

**PUNE VIDYARTHI GRIHA'S
COLLEGE OF SCIENCE & TECHNOLOGY**

**FYBCOM Sem - I
Examination JAN 2020**

Subject :- Mathematical and Statistical Techniques

Note:1. Attempt any 40 from given 50 Question

Total 60 Marks

2. Each correct question Carry 1.5 marks

Time:- 1 hour

1. The smallest part of total capital is called _____
 - a) Mutual fund
 - b) Dividend
 - c) Share
 - d) Face value
2. The face value of equity share is Rs _____
 - a) 1
 - b) 10
 - c) 100
 - d) 1000
3. _____ market deals with share and purchase of existing shares
 - a) Primary
 - b) Secondary
 - c) Urban
 - d) Rural
4. There are _____ types of mutual fund
 - a) 1
 - b) 2
 - c) 3
 - d) 4
5. _____ is calculated as the difference between assets and liabilities of scheme
 - a) Assets
 - b) Liabilities
 - c) Net assets
 - d) NAV
6. Number of shares = _____
 - a) Face value of all shares / Face value of 1 shares
 - b) Market value of all shares / Face value of 1 shares
 - c) Face value of all shares / Market value of 1 shares
 - d) Face value of all shares / Market value of all shares
7. Total Gain =
 - a) Gain on 1 share + number of shares
 - b) Gain on 1 share \times number of shares

- c) Gain on 1 share / number of shares
d) Gain on 1 share - number of shares
8. Find the number of shares if the total dividend at 8% on the shares with face value Rs.10/- was Rs. 240.
a) 300
b) 500
c) 700
d) 600
9. Investors can invest in mutual fund by purchasing _____
a) shares
b) product
c) Units
d) commodity
10. N.A.V = _____
a) Net Assets of the Scheme/ Total number of Units outstanding
b) Net Assets of the Scheme + Total number of Units outstanding
c) Net Assets of the Scheme - Total number of Units outstanding
d) Net Assets of the Scheme \times Total number of Units outstanding
11. The value of 6! Is _____
a) 6
b) 12
c) 720
d) 240
12. n_{P_0} = _____
a) n
b) 0
c) 1
d) -1
13. In combination of n objects taken r at a time, the order in which the selection is done is ____
a) Important
b) Same
c) Different
d) Not important
14. $Ax+By=C$ is known as _____ equation
a) Linear
b) Parallel
c) Perpendicular
d) Scalar
15. _____ is called the objective function
a) z
b) r
c) s
d) t
16. The value of $C(4,2)$ is _____
a) 1
b) 2
c) 3
d) 4
17. In how many ways can the letters of the word "FATHER" be arranged?

- a) 710.
 - b) 720
 - c) 730
 - d) 740
18. Find the coordinates for the given equation $x + y - 3 \geq 0$
- a) (0,3), (3,0)
 - b) (3,0), (0,3)
 - c) (0,-3), (-3,0)
 - d) (0,-1), (-1,0)
19. The _____ is the method available for solving an LPP.
- a) Graphical method
 - b) Least cost method
 - c) MODI method
 - d) Hungarian method
20. In how many ways can 6 boys and 4 girls be made to stand for a photograph?
- a) 10!
 - b) 20!
 - c) 30!
 - d) 40!
21. Measures of Central tendency is divided into _____ types
- a) 1
 - b) 2
 - c) 3
 - d) 4
22. The ratio of summation of all objects to the total number of observation is called
- a) Mean
 - b) Median
 - c) Probability
 - d) mode
23. _____ is the mid value of arranged data
- a) Mean
 - b) Median
 - c) Mode
 - d) Percentile
24. _____ is the value of the highest frequency
- a) Mean
 - b) Median
 - c) Mode
 - d) mean deviation
25. Quartile divide the series into _____ parts
- a) 2
 - b) 3
 - c) 4
 - d) 5
26. The sum of N observations is 630 and their mean is 42, then the value of N is _____.
- a) 25
 - b) 20
 - c) 15

- d) 16
27. Measure of spread or scatter of data is called
- a) measure of dispersion
 - b) measure of Central tendency
 - c) range
 - d) coefficient of range
28. $Q_3 - Q_1 / Q_3 + Q_1$ is _____
- a) coefficient of Quartile deviation
 - b) coefficient of Mean deviation
 - c) coefficient of standard deviation
 - d) coefficient of mode
29. Ungrouped frequency distribution can be divided into _____ types
- a) 1
 - b) 2
 - c) 3
 - d) 0
30. is represented in the form of rectangle.
- a) frequency polygon
 - b) frequency curve
 - c) table
 - d) histogram
31. For a statistical experiment every possible outcome is called
- a) Sample
 - b) Sample point
 - c) Value
 - d) Probability
32. The probability of appearing both tail when two coins are tossed is _____
- a) 1
 - b) $\frac{1}{2}$
 - c) $\frac{1}{4}$
 - d) 4
33. $E(X)$ is the arithmetic _____ of X
- a) Mean
 - b) Median
 - c) Mode
 - d) Quartile
34. The sum of all probabilities of given observation is always _____
- a) 1
 - b) 0
 - c) 2
 - d) -1
35. Any subset of sample space of experiment is called
- a) Event
 - b) Subset
 - c) Sample
 - d) Values
36. Probability lies between:
- a) -1 and +1
 - b) 0 and 1
 - c) 0 and n

- d) 0 and ∞
37. The events having no experimental outcomes in common is called:
- Equally likely events
 - Exhaustive events
 - Mutually exclusive events
 - Independent events
38. _____ is denoted by $V(X)$
- Variance
 - Mean
 - Median'
 - mode
39. The term 'event' is used for:
- Time
 - A sub-set of the sample space
 - Probability
 - Total number of outcomes
40. $P(A)+P(A^c)=$ _____
- Zero
 - One
 - Infinity
 - Less than one
41. There are _____ types of decision making criterion
- 1
 - 2
 - 3
 - 4
42. Decision tree calculation _____ begins from left to right
- Sometimes
 - Always
 - Never
 - Rarely
43. Maximum criterion is a decision making under _____
- Risk
 - No risk
 - Certainty
 - Uncertainty
44. What makes the difference between good decisions and bad decisions?A)
- A good decision is based on logic.
 - A good decision considers all available data.
 - A good decision considers all alternatives.
 - A good decision applies quantitative approaches.
45. A measurable quantity that is inherent in the problem is called a _____
- decision variable.
 - uncontrollable variable.
 - algorithm.
 - parameter
46. States of nature are also known as _____
- Outcomes

- b) Objects
 - c) Event
 - d) Space
47. _____ is known as expected pay off
- a) EMV
 - b) EOL
 - c) EPPI
 - d) ESL
48. The best course of action is the one with _____ pay off
- a) Maximum
 - b) Minimum
 - c) Equal
 - d) Unequal
49. The probability is assigned to each _____.
- a) State of nature
 - b) Acts
 - c) payoffs
 - d) actions
50. A decision node is represented by _____
- a) Square
 - b) Rectangle
 - c) Line
 - d) Circle