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Worksheet -1 Subject: - Computers Class: - V Teacher: - Mrs. Suudha Sharma

Name: _____ Class & Sec: _____ Roll No. ____ Date: 04. 04.2020

Lesson 1: Development of Computers

- People used to count and calculate using knots in ropes, notches in sticks, scratches on rocks and drawing lines on ground when there were no devices to compute.
- **Abacus** is the first known calculating device. It is believed that Chinese invented Abacus around 3000BC. Abacus has two parts separated by mid-bar. The upper deck is called heaven and lower deck is earth. There are 2 beads in each string in heaven and each has value 5.
- **Napier's bones** was invented by a Scottish mathematician John Napier in 1617. There are 11 rods in a set of Napier's bones and numbers are engraved in each rod. The rods are aligned properly to read the result using Napier's bones. They could be used to multiply and divide numbers.
- John Napier's principal invention is **Logarithm** a branch of mathematics to multiply and divide very large or very small numbers. Napier invented Logarithm in 1614.
- Slide Rule was invented in 1620 by English mathematician William Oughtred. Slide Rule contains two or more sliding scales which can be properly aligned and the result is obtained by inspection. It could be used to multiply and divide numbers.
- A French mathematician **Blaise Pascal** invented an Adding Machine called **Pascaline** in 1642. It can add or subtract numbers by dialing wheels. Blaise Pascal designed this device to help his father who was a tax officer.
- **Stepped Reckoner** was invented in 1671 by a German mathematician Gottfried Wilhelm von Leibnitz. Leibnitz refined Pascal's Adding Machine and made Stepped Reckoner capable to add, subtracts, multiply, divide and even find square root.
- **Punched Card** was invented by a French textile manufacturer Joseph Jacquard to automate his weaving loom. These cards later used in computers to feed data.
- Charles Babbage designed **Difference Engine** in 1923 and **Analytical Engine** in 1933. Charles Babbage is known as **Father of Computing**.

Note: View this link also: (<u>https://www.youtube.com/watch?v=K0QXBJMOngM</u>)

Q.1. Fill in the blanks:

- 1. In 1933, ______ designed an 'analytical engine' that performed calculations.
- 2. Ancient people used______, _____ and ______ for counting.

3. The ______ is the first tool created by man for calculations.

Set of rods used to perform multiplications is called ______.

5. The first gear device is ______.

Q.2. Match the following:

1. Punched CardsAbacus2. Chineseadd, subtracts, multiply, divide and square root 3. Slide3. Multiply and Divide NumbersJoseph Jacquard

Page | 2 4. Stepped Reckoner Slide Rule Q.3. Unscramble the following words: 1. SOENB PRIENA 2. NILEACSAP 3. EFIDEFCREN GNEENI Q.4. Identify the following 1. 2. - Andread and a start of the elahan (1) C. 3.

HOMEWORK

Draw the following in your Answer sheets and colour them properly:

- 1. Abacus
- 2. Slide Rule

Class 5: Worksheet1

Answers

Lesson 1: Development of Computers

Q.1. Fill in the blanks:

- 1. Charles Babbage
- 2. Fingers, sticks and stones
- 3. Abacus
- 4. Napier Bones
- 5. Pascaline

Q.2. Match the following:

- 1. Joseph Jacquard
- 2. Abacus
- 3. Slide Rule
- 4. add, subtracts, multiply, divide and square root

Q.3. Unscramble the following words:

- 1. Napier Bones
- 2. Pascaline
- 3. Difference Engine

Q.4. Identify the following

- 1. Abacus
- 2. Napier Bones
- 3. Slide Rule