# **SCHOOL BASED ASSESSMENT 2024-25**

# **Mid-Term**

# **Computer Education Grade 8**

# **ANSWER KEYS**

Q. No.1 : c	Q. No.2 : b	Q. No.3 : a
Q. No.4 : d	Q. No.5 : c	Q. No.6 : b
Q. No.7 : c	Q. No.8 : a	Q. No.9 : c
Q. No.10 : b		

# **ANSWERS / RUBRICS**

Question No: 11	
	سوال نمبر 11
<u>a )</u> Define simple problem with one example. (3 Marks)	
	ایک مثال کے ساتھ سمپل پراہلم کی وضاحت کریں۔(3نمبر)
Award Two Marks for correct definition of simple problem	
Award One Mark for correct example	
Acceptable Answer:	
Simple problem:	
A simple problem is one with a certain source and a certain	
outcome that is simple to locate and resolve.	
Example:	
Let's say you place food in an oven, but you do not remember to	
set the timer. When left unattended for too long, it burns. Burnt	
food is the result, and you need to eat something else for supper.	
Elaborate complex problem with one example.(3 Marks)	
	مثال کے ساتھ کمپلیکس پر اہلم کی وضاحت کریں۔( 3 نمبر )
A 17 M 1 C	y, 5/20,2 = 1/0   - 2,0

Award Two Marks for correct definition of complex problem AwardTwo Marks for correct examples

# **Acceptable Answer:**

A complex problem has various root causes. While some of these factors could be clear, others might be difficult to find.

## **Example:**

Rising a child

Identify the type of problem for each scenario given below. (4 Marks)

- 1. An algorithm for picnic
- 2. An algorithm for up bringing of child
- 3. An algorithm for making the tea
- 4. An algorithm to convert a decimal to binary number

ذیل میں دیئے گئے ہر بیان کے لیے پر اہلم کی قشم کی شاخت کریں۔ (4 نمبر) 1. پکنک کے لیے الگور تھم 2. بچ کی پر ورش کے لیے الگور تھم 3. چائے بنانے کے لیے الگور تھم 4. ڈیسیمل کو بائنزی نمبر میں تبدیل کرنے کے لیے الگور تھم

Award One Mark for each correct problem type.

### **Acceptable Answer:**

- 1. An algorithm for picnic (Simple Problem)
- 2. An algorithm for up bringing of child (Complex Problem)
- 3. An algorithm for making the tea (Simple Problem)
- 4. An algorithm to convert a decimal to binary number (Complex

Problem)

**Question No: 12** 

سوال نمبر 12

# <u>a</u>) How many values a variable can hold at a time? Write two examples. (2 Marks)

ويرى ايبل ميں ايك وقت ميں كتنى مقداريں آسكتى ہيں؟ دومثاليں كھيں۔(2نمبر)

#### Item Rubric (English):

Award One Mark for the correct number of values in a variable.

Award Half (0.5) Mark for each correct example of a variable.

#### Acceptable Answer:

A variable can hold only one value at a time.

#### **Examples**

Name, Roll\_No, Class and Gender etc.

#### Differentiate between if and if-then-else conditions with an examples. (3 Marks)

if اور if-then-else کنڈیشنز میں مثالوں کے ساتھ فرق بتائیں۔(3نمبر)

#### Item Rubric (English):

Award One Mark for each correct definition of if and if-then-else conditions.

Award Half (0.5) Mark for each correct example of if and if-then-else.

#### **Acceptable Answer:**

# If Condition:

A statement or block of statements that are only executed if a specific condition is true.

#### **If-then-else Condition:**

A statement or block of statements that are only executed if a specific condition is true otherwise it goes to the else statement or block of statements to execute.

### **Examples:**

- 1. If it is cold outside; we would take tea. Or any other related example.
- 2. If it is cold outside; we would take tea, otherwise we enjoy ice cream.

Or any other related example.

#### Write an algorithm that prints even numbers from 2 to 100. (5 Marks)

الگور تھم لکھیں جو 2سے 100 تک جفت اعدادیرنٹ کروائے۔ (5نمبر)

#### Item Rubric (English):

Award One Mark for each correct step of the algorithm that prints even numbers.

## Acceptable Answer:

Step 1: Start

Step 2: Declare the value 2 to Num

Step 3: Print the value Num

Step 4: Add 2 to num

Step 5: if the Value of Num < 100, repeat steps 3 and 4

Step 6: Stop

**Question No: 13** 

موال نمبر 13

<u>a)</u> Write a short note on forever block. (5 Marks)

Forever بلاك پر مخضر نوٹ لکھیں۔(5 نمبر)

Item Rubric (English):

Award Five Marks for correct short note on forever block.

#### **Acceptable Answer:**

#### **Forever Block:**

Forever block is used to execute any command written within this block. If the project is running and stop button is not pushed, the instructions contained in the forever block continue to be executed forever. This is very helpful for things like making background music or others actions that don't need to stop.

Write difference between repeat and repeat until. (5 Marks)

Repeat Until اور Repeat میں فرق بیان کریں۔(5 نمبر)

### Item Rubric (English):

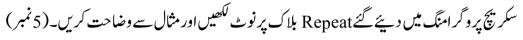
Award Five Marks for correct difference between Repeat and Repeat Until.

#### **Acceptable Answer:**

#### **Difference between Repeat and Repeat Until:**

Repeat	Repeat Until
Repeat Block is used to play a loop a specific	Repeat Until Block allows to play a loop until
number of times. This block helps to control	some condition is true. A loop and a condition
the loop function using some condition. For	are combined in repeat until block. The block
example, if user enter repeat block in code	determines whether the condition is true or
and enter repeat condition for 5 times. It	false. For example, if repeat until assigned as
means the loop function will run 5 times and	x>5, then block will determine whether
then stop.	condition is true or false. If the condition is
	true the loop will stopped.

Write a short note on Repeat block in Scratch programming. Explain with an example. (5 Marks)



#### Item Rubric (English):

Award Three Marks for correct explanation of Repeat Block.

Award Two Mark for correct example of Repeat Block.

#### **Acceptable Answer:**

#### **Repeat Block:**

Repeat Block is used to play a loop a specific number of times. This block helps to control the loop function using some condition.

## Example:

If user enter repeat block in code and enter repeat condition for 5 times. It means the loop function will run 5 times and then stop.