BCM SCHOOL, BASANT AVENUE, LUDHIANA

INFORMATION TECHNOLOGY (402) – CLASS IX

ANSWER KEY – ASSIGNMENT: ELECTRONIC SPREADSHEET

Total Marks: 30

SECTION A – MCQs (15 × 1 = 15 Marks)

Q. No.	Correct Answer
1	b) Formula
2	a) =B2+C2
3	b) =B3*C3
4	b) =AVERAGE(B2:B31)
5	c) MAX
6	a) Filter
7	b) Descending sort
8	b) The column is too narrow to display the value
9	b) The formula will automatically ignore the deleted cell and include the remaining values
10	a) Column chart
11	b) =E2/F2*100
12	b) They are temporarily hidden from the displayed result
13	a) Relative cell references adjust automatically for different rows
14	a) Line chart
15	b) Use formulas and appropriate functions

SECTION B – HIGHER-ORDER & COMPETENCY-BASED QUESTIONS (15 Marks)

Q16. Case-Based Question – 3 Marks

a) Formula: =SUM(B2:D2) (or =B2+C2+D2)

b) A formula automatically performs the calculation and updates the result whenever the subject marks are changed. It saves time and reduces calculation errors.

c) If Maths changes from 85 to 90:

Old Total = 78 + 85 + 82 = 245

New Total = 78 + 90 + 82 = 250

The Total will automatically change to 250 because the formula recalculates when the referenced value changes.

Q17. Application-Based Question – 3 Marks

a) Use Sort → Descending order to arrange percentages from highest to lowest.

b) Use Filter to display only students scoring 90% or above.

c) Use a Column Chart because it is suitable for visually comparing the number of students across different sections.

Q18. Problem-Solving Question – 3 Marks

a) After inserting a new column between C and D, the original formula should be checked to ensure that the newly inserted subject is included as intended.

b) Use a SUM function over the continuous range, for example: =SUM(B2:E2), if the subjects occupy B2:E2.

c) SUM makes the spreadsheet easier to maintain because it can calculate a complete range of cells and reduces the need to manually write individual cell references.

Q19. Competency-Based Question – 3 Marks

1. Highest number of high-performing students: Use Sort. Sort the number of students scoring above 90% in descending order to identify the highest value.

2. Students in a particular performance category: Use Filter. Filter the relevant category to display only matching students.

3. Visual comparison of sections: Use a Column Chart. It makes comparison between sections easy and clear.

Q20. HOTS Question – 3 Marks

Any four appropriate actions/features:

1. Check and correct formulas – Verify percentage formulas such as =Total/Maximum*100 to correct calculation errors.

2. Use Sort – Arrange students in the required order, such as highest to lowest percentage.

3. Use Filter – Filter records to inspect only the required students/categories instead of checking all records manually.