Version No.				
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ROLL NUMBER					

COMPUTER STUDIES
HSSC–II
SECTION – A (Marks 10)

Time allowed: 15 Minutes

Section – A is compulsory. All parts of this section are to be answered on this page and handed over to the Centre Superintendent. Deleting/overwriting is not allowed.

Do not use lead pencil.

حصہ اوّل لازمی ہے۔ اس کے جوابات اسی صفحہ پر دے کر نگرانِ مرکز کے حوالے کریں۔ کاٹ کر دوبارہ لکھنے کی اجازت نہیں ہے۔ لیڈ پنسل کا استعمال ممنوع ہے۔

Answer Sheet No. _____

ہر سوال کے سامنے دیے گئے، کریکولم کے مطابق درست دائرہ کو پُر کریں۔ **Invigilator Sign.** _____

Fill the relevant bubble against each question according to curriculum: **Candidate Sign.** _____

	Question سوال	A	B	C	D	A	B	C	D
1.	A special purpose computer that can perform functions according to the requirement of a product is called:	Mainframe	Personal computer	Embedded computer	Mini computer	○	○	○	○
2.	The component of CPU that decodes the instruction.	Arithmetic and logic unit	Control unit	Register	CACHE	○	○	○	○
3.	1 Giga byte (GB)=	1024 bytes	1024 kilo bytes	1024 mega bytes	1024 tera bytes	○	○	○	○
4.	The binary equivalent of $(54)_8$ is:	$(101100)_2$	$(110110)_2$	$(100101)_2$	$(111001)_2$	○	○	○	○
5.	The expression $3 \wedge 4 - (5+3) * 9$ is evaluated as:	49	27	16	9	○	○	○	○
6.	The symbol to represent an integer variable is:	$	%	!	#	○	○	○	○
7.	In this stage of problem solving the best solution among many is determined:	Problem identification	Specify requirement	Testing and debugging	Analyzing problem	○	○	○	○
8.	Every computer has its own.	Machine language	Assembly language	Programing	Processing language	○	○	○	○
9.	The 2's compliment of $(1101)_2$ is:	$(0010)_2$	$(0110)_2$	$(0011)_2$	$(1011)_2$	○	○	○	○
10.	In departmental stores sales data is entered and price is scanned using:	Barcode reader	ATM	Digital camera	Scanner	○	○	○	○

COMPUTER STUDIES HSSC–II

Time allowed: 2:15 Hours **Total Marks Sections B and C: 40**

NOTE: Answer any eight parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Write your answers neatly and legibly.

SECTION – B (Marks 24)

Q. 2 Write brief answers of any EIGHT parts. **(8 x 3 = 24)**

(i) Give a comparison between analog and digital computer with example.

(ii) Categorize each software as either system software or application software:

a. MS Windows **b.** MS Word **c.** Antivirus **d.** Linux

e. Photoshop **f.** Device Driver

(iii) Write any three operations that are performed by control unit.

(iv) Convert $(A58)_{16}$ into Binary.

(v) Draw a flow chart to display even numbers from 20 to 50.

(vi) Convert the following expressions in their equivalent BASIC statements:

a. $\frac{a+3b}{2c}$ **b.** a^2-b^2 **c.** $\frac{b^2-4ac}{2a}$

(vii) Why is assembly language easier as compared to machine language?

(viii) How are computers used in bank?

(ix) Write down the output of the following code:

```
10  CLS
20  N=1
30  FOR X=1 to 6
40  N=N*X
50  NEXT
60  PRINT N
```

(x) Differentiate between **READ-DATA** statement and **INPUT** statement in **BASIC**.

(xi) Which device is used for voice input in computer? How does it work?

SECTION – C (Marks 16)

Note: Attempt any TWO questions. All questions carry equal marks. **(2 x 8 = 16)**

Q. 3 a. Write a BASIC program that input Fahrenheit temperatures and convert it into Celsius temperature using formula. $c=\frac{5}{9}(F-32)$ **(04)**

b. Calculate 45-28 using 8-bit 2's compliment method. **(04)**

Q. 4 What is RAM? Write down its characteristics. Also discuss its types. **(02+02+04)**

Q. 5 a. Write down some important features and uses of super computer and mainframe computer. **(04)**

b. How are computer used in different fields of commerce like marketing and Stock exchange? **(04)**