Pakistan Institute of Engineering and Applied Sciences

BS ADMISSION TEST (Sample)
TIME ALLOWED: Three (3) Hours

Roll Number: _____ **Question Book No:** _____

Name:_____ **Signature:**_____
      (Use BLOCK Letters)
Please make sure that:

The question book given to you contains hundred (100) questions in all. Section (I): 20 MCQs (English); Section (II): 30 MCQs (Mathematics); Section (III): 30 MCQs (Physics); Section (IV): 20 MCQs (Chemistry/Computer). *The one who attempts for computer in Section (IV) will only be considered for BS Computer & Information Sciences and/or BS Physics program.*	
You are provided with one page printed answer sheet	

Please read the following instructions carefully before attempting the question paper.

1. Do not bend, roll or fold the printed answer sheet.

2. You must write your **Roll No., Name and put your signature** in the spaces provided on this page and also on the answer sheet.

3. **On the printed answer sheet, there are FOUR choices (i.e. A, B, C, and D) for each question. Fill the appropriate choice only with a fine tip black marker or ball point.** Erasing is not allowed. Do not overwrite or fill more than one choice for a single question.

4. There will be no negative marking.

5. The question paper is divided into Four Sections. As your performance in the written test depends on doing well in ALL the Four Sections, you are strongly advised to attempt as many questions as you can from each section.

6. You can do your rough work anywhere on the question paper. *Do not use the answer sheet for any rough work.*

7. Put your pens down as soon as you hear STOP WRITING, otherwise your paper may be cancelled.

8. After the test is over, place your printed answer sheet inside the question paper and return both the question paper and the answer sheet to the invigilator.

9. **Mobile phones are strictly prohibited in the Examination Hall. Anyone found with a mobile phone inside the examination hall, his/her paper will be cancelled.**

10. Use your own calculator only. Borrowing calculator is not allowed.

11. Anyone found using unfair means will be disqualified automatically.

SAMPLE TEST PAPER

Section (I): English *(Questions 1–20)*

Read the following passage and answer the questions given at the end.

Questions 1-2
Although some fish appear capable of swimming at extremely high speeds, most fish, such as trout and minnows, can actually swim only about ten body lengths per second. Translated into kilometers per hour, it means that a 30-centimeter trout can swim only about 10.4 kilometers per hour. Generally speaking, the larger the fish the faster it can swim.
We can understand how fish swim by studying the motion of a very flexible fish such as an eel. The movement is serpentine, with undulations moving backward along the body by alternate contraction of the muscles on either side of the eel's body. While the undulations move backward, the bending of the body pushes sideways against the water, producing a reactive force that is directed forward at an angle. The movement has two components: thrust and lateral force. Thrust is used to propel the fish forward, and lateral force tends to make the fish's head deviate from the course in the same direction as the tail. This side to side head movement is very obvious in a swimming eel, but fish with large, rigid heads have enough surface resistance to minimize the lateral movement.

Q.1. What would 'serpentine, undulated' movement look like, guessing from the passage?
- A) A moving rabbit
- B) A moving crab
- C) A moving earthworm
- D) A moving snake

Q.2. Concluding from the passage above what type of fish that move faster:
- A) Larger fish with small heads in proportion to their bodies
- B) Small fish with small heads in proportion to their body lengths.
- C) Flexible Fish with large heads
- D) Flexible fish with small flexible heads

Q3. What is the synonym of 'CAPACIOUS':
A) Small   B) Huge   C) Inactive   D) Ocean

Fill in the blanks by choosing appropriate words.
Q4. Last year Beckham …………..the football team to victory.

A) lead   B) lay   C) led   D) laid

Q5. A number of individuals ………………displaced from their homes due to flood warning.
A) would be   B) would have been
C) will   D) would have

Q6. Did you …………….. the cricket match on TV yesterday evening?

A) look at   B) see   C) watched   D) watch

Q7. Most people………………… and operating their own schools due to inadequacy of mainstream education.
A) have established   B) are establishing
C) have been established   D) establish

Q8. The battle ……………….. yesterday by great effort and sacrifice of our troops and their commanders.

A) is won   B) has been won
C) had been won   D) was won

Q9. Close your eyes and ………………the sounds coming from outside.

A) listen to   B) hear   C) eavesdrop on   D) listen

Q10. ………………….. hiding behind the tree?

A) Whose   B) Who   C) Who's   D) Whom

Q11. …………………… me, I would be happy to dedicate a few extra hours for the humanitarian cause.

A) As of   B) As for   C) As from   D) As to

Q12. They have a(n)…………………. on the top prize in the competition.

A) advantage   B) edge   C) eye   D) vision

Q13. Ahmed was true to his ………………… when he saved the child's life in the accident but asked for money as a favor from the child's parents.

A) colors   B) tones   C) character   D) self

Q14. Are we …………………… to leave on vacation?

A) already   B) altogether   C) all together   D) all ready

Q15. He is very careful. He…………………………… his children to drive his car in rush hour traffic.

A) does not allow   B) did not allow   C) allowed   D) allow

Q16. The coach's insistence on fitness has become ………………… He yells at players all the time.

A) emotional   B) dilatory   C) obsessive   D) rational

Q17. They …………………………… just reaching the office at 5 p.m. when I finished off my work.

A) have been   B) will be   C) had been   D) were

Q18. Would he like the dinner? I …………………. very hard to make it delicious.

A) will be working   B) will work   C) worked   D) had worked

Q19. Our group will be ……………. by your group at next intersection but the goal of both groups will remain same.

A) joined   B) replaced   C) ignored   D) influenced

Q20. The ……………… applauded enthusiastically after the performance was finished.

A) audience   B) spectators   C) bystanders   D) onlookers

Section (II): Mathematics (Questions 21-50)

Q21. $\begin{vmatrix} 0 & 0 & 1 & 2 & 3 \\ 1 & 2 & 3 & 4 & 5 \\ 0 & 0 & 0 & 3 & 4 \\ 0 & 1 & 0 & 2 & 3 \\ 0 & 0 & 0 & 0 & 2 \end{vmatrix} =$

(A) –6 (B) –3 (C) 6 (D) 0

Q22. **If $y^3 + xy^2 - 2x = 0$ defines y implicitly as a function of x, then the value of $\dfrac{dy}{dx}$ at the point (4, -2) is**

(A) $-\dfrac{1}{2}$ (B) $-\dfrac{1}{8}$ (C) $\dfrac{1}{4}$ (D) $\dfrac{1}{2}$

Q23. **If $a + d \neq 0$ and $\begin{pmatrix} a & b \\ c & d \end{pmatrix}^2 = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$, then ad is**

(A) –1 (B) 0 (C) 2 (D) 1

Q24. **What is the y-intercept of the line tangent to the graph of $y = \dfrac{1}{x}$ at $(2, \dfrac{1}{2})$?**

(A) $-\dfrac{1}{2}$ (B) 0 (C) $\dfrac{1}{2}$ (D) 1

Q25. **The number of values of x where the function $f(x) = \cos x + \cos(\sqrt{2}\, x)$ attains its maximum value is**

(A) 0 (B) 1 (C) 2 (D) ∞

Q26. **If $f(x) = x^3 - 3x + 3x$ then $f(\sqrt[3]{7} + 1)$ equals**

(A) 6 (B) 7 (C) 8 (D) 9

Q27. **If the number of subsets with 4 elements of a set A is equal to the number of subsets with 5 elements of the set, then the number of subsets with 3 elements of this set is:**

(A) 64 (B) 84 (C) 128 (D) none of the above

Q28. **If $f(a.b) = f(a) + f(b)$ and $f(2) = 3$, then $f(32)$ equals**

(A) 9 (B) 12 (C) 15 (D) none of the above

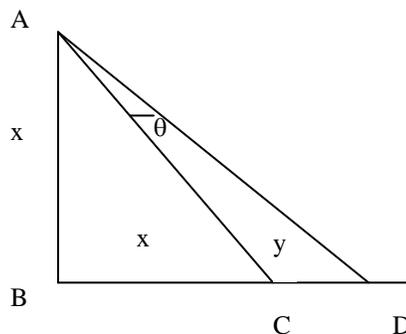Q29. **If $f(x) = x-2$ and $g(x,y) = y^2 + x$, then $g(3, f(4))$ is**

(A) 7 (B) 14 (C) 21 (D) 28

Q30. **If m men can do a job in d days, then m+r men can do the job in:**

(A) d-r days (B) $\dfrac{md}{m+r}$ days (C) $\dfrac{d}{d+r}$ days (D) none of the above

Q31. **Tan θ in the accompanying diagram is:**

(A) $\dfrac{y}{y+2x}$

(B) $\dfrac{x}{y+x}$

(C) $\dfrac{y}{y+x}$

(D) $\dfrac{y}{x}$

Q32. **How many different 3-digit number divisible by 5 can be formed using the elements of the set A = {1,2,3,4,5,6}**

(A) 36   (B) 24   (C) 40   (D) none of the above

Q33. **The sum of the integral values of x so that the function f (x) = $\dfrac{\sqrt{5-x}}{\sqrt{x-1}}$ is defined in the set of real numbers is:**

(A) 14   (B) 15   (C) 5   (D) none of the above

Q34. **If f(x) = 4^x then f(x+1) – f(x) equals**

(A) 4   (B) f(x)   (C) 2f(x)   (D) 3f(x)

Q35. **The sum of roots of equation $x^2 - x + 1 = 0$ is:**

(A) 2   (B) 1   (C) -2   (D) -1

Q36. $\displaystyle\sum_{n\to 0}^{\infty}\left(\dfrac{1}{4}\right)^n =$

(A) $\dfrac{1}{4}$ (B) $\dfrac{3}{4}$ (C) $\dfrac{2}{4}$ (D) none of the above

Q37. **Minimum number of points required to define a plane are**

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

Q38. **If $x = 1 + i$ where $i = \sqrt{-1}$, then x^5 is:**

(A) 2-2i   (B) 2+2i   (C) -2-2i   (D) -2+2i

Q39. **$\log_2 x = \log_c x / ?$**

(A) $\log_2 2$ (B) $\log_2 c$ (C) $\log_c 2$ (D) $\log_c c$

Q40. **What is the radius of the circle with area equal to the area of the following right triangle?**
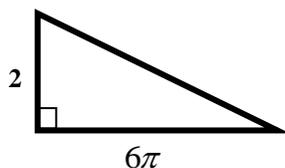
(A) $\sqrt{3}$ (B) $2\sqrt{3}$ (C) $\sqrt{6}$ (D) $2\sqrt{6}$

Q41.   Twelve students in a class average 70% on a certain test. Eighteen others average 80%. What is the overall average of the thirty students as a percent?

(A) $74\dfrac{3}{4}$ (B) $75\dfrac{1}{4}$ (C) 76   (D) $77\dfrac{1}{8}$

Q42.   The cosine of the angle between the vectors -4i+8j-3k and 2i+j+k   is:

(A) $\dfrac{-3}{534}$ (B) $\dfrac{3}{534}$ (C) $\dfrac{3}{\sqrt{534}}$ (D) $\dfrac{-3}{\sqrt{534}}$

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Q50.   The two adjacent sides of a parallelogram are determined by P(4, -3, 1), Q(6,-4, 7) and R(1, 2, 2), with P as the intersecting corner point of the sides. The area of the parallelogram is:

(A) $\sqrt{1410}$ units   (B) $\sqrt{1415}$ units

(C) $\sqrt{1420}$ units   (D) $\sqrt{1425}$ units

Section (III): Physics (Questions 51-80)

Q51. **Of the following subatomic particles, the particle which has the same charge as the positron is;**
(A) Photon
(C) Electron
(B) Alpha particle
(D) Proton

Q52. **A ball is projected vertically upward from the surface of the earth and reaches its maximum height in 4.0 seconds. The ball's initial speed, in meters per second is approximately**
(A) 20
(B) 40
(C) 80
(D) 100

Q53. **The conductivity in metallic wires depends on**
(A) Free electrons only
(B) Positive ions only
(C) Negative ions only
(D) Positive ions, negative ions and electrons

Q54. **Momentum is a quantity whose unit might be the**
(A) foot-pound
(C) erg
(B) newton
(D) gram centimeter per second

Q55. **Two rectangular tanks stand next to each other on a horizontal table. The area of the bottom of the first tank is 40 square centimeters; that of the second tank is 80 square centimeters. Both tanks are filled with water to the same height. The ratio of the liquid pressure on the bottom of the second tank to that of the bottom of the first tank is**
(A) 1
(B) 2
(C) 4
(D) 16

Q56. **Two freely falling objects, one 10 kg and one 20 kg, are dropped from the same height at the same time. Air resistance is negligible. Which of the following statements is (are) true?**
I. **Both objects have the same potential energy at the top.**
II. **Both objects fall with the same acceleration.**
III. **Both objects have the same speed just before hitting the ground.**

(A) III only
(B) I and II only
(C) II and III only
(D) I, II, and II

Q57. **If a stone at the end of a string is whirled in a circle, the inward pull of the string on the stone**
(A) is inversely proportional to the speed of the object
(B) is inversely proportional to the square of the speed
(C) is proportional to the speed
(D) is proportional to the square of the speed

Q58. **A change in temperature of 450 C corresponds to a change in Fahrenheit degrees of**
(A) 25
(B) 45
(C) 81
(D) 113

Q59. **The bending of a bimetallic strip when heated is primarily due to**
(A) the good conductivity of the two metals
(B) the large coefficient of expansion of both metals
(C) the unequal expansion of the two metals
(D) the effect of gravity

Q60. **If a gas is heated at constant pressure, which of the following descriptions will apply?**
I. **Its volume increase is proportional to the temperature**
II. **The kinetic energy of the molecules decreases**
III. **The kinetic energy of the molecules increases**

(A) I only   (C) I and II only

(B) I and III only   (D) II and III only

Q61.   **A 20 ohm and a 60 ohm resistor are connected in series to a DC generator. The voltage across the 20 ohm resistor is 80 volts. The current through the 60 ohm resistor**

(A) cannot be calculated with the given information

(B) is about 1.3 A

(C) is 4.0 A

(D) is 5.0 A

Q62.   **An object is placed 10 centimeters from a concave spherical mirror whose radius of curvature is 12 centimeters. The distance of the image from the mirror is**

(A) 5 cm   (B) 10 cm   (C) 15 cm   (D) 20 cm

Q63.   **Two frequencies sounded together produce 3 beats per second. If one of the frequencies is 400 vibrations per second, the other frequency will be?**

(A) 1200 vib/sec   (C) 403 vib/sec

(B) 397 vib/sec   (D) 133.33 vib/sec

Q64.   **X rays consist of**

(A) a stream of neutrons   (C) a stream of electrons

(B) radiation similar to radon   (D) radiation similar to gamma rays

Q65.   **During the time that sound travels 1100 feet in air, light can travel in vacuum a distance of about**

(A) 1100 miles   (B) 200000 miles   (C) 20000 miles   (D) 11000 km

Q66.   **A spacecraft is approaching the earth. Relative to the radio signals it sends out, the signal received on the earth have**

(A) a lower frequency   (C) a higher velocity

(B) a shorter wavelength   (D) all of the above

Q67.   **All of the following pure elements are good electrical conductors except**

(A) copper   (B) aluminum   (C) silver   (D) iron

Q68.   **Which of the following examples of electromagnetic radiation has the most energy per quantum?**

(A) Radio waves   (B) Microwaves   (C) visible light   (D) X-rays

Q69.   **Three capacitors each of value 0.1F are connected in series, then there total capacitance is closest to**

(A) 0.0333F   (B) 0.3333F   (C) 0.3F   (D) 3.0F

Q70.   **Atomic spectra can be explained by**

(A) The Bohr atomic model   (C) Quantum Mechanics

(B) Quantized orbits of electrons   (D) All of the above

Q71.   **When $^{235}_{92}U$ decays by alpha particle emission, the daughter nuclei formed is**

(A) $^{231}_{90}Th$ (B) $^{233}_{91}Pa$ (C) $^{234}_{91}Pa$ (D) $^{239}_{94}Pu$

Q72.   **We can increase the capacitance of a parallel plate capacitor by**

(A) cooling the plates.

(B) bringing the plates closer together.

(C) decreasing the dielectric constant of the material between the plates.

(D) increasing the voltage across the plates.

Q73.   **Terminal velocity is usually defined as the**

(A) velocity of shock waves

(B) velocity of light in water

(C) velocity at which air resistance balances gravity

(D) All of the above

Q74. **Our sun releases energy by nuclear fusion reactions. What actually happens?**
  (A) Hydrogen is converted to helium
  (B) Helium is converted to hydrogen
  (C) Two nuclei change into one nucleus
  (D) One nucleus splits into two nuclei

Q75. **Water flowing through a tube having variable cross-sectional area is shown in the figure below.**
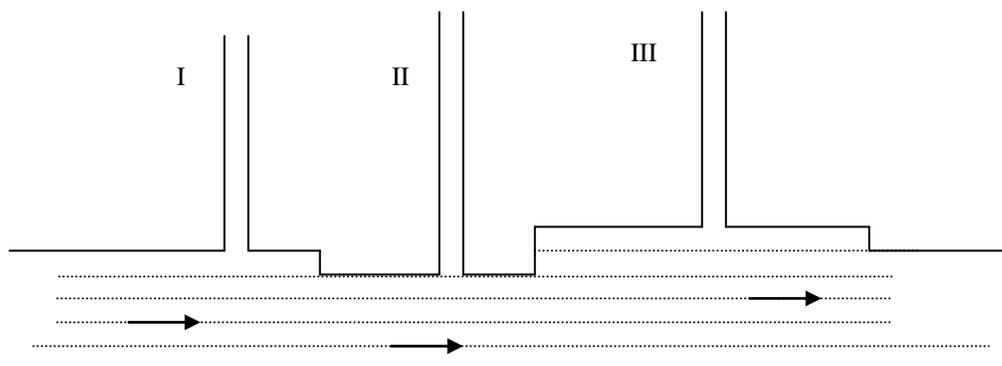
The water will attain the maximum level in
   (A) tube I　　　　(B) tube II　　(C) tube III　　　　　(D) all the tubes.

Q76. **The emf of a cell is quoted as 1.5 V. This means that the cell can supply 1.5**
  (A) Amperes of current　　　　(B) Coulombs of charge

  (C) Joules of energy　　　　(D) Joules of energy per coulomb of charge it delivers

Q77. **If the potential difference between two parts of a thundercloud is 108 V, what is the amount of energy given up during the passage of 20 coulombs?**
  (A) 2×10^{-7} J　　　　(B) 200 J　　　　(C) 2×10^{9} J　　　　(D) 3×10^{9} J

Q78. **The strength of the magnetic field between the poles of an electromagnet would be unchanged if the**
  (A) Current in the electromagnet windings was doubled.

  (B) Direction of the current in the electromagnetic windings was reversed

  (C) Material of the core of the electromagnet was changed

  (D) Number of turns in the electromagnet windings were doubled.

Q79. **A transformer which is 80% efficient gives an output of 10 V and 4 A. What is the input power in W**
  (A)　25　　　　(B) 32　　　　(C) 40　　　　(D) 50

Q80. **A piece of cobalt is known to be source of radiation. The radiation is detected by a suitable device. When a piece of lead 20 mm thick is used as an absorber between the source and the detector the response is still recorded. The radiation is**
  (A) Alpha particle　　　　　　　　(B) Gamma rays
  (C) Beta particle　　　　　　　　(D) high speed cobalt atom

Section (IV): Chemistry (Questions 81-100)

Q81. **1 mole of hydrogen gas is reacted with 1 mole of iodine vapour. After t second, 0.8 mole of hydrogen remains. The number of moles of hydrogen iodide formed at t seconds is**

      (A) 0.2   (B) 0.4   (C) 0.8   (D) 1.6

Q82. **Liquid petrol does not ignite spontaneously when exposed to the air because**

(A) The ΔH for the combustion of petrol is positive

(B) Reaction between petrol and oxygen requires a catalyst

(C) The reactants are in different physical states

(D) Not enough molecules possess sufficient energy to react

Q83. **In the reaction represented by the equation $N_2(g) + 3H_2(g) \rightleftharpoons 2NH_3(g)$, the forward reaction is exothermic. Which set of conditions would give the best yield of ammonia at equilibrium?**

A) 800 atmospheres and 2000 ^{o}C

B) 1 atmosphere and 500 ^{o}C

C) 1 atmosphere and 2000 ^{o}C

D) 800 atmospheres and 500 ^{o}C

Q84. **A sample of copper powder was contaminated with zinc dust. Pure copper was obtained from it by heating with excess of acid, filtering and washing. Which of the following acids was used?**

(A) Dilute nitric acid

(B) Concentrated nitric acid

(C) Dilute hydrochloric acid

(D) Concentrated sulphuric acid

Q85. **In the reaction $2C(s) + O_2 \longrightarrow 2CO(g)$, what mass of carbon is required to form 2.24 liters of CO at S.T.P.?**

    (A) 0.6 g   (B) 1.2 g   (C) 6.0 g   (D) 12.0 g

Q86. **One faraday of electricity will liberate one gram-atom of the metal form a solution of**

    (A) $AuCl_3$ (B) $BaCl_2$ (C) $CuSO_4$ (D)   NaCl

Q87. **The composition of air by volume is approximately 1/5 oxygen, 4/5 nitrogen. When air is passed through red-hot carbon, the following reaction occurs: $2C + O_2(g) \longrightarrow 2CO(g)$. If all of the oxygen is converted to carbon monoxide, what is the composition, by volume, of the gas produced?**

(A) 1/5 carbon monoxide, 4/5 nitrogen

(B) 1/3 carbon monoxide, 2/3 nitrogen

(C) 2/5 carbon monoxide, 3/5 nitrogen

(D) 1/2 carbon monoxide, 1/2 nitrogen

Q88. **An element does not conduct electricity. When it is burned in oxygen and the product is added to water, the resulting solution has a pH less than 7. The element could be**

    (A) Silicon   (B) Sodium   (C) Sulphur   (D) Aluminium

Q89. **Which electron arrangement represents the atom of the most active non-metal?**

    (A) 2, 6   (B)   2, 8, 6   (C)   2, 7   (D)   2, 8, 7

Q90. **Which of the following gases does not give a precipitate with an ammoniacal solution of silver nitrate but decolourizes KMnO4?**
(A) Acetylene   (B) Ethane   (C) Ethylene   (D) Methane

Q91. **Benzaldehyde reacts with PCl5 to give**
(A) Benzal chloride
(B) Benzoyl chloride
(C) Benzyl chloride
(D) Benzophenone

Q92. **Which is the final product of reduction of nitrobenzene?**
(A) Aniline
(B) Azobenzene
(C) Nitrosobenzene
(D) Phenylhydroxylamine

Q93. **The type of isomerism not found in alkenes is**
(A) Chain isomerism
(B) Mesomerism
(C) Position isomerism
(D) Geometrical isomerism

Q94. **Which of the following will dissolve in sodium hydroxide solution?**
(A) Toluene   (B)   Phenol   (C)   Aniline   (D)   Benzene

Q95. **Which of the following describes the effect of a catalyst?**

	Activation energy	Enthalpy of reaction
(A)	decreased	decreased
(B)	decreased	increased
(C)	unchanged	decreased
(D)	decreased	unchanged

Q96. **Oil is solubilized in soapy water by the:**
(A) formation of micelles   (B) Tyndall effect
(C) reverse osmosis process   (D) eutrophication process

Q97. **When ice melts into water entropy …………….**
(A) Becomes zero   (B) Increases
(C) Decreases   (D) Remains constant

Q98. **When potassium salt of acetic acid is electrolysed, acelate ion migrates towards the anode and gives up one electron to produce**
(A) Acetate free radical   (B) Methyl free radical
(C) Ethane   (D) Ethene

Q99. **The reaction between oil and KOH is called**
(A) Condensation   (B) Polymerization
(C) Saponification   (D) Neutralization

Q100. **Orientation of orbitals is given by**
(A) Principal quantum number   (B) Azimuthal quantum number
(C) Magnetic quantum number   (D) Spin quantum number

Section (IV): Computer Science (Questions 81-100)

Q81. **A mechanism that will look for information on different web sites and databases distributed all over the Internet is**
(A) browser   (B) Trojan   (C) search engine   (D) web server

Q82. **A light pen is**
(A) optical input device   (B) electronic input device
(C) optical output device   (D) mechanical input device

Q83. **Each set of bit pattern is called**
(A) Code   (B) Unicode   (C) Coding   (D) ASCII

Q84. **In MS Word, the shortcut key to increase the size of the font is**
(A) Ctrl+}   (B) Ctrl+{   (C) Ctrl+((D) Ctrl+)

Q85. **The locations of memory (RAM) are be accessed**
(A) Randomly   (B) Only Sequentially
(C) Only parallel   (D) Only simultaneously

Q86. **The compilation of a C-language program with only printf prototype will:**
(A) not fail as printf definition is not required at compile time.
(B) fail if no printf definition is available at compile time.
(C) give syntax error as printf definition is not available at compile time.
(D) None of these

Q87. **1TB storage device can store**
(A) 1024GB   (B) 2048GB   (C) 4096GB   (D) 8096GB

Q88. **Which of the following is not an instruction processing device**
(A) Memory Controller   (B) GPU   (C) CPU   (D) DSP

Q89. **The purpose of caches in processor is to exploit**
(A) Temporal and spatial locality   (B) Temporal locality only
(C) Spatial locality only   (D) None of these

Q90. **Which of the following resides in CPU**
(A) ALU, Control Unit, Register File   (B) ALU, Control Unit, RAM
(C) ALU, Control Unit, HDD   (D) ALU

Q91. **URL stands for**
(A) Uniform Resource Locator   (B) Uniform Registered Identifier
(C) Unified Resource Link   (D) Uniform Resource Link

Q92. **A collection of related fields in a database is called**
(A) Record   (B) Character   (C) Database   (D) File

Q93. **In programming language BASIC, statements ending with REM are considered as**
(A) Narrative   (B) Unmarked strings
(C) Marked strings   (D) Unmarked variables

Q94. **CAD stands for**
    (A) Computer Analogue Design   (B) Computer Aided Design
    (C) Computer Algorithm for Design   (D) Computer Application in Design

Q95. **A web server**
    (A) is without a domain name   (B) stores and delivers web pages
    (C) restricts electronic chatting   (D) distributes emails

Q96. **A string of eight 0s and 1s is called a**
    (A) kilobyte   (B) byte   (C) gigabyte   (D) Nibble

Q97. **While communicating, both station can transmit and receive data simultaneously in:**
    (A) Half duplex mode   (B) Simplex mode
    (C) Full duplex mode   (D) Hyper duplex mode

Q98. **The smallest meaningful unit of data in a database is called:**
    (A) Byte   (B) Record   (C) Field   (D) Character

Q99. **In MS Word, the space left between the margin and the start of a paragraph is called:**
    (A) Indentation   (B) Spacing   (C) Alignment   (D) Gutter

Q100. **Physical components that make up your system are known as**
    (A) Firmware   (B) Hardware
    (C) Software   (D) Operating System