

HALL TICKET NO:

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**Ph.D. in Management Studies**  
**Entrance Examination – 2018**  
**(80 Marks)**

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**INSTRUCTIONS**

1. *Write your Hall Ticket Number in the OMR Answer sheet given to you. Also write the Hall Ticket Number in the space provided above.*
2. *The question paper booklet consists of Part A and B which carries 80 questions. Each question carries one (1) mark. There is negative marking for Part A only. Each wrong answer carries – 0.33 marks.*
3. *Answers are to be marked on the OMR answer sheet following the instructions provided thereupon.*
4. *Hand over OMR answer sheet to the invigilator before leaving the examination hall.*
5. *No additional sheets will be provided. Rough work can be done in the question paper itself or in the space provided at the end of the booklet.*
6. *Calculators, mobile phones and electronic gadgets are not allowed.*

## PART A

*(Each wrong answer carries – 0.33 marks for this Part only)*

1. Exercise is to Gym as eating is to

- A. Food
- B. Dieting
- C. Fitness
- D. Restaurant

2. Optimist is to cheerful as pessimist is to

- A. Gloomy
- B. Mean
- C. Petty
- D. Helpful

3. Find out the alternative which will replace the question mark.

MASTER: OCUVGT::LABOUR: ?

- A. NCDQWT
- B. NDERWT
- C. NBERWT
- D. NEDRWT

4. What is the exact OPPOSITE of “Rebuked”?

- A. Awarded
- B. Praised
- C. Invited
- D. Received

5. Ignorance: Education: : Disease : ?

- A. Hospital
- B. Doctor
- C. Medicine
- D. Nurse

6. The price of 2 sarees and 4 shirts is Rs. 1,600. With the same money one can buy 1 saree and 6 shirts. If one wants to buy 12 shirts, how much shall he have to pay?

- A. Rs. 1,200
- B. Rs. 2,400
- C. Rs. 4,800
- D. Rs. 3,200

7. Running at the same constant rate, 6 identical machines can produce a total of 270 bottles per minute. At this rate, how many bottles could 10 such machines produce in 4 minutes?

- A. 648
- B. 1,800
- C. 2,700
- D. 10800

8. In a camp, there is a meal for 120 men or 200 children. If 150 children have taken the meal, how many men will be catered to with remaining meal?

- A. 20
- B. 30
- C. 40
- D. 50

9. If 'air' is called 'green', 'green' is called 'red', 'red' is called 'sea', 'sea' is called 'blue', 'blue' is called 'water' and 'water' is called 'pink', then what is the colour of grass?

- A. Green
- B. Air
- C. Red
- D. Pink

10. In the first 10 overs of a cricket game, the run rate was only 3.2. What should be the run rate in the remaining 40 overs to reach the target of 282 runs?

- A. 6.25
- B. 6.5
- C. 6.75
- D. 7

11. A grocer has a sale of Rs. 6,435, Rs. 6,927, Rs. 6,855, Rs. 7,230 and Rs. 6,562 for 5 consecutive months. How much sale must he have in the sixth month so that he gets an average sale of Rs. 6,500?

- A. Rs. 4,991
- B. Rs. 5,991
- C. Rs. 6,001
- D. Rs. 6,991

12. Two bus tickets from city A to B and three tickets from city A to C cost Rs. 77 but three tickets from city A to B and two tickets from city A to C cost Rs. 73. What are the fares for cities B and C from A ?

- A. Rs. 4, Rs. 23
- B. Rs. 13, Rs. 17
- C. Rs. 15, Rs. 14
- D. Rs. 17, Rs. 13

13. A's son B is married with C whose sister D is married to E the brother of B. How D is related to A?

- A. Sister
- B. Daughter-in-law
- C. Sister-in-law
- D. Cousin

14. The calendar for the year 2007 will be the same for the year:

- A. 2014
- B. 2016
- C. 2017
- D. 2018

15. There are two examinations rooms I and II. If 10 students are sent from I to II, then the number of students in each room is the same. If 20 candidates are sent from II to I, then the number of students in I is double the number of students in II. The number of students in room I is:

- A. 20
- B. 80
- C. 100
- D. 200

16. Which type of research provides the strongest evidence about the existence of cause-and-effect relationships?

- A. Non-experimental research
- B. Experimental research
- C. Survey research
- D. Archival research

17. What is the standard deviation of a sampling distribution called?
- A. Sampling error
  - B. Sample error
  - C. Standard error
  - D. Simple error
18. If there were a perfect positive correlation between two interval/ratio variables, the Pearson's  $r$  test would give a correlation coefficient of:
- A. - 0.328
  - B. +1
  - C. +0.328
  - D. -1
19. The group that receives the experimental treatment condition is the \_\_\_\_\_.
- A. Experimental group
  - B. Control group
  - C. Participant group
  - D. Independent group
20. A sampling interval of 5 was used to select a sample from a population of 1,000. How many elements are to be in the sample?
- A. 5
  - B. 50
  - C. 100
  - D. 200
21. If the study is carried out once and represent a snapshot of one point in time, then the study is \_\_\_\_\_.
- A. Time related study
  - B. Longitudinal study
  - C. Cross sectional study
  - D. Case study
22. In \_\_\_\_\_, each sample has equal and known chance of selection.
- A. Simple random sampling
  - B. Cluster sampling
  - C. Stratified sampling
  - D. Snowball sampling

23. Respondents are asked to rate an attitude object on a number of multiple-point rating scales bounded at each end by one of two bipolar adjectives or phrases. This type of scale is called:
- A. Dichotomous Scale
  - B. A Semantic Differential Scale
  - C. Stapel Scale
  - D. Likert Scale
24. Personal interviewing of a certain percentage of individuals who pass by certain points in a shopping centre is also known as
- A. On-site interviewing
  - B. Focus group interviewing
  - C. In-home interviewing
  - D. Intercept interviews
25. Reliability is mostly a matter of \_\_\_\_\_, while validity is mostly about \_\_\_\_\_
- A. Consistency, accuracy
  - B. Accuracy, consistency
  - C. Similarity, dissimilarity
  - D. Similarity, consistency
26. Which type of reliability refers to the consistency of a group of individuals' scores on two equivalent forms of a test designed to measure the same characteristic?
- A. Split-half
  - B. Test-retest
  - C. Split-forms
  - D. Equivalent forms
27. Research that is done to examine the findings of someone else using the "same variables but different people" is which of the following?
- A. Exploration
  - B. Hypothesis
  - C. Replication
  - D. Empiricism
28. A \_\_\_\_\_ scale only assigns numbers to objects to classify the objects according to the characteristic of interest.
- A. Ratio
  - B. Ordinal
  - C. Nominal
  - D. Interval

29. If an organisation has 12,000 employees and the researcher is able to interview 250 the probability of inclusion in the sample is?
- A. 1 in 96.
  - B. 1 in 20.
  - C. 1 in 48.
  - D. 1 in 250.
30. If Raju has a percentile score of 53, you would interpret this score saying that:
- A. 53 percent of the items were correctly answered.
  - B. Raju's performance equaled that of 53 percent of the group tested.
  - C. 53 percent of the group tested had a score at or below Raju's.
  - D. 53 percent of the group tested had a score at or above Raju's.
31. If you drew all possible samples from some population, calculated the mean for each of the samples, and constructed a line graph (showing the shape of the distribution) based on all of those means, what would you have?
- A. A population distribution
  - B. A sample distribution
  - C. A sampling distribution
  - D. A parameter distribution
32. The use of the laws of probability to make inferences and draw statistical conclusions about populations based on sample data is referred to as \_\_\_\_\_.
- A. Descriptive statistics
  - B. Inferential statistics
  - C. Sample statistics
  - D. Population statistics
33. A statistical test used to compare 2 or more group means is known as \_\_\_\_\_.
- A. One -way analysis of variance
  - B. Post hoc test
  - C. t-test for correlation coefficients
  - D. Simple regression
34. The theorem supporting the statement that, when the number of sample is large, almost all test statistics follows normal distribution
- A. Neyman-Pearson theroem
  - B. Central limit theorem
  - C. Bernoullie's laws
  - D. None of these

35. A \_\_\_\_\_ is a numerical characteristic of a sample and a \_\_\_\_\_ is a numerical characteristic of a population.

- A. Sample, population
- B. Population, sample
- C. Statistic, parameter
- D. Parameter, statistic

Study the following table and answer the questions 36 to 40.

**Expenditures of a Company (in Lakh Rupees) per Annum Over the given Years.**

Year	Item of Expenditure				
	Salary	Fuel and Transport	Bonus	Interest on Loans	Taxes
1998	288	98	3.00	23.4	83
1999	342	112	2.52	32.5	108
2000	324	101	3.84	41.6	74
2001	336	133	3.68	36.4	88
2002	420	142	3.96	49.4	98

36. What is the average amount of interest per year which the company had to pay during this period?

- A. Rs. 32.43 lakhs
- B. Rs. 33.72 lakhs
- C. Rs. 34.18 lakhs
- D. Rs. 36.66 lakhs

37. The total amount of bonus paid by the company during the given period is approximately what percent of the total amount of salary paid during this period?

- A. 0.1%
- B. 0.5%
- C. 1%
- D. 1.25%

38. Total expenditure on all these items in 1998 was approximately what percent of the total expenditure in 2002?

- A. 62%
- B. 66%
- C. 69%
- D. 71%



39. The total expenditure of the company over these items during the year 2000 is?

- A. Rs. 544.44 lakhs
- B. Rs. 501.11 lakhs
- C. Rs. 446.46 lakhs
- D. Rs. 478.87 lakhs

40. The ratio between the total expenditure on Taxes for all the years and the total expenditure on Fuel and Transport for all the years respectively is approximately?

- A. 4:7
- B. 10:13
- C. 15:18
- D. 5:8

### PART B

41. Using a successful brand name to introduce additional items in a given product category under the same brand name (such as new flavors, forms, colours, added ingredients, or package sizes) is known as:

- A. line extension.
- B. brand extension.
- C. Multi-branding.
- D. New brands.

42. In terms of special product life cycles, a \_\_\_\_\_ is a basic and distinctive mode of expression.

- A. genre
- B. style
- C. fashion
- D. fad

43. \_\_\_\_\_ is a person's distinguishing psychological characteristics that lead to relatively consistent and lasting responses to his or her own environment.

- A. Psychographics
- B. Personality
- C. Demographics
- D. Lifestyle

44. Cognitive dissonance occurs in which stage of the buyer decision process model?

- A. Need recognition
- B. Information search
- C. Evaluation of alternatives
- D. Post purchase behaviour

45. Strategic business unit with low market share and high market growth is considered as
- A. Cash Cows
  - B. Stars
  - C. Dogs
  - D. Question marks
46. Considering strategic planning, 'Organizations purpose' statement is known as
- A. Vision statement
  - B. Mission statement
  - C. Value proposition
  - D. Both A and B
47. Profitable but less loyal customers are known as
- A. Butterflies
  - B. Strangers
  - C. True friends
  - D. Barnacles
48. Customer equity is defined as:
- A. The total combined customer lifetime values of all the company's customers
  - B. The total combined supplier lifetime values of all the company's suppliers
  - C. The total combined stock value of all the company's warehouses
  - D. All of the above
49. Which of the following is not part of the marketing concept?
- A. Customer needs
  - B. Integrated marketing
  - C. Profits through customer satisfaction
  - D. Profits through sales volume
50. Diversification is characterized by which of the following?
- A. Producing existing products for the existing market
  - B. Offering new products to current markets, by building new factories
  - C. Starting up or buying businesses outside of its current products and markets
  - D. All of the above
51. The following is not a major contributor in the development of Control Charts and Sampling plan
- A. F H Dodge
  - B. H G Roming
  - C. Walter Schewhart
  - D. J M Juran

52. Productivity increases when
- A. inputs increase while outputs remain the same
  - B. inputs decrease while outputs remain the same
  - C. inputs and outputs increase proportionately
  - D. outputs decrease while inputs remain the same
53. Which of the following is a basic assumption of PERT?
- A. There is only one complete route from the start of a project to the end of a project.
  - B. No activity in the network must be repeated.
  - C. Only critical path activities in the network must be performed.
  - D. Activity completion times are known with certainty.
54. Given last period's forecast of 65, and last period's demand of 62, what is the simple exponential smoothing forecast with an alpha of 0.4 for the next period?
- A. 63.8
  - B. 65
  - C. 63.2
  - D. 62
55. One hundred percent Inspection
- A. Is practical and an excellent fit for world-class manufacturers?
  - B. Means that every part is checked to see whether or not it is defective.
  - C. Means that only good parts will be shipped to a customer.
  - D. Catches all of the defective parts.
56. A product-oriented layout
- A. Addresses the layout requirements of large, bulky projects such as ships and buildings.
  - B. groups workers, their equipment, and spaces/offices to provide for movement of information
  - C. Seeks the best personnel and machine utilization in repetitive or continuous production.
  - D. Deals with low-volume, high-variety production.
57. A store wants to ensure a shelf full of marshmallow peeps as the holiday season approaches. Daily demand for peeps is normally distributed with a mean of 25 and a standard deviation of 5. Lead time is 3 days and the store intends a 98% service level. What is their reorder point?
- A. 87
  - B. 75
  - C. 107
  - D. 93

58. Which cost would NOT be included in the traditional view of maintenance but would be considered in the full cost view of maintenance?

- A. the cost of inventory used to decouple production and demand in case of a breakdown
- B. cost of labor to repair a broken device
- C. preventive maintenance cost
- D. cost of parts to repair a broken device

59. Which of the following is NOT a property of linear programming problems?

- A. optimization of some objective
- B. usage of only linear equations and inequalities
- C. the presence of restrictions
- D. one course of action

60. Which of the following is NOT needed to use the transportation model?

- A. the cost of shipping one unit from each origin to each destination
- B. degeneracy
- C. the origin points and the capacity or supply per period at each
- D. the destination points and the demand per period at each

61. Using simulation for a queuing problem

- A. Would be reasonable even if service times were not exponential.
- B. Would not be reasonable in a realistic situation.
- C. Is an unreasonable alternative if the arrival rate is not Poisson distributed but can be plotted on a curve.
- D. Cannot be done due to the complexity of the queuing formulas.

62. A product whose EOQ is 400 experiences a 50% increase in demand. The new EOQ is

- A. unchanged
- B. increased by less than 50%
- C. increased by 50%
- D. increased by more than 50%

63. Coping style refers to:

- A. How a personality style deals with stress
- B. Strategies that remain relatively consistent over time and circumstances
- C. The effort to manage psychological stress in a given situation
- D. How well someone copes with stress

64. Personal stress includes:

- A. Poor refereeing decisions, hot weather, challenging opponents
- B. Competitive stress, physical errors, mental errors
- C. Weather conditions, opponents playing well, vociferous audience
- D. Cold weather, biased judges, vocal home support

65. According to Lazarus's cognitive-motivational-relational theory, primary appraisal is:

- A. The relevance of a situation to a person's well-being in terms of his or her goals
- B. The motivation to protect oneself from threats
- C. The attention to detail in a threatening environment
- D. A focus upon options for coping

66. No single characteristic or trait explains why some people emerge as leaders although there is reliable evidence to argue that a personal characteristic apart from personality is also influential. What is that characteristic?

- A. Consideration
- B. Intelligence
- C. Wealth
- D. Culture

67. Which of the following reflects the relatively stable behavioural tendencies that individuals display across a variety of situations?

- A. Motivation
- B. Personality
- C. Emotion
- D. Perception

68. Maslow's hierarchy of needs is based on which premise?

- A. All humans acquire a similar set of motives through genetic endowment and social interaction.
- B. Some motives are more basic or critical than others.
- C. The more basic motives must be satisfied to a minimum level before other motives are activated.
- D. All of the above

69. Theory X assumes which of the following

- A. People regard work as normal activity
- B. People achieve little satisfaction from work
- C. People seek out responsibility
- D. People are self-motivated

70. In leadership trait theory what is a trait?
- A. A list of the things that make leaders different to everyone else.
  - B. A list of the key things that a leader should do to be great.
  - C. The list of key behaviours a leader exhibits.
  - D. A list of key characteristics that makes a leader great.
71. ----- is appropriate investment objective for investors who want their portfolio to grow in real terms, i.e., exceed the rate of inflation.
- A. Capital Preservation
  - B. Capital Appreciation
  - C. Portfolio growth
  - D. Value additivity
72. The asset allocation decision must involve a consideration of
- A. Cultural differences
  - B. The objectives stated in the investor's policy statement
  - C. The types of assets that are appropriate for investors
  - D. All the above
73. Banks typically
- A. Have low liquidity needs
  - B. Face few central and state constraints
  - C. Don't have to compete for funds
  - D. Have high liquidity needs and short time horizon constraints
74. Antiques, art, coins, stamps, jewelry are not included in the normal investment portfolios of financial institutions because
- A. Prices vary substantially
  - B. Transaction costs are relatively high
  - C. They are illiquid
  - D. All of the above
75. A statistic that measures how two variables tend to move together is the
- A. Coefficient of variation
  - B. Correlation coefficient
  - C. Standard deviation
  - D. Mean
76. In order to diversify risk an investor must have investments that have correlation with other investments in the portfolio that are
- A. Low positive
  - B. Zero
  - C. Negative
  - D. Any of the above

77. What effect a stock split can have on a price weighted index series?
- A. Index remains the same, divisor will increase/decrease
  - B. Divisor remains the same, index will increase/decrease
  - C. Index and divisor both reflect the changes immediately
  - D. Not enough information is provided
78. A portfolio manager without superior analytical skills should
- A. Determine and quantify the risk preferences of the client
  - B. Minimize the transaction cost
  - C. Maintain the specific risk level
  - D. All of the above
79. The correlation between market return and risk free rate would be
- A. + infinity
  - B. - infinity
  - C. Perfect positive correlation of 1
  - D. Zero
80. Consider a 12% 15 years bond that pays interest semiannually, and its current price is Rs.675. What is the promised yield to maturity?
- A. 10.23%
  - B. 18.45%
  - C. 17.77%
  - D. 2.31%

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