AUAT — 2024 Lateral Entry to 2nd Year of B. Tech. (U22) (TEST BASED ON MCQ)

Full Marks: 100	Duration : 2 Hours
Roll No. of the Candidate :	
Date of Examination :	
Name of Examination Centre :	Signature of the Invigilator on
Signature of the Candidate :	Varification

IMPORTANT INSTRUCTIONS

Candidates should read the below instructions carefully and follow them accordingly.

- **1.** The Question Booklet has paper seal pasted on it. Please do **NOT** open the Question Booklet until you are asked to do so by the Invigilator.
- **2.** The candidates must check immediately after breaking the seal that the Question Booklet contains **100 Multiple Choice Questions** in two parts (Part—I and Part—II).
- 3. Answer of questions of Part—I and Part—II both will have to be given on the **OMR Answer Sheet** provided for this purpose. Fill up the necessary fields that are intended for you by writing and/or shading appropriately. Otherwise the **OMR Answer Sheet** *cannot* be evaluated and will liable to be rejected. Question numbers progress from 1 to 100 continuously with alternative answers being shown as [A], [B], [C] and [D] for each question. Record your response by completely darkening the corresponding bubble. While responding, you should consider the best alternative answer and shade only one bubble with **black/blue ball point pen only**. For each correct response you will be awarded 1 mark. There will be negative marking for wrong responses. For each wrong response, **-0.25** mark will be awarded. Multiple responses against one **MCQ** will be treated as a wrong response.
- **4.** On leaving the examination hall, candidates must submit the **OMR Answer Sheet**. They are allowed to keep the Question Booklet with them.
- **5. OMR Answer Sheet** will be processed by electronic means. Any untoward/irrelevant remarks, folding or putting stray notes on the answer sheet, any damage to the answer sheet will lead to the rejection of the same and the sole liability shall remain with the candidate.
- **6.** Rough Work may be done at the end of the Question Booklet.
- 7. No candidate will be allowed to leave the examination hall before completion of the examination.
- 8. Use of any Electronic device like Mobile, Programmable Calculator etc. is strictly prohibited.

DO NOT OPEN THE SEAL UNTIL INSTRUCTED TO DO SO

PART—I

(Core Subject)

- 1. The rank of the matrix $\begin{vmatrix} 1 & 4 & 5 \\ 2 & 6 & 8 \\ 3 & 7 & 22 \end{vmatrix}$ is
 - [A] 1
 - [B] 2
 - [C] 3
 - [D] 0
- 2. The value of the determinant $\begin{vmatrix} 1 & x & y \\ 0 & \cos x & \sin y \\ 0 & \sin x & \cos y \end{vmatrix}$ is
 - [A] $\sin(x+y)$
 - [B] $\cos(x+y)$
 - [C] 1
 - [D] $\cos(x-y)$
- **3.** If A, B be $n \times n$ matrices such that $BA + B^2 = I BA^2$, where I is the $n \times n$ identity matrix.

Which of the following is always *true*?

- [A] A is nonsingular
- [B] B is nonsingular
- [C] A + B is nonsingular
- [D] AB is nonsingular

4. If ω is a cube root of unity, then a root of the equation

$$\begin{vmatrix} x+1 & \omega & \omega^2 \\ \omega & x+\omega^2 & 1 \\ \omega^2 & 1 & x+\omega \end{vmatrix} = 0 \text{ is}$$

- [A] $x = \omega$
- [B] x = 0
- [C] x = 1
- [D] $x = \omega^2$
- **5.** The value of $\left(\frac{1+i}{1-i}\right)^{20}$ where $i = \sqrt{-1}$ is
 - [A] -1
 - [B] _-
 - [C] i
 - [D] 1
- **6.** If $(\vec{a} \times \vec{b})^2 = (\vec{a} \cdot \vec{b})^2 = 144$ and $|\vec{b}| = 4$,

then what is the value of $\begin{vmatrix} \overrightarrow{a} \\ \overrightarrow{a} \end{vmatrix}$?

- [A] 4
- [B] 6
- [C] 3
- [D] 0

- 7. A line makes angles α , β , γ with coordinate axes, then $\cos 2\alpha + \cos 2\beta + \cos 2\gamma$ is equal to
 - [A] 1
 - [B] 2
 - [C] -1
 - [D] -2
- **8.** The value of $\lim_{x \to \pi/2} \frac{\log \sin x}{(\pi/2 x)^2}$ is
 - [A] 0
 - [B] $\frac{1}{2}$
 - [C] $-\frac{1}{2}$
 - [D] -2
- 9. The probability that a man will live for 10 more years is 1/4 and the probability that his wife will live for 10 more years is 1/3. The probability that neither husband nor wife will be alive after 10 years is
 - [A] $\frac{3}{12}$
 - [B] $\frac{1}{2}$
 - [C] $\frac{7}{12}$
 - [D] $\frac{11}{12}$

- **10.** The integrating factor of the differential equation $\frac{dy}{dx} + \frac{3x}{y} = \frac{1}{y^2}$ is
 - [A] x^3
 - [B] y^3
 - [C] e^{y3}
 - [D] $-y^3$
- 11. The integration $\int_0^{\pi/2} \frac{\sqrt{\sin x}}{\sqrt{\sin x} + \sqrt{\cos x}} dx$ is equal to
 - [A] 0
 - [B] 1
 - [C] $\frac{\pi}{4}$
 - [D] $\frac{\pi}{2}$
- **12.** If S_1 and S_2 are surface areas of the solids generated by revolving the

ellipses
$$\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$$
 and $\frac{x^2}{b^2} + \frac{y^2}{a^2} = 1$ about the *y*-axis, then

- $[A] \quad S_1 > S_2$
- [B] $S_1 < S_2$
- [C] $S_1 = S_2$
- [D] Can't predict
- **13.** The radius of curvature of the curve $y = e^x$ at the point where it crosses the y- axis is
 - [A] 2
 - [B] $\sqrt{2}$
 - [C] $2\sqrt{2}$
 - [D] $\frac{1}{2}\sqrt{2}$

14. The area of a triangle is 5 sq.m. The coordinates of its two vertices are (2,1) and (3,-2) and the third vertex lies on the line y = x + 3. The coordinates of the third vertex will be

$$\begin{bmatrix} -\frac{3}{2}, \frac{3}{2} \end{bmatrix}$$

[B]
$$\left(\frac{3}{2}, -\frac{3}{2}\right)$$

[C]
$$\left(\frac{7}{2}, \frac{14}{3}\right)$$

[D]
$$\left(\frac{7}{2}, \frac{13}{2}\right)$$

15. If $\log 2$, $\log(2^x - 1)$ and $\log(2^x + 3)$ are in A.P., then x is equal to

[A]
$$\frac{5}{2}$$

[B]
$$\log_2 5$$

$$[C] \log_2 3$$

[D]
$$\frac{3}{2}$$

16. *A* speaks truth in 75% of cases and *B* in 80% of cases. The percentage of cases they are likely to contradict each other in stating the same fact is

17. The area bounded by
$$y = x^3, x = 0$$
 and $y = 8$ is

18. If
$$x\sqrt{1+y} + y\sqrt{1+x} = 0$$
, then the value of $\frac{dy}{dx}$ at $x = 1$ will be

[B]
$$-\frac{1}{2}$$

[C]
$$-\frac{1}{4}$$

[D]
$$\frac{1}{2}$$

19. The slope of the tangent to the curve represented by $x = t^2 + 3t - 8$ and $y = 2t^2 - 2t - 5$ at the point M(2,-1) is

[A]
$$\frac{6}{7}$$

[B]
$$\frac{7}{6}$$

[C]
$$\frac{3}{2}$$

[D]
$$\frac{2}{3}$$

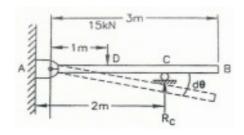
- **20.** Two numbers are selected at random from the numbers 1, 2, 3,.....,10 without replacement. The probability that minimum of the two numbers is less than 5 is
 - [A] $\frac{1}{3}$
 - [B] $\frac{2}{3}$
 - [C] $\frac{1}{2}$
 - [D] $\frac{1}{5}$
- **21.** The length and breadth of a rectangle are 4.5 mm and 5.9 mm. Keeping the number of significant figures in mind, its area in mm² is
 - [A] 22·55
 - [B] 26·55
 - [C] 26·6
 - [D] 27
- **22.** If the units of length and time are doubled, what will be the factor by which the unit of acceleration will change?
 - [A] 1
 - [B] 0·25
 - [C] 0·5
 - [D] 2

- **23.** A ball is being rotated in a circle of radius 5 m with a constant tangential velocity of 20 m/s. A stone is also being rotated in a circle of radius 4 m with a constant tangential velocity of 16 m/s. Which one of the following choices is **true** about both the circular motions?
 - [A] Both have same angular velocity
 - [B] Both have different angular velocity
 - [C] Angular velocity of ball > angular velocity of stone
 - [D] Angular velocity of stone > angular velocity of ball
- **24.** A person of mass 50 kg carrying a load of 20 kg walks up a staircase. The width and height of each step are 0.25 m and 0.2 m respectively. What is the work done by the man in walking 20 steps?

(Assume
$$g = 10 \,\mathrm{m/s^2}$$
)

- [A] 800 J
- [B] 1600 J
- [C] 2000 J
- [D] 1800 J
- **25.** Two spheres , A and B, are made up of the same material. The radius of A is twice that of B, while the temperature of A is half that of B. What is their ratio of energy emitted per unit time $(E_A:E_B)$?
 - [A] 1
 - [B] 1/4
 - [C] 1/2
 - [D] 1/16

- **26.** In Young's double-slit experiment, the two parallel slits are made one millimeter apart and a screen is placed one meter away. What is the fringe separation when blue-green light of wavelength 500 mm is used?
 - [A] 0.5 mm
 - [B] 50 mm
 - [C] 0.25 mm
 - [D] 25 mm
- 27. A beam AB of 3 m length is hinged at A and supported at C on a roller at a distance of 2 m from the hinged end. Determine the reaction of the support at C when the beam carries a load of 15 kN at a distance of 1 m from the hinged end



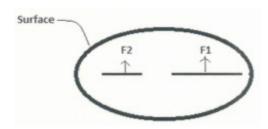
- [A] 3·75 kN
- [B] 15 kN
- [C] 1·37 kN
- [D] 7.5 kN
- **28.** Consider a gas enclosed in a box. A molecule of mass m, having a velocity -2i+3j+4k collides with a wall parallel to the xz plane. What will be its velocity after collision and its change in momentum? [i, j & k are unit vectors along the x, y and z axes]
 - [A] -2i 3j + 4k, -6mj
 - [B] 2i + 3j 4k, -6mj
 - [C] -2i 3j + 4k, 6mj
 - [D] 2i + 3j 4k, 6mj

29. In the given system, masses are released from rest. The Young 's modulus of wire is 10^{11}N/m^2 , length = 1 m and radius = 2 mm. Find elongation in wire when masses are moving. Assume pulley to be frictionless.



- [A] 1.05×10^{-5} m
- [B] 2.00×10^{-5} m
- [C] 3.00×10^{-5} m
- [D] 0.50×10^{-5} m
- **30.** Two beams, one of red light and the other of blue light, of the same intensity are incident on a metallic surface to emit photoelectrons. Which emits electrons of greater frequency?
 - [A] Both
 - [B] Red light
 - [C] Blue light
 - [D] None of the above
- **31.** A wire with a radius of 5 mm is hung freely from the ceiling. A load of 5 N is applied to its free end. Find the elongation in the wire if its volume is 7.85×10^{-5} m³ and Young's modulus is 10^{11} N/m².
 - [A] 6.21×10^{-7} m
 - [B] 7.00×10^{-7} m
 - [C] 6.36×10^{-7} m
 - [D] 8.00×10^{-7} m

- **32.** A liquid cools from 65°C to 55°C in 5 mins. If the surrounding temperature is 35°C, calculate the time taken for temperature to fall from 45°C to 35°C.
 - [A] 25 sec
 - [B] 25 min
 - [C] 30 min
 - [D] 30 sec
- **33.** In which of the following conditions can the Bernoulli equation *not* be used?
 - [A] Viscous flow
 - [B] Incompressible fluid
 - [C] Steady flow
 - [D] Laminar flow
- **34.** Consider two lines on the surface of water kept in a beaker. The length of one line is twice the other. A force will be acting on the lines from either side. What is the ratio of magnitude of F1 and F2?

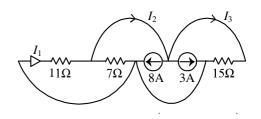


- [A] 2:1
- [B] 1:1
- [C] 1:2
- [D] $\sqrt{2:1}$
- **35.** Calculate its focal length if the radii of curvature of a double convex lens are 10 cm, and 20 cm and its refractive index is 1.75.
 - [A] 50 cm
 - [B] 13 cm
 - [C] 8.9 cm
 - [D] 8 cm

- **36.** If alpha, beta and gamma rays carry the same momentum, which has the longest wavelength?
 - [A] Alpha rays
 - [B] Beta rays
 - [C] Gamma rays
 - [D] All have the same wavelength
- **37.** When an electron jumps from 3rd orbit to 2nd orbit, which series of spectral lines are obtained?
 - [A] Balmer
 - [B] Lyman
 - [C] Paschen
 - [D] Brackett
- **38.** Water molecules contain _____ hydrogen bond/s.
 - [A] intermolecular
 - [B] intramolecular
 - [C] Both intermolecular and intramolecular
 - [D] neither intermolecular nor intramolecular
- **39.** What is the energy that is relased upon the formation of an ionic compound known as?
 - [A] Ionization energy
 - [B] Lattice energy
 - [C] Electron gain enthalpy
 - [D] Electropositivity
- **40.** A compound consists of 52·17% of carbon, 13·04% of hydrogen and 34·78% of oxygen. Find the molecular formula if the given molecular weight of the compound is 46 g.
 - [A] $C_6H_{12}O_6$
 - [B] CHO
 - [C] $C_2H_6O_2$
 - [D] CH₂O

- **41.** Which of the following do you think is a **correct** statement?
 - [A] Oxidation is caused by a reducing agent
 - [B] The oxidation reaction is a Redox reaction
 - [C] Addition of electropositive element is a type of oxidation
 - [D] Reduction is the addition of hydrogen
- **42.** Which of the following is **not** a constituent of DDT?
 - [A] Carbon
 - [B] Fluorine
 - [C] Chlorine
 - [D] Hydrogen
- **43.** The maximum limit of which of the following components in drinking water should be 50 ppb?
 - [A] Lead
 - [B] Sulphate
 - [C] Nitrate
 - [D] Fluoride
- **44.** Arrange the following in the increasing order of electronegativity.
 - [A] $sp^2 < sp < sp^3$
 - [B] $sp^3 < sp^2 < sp$
 - [C] $sp < sp^2 < sp^3$
 - [D] $sp^3 < sp < sp^2$
- **45.** What is Calgon?
 - [A] Potassium phantom metaphosphate
 - [B] Sodium penta metaphosphate
 - $[C] \quad Potassium \ hexametaphosphate$
 - [D] Sodium hexametaphosphate

- **46.** Which of the following are the main constituents of acid rain?
 - [A] Carbon, nitrogen
 - [B] Sulphur, oxygen
 - [C] Sulphur, nitrogen
 - [D] Nitrogen, hydrogen
- **47.** Which of the following is a Lewis base?
 - [A] Ammonia
 - [B] Magnesium chloride
 - [C] Aluminium chloride
 - [D] Sodium ion
- **48.** The location of any element in the periodic table is determined by the _____ of the filled last orbital.
 - [A] Spin quantum number
 - [B] Quantum numbers
 - [C] Azimuthal quantum number
 - [D] Magnetic quantum number
- **49.** Determine currents I_1 , I_2 , and I_3 .

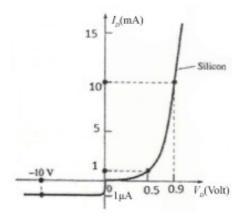


- [A] -3·3 A,-8·5 A, 2·4 A
- [B] 3A,-8A, 2A
- [C] 3·3 A, 8·5 A, -2·4 A
- [D] 3·2 A, 8·6 A, 2·3 A

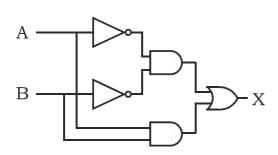
- **50.** Calculate the ratio of the resistivity of 2 wires having the same length and same resistance with area of cross section 2 m² and 5 m² respectively.
 - [A] 5:7
 - [B] 2:7
 - [C] 2:5
 - [D] 7:5
- **51.** How can eddy current loss be minimized in transformer?
 - [A] By using iron core
 - [B] By using air core
 - [C] By using steel core
 - [D] By using laminated iron core
- **52.** If the terminal voltage of 220-V do generator having armature resistance of 1 ohm. The induced e.m.f produced is 200 V. The armature current for the above machine is
 - [A] 20 A
 - [B] -20 A
 - [C] -10 A
 - [D] 10 A
- **53.** In a series RLC circuit, the phase difference between the voltage across the capacitor and the voltage across the inductor is
 - [A] 0°
 - [B] 90°
 - [C] 180°
 - [D] 360°

- **54.** In a given semiconductor at T=300 K, the electron concentration varies linearly from $n = 10^{12} cm^{-3}$ to $n = 10^{16} cm^{-3}$ over the distance from x = 0 to $x = 3\mu m$ and $D_n = 35$ cm²/s. What is the diffusion current density?
 - [A] 187 A/m^3
 - [B] 211 A/m^3
 - [C] 170 A/m^3
 - [D] 145 A/m^3
- **55.** The maximum noise voltage that may appear at the input of a logic gate without changing the logical state of its output is termed as
 - [A] Noise Margin
 - [B] Noise Immunity
 - [C] White Noise
 - [D] Signal to Noise Ratio
- **56.** Which of the following is *incorrect* for a operational amplifier?
 - [A] It has a high voltage gain
 - [B] It is a direct coupled amplifier
 - [C] It is only useful for amplifying AC signals
 - [D] It was originally designed to perform mathematical operations
- **57.** Consider a practical op-amp where the power supply is V_{cc} = +12 V and V_{EE} = -12 V. The open loop gain is 106 and open loop bandwidth is 5Hz. What is the maximum positive input before which the output is saturated?
 - [A] 12 mV
 - [B] 0.012 mV
 - [C] 24 mV
 - [D] 12 V

58. The DC resistances of the diode at $I_D = 10\,\mathrm{mA}$ and $V_D = -10\,\mathrm{V}$ from the characteristic graph given below are respectively



- [A] 90Ω , $10 M\Omega$
- [B] $9 \Omega, 1 M\Omega$
- [C] 100Ω , $50 M\Omega$
- [D] 50Ω , $100 M\Omega$
- **59.** What type of logic circuit is represented by the figure shown below?



- [A] XOR
- [B] XNOR
- [C] AND
- [D] XAND

- **60.** Which of the following options represents the **correct** reduction of $X\overline{Y}Z + \overline{XY}Z$?
 - [A] 0
 - [B] $\bar{Y}Z$
 - [C] $X + \bar{X}$
 - [D] $2\bar{Y}Z$
- 61. VLSI chip utilizes
 - [A] NMOS
 - [B] CMOS
 - [C] BJT
 - [D] All of the above
- **62.** Which of the following is the *correct* sequence of operations in a microprocessor?
 - [A] Opcode fetch, memory read, memory write, I/O read, I/O write
 - [B] Opcode fetch, memory write, memory read, I/O read, I/O write
 - [C] I/O read, opcode fetch, memory read, memory write, I/O write
 - [D] I/O read, opcode fetch, memory write, memory read, I/O write
- **63.** What kind of transmission medium is most appropriate to carry data in a computer network that is exposed to electrical interferences?
 - [A] Shielded twisted pair
 - [B] Coaxial cable
 - [C] Optical fiber
 - [D] Unshielded twisted pair

64. What will happen if the following C code is executed?

```
#include<stdio.h>
int main()
{
   int main=3;
```

printf("%d", main);

Return 0;

}

- [A] It will cause a compile-time error
- [B] It will cause a run-time error
- [C] It will run without any error and prints 3
- [D] It will experience infinite looping
- **65.** The result of arithmetic and logical operations are stored in
 - [A] Accumulator
 - [B] Instruction Register
 - [C] ROM
 - [D] Cache Memory
- **66.** A 'switch' statement in C is used to
 - [A] choose from multiple possibilities which may arise due to different values of a single variable
 - [B] switch from one variable to another variable
 - [C] switch between functions in a program
 - [D] All of the above

67. How many times i value is checked in the following C program?

#include<stdio.h>

```
int main()
{
    int i = 0;
    while (i < 3)
        i + +;
    printf("In while loop\n");
}</pre>
```

- [A] 2
- [B] 3
- [C] 4
- [D] 1
- **68.** Suppose registers 'A' and 'B' contain 50H and 40H respectively. After instruction MOV A, B, what will be the contents of registers A and B?
 - [A] 40H, 40H
 - [B] 50H, 40H
 - [C] 50H, 50H
 - [D] 60H, 40H
- **69.** Bluetooth is the wireless technology for
 - [A] local area network
 - [B] personal area network
 - [C] metropolitan area network
 - [D] wide area network
- **70.** Which type of topology is best suited for large businesses which must carefully control and coordinate the operations of distributed branch outlets?
 - [A] Ring
 - [B] Bus
 - [C] Star
 - [D] Hierarchical

PART—II

(Islamic History and Culture, General English & General Knowledge)

(18	sian	nic History and Culture, Ge
71.	The	third Caliph was
	তৃতীয় খলিফার নাম	
	[A]	Bilal ibn Rabah
	[B]	Khalid ibn Walid
	[C]	Uthman Ibn Affan
	[D]	Zayd ibn Harithah
72.	Insha' allah means ইনশাআল্লাহ কথার অর্থ	
	[A]	Glory to Allah
	[B]	If Allah wills
	[C]	Praise to Allah
	[D]	As per Allah's wills
73 .	Acc	ording to Islam, after death
	ইসলাম অনুসারে মৃত্যুর পরে	
	[A]	human beings will be resurrected
	[B]	reward or punishment will be given
	[C]	Both of the above
	[D]	nothing happens
74.		rings of Prophet Muhammad UH) are called
	নবী মুহাম্মদ (সাঃ)এর বাণীসমূহকে বলা হয়	
	[A]	Nasihat
	[B]	Sifat
	[C]	Akhlaq
	[D]	Hadith
75 .	The	Holy Qur'an has chapters.
	পবিভ	্ব 'কুরআনে' টি অধ্যায় আছে।
	[A]	30
	[B]	99
	[C]	114

- **76.** The shape of Kaaba inside Masjid al-Haram is like a
 - মসজিদুল হারামের অভ্যন্তরে কাবার আকৃতি হল
 - [A] cube
 - [B] sphere
 - [C] cylinder
 - [D] cone
- 77. Prophet Muhammad (PBUH) was a
 - নবী মুহাম্মদ (সাঃ) ছিলেন
 - [A] Tanslator
 - [B] Merchant
 - [C] Peasant
 - [D] Mason
- **78.** Who of the following Prophets was born miraculously?

নিম্নে উল্লেখিত নবীদের মধ্যে কার জন্ম অলৌকিকভাবে হয়েছিল?

- [A] Moses
- [B] Jesus
- [C] Yaqub
- [D] Yusuf
- **79.** At the beginning of any task, Muslims say

কোনো কাজের শুরুতে মুসলিমরা বলে

- [A] bismillah
- [B] inshaallah
- [C] mashaallah
- [D] subhanallah
- **80.** The city of Madinah was known in the past as

অতীতে মদিনা শহর যে নামে পরিচিত ছিল, তা হল

- [A] Taif
- [B] Tabuk
- [C] Yathrib
- [D] Dammam

[D] 786

81. What did Allah (SWT) command the angels to do to Adam (AS)?

আল্লাহ (সুবহানাহু ওয়া তায়ালা) আদম (আঃ)এর প্রতি ফেরেশতাদের কী আদেশ করেছিলেন?

- [A] Test his patience
- [B] Protest
- [C] Degrade
- [D] Bring him food
- **82.** Where did Adam (AS) and Hawwa reside before coming to earth?

পৃথিবীতে আসার আগে আদম (আঃ) ও হাওয়া কোথায় থাকতেন?

- [A] Sahara
- [B] Jahannam
- [C] Madinah
- [D] Jannah
- **83.** As a young boy Prophet Muhammad (SAW) used to work as a

ছোট বালক বয়সে নবী মুহাম্মদ (সাঃ) কোন কাজ করতেন?

- [A] Merchant
- [B] Scientist
- [C] Trader
- [D] Shepherd
- **84.** What is the relation of Aisha (RA) with Prophet Muhammad (SAW)?

হ্যরত মুহাম্মদ (সাঃ)এর সাথে আয়েশা (রাঃ)এর সম্পর্ক কী?

- [A] Siblings
- [B] Husband and wife
- [C] Father and daughter
- [D] None of the above
- **85.** What is the meal to break the fast called?

রোজা ভাঙার খাবারকে কী বলে?

- [A] Suhoor
- [B] Sadaqah
- [C] Tarawih
- [D] Iftar

86. During Ramadan, Muslims refrain from which of the following?

রমজান মাসে মুসলমানরা নিচের কোনটি থেকে বিরত থাকে?

- [A] Sleeping
- [B] Speaking
- [C] Eating and drinking
- [D] Working out
- **87.** What is the meaning of 'Allahu Akbar' in English?

ইংরেজিতে 'আল্লাহু আকবর'এর অর্থ কী?

- [A] Allah is the most praiseworthy
- [B] Allah is the most merciful
- [C] Allah is the greatest
- [D] None of the above
- **88.** What do we say when we hear the name of Prophet Muhammad?

নবী মুহাম্মদের নাম শুনলে আমরা কী বলি?

- [A] Salallahu Alayhi Wasallam
- [B] Sadaqallahul Azim
- [C] Radi Allah Anhu
- [D] None of the above
- **89.** What is the meaning of the term 'Dua' in Arabic?

আরবীতে 'দুআ' শব্দের অর্থ কী?

- [A] Supplication
- [B] Charity
- [C] Prayer
- [D] Fasting
- **90.** How many times does the term 'Allahu Akbar' appear in the call to prayer (Adhan)?

আযানে কতবার 'আল্লাহু আকবর' শব্দটি এসেছে?

- [A] 2
- [B] 4
- [C] 5
- [D] 6

- **91.** Identify the *correct* alternative given below.
 - [A] Misanthropist one who hates or distrusts mankind
 - [B] Misogynist one who hates men
 - [C] Atheist one who believes in the existence of God
 - [D] Philanthropist one who writes life story of another person
- **92.** She dealt with the problem of her client so _____, that even the Judge was _____.

Fill in the blanks with the **correct** alternatives.

- [A] agreeably, satisfied
- [B] inspiringly, appreciating
- [C] diligently, happy
- [D] dexterously, impressed
- **93.** A _____ of arrows.

Fill in the blank with the appropriate collective noun.

- [A] quiver
- [B] fleet
- [C] swarm
- [D] cluster
- **94.** Select the *correct* sentence from the given alternatives.
 - [A] The convict was hung this morning
 - [B] These houses are for the poor to live
 - [C] Neither of the books were interesting
 - [D] What is the time by your watch?
- **95.** A collection of poems or other pieces of writing is called
 - [A] analogy
 - [B] anthology
 - [C] philology
 - [D] cryptology

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96. LED stands for what?

LED মানে কী?

- [A] Light Emitting Device
- [B] Low Emitting Diode
- [C] Light Electronic Diode
- [D] Light Emitting Diode
- **97.** Computer is connected to Internet by which device?

কম্পিউটার কোন যন্ত্রের মাধ্যমে ইন্টারনেটের সাথে সংযুক্ত হয়?

- [A] Modem
- [B] Mouse
- [C] CPU
- [D] RAM
- **98.** Which is the smallest planet in our solar system?

আমাদের সৌরজগতের সবচেয়ে ছোট গ্রহ কোনটি?

- [A] Earth
- [B] Mars
- [C] Mercury
- [D] Saturn
- **99.** The first British Viceroy of India was

ভারতের প্রথম ব্রিটিশ ভাইসরয় হলেন

- [A] Lord Curzon
- [B] Lord Irwin
- [C] Lord Canning
- [D] Lord Tom
- **100.** Which of the following is **not** a feature of the Indian Constitution?

নিচের কোনটি ভারতীয় সংবিধানের বৈশিষ্ট্য নয়?

- [A] Parliamentary Form of Government
- [B] Independence of Judiciary
- [C] Presidential for of Government
- [D] Federal Government

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