**Chapter 16**

**Analysis of Time Series**

**Identify the Times Series Tend**

1. **Increased demand for foot-wears before Eid.**
2. Secular Trend
3. Seasonal Variations
4. Cyclical fluctuations
5. Irregular movements
6. **The decline in death rate due to advancement in science.**
7. Secular Trend
8. Seasonal Variations
9. Cyclical fluctuations
10. Irregular movements
11. **A steel strike, delaying production for a week.**
12. Secular Trend
13. Seasonal Variations
14. Cyclical fluctuations
15. Irregular movements
16. **Rise in the prices of certain consumer goods due to tax increase in the annual budget.**
17. Secular Trend
18. Seasonal Variations
19. Cyclical fluctuations
20. Irregular movements
21. **An era of prosperity in a business.**
22. Secular Trend
23. Seasonal Variations
24. Cyclical fluctuations
25. Irregular movements
26. **The festival sale.**
27. Secular Trend
28. Seasonal Variations
29. Cyclical fluctuations
30. Irregular movements
31. **The production of sugar recorded for 1986, 1987, …, 1992.**
32. Secular Trend
33. Seasonal Variations
34. Cyclical fluctuations
35. Irregular movements
36. **The weekly statement of the sale of pens.**
37. Secular Trend
38. Seasonal Variations
39. Cyclical fluctuations
40. Irregular movements
41. **A fire in a factory delaying production for 3 weeks.**
42. Secular Trend
43. Seasonal Variations
44. Cyclical fluctuations
45. Irregular movements
46. **An after Eid sale in a departmental store.**
47. Secular Trend
48. Seasonal Variations
49. Cyclical fluctuations
50. Irregular movements
51. **A need for increased wheat production due to a constant increase in population.**
52. Secular Trend
53. Seasonal Variations
54. Cyclical fluctuations
55. Irregular movements
56. **The monthly rainfall in inches in a city over a 5 – year period.**
57. Secular Trend
58. Seasonal Variations
59. Cyclical fluctuations
60. Irregular movements
61. **A recession in a business.**
62. Secular Trend
63. Seasonal Variations
64. Cyclical fluctuations
65. Irregular movements
66. **An increase in employment during summer months.**
67. Secular Trend
68. Seasonal Variations
69. Cyclical fluctuations
70. Irregular movements
71. **A continually increasing demand for smaller automobiles.**
72. Secular Trend
73. Seasonal Variations
74. Cyclical fluctuations
75. Irregular movements

**Choose the correct answer**

1. **The graph of a time series is called \_\_\_\_\_\_.**
2. Histogram
3. Historigram
4. Ogive
5. Polygon
6. **Secular trend is what kind of variation?**
7. Short Term
8. Long Term
9. Inconsistent
10. Short Term and Inconsistent
11. **Seasonal variations are \_\_\_\_\_\_\_ in nature.**
12. Irregular
13. Regular
14. Uncertain
15. Stochastic
16. **Secular trend has \_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_.**
17. Booms, Depressions
18. Smoothness, Steadiness
19. Fluctuations, Hikes
20. Irregularity, Uncertainty
21. **Irregular variations are not \_\_\_\_\_\_\_\_\_ in nature.**
22. Uncertain
23. Random
24. Regular
25. Stochastic
26. **The increase in the school fee in private schools is a / an \_\_\_\_\_.**
27. Secular Trend
28. Seasonal Variations
29. Cyclical fluctuations
30. Irregular movements
31. **The increase in the number of patients in the hospitals is like \_\_\_\_\_\_\_ in a time series.**
32. Secular Trend
33. Seasonal Variations
34. Cyclical fluctuations
35. Irregular movements
36. **The increase in the number of patients of heat stroke in summer is like \_\_\_\_\_\_\_\_\_\_\_ in a time series.**
37. Secular Trend
38. Seasonal Variations
39. Cyclical fluctuations
40. Irregular movements
41. **The secular trend is measured by a straight line when a time series has a / an \_\_\_\_\_\_\_\_\_\_ trend.**
42. Upward
43. Downward
44. Linear
45. Upward and Downward
46. **The secular trend is measured by Semi – Averages method when trend is \_\_\_\_\_.**
47. Linear
48. Quadratic
49. Both Linear and Quadratic
50. Exponential
51. **The straight line is fitted to a time series when the movements in the time series are \_\_\_\_\_\_.**
52. Linear
53. Quadratic
54. Exponential
55. Cubic
56. **In the measurement of secular trend by the method of least squares, the number of years can be:**
57. Odd
58. Even
59. Odd and Even
60. None of these
61. **For a least square linear trend, , the is \_\_\_\_\_\_\_ of the line and is \_\_\_\_\_\_.**
62. an intercept, the slope
63. the slop, an intercept
64. dependent variable, independent variable
65. independent variable, dependent variable
66. **Which of the following statement is NOT true about seasonal variations?**
67. Seasonal variations can be used for yearly, quarterly and monthly data.
68. Seasonal variations can be measured only when the time series contains yearly values
69. Seasonal variations can have cyclical variations.
70. Seasonal variations are because of different seasons in a time period, whether it can be festivals, weather or any other special event.
71. **In the measurement of secular trend, the moving averages \_\_\_\_\_\_\_\_.**
72. Give the trend in a straight line
73. Measure the seasonal variations
74. Smooth out a time series
75. None of them
76. **For a least square trend ,**
77. None of them
78. **For a least square trend , the when**
79. All the – values lie on the line.
80. All the – values are positive.
81. All the – values lie above the line.
82. None of them