**Question Set1 for Class 9**

**(Question/Exercise/Activities)**

**Topics – Vector operations, Cascading calculations, circular referencing, functions, ranges,**

**Q1.** Show cascading calculations – A customer purchases a product whose cost is Rs 6000. If there is a 10% discount applicable on the price of the item and a 12.5% VAT on the discounted price, compute the discounted price and the net price of the item. Show the pictorial representation of referencing used in the calculation.

**Q2.** The price of 4 products A, B, C and D is given as 340, 480, 537 and 633 respectively. Find out the discount applicable on these if the discount rate is 15% using vector operation.



*Hint: Select all the output cells and input cells while creating the formula*

**Q3.** Try to solve the following equations. Comment on your findings.

B = A + 2

C = B + 5

A = C/2

*Hint: Circular referencing is not allowed in Excel unless File>options>Formula>Enable iterative calculations is not enabled. Normally having a circular referencing is an indication of an error.*

**Q4.** In question no 2, find the total discount applicable on all 4 products together.

*Hint: Use the sum function*

**Q5.** In question no 4, use the sum to show the use of individual cells and ranges as parameters.

*Hint: cells and ranges.*

**Q6.** Generate sequence numbers using formulas.

*Hint: Generate every next number from the previous number by incrementing that by 1*

**Q7.** Generate an arithmetic progression using formula.

*Hint: Do the same as in Q7 with increment value as d*

**Q8.** Generate first 10 numbers of a geometric progression.

*Hint: Style 1 – Generate every next number from the previous number by multiplying by r. Style2 – Generte powers in one columns and generate terms of geometric series in the second column in such a way that the corresponding power values are used.*

**Q9.** Compute the area of a circle by using pi function.

*Hint: The function pi() gives the value of pi*

**Q10.** Generate 10 random numbers between 0 and 1

*Hint: Use rand function*

**Q11.** Generate 10 random numbers between 50 and 80.

*Hint: Use rand() or randbetween() functions*

**Q12.** Find out if a person is fail or pass from the percentage of marks obtained by the student by using the rule that student scoring 40% or more is declared pass and student scoring less than 40% is declared fail.

*Hint: Use of if() function.*