

## Model Test – I

### QUESTION SHEET

#### GENERAL INSTRUCTION

1. Write your information (Name, Roll. Number, Date etc.) on your Answer Sheet.
2. Do not write anything on your Question Sheet
3. Use given extra loose sheet for rough work.
4. Mark your correct answers by blackening the appropriate bubble against each question on your Answer Sheet.
5. No negative marks will be given for wrong answers.
6. All pages (Question, Answer Sheet) must be submitted after the examination.
7. Duration of Examination is 2 hours.

*Read the following passage and answer the following question (1-5) given below.*

Broken friendship may be repaired but break is unwanted) Friendship is a precious thing - too precious a treasure to be carelessly broken or thrown away. The world handles the word 'friend' lightly; its real, true, deeper meaning is forgotten.

Your friend is one who appreciates you, your faults as well as your virtues. He understands and sympathizes with your defeats and victories, your aims and ideas, your joys and temptation, your hopes, and disappointments as no one else does or can. It is your friend to whom you turn for counsel, for comfort, for praise; he may not be as learned as some or as wise as others.

Blessed is the man or woman into whose life has come the beauty and power of such a friendship. Prize it well. Do all in your power to keep such a friendship unbroken. Avoid the break, for when it comes it can't be mended and all jarring note mars the harmony.

#### Questions:

- 1) In what way will you judge your sincere friend?
 

a) by his appearance	b) by the way he appreciates your virtues
c) by the way he pinpoints your demerits	d) by the way he appreciates your faults and virtues
- 2) A true friend is one who
  - a) shares with another all the joys of life
  - b) encourages you in your hour of trials and tribulations
  - c) shows lip sympathy
  - d) shares your defeats and victories, aims and ideas, joys and temptations
- 3) We owe our blessed life to
 

a) the experience of moments of loneliness	b) a friend's constant companionship
c) The power and beauty of friendship	d) the feeling that there is someone to honor us
- 4) Why do we turn to sincere friends
 

a) for physical support	b) for financial help
c) for their magnanimity	d) for counsel, comfort and words of cheer
- 5) Friendship ought not to be broken, why?
 

a) Because it will foster discord	b) Because it will make life troublesome
c) Because it will foster pessimistic attitude towards life	
d) Because broken friendship cannot be mended	
- 6) The women at the meeting ..... annoyed by the director' statement.
 

a) is	b) have	c) were	d) has
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- 7) Each of board members ..... own agenda.
 

a) have prepared his	b) is prepared his	c) have prepared their	d) has prepared her
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- 8) He congratulated me for what I .....
 

a) have done	b) did	c) done	d) had done
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- 9) Let us go out, .....?  
 a) won't you                      b) shall we                      c) shan't we                      d) will you
- 10) I often get ..... on.  
 a) move                      b) moved                      c) moving                      d) moves
- 11) I hate ..... my breakfast brought to me in bed.  
 a) to be                      b) being                      c) to have                      d) having
- 12) There are some birds flying .... us in the sky.  
 a) under                      b) below                      c) over                      d) above
- 13) The doctor has private .....  
 a) practise                      b) to practice                      c) practice                      d) Practicing
- 14) If I called her, she .....  
 a) would come                      b) would have come                      c) comes                      d) would came
- 15) His song ..... me badly.  
 a) affect                      b) effect                      c) affects                      d) effects
- 16) You can hear people ..... next door.  
 a) sing                      b) singing                      c) song                      d) sung
- 17) A person skilled with his hands is called  
 a) Loquacious                      b) garrulous                      c) dexterous                      d) calligrapher
- 18) Fear of fire is called  
 a) pyrophobia                      b) thermophobia                      c) acrophobia                      d) Gynophobia
- 19) A person who believes in the existence of God is  
 a) philanthropist                      b) hypochondriac                      c) skeptic                      d) Theist
- 20) The study of weather is called.  
 a) Agronomy                      b) Meteorology                      c) Seismology                      d) Geology
- 21) The food of god is called  
 a) Ambrosia                      b) panacea                      c) Theosia                      d) offerings
- 22) The total or partial loss of language skill due to brain damage is called  
 a) Amnesia                      b) Aphasia                      c) Theosia                      d) Insomnia
- 23) The loss of memory is called  
 a) Amnesia                      b) Aphasia                      c) Theosia                      d) Insomnia
- 24) The sleeping disorder is called  
 a) Amnesia                      b) Aphasia                      c) Theosia                      d) Insomnia
- 25) Killing of one's wife is called  
 a) Matricide                      b) Xenocide                      c) Uxoricide                      d) sororicide
- 26) The "Cell Theory" was given by:  
 a) Robert Hooke                      b) Schleiden and Schwann  
 c) Leeuwenhoek                      d) Purkinje
- 27) Animal cell can be differentiated from a plant cell by the presence of:  
 a) Endoplasm                      b) Ribosome                      c) Mitochondria                      d) Centriole
- 28) The living components of the cell are often termed as:  
 a) Cell particles                      b) Cell inclusions                      c) Cell organelles                      d) Cell organisms
- 29) "Father of Modern Genetics" is referred to:  
 a) Gregor Mendel                      b) Hugo de Vries                      c) Charles Darwin                      d) Spencer
- 30) Double helical model of DNA was proposed by:  
 a) Oparin and Haldane                      b) Miller and Urey                      c) Watson and Crick                      d) Nirenberg and Vries
- 31) Study of algae is known as:  
 a) Agronomy                      b) Phycology                      c) Mycology                      d) Anthology
- 32) Plant body of algae is thalloid, that means:  
 a) Body is multicellular with diversified roots.                      b) Body is developed enough to carry out photosynthesis.  
 c) Body is not differentiated into root, stem and leaf.  
 d) Body is elongated with thick leaves
- 33) Water canal system is present in:  
 a) Poriferans                      b) Arthropods                      c) Nematelminths                      d) Coelenterates
- 34) Which one of the following is not an insect?  
 a) Honeybee                      b) Cockroach                      c) Silverfish                      d) Spider
- 35) Study of coelenterate is referred as:  
 a) Parazoology                      b) Cnidology                      c) Malacology                      d) Coelentology

- 36) What is the locomotory organ of Paramecium?  
 a) No locomotory organ b) Cilia c) Flagella d) Pseudopodia
- 37) Parasites which require two hosts to complete their life cycle are called:  
 a) Amphibious parasites b) Digenetic parasites  
 c) Diploblastic parasites d) Dimorphic parasites
- 38) Five kingdom classification system was proposed by:  
 a) Linnaeus b) Tansely c) Whittaker d) Huxley
- 39) Hepatology is the biology that deals with the study of:  
 a) Blood b) Amphibian and reptiles  
 c) Kidney d) Liver
- 40) Defect of vision in which person can see nearer objects clearly but cannot see distant objects is known as:  
 a) Hypermetropia b) Myopia c) Presbyopia d) Far sightedness
- 41) \_\_\_\_\_ has the same unit and dimensions that of kinetic energy.  
 a) Work b) Force c) Momentum d) Pressure
- 42) The dimensions of gravitational constant G.  
 a)  $[M^{-1}L^2T^{-2}]$  b)  $[M^{-1}L^3T^{-2}]$  c)  $[LT^{-2}LT^{-2}]$  d)  $[M^{-1}L^2T^{-3}]$
- 43) What is the minimum number of coplanar vectors with different magnitudes that can be added to get a resultant of zero?  
 a) 1 b) 2 c) 3 d) 4
- 44) The body moving with uniform velocity changes its.....  
 a) acceleration b) displacement from origin  
 c) speed d) direction of motion
- 45) Initial velocity of body is 5m/s whose acceleration is 10m/s<sup>2</sup>. What is the distance covered in 10 seconds?  
 a) 550m b) 350m c) 250m d) 50m
- 46) Which law of motion is also known as the law of inertia?  
 a) 1<sup>st</sup> b) 2<sup>nd</sup> c) 3<sup>rd</sup> d) 4<sup>th</sup>
- 47) No work is done if  
 a) displacement is zero b) force is zero  
 c) force and displacement are mutually perpendicular d) All of these
- 48) The amount of heat energy Contained in body depend on  
 a) mass b) temperature c) material of body d) All the above
- 49) If the change in Celsius scale is 35 °C, what will be the equivalent change in Fahrenheit scale  
 a) 27 F b) 59 F c) 48.6 F d) 63F
- 50) Electrical resistivity of a given metallic wire depends upon  
 a) Its length b) Its thickness c) Its shape d) Nature of the material
- 51) How much more heat is produced if the current is doubled?  
 a) Twice the original amount b) Thrice the original amount  
 c) Four times the original amount d) Five times the original amount
- 52) Unit of electric power may also be expressed as  
 a) Volt-ampere b) Kilowatt-hour c) Watt second d) Joule second
- 53) The least resistance obtained by using 2 Ω, 4 Ω, 1 Ω and 100 Ω is  
 a) < 100 Ω b) < 4 Ω c) < 1 Ω d) > 2 Ω
- 54) A full length of the image of a distant tall building can be seen using.....  
 a) a convex mirror b) a plane mirror c) a concave mirror d) none of the options
- 55) Concave lens produces.....  
 a) only virtual image b) only erect image  
 c) only diminished image d) virtual, erect, and diminished image
- 56) Electron was discovered by  
 a) Dalton b) E. Goldstein c) J. J. Thomson d) James Chadwick
- 57) Smoke is  
 a) Compound b) Homogeneous mixture  
 c) Heterogenous mixture d) an element
- 58) Molecular formula of dry ice is  
 a) H<sub>2</sub>O b) CO<sub>2</sub> c) NH<sub>3</sub> d) N<sub>2</sub>
- 59) Which of the following is not the property of ionic compound?  
 a) high melting point or boiling point b) normally exist in crystalline solid  
 c) soluble in non-polar solvents d) conduct electricity

- 60) Organic compounds generally have  
 a) low melting and low boiling point  
 c) high melting but low boiling point  
 b) low melting but high boiling point  
 d) high melting and high boiling point
- 61) The types of bonds present in  $\text{SO}_3$  molecule are  
 a) Ionic and covalent  
 c) Ionic and coordinate  
 b) Covalent and coordinate  
 d) only covalent bonds
- 62) Which is an organic compound in the following examples?  
 a)  $\text{CO}_2$   
 b)  $\text{CS}_2$   
 c)  $\text{NH}_3$   
 d)  $\text{H}_2\text{O}$
- 63) Hydrogen was discovered by  
 a) Joseph Priestley  
 b) Michael Faraday  
 c) Henry Cavendish  
 d) Dalton
- 64) The actual credit for the discovery of the periodic table goes to  
 a) Mendeleev  
 b) Moslay  
 c) Dalton  
 d) Bohr
- 65) The longest complete period in the modern periodic table is  
 a) 7  
 b) 6  
 c) 5  
 d) 4
- 66) The first organic compound synthesized in lab is  
 a) Urea  
 b) Methane  
 c) Ethane  
 d) Chloroform
- 67) Generally organic compound are  
 a) electrovalent in nature  
 c) co-ordinate covalent in nature  
 b) covalent in nature  
 d) All of above
- 68) The atomic mass unit is defined as  
 a) Mass of 1 atom of C-12  
 c) Mass of 1 atom of C-14  
 b)  $\frac{1}{12}$  th mass of 1 atom of C-12  
 d)  $\frac{1}{10}$  th mass of an atom of C-12
- 69) How many numbers of electrons are there in the symbol  ${}_{13}^{27}\text{Al}^{3+}$ ?  
 a) 10  
 b) 13  
 c) 27  
 d) 16
- 70) Polyethene is formed by the process of  
 a) Decomposition  
 b) Substitution  
 c) Polymerization  
 d) Rearrangement
- 71) If 5 chairs and 4 benches cost Rs. 600. If a pair of chairs cost Rs. 80, how much does 1 bench cost?  
 a) Rs. 50  
 b) Rs. 80  
 c) Rs. 100  
 d) Rs. 120
- 72) If x % of y is 10, then value of y is:  
 a)  $\frac{10}{x}$   
 b)  $\frac{100}{x}$   
 c)  $\frac{1000}{x}$   
 d)  $\frac{x}{1000}$
- 73) If 120% of a is equal to 80% of b; which of the following is equal to (a + b):  
 a) 3 a  
 b) 2.5 a  
 c) 1.5a  
 d) 5 a
- 74) A cyclist rides 250 meters in one minute, then the speed of the cyclist in kilometer per hour is:  
 a) 30  
 b) 27  
 c) 15  
 d) 7
- 75) If Set A and B have 40 and 70 elements respectively then the maximum number of elements in set  $(A \cup B)$  is:  
 a) 30  
 b) 40  
 c) 70  
 d) 110
- 76) The interior angle of a regular pentagon in degree is:  
 a)  $108^\circ$   
 b)  $180^\circ$   
 c)  $120^\circ$   
 d)  $110^\circ$
- 77) The perimeter of an isosceles right-angled triangle is  $2p$  then its area is  
 a)  $(2 - \sqrt{2}) p^2$   
 b)  $(2 + \sqrt{2}) p^2$   
 c)  $(3 - 2\sqrt{2}) p^2$   
 d)  $(3 + 2\sqrt{2}) p^2$
- 78) If the radius of a circle is doubled by what percentage does the area of the circle changed?  
 a) 400 %  
 b) 300 %  
 c) 200 %  
 d) 100 %
- 79) A square with area 2 square units is inscribed in a circle. The area of circle is:  
 a)  $\pi$   
 b)  $\frac{\pi}{2}$   
 c)  $\frac{\pi}{4}$   
 d)  $\sqrt{2} \pi$
- 80) The price of a commodity has fell down by 15% so that you can buy 3 more commodities for Rs. 1700 then the original price of the commodity was:  
 a) Rs. 200  
 b) Rs. 250  
 c) Rs. 275  
 d) Rs. 500
- 81) The acute angle between the line  $x - 3y = 6$  and  $y = 2x + 5$  is  
 a)  $30^\circ$   
 b)  $45^\circ$   
 c)  $60^\circ$   
 d)  $75^\circ$
- 82) If a number X is 10% more than the number Y, by what percentage Y is less than X?  
 a) 9%  
 b) 10%  
 c) 11%  
 d)  $\frac{100}{11}$  %
- 83) X, Y, and Z together can do a piece of work in 20 days. If X alone can do the same piece of work in 40 days and Y alone in 60 days. In how many days Z alone can do the same work.:  
 a) 120  
 b) 130  
 c) 40  
 d) 160

- 84) If  $2x + 3y + 4z = 70$  and  $4x + 3y + 2z = 200$  what is the arithmetic mean of  $x, y$  and  $z$ ?  
 a) 15                                      b) 20                                      c) 25.                                      d) 30
- 85) A man paid Rs. 118 for income tax at the rate of  $\frac{1}{2}$  paisa per rupee, then his income is:  
 a) Rs. 2300                                      b) Rs. 11800                                      c) Rs. 11000                                      d) Rs. 23600
- 86) What is the primary function of a CPU in a computer?  
 a) Storing data                                      b) Displaying graphics  
 c) Processing instructions                                      d) Connecting to the internet
- 87) What does RAM stand for in a computer?  
 a) Random Access Memory                                      b) Read-Only Memory  
 c) Remote Access Module                                      d) Real-time Application Module
- 88) What is the function of an operating system?  
 a) Store files and folders                                      b) Connect to the internet  
 c) Manage hardware and software resources                                      d) Perform mathematical calculations
- 89) What does HTML stand for?  
 a) Hyper Text Markup Language                                      b) High-level Text Management Language  
 c) Hyperlink and Text Manipulation Language  
 d) Home Tool for Multiple Languages
- 90) What is the function of a compiler?  
 a) Executes instructions                                      b) Converts high-level code to machine code  
 c) Transfers data between devices                                      d) Stores data permanently
- 91) What does URL stand for in the context of the web?  
 a) Uniform Resource Locator                                      b) Universal Resource Language  
 c) Unique Resource Link                                      d) Unified Resource Label
- 92) What is the function of a modem?  
 a) Displays output on the screen                                      b) Connects the computer to the internet  
 c) Stores files and folders                                      d) Reads and writes data to CDs
- 93) What does GUI stand for?  
 a) Graphical User Interface                                      b) General User Input  
 c) Graphical Understanding Interface                                      d) General Utility Interface
- 94) Which of the following is a web browser?  
 a) Microsoft Word                                      b) Google Chrome                                      c) Adobe Photoshop                                      d) Windows Media Player
- 95) What is the purpose of a search engine?  
 a) Connect to the internet                                      b) Play games  
 c) Retrieve information from the web                                      d) Create spreadsheets
- 96) How many bits make up a byte?  
 a) 4                                      b) 8                                      c) 16                                      d) 32
- 97) What is the binary representation of the decimal number 10?  
 a) 1010                                      b) 1100                                      c) 1000                                      d) 1110
- 98) Which of the following best defines software?  
 a) Physical components of a computer                                      b) Instructions that tell the computer what to do  
 c) Hardware components that store data                                      d) Devices used to input data into the computer
- 99) What is the purpose of software updates?  
 a) To increase the price of software                                      b) To fix bugs and security vulnerabilities  
 c) To delete files from the computer                                      d) To upgrade hardware components
- 100) Which type of software allows users to perform mathematical calculations, create graphs, and analyze data?  
 a) Word processors                                      b) Spreadsheet programs  
 c) Presentation software                                      d) Database management systems

# Answer Key

QN	Answer	QN	Answer	QN	Answer	QN	Answer
1	D	26	B	51	C	76	A
2	D	27	D	52	B	77	C
3	C	28	C	53	C	78	B
4	D	29	A	54	A	79	A
5	D	30	C	55	D	80	A
6	C	31	B	56	C	81	B
7	D	32	C	57	C	82	D
8	B	33	A	58	B	83	A
9	B	34	D	59	C	84	A
10	B	35	B	60	A	85	D
11	D	36	B	61	B	86	C
12	C	37	B	62	B	87	A
13	B	38	C	63	C	88	C
14	A	39	D	64	A	89	A
15	C	40	B	65	B	90	B
16	B	41	A	66	A	91	A
17	C	42	B	67	B	92	B
18	A	43	C	68	B	93	C
19	D	44	B	69	A	94	B
20	B	45	A	70	C	95	C
21	A	46	A	71	C	96	B
22	B	47	D	72	C	97	A
23	A	48	D	73	B	98	B
24	D	49	D	74	C	99	B
25	C	50	D	75	D	100	B