DR. A. Q. KHAN SCHOOL & COLLEGE BAHRIA TOWN PHASE-8
MODEL PAPER COMPUTER SCIENCE CLASS: VIII

Time Allowed: 20 Minutes

Name: _____   **Section:** _____

Date: _____   **Invigilator's Signature:** _____

SECTION – A (10 Marks)

Q.1 Fill the relevant bubble against each question according to curriculum

No	Question	A	B	C	D	A	B	C	D
i.	Which one of the following is not a guided transmission media?	Coaxial cable	Twisted pair cable	Fiber-optic cable	Infrared	O	O	O	O
ii.	What is the key characteristic of the Internet of Things(IoT)?	Centralized data processing	Wireless connectivity between devices	Embedded systems in home appliances	Edge computing for data analysis	O	O	O	O
iii.	Which network device would be most suitable for transmitting messages intelligently to the destination device?	Router	Switch	NIC	Access Point	O	O	O	O
iv.	Which Microsoft Excel function checks whether a condition is true or false?	SUM( )	MIN( )	AVERAGE( )	IF( )	O	O	O	O
v.	Which of the following shortcut key is used to Redo the last action performed?	Ctrl+N	Ctrl+X	Ctrl+Y	Ctrl+P	O	O	O	O
vi.	The tab which provides many excel functions categorized in different groups like math, financial, statistical, logical, etc?	Insert Tab	Data Tab	Review Tab	Formulas Tab	O	O	O	O
vii.	Which MS Excel function checks whether a condition is true or false?	SUM( )	MIN( )	IF( )	ELSE( )	O	O	O	O
viii.	_____ is created from algorithm in order to run them on computers.	Flowchart	Pseudocode	English Language	Program	O	O	O	O
ix.	You are developing a pseudocode to display a multiplication table for a given number. Which type of statement would be the most appropriate to use for this task?	IF Statement	Repeat Loops	Nested Loops	IF-ELSE Statement	O	O	O	O
x.	What is the primary role of the server in client-server architecture of an online banking system?	To store the client's login credentials	To process the client's banking transactions	To verify the client's login credentials and provide the requested services	To display the banking interface on the client's web browser	O	O	O	O

Time Allowed: 1.40 Hrs   **Maximum Marks: 40**

SECTION – B (20 Marks)

Q.2 Attempt the following questions briefly. $(10 \times 2 = 20)$

i.	Write down two differences between MAN and WAN.	1 + 1	OR	What is the purpose of blockchain technology?	2
ii.	Is protocol necessary for data communication system? Justify with reason.	1 + 1	OR	Draw the block diagram of transmission media.	2
iii.	Briefly describe any two components of cellular communication.	1 + 1	OR	In your opinion, which computer network would be suitable for your computer lab? Give reason.	2
iv.	What is the purpose of Format painter and wrap text in Microsoft Excel?	1 + 1	OR	Why is there a need of a spreadsheet software for data handling?	2
v.	Date and time feature is present in which tab in MS Excel? Briefly describe that tab.	1 + 1	OR	Write down the function of following shortcut keys: a) Ctrl+X b) Shift+F11	1 + 1
vi.	What do you know about a cell and a cell address in Microsoft Excel?	1 + 1	OR	Write down the steps to create a 2-D column chart?	2
vii.	How an algorithm plays an important role in programming?	2	OR	Write down the syntax of Repeat Loops.	2

viii.	How can you declare and initialize constant and variable?	1 + 1	OR	Define the following:
				  a) Halting Problem
				  b) Pseudocode
					1 + 1

ix.	Differentiate between scope and limitations of a problem.	2	OR	Write a pseudocode that checks whether the input number is a negative number or a positive number or equal to zero.	2
x	What is the purpose of "AutoSum" feature in Excel, and how does it help users quickly calculate sums in a worksheet?	1 + 1	OR	Write a pseudocode that tells a user that the year they entered is a leap year or not.	2

SECTION – C (20 Marks)

Note: Attempt the following questions in detail. $(4 \times 5 = 20)$

Q.3	Explain in detail any two emerging technologies: a) 5G c) AI b) Virtual Reality	$2.5 + 2.5$	OR	What is guided media? Explain any two types of guided media.	$1 + 2 + 2$
Q.4	What is data communication? What are the components of data communication system? Briefly describe.	$1 + 1 + 1 + 1 + 1$	OR	What is the function in MS Excel? Describe the usage of following functions: a) AVERAGE( ) c) MIN( ) b) MAX( ) d) SUM( )	$1 + 1 + 1 + 1 + 1$
Q.5	What do you mean by MS Excel Ribbon? Write down two features of the following tabs: a) Home Tab b) Page Layout Tab	5	OR	a) What is purpose of IF( ) function in MS Excel? Write down the syntax of IF( ) function with the help of an example.	$1.5 + 1$
				b) What are the steps to write down a pseudocode?	2.5
Q.6	Draw a labelled block diagram of computer processing model.	5	OR	Write a pseudocode to calculate a mathematical table of a given number in reverse order and display it on screen.	5