## Mathematical and Statistical teachniques- FYBCom - Sem I

1. When the market value of a share is more than its face value , then the share is said to be
(a) At par
(b) At a discounted rate
(c) At a premium rate
(d) None of the above
2. If Suresh invests Rs 10,320 on Rs 100 share at a discount of Rs 14 , then the number of shares he buys is
(a) 110
(b) 120
(c) 130
(d) 150
3. The value of ${ }^{8} P_{3}+{ }^{7} P_{2}$ is
(a) 654
(b) 645
(c) 564
(d) 378

4 The number of 3 letter words that can be arranged using the letters of the word 'FLOWER' exactly once is $\qquad$ .
(a) 20
(b) 720
(c) 120
(d) 6

5 If there are extreme values present in the data the following measure is suitable
(a) Arithmetic Mean
(b) Median
(c) Harmonic Mean
(d) Geometric Mean

6 If there are 2 groups with 50 observations each and with 25 and 35 as values of AM , the combined mean of 100 observation is
(a) 25
(b) 30
(c) 35
(d) 50

8 If a random variable X has the following probability distribution $\mathrm{X}-1-212 \mathrm{P}$ ( x ) $1 / 31 / 61 / 31 / 6$ Then the expected value of $X$ is
(a) 1.5
(b) 1
(c) 0.5
(d) none of the above

9 Which of the following is not a component of decision making?
(a) Decision maker
(b) States of nature
(c) Course of actions
(d) Profiting organization

10 For the following pay-off table, what is the expected monitory value (EMV) of $A_{2}$ ?

| Course of actions | States of nature |  |  |
| :---: | :---: | :---: | :---: |
|  | $S_{1}$ | $S_{2}$ | $S_{3}$ |
| $A_{1}$ | 24 | 36 | -26 |
| $A_{2}$ | 32 | 22 | 16 |
| $A_{3}$ | 12 | -8 | 0 |
| $A_{4}$ | 28 | 42 | 34 |
| Probability | 0.3 | 0.5 | 0.2 |

(a) 46
(b) 70
(c) 6.36
(d) 23.8

