is caused due to deficient iodine diet? A. Goiter B. Acromegaly C. Cretinism D. Beri-beri
9	Cushing's syndrome is caused due to hyperactivity of A. Adrenal medulla B. Adrenal cortex C. Thyroid gland D. Parathyroid gland
10	Gilt-edged market means A. bullion market B. market of government securities C. market of guns D. market of pure metals
11	Which one of the following lipoprotein has maximum density? A. LDL B. Chylomicrons C. HDL D. RNA
12	_____ component of Nucleus has phosphoric acid and four nitrogenous base. A. Chromatin B. RNA C. DNA D. Nucleoli

13	Areolar tissue, fibrous tissue, yellow elastic, reticular, adipose, lymphoid tissue, cartilage, bone & teeth are example of which type of tissue. A. Epithelial tissue B. Muscular tissue C. Connective tissue D. Nervous tissue
14	Which of the following types of energy can be used to decompose water into its elements? A. Heat energy B. Light energy C. Chemical energy D. Electrical energy
15	Blood pressure & cardiac output is increased during A. Sleeping B. Eating C. Exercise D. Both a & c
16	_____ is longest & largest bone of skeleton. A. Femur B. Tibia C. Fibula D. None of these
17	Muscles having double nerve supply: A. Digastrics muscle B. Trapezius C. Adductor magnus D. All of the above
18	A dark purple compound used as an antiseptic and disinfectant is: A. potassium nitrate B. sodium thiosulphate C. potassium permanganate D. calcium phosphate
19	Which wave in ECG represents ventricular septal activity and is shown by inconspicuous downward deflection? A. Q wave B. R wave C. S wave D. T wave
20	On which factor, the blood pressure is dependent? A. Systolic force B. Cardiac output C. Peripheral resistance D. All of these
21	Which type of cell is increased in body fluid in bacterial infection? A. Neutrophil B. Basophil C. Eosinophil D. Macrophages
22	Which is not found in DNA? A. Guanine B. Uracil C. Adenine D. Thymine
23	In strip method, colour of strip is changed to _____ when the urine contains albumin. A. Yellow B. Orange C. Red D. Green
24	Hormones that regulate salt and water balance, except: A. Calcitonin B. Vasopressin C. Parathyroid hormone D. 1, 25-dihydroxycholecalciferol

25	Which method is used for estimation of hormones? A. Radioimmunoassay (RIA) B. Fluorimetric assay C. ELISA D. All of the above
26	Amino acids are building blocks for A. Proteins B. Carbohydrates C. Lipids D. DNA
27	In diabetes ____ level is raised. A. Blood urea B. Blood sugar C. Blood cholesterol D. Blood lipid
28	Oils and fats are obtained from – A. Animal sources B. Vegetable sources C. Synthesis D. Both animal and vegetable sources
29	Serum amylase is increased in A. Renal failure B. Obesity C. Diabetes D. Acute pancreatitis
30	Which of the following is most important in causing coronary artery disease? A. LDL B. HDL C. VLDL D. Triglycerides
31	Which protein is synthesized by platelet? A. Albumin B. Globulin C. Fibrinogen D. Collagen
32	Which blood cell is essential for blood clotting? A. Red blood cell B. White blood cell C. Platelets D. All of the above
33	The difference between isotopes of an element is due to the presence of a different number of: A. Protons B. Neutrons C. Electrons D. Photons
34	Permanent hardness of water is due to the presence of – A. Calcium bicarbonate B. Magnesium bicarbonate C. Calcium Sulphate D. Sodium bicarbonate
35	_____ is known as power house of the cell. A. Ribosome B. Golgi apparatus C. Lysosomes D. Mitochondria

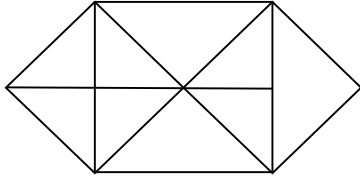
36	Malaria infection can be transmitted by A. Anopheles mosquito bite C. Transmission through placenta B. Blood transfusion D. All of the above
37	0°K is equivalent to: A. 273°C B. -273°C C. 0°C D. 100°C
38	In Myelography the intra-theal contrast injection is injected into which space: (a) Extra-dural (b) Intra-medullary (c) Sub-dural (d) Sub-arachnoid
39	Basic protein is: A. Albumin B. Globulin C. Histone D. Glutelin
40	Ferritin is stored in A. Liver B. Spleen C. Gut D. All of the above
41	_____ components is used as an amplifying device? A. Diode B. Electric cell C. Transformer D. Transistor
42	The following two amino acids are semi-essential. A. Arginine, histidine B. Cysteine, tyrosine C. Proline, phenylalanine D. Serine, threonine
43	The temperature at which a substance catches fire is called its: A. melting point B. boiling point C. heat temperature D. Ignition temperature
44	Intraoperative radiation therapy (IORT) is used to treat an exposed tumour during cancer surgery. Which rays are used in this treatment? A. UV rays B. Infrared rays C. X-rays, gamma rays and electron beams D. Neutrons
45	All of the following infectious disease are transmitted by milk except A. Tuberculosis B. Hepatitis A virus C. Brucellosis D. Salmonellosis
46	Cytology helps in the diagnosis of A. Malignancy B. Evaluation of endocrine disorder C. In assessment of hormonal activity D. All of the above

47	Ultrasonic sounds are the sound which have frequencies more than: A. 30 KHz B. 50 KHz C. 20 KHz D. 15 KHz
48	Syphilis is caused by A. Treponema pallidum B. Neisseria gonorrhoeae C. Human papilloma virus D. Human immunodeficiency virus
49	In zinc sulphate floatation technique, what percentage of zinc sulphate solution is used? A. 25% B. 31% C. 33% D. 35%
50	Carbon dating technique is used to determine _____. A. age of fossils B. age of plastic C. weight of non metals D. volume of liquids
51	What percentage of numbers 1 to 70 have 1 or 9 in the unit's digit? A. 1% B. 14% C. 20% D. 21%
52	If selling price is double, the profit triples. Find the profit percent. A. $66\frac{2}{3}$ B. 100 C. $105\frac{1}{3}$ D. 120
53	Find the value : $1132.757 - 2315.996 - 1753.039 + 2 \times 2846.639 = ?$ A. 2746 B. 2757 C. 2656 D. 2646
54	The average marks of 40 students were found to be 68. If the marks of two students were incorrectly entered as 48 and 64 instead of 84 and 46 respectively, then what is the correct average? A. 68.25 B. 68.15 C. 68.45 D. 68.35
55	The sum of ages of 5 children born at the intervals of 3 years each is 50 years. What is the age of the youngest child? A. 4 years B. 8 years C. 10 years D. None of these
56	What is the HCF of 57 and 513? A. 10 B. 57 C. 3 D. 27
57	The two numbers are 63 and 77. HCF is 7. Find the LCM. A. 668 B. 693 C. 674 D. 680

58	<p>A, B, C, D, E and F are cousins. No two cousins are of the same age, but all have birthday on the same date. The youngest is 17 years old and E the oldest is 22 years old. F is somewhere between B and D in age. A is older than B. C is older than D.</p> <p>Which of the following statement is not possible?</p> <p>(A) F is 18 years old (B) F is 20 years old</p> <p>(C) D is 20 years old (D) F is 19 years old</p>
59	<p>One morning Udai and Vishal were talking to each other face to face at a crossing. If Vishal's shadow was exactly to the left of Udai, which direction was Udai facing?</p> <p>(A) East (B) North</p> <p>(C) South (D) West</p>
60	<p>A person crosses a 600m long street in 5 minutes. What is his speed in km/hr?</p> <p>A. 3.6km/h B. 7.2 km/h C. 8.4 km/h D. 72 km/h</p>
61	<p>Find the value of</p> $45 - 3 \times (4 \times 6 + 12 \div 3 \times 6 - 4 \times 5) + 6$ <p>A. -123 B. -65 C. -42 D. -33</p>
62	<p>Simplify: 12% of 4% of 7% of 2×10^6</p> <p>A. 380 B. 575 C. 672 D. 786</p>
63	<p>A sum fetched a simple interest of Rs. 3040 at rate of 8% per annum in 5 years. What is the sum?</p> <p>A. Rs. 5400 B. Rs. 7600 C. Rs. 8200 D. Rs. 10000</p>
64	<p>The length of a diagonal of a square is 14cm, then what will the area of the square?</p> <p>A. 98cm^2 B. 82cm^2 C. 64cm^2 D. 48cm^2</p>
65	<p>Ram and Mohan start a business with investment of Rs. 28000 and Rs. 42000 respectively. Ram invests for 8 months and Mohan invests for one year. If the total profit at the end of the year is Rs. 21125, then what is the share of B?</p> <p>A. Rs. 8465 B. Rs. 10295 C. Rs. 12388 D. Rs. 14625</p>
66	<p>Who was the second Prime Minister of India?</p> <p>A. Gulzarilal Nanda B. Indira Gandhi</p> <p>C. Lal Bahadur Shastri D. Rajendra Prasad</p>
67	<p>The tertiary winds on the north of the Alps (Europe) are called</p> <p>A. the Chinook</p> <p>B. the foehn</p> <p>C. the sirocco</p> <p>D. the loo</p>

68	Which operation has been launched by Railways Protection Force (RPF) to stop human trafficking? A. Operation Thrust B. Operation Aahat C. Operation Fateh D. Operation 25
69	Which team won the title of “2022” India Premier League (IPL)? A. KKR B. Rajasthan Royals C. Gujarat Titans D. RCB
70	Who has been appointed as the new chief of Indian Army? A. Vineet Joshi B. Manoj Pandey C. Nitin Paranjape D. S. Somanath
71	Who won the gold medal in javeline throwTokyo Olympics 2022 ? A.Sania Mirza B. PV Sandhu C. Neeraj Chopra D. Karnam Malleshwari
72	Who became the first Indian citizen to go to space? A. Kalpna Chawla B.Sunita Williams C.Rakesh Sharma D. None of these
73	Govt will hand over how many monuments to private sector to their upkeep under Monument Mitra scheme announced by Ministry of Culture in 2023? A. 500 B.750 C. 1000 D. 1200
74	Wimbledon Grand slam is organised every year in which country? A. Washington,USA B. London, UK C. Darwin, Australia D. Qatar
75	Which ministry has launched “Svanidhi as Samridhi” program? A. Ministry of Housing & Urban Affairs B. Woman and child development C. Home Ministry D. None of these

76	Which Bank has introduced its digital broking solution – ‘E-Broking’? A. SBI B. RBI C. Indian Bank D. Axis Bank
77	Which country hosted “SCO Anti – Terror Exercise”? A. India B. China C. Pakistan D. Iran
78	Which of the following rivers is not a tributary of the Ganga? A. Gomti B. Gandak C. Kosi D. Chambal
79	In which Indian State the Great Himalayan National Park is situated? A. Uttarakhand B. Himachal Pradesh C. Arunachal Pradesh D. Sikkim
80	When International ‘Youth Day’ is celebrated? A. 12 th August B. 15 th August C. 7 th August D. 20 th August
81	If CUSTOM is written as UCTSMO the how PARENT be written in the same code? A. APERTN B. RAPTNE C. TNERAP D. ERAPTN
82	If B = 2, BAG = 10, then BOX = ? A. 41 B. 52 C. 36 D. 39
83	Select the letter-cluster from among the given options that complete the following series. BHO, GMT, LRY, ? A. 10U B. DJL C. HMT D. QWD
84	Select the number that can replace the questions mark (?) in the following series: 55, 58, 64, ?, 85 A. 77 B. 67 C. 73 D. 70
85	Select the word-pair form the given options in which the two words are related in the same way as the two words in the following pair.

90	<p>How many triangles are present in the following figure?</p>  <p>A. 20 B. 16 C. 18 D. 14</p>
91	<p>Direction [Q91-92]: Choose the word <u>opposite</u> in meaning to the given word.</p> <p>SUPERFICIAL</p> <p>A. Artificial B. Natural C. Genuine D. Amicable</p>
92	<p>HARMONIOUS</p> <p>A. Discordant B. Sonorous C. Balanced D. Concordant</p>
93	<p>Find the correctly <u>spelt</u> word.</p> <p>A. Juvinile B. Juvenile C. Juvinnile D. Juvenili</p>
94	<p>Find the correctly <u>spelt</u> word</p> <p>A. Deteriorate B. Deteriorrate C. Detariorate D. Deterriorate</p>
95	<p>To keep one's temper</p> <p>A. To become hungry</p> <p>B. To be in good mood</p> <p>C. To preserve ones energy</p> <p>D. To be aloof from</p>
96	<p>Please, stop _____ so many mistakes</p> <p>a) To make</p> <p>b) Make</p> <p>c) Making</p> <p>d) Makes</p>
97	<p>Direction [Q97-98]: Sentences given with blanks to be filled in with an appropriate word. Four alternatives are suggested for each question. Choose the correct alternative out of the four.</p> <p>The publisher is bringing _____ a revised edition of this book.</p> <p>A. up B. about C. out D. round</p>

98	This is our house and that is _____. A. their B. theirs C. them D. their's
99	Direction [Q99-100]: Choose the one which best expresses the <u>meaning</u> of the given words. HONOUR A. Respect B. Determination C. Courage D. Discipline
100	FRAGILE A. Sturdy B. Weak C. Hard D. Strong

Space for rough work