Statistics MCQ Question Bank

First Paper

Chapter 03
Measures of Central Tendency

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1. **The arithmetic mean of first n natural numbers-**
   (a) $\frac{n}{2}$ (b) $\frac{n+1}{2}$ (c) $\frac{n^2}{2}$ (d) $\frac{n^2-1}{2}$

2. **When is the relationship $AM = HM = GM$ true?**
   (a) All values are equal   (b) The values form a geometric progression
   (c) The values form an arithmetic progression   (d) All values are distinct

3. **In the presence of outlier(s), which measure of central tendency is suitable?**
   (a) Arithmetic mean   (b) Median   (c) Quadratic mean   (d) Power mean

4. **If a rate is defined as $R = \frac{c}{d}$, where c is constant, then which measure is perfect?**
   (a) Weighted arithmetic mean   (b) Harmonic mean
   (c) Quadratic mean   (d) Weighted geometric mean

   Answer the next two questions as per the following information.

   42 44 59 64 70 72 74 91 94 are 9 values.

5. **What is the 50th percentile?**
   (a) 64   (b) 70   (c) 72   (d) 71

6. **Below which value lie 70 percent values?**
   (a) 42   (b) 44   (c) 59   (d) 74

7. **Which measure might have more than one value?**
   (a) Arithmetic mean   (b) Geometric mean   (c) Quadratic mean   (d) Mode

8. **Above which value lie 30% observations?**
   (a) 3rd Quartile   (b) Median   (c) 30th Percentile   (d) 70th percentile

9. **Arithmetic means of three groups having equal no. of items are 30, 32, and 34. What is the combined mean?**
   (a) 30.33   (b) 32.67   (c) 32.00   (d) 33.00

Answer Key:

1. (b) $\frac{n+1}{2}$

2. (a) All values are equal

3. (b) Median

4. (b) Harmonic mean

5. (b) 70

6. (d) 74

7. (d) Mode

8. (d) 70th percentile

9. (c) 32.00