

BUNTS SANGHA'S
S.M. SHETTY COLLEGE OF SCIENCE, COMMERCE AND
MANAGEMENT STUDIES, POWAI
FYBMS – SEMESTER 2

SAMPLE QUESTIONS

PRINCIPLES OF MARKETING

Q.N O	O.NO .	QUESTIONS AND OPTIONS
1		Marketing is
	A	An art only
	B	Absolute science
	C	An art as well as science
	D	Mathematical
2		The basic 4Ps of Marketing includes Product, Price, Promotion and _____
	A	Place
	B	Presentation
	C	Publicity
	D	Public
3		The variable 'Price' of Marketing Mix does not include
	A	List Price
	B	Credit limit
	C	Mode of payment
	D	Credit score of customer
4		According to Boom and Bitner's extended marketing mix, Process means
	A	How the customer is served
	B	what is the mode of payment

	C	How the product Is manufactured
	D	How the raw material is procured
5		_____ aren't essential for humans to survive, but it's associated with needs and are changing with time, location etc.
	A	Need
	B	Want
	C	Thirst
	D	Desire
6		Which of the following does not hold true in context with marketing during Industrial Revolution?
	A	Large Scale Production
	B	Intensive Market Research
	C	No concept of customer satisfaction
	D	Low price and wide distribution
7		The essence of _____ is Develop deep enduring relationship with all key people and organisations
	A	The Selling Concept
	B	The Product Concept
	C	The Production Concept
	D	The Relationship Marketing Concept
8		Mother gives gift to daughter. It is an example of _____
	A	Transfer
	B	Exchange
	C	Negotiation
	D	Transaction
9		Which is the correct sequence of managerial functions in marketing? 1. Strategizing and planning 2. Directing 3. Evaluating and controlling 4. Determining objectives 5. Coordinating 6. Organizing
	A	1,2,3,4,5,6
	B	4,1, 6, 2, 5, 3

	C	4,1, 2,3,5,6
	D	6,5,4,3,2,1
10		_____ is the systematic collection, analysis, and interpretation of data pertaining to the marketing conditions of an organization
	A	Product Development
	B	Market Development
	C	Market research
	D	Market penetration
11		The word _____ is derived from the Old French word promocion meaning to "move forward"
	A	Positioning
	B	Packaging
	C	Promotion
	D	Production
12		_____ means to influence behaviour to take desired action
	A	Positioning
	B	Packaging
	C	Persuasion
	D	Production
13		_____ activities are conducted to create a favorable and positive image for the company
	A	Public Relations
	B	Publicity
	C	Personal Selling
	D	Sales Promotion
14		_____ is a study conducted to find out how well the advertisement/ advertising campaign accomplishes its objectives
	A	Consumer research
	B	Product research

	C	Sales Research
	D	Advertising research
15		_____ is the behaviour a consumer displays in searching for, purchasing, using and disposing of products and services that they expect will satisfy their needs
	A	Consumer cost
	B	Consumer behaviour
	C	Consumer Expectation
	D	Consumer Satisfaction
16		_____ are the individual who uses the product, but may or may not buy it
	A	Consumer
	B	Retailer
	C	Customer
	D	Manufacturer
17		Patanjali offers products for toiletries, spices, medicinal products. These categories are called as _____
	A	Product areas
	B	Product line
	C	Product specialization
	D	Product style
18		Brand _____ means creating an image in the mind of consumer using brand identity initiatives
	A	Positioning
	B	Placing
	C	Pricing
	D	Packaging
19		The stage of PLC at which the company should invest maximum in marketing and innovation is ____
	A	Introduction stage
	B	Growth Stage

	C	Maturity stage
	D	Decline stage
20		_____ dimension of product planning includes eliminating unprofitable products
	A	Product Research
	B	Product Development
	C	Product Modification
	D	Product Discontuation
21		_____ is a Systematic process of developing large number of new product ideas
	A	Idea Screening
	B	Idea Generation
	C	Business Analysis
	D	Commercialization
22		Go Error which may occur during idea screening for new product generation is
	A	A good idea may get rejected
	B	A good Idea may get selected
	C	A bad idea may get selected
	D	A bad idea may get accepted
23		Which of the following is the reason for product failure?
	A	Desirable features of the product
	B	Incorrect estimation of the competitors strengths
	C	Appropriate pricing
	D	Perfect launching time
24		_____ is the commercial value that derives from consumer perception of the brand name of a particular product or service
	A	Brand Identity
	B	Branding

	C	Brand Building
	D	Brand Equity
25		_____ is the process of dividing a market of potential customers into groups.
	A	Segmentation
	B	Marketing
	C	Promotion
	D	Branding

INDUSTRIAL LAW

1. Employees Provident Fund Act is administered by
 - a. Central government
 - b. State government
 - c. Corporation
 - d. Central and State government

2. The maximum pay for coverage under the Employees Provident Fund Act is Rs. ___ per month
 - a. 5000
 - b. 6500
 - c. 8000
 - d. 10000

3. The rate of minimum widow pension is Rs. ___ per month
 1. 300
 2. 450
 3. 600
 4. 750

4. The Employers are required to contribute to the Insurance Fund at the rate of ___% of the emoluments.
 - a. 0.1
 - b. 0.5
 - c. 1.5
 - d. 2.0

5. The Medical Benefit in the Employees State Insurance Act is divided into _ parts
 - a. 2
 - b. 3
 - c. 4
 - d. 5

6. To promote measures for securing and preserving amity and good relations between the employer and workmen is a duty of
 - a. Work Committee
 - b. Labour Court
 - c. High Court
 - d. Supreme Court

7. The computation of Available surplus is found in Section ___ of The Payment of Bonus Act, 1965
 - a. 2
 - b. 3
 - c. 4
 - d. 5

8. All factories and establishments in which ___ or more workers are employed, the Payment of Bonus Act, 1965 is applicable
 - a. 10
 - b. 15
 - c. 20
 - d. 25

9. Any establishment in public sector means ____
 - a. Private company
 - b. Co-operative society
 - c. Foreign company
 - d. Government company

10. A Works Committee is formed where the number of workmen is
 - a. 50 or more
 - b. 100 or more
 - c. 150 or more
 - d. 250 or more

11. The payment of maximum bonus is mentioned in Section ____
 - a. 7
 - b. 9

- c. 11
 - d. 13
12. Deduction of wages due to absence from duty is mentioned in section ___ of the Payment of Wages Act, 1936
- a. 2
 - b. 4
 - c. 7
 - d. 15
13. The Inspector appointed in the Payment of Wages Act, 1936 is appointed by ___
- a. State government
 - b. Central government
 - c. Parliament
 - d. Police
14. The amount of fine must not exceed ___% of the wages payable in respect of that wage period
- a. 1
 - b. 2
 - c. 3
 - d. 4
15. Set on of Allocable Surplus is mentioned in Section ___ of the Payment of Bonus Act.
- A. 13
 - B. 14
 - C. 15
 - D. 16
16. The Trade Union act does not cover which of the following.
- a. provisions for going on a strike
 - b. registration of trade union
 - c. rights of a registered trade union
 - d. provisions of application of funds
17. The powers of the conciliation officer are similar to those of a
- a. civil court
 - b. criminal court
 - c. high court
 - d. supreme court
18. The Employees Compensation Act, 1923 applies to
- a. Railways

- b. Navy
 - c. Air force
 - d. Military
19. The State Government are required to appoint workmen's Compensation Commissioner for
- a. Settlement of war between States
 - b. Settlement of dispute between worker and employer
 - c. Creating awareness in the factory importance of vote
 - d. Creating awareness in the factory about the current affairs
20. A Standing Committee of a Corporation shall be Constituted from among its member,
- a. A Chairman
 - b. A Director
 - c. A CEO
 - d. A President
21. A member of the Standing Committee shall cease to be a member if he fails to attend ___ consecutive meetings
- a. 0
 - b. 1
 - c. 2
 - d. 3
22. Minimum dependent pension is Rs. ___ per family
- a. 1000
 - b. 1100
 - c. 1200
 - d. 1500
23. Employees State Insurance Act, 1948 is one of the acts relating to ___
- a. Social security
 - b. Health measures
 - c. Safety measures
 - d. Workmen compensation
24. The ESI scheme is administered by ___
- a. Central government
 - b. State government
 - c. Parliament
 - d. Corporation

25. The Employees Provident Fund money is invested in
- Equity shares
 - Preference shares
 - Government bonds
 - Companies

Business Communication II

- For effective presentations, you must be clear on the _____ behind your presentation.
 - objective
 - monotone
 - pattern
 - skills
- When the RTI act passed?
 - 1955
 - 2004
 - 2005
 - 1990
- What creates awareness of consumer's legitimate rights?
 - Lawyer
 - Consumer Guidance Cell
 - Police
 - Political leader
- The group discussion _____ real lifework place situations.
 - Simulates
 - Poor

- C Worse
- D Negative

5. When an employee leaves an organisation a/an _____ interview is conducted.

- A Exit
- B Panel
- C Selection
- D Directional

6. During a _____ interview there are many interviewers.

- A Panel
- B One-one
- C Face-to-face
- D Personal

7. Interview is a _____ process of communication.

- A two-way
- B one-way
- C individual
- D zero

8. The _____ is now preferred means of screening and evaluation of candidates because it simulates real life workplace situations.

- A Group Discussion
- B Personal interview
- C Individual Speech

D Directional Interview

9. In group discussion, going off the topic _____.

- A should be avoided
- B is appreciated
- C is allowed
- D is entertained

10. Group Discussion is not a _____

- A debate
- B discussion
- C exchange of information
- D logical

11. _____ is the list of items to be discussed at a meeting.

- A agenda
- B resolution
- C notice
- D quorum

12. _____ is an example of electronic meetings.

- A video-conferencing
- B face-to-face
- C physical meet
- D meeting at home

13. Resolutions are recorded in the _____.

- A meetings
- B notice
- C agenda
- D draft

14. _____ is the minimum number of people required to conduct a meeting.

- A 2
- B 1
- C 0
- D 10

15. The chairperson conducts and monitors the _____.

- A meetings
- B minutes
- C resolutions
- D agenda

16. The notice includes the _____, time and venue of the meeting.

- A date
- B everybody's signature
- C resolution
- D minutes of current meetings

17. The _____ records the proceedings of the meeting.

- A secretary
- B chairperson
- C participants

D peon

18. Resolutions are _____ taken at meetings.

A decision

B proposal

C agenda

D notice

19. Group dynamics was defined by _____ in 1965.

A Bruce Tuckman

B Henry Fayol

C Peterson

D S.P.Das

20. It is normal to have a conflict in a meeting because of _____ point of views.

A divergent

B same

C identical

D similar

21. The word Conference is derived from _____ which means to consult together.

A confer

B confier

C idea

D communis

22. A conference may be divided into _____.

A sessions

B meetings

- C schemes
- D rotations

23. Public relations helps to improve the ____of an organisation among its public.

- A image
- B management
- C meeting
- D conference

24. _____involves communication both within and outside the organisation.

- A public relation
- B meetings
- C sales
- D distribution

25. AIDA formula of letter includes: Attention, Interest---- and Action.

- a) Desire
- b) Degree
- c) Disgust
- d) Defects

FOUNDATION COURSE II

Q.NO	OP.	
1		Progressive elimination of government control over economic activities is known as _____ -
	A	Liberalization
	B	Globalization
	C	Privatization
	D	Capitalization

2		_____ is the process of rapid integration between the countries
	A	Liberalization
	B	Globalization
	C	Privatization
	D	Capitalization
3		In which of the following years the process of liberalization started in India
	A	Early 1980s
	B	Early 1990s
	C	Early 2000s
	D	Early 1970
4		_____ means moving to a new home withing a state or country
	A	External migration
	B	Internal migration
	C	Seasonal migration
	D	Emigration
5		_____ farming is one of the agriculture reforms after the introduction of new agriculture policy 2000
	A	Corporate
	B	Contract
	C	Collective
	D	Urban
6		Natural right theory was introduced by _____
	A	Hugo Grotius
	B	John Locke
	C	Thomas Hobbs
	D	King Edward
7		The UDHR consist of _____ articles
	A	28
	B	26
	C	30
	D	40
8		Rights protected by article 32 are called
	A	Human rights
	B	Natural rights
	C	fundamental rights

	D	Constitutional rights
9		Equality in matters of public employment is guaranteed by article _____
	A	14
	B	15
	C	16
	D	17
10		_____ states that before the law and are entitled without any discrimination to equality of law
	A	Right to Education
	B	Right to Life
	C	Right to Equality
	D	Right to Environment
11		_____ is called as anthrosphere
	A	Animal
	B	Human Environment
	C	Plant Life
	D	Marine Life
12		Land, Water are _____ factors in the ecosystem
	A	Changing
	B	Abiotic
	C	Complex
	D	Biotic
13		_____ refers to the study of habbitations of organisms
	A	Environment
	B	Biology
	C	Ecology
	D	Tropology
14		_____ degrades soils and makes the cultivation of the crops impossible
	A	Deforestation
	B	Dessertification
	C	Soil Erosion
	D	Acid Rain
15		_____ is the study of relationship between organisms and their environment
	A	Biology
	B	Sociology

	C	Ecology
	D	Hydrology
16		The _____ stressors are also called as personal stressors
	A	Organizational
	B	Group
	C	Individual
	D	Environmental
17		_____ is also called as prejudgement
	A	Violence
	B	Prejudice
	C	Stereotyping
	D	Aggression
18		_____ arises when goal oriented behaviour is blocked
	A	Prejudice
	B	Eustress
	C	Conflict
	D	Frustration
19		School and religious institutions are _____ agents of socialization
	A	Primary
	B	Secondary
	C	Tertiary
	D	Natural
20		which of the following is an environmental stressor
	A	career concern
	B	role ambiguity
	C	rotating shifts
	D	excessive noise or air pollution
21		_____ is not a type of aggression
	A	Hostile aggression
	B	Correlation aggression
	C	Instrumental aggression
	D	Impulsive aggression
22		_____ conflict occurs within the individual
	A	Intrapersonal

	B	Interpersonal
	C	Intragroup
	D	Intergroup
23		As per Maslow's theory of Human Needs, _____ include needs that are necessary for human survival, such as food, water, shelter etc.
	A	Esteem needs
	B	Physiological needs
	C	Safety needs
	D	Self-actualization needs
24		_____ is a submission of conflict matter to an impartial person. It happens in out-of-court settlements.
	A	Negotiation
	B	Mediation
	C	Confrontation
	D	Arbitration
25		_____ provides temporary relief from the discomfort produced by stress
	A	Withdrawal
	B	Assertiveness
	C	Coercion
	D	Conflict

BUSINESS ENVIRONMENT

- 1 Business is a form of _____ activity.
 - A Economic
 - B Non-economic
 - C Social
 - D Abnormal

- 2 _____ industry consists of any operations that remove metals, minerals and aggregates from the earth.
 - A Primary
 - B Genetic
 - C Extractive
 - D Secondary

- 3 _____ removes hindrances in the smooth flow of goods from the producers to the consumers.

- A Transport
- B Trade
- C Warehousing
- D Advertising

4 _____ form of business has less government regulation.

- A Sole trading
- B Partnership
- C Joint Stock Company
- D Joint Hindu Family Business

5 _____ removes the hindrance of time in the smooth flow of goods from the producers to the consumers.

- A Transport
- B Banking
- C Warehousing
- D Advertising

6 In the case of a Partnership Firm, the financial liability of partners is _____.

- A limited
- B unlimited
- C flexible
- D fixed

7 _____ firms have minimum government regulations.

- A Partnership
- B Joint Hindu Family Business
- C Government Company
- D Private Company

8 Fundamental rights are included in the _____ for the development of the personality.

- A Constitution of India
- B Indian Contract Act
- C The Companies Act

- D The Partnership Act
- 9 Writ of mandamus is issued to _____ who refrain from performing his public duties.
- A Public officer
- B Government
- C Director
- D President
- 10 _____ system is the system of production, distribution and consumption.
- A Economic
- B Political
- C Judicial
- D Social
- 11 _____ economy is a combination of public and private sector.
- A capitalist
- B Socialist
- C Mixed
- D Hippocrate
- 12 _____ is the major source of government revenue.
- A Taxation
- B Sales
- C Fines
- D Fees
- 13 _____ constitute and systemise the country's legal framework
- A Legislature
- B Executive
- C Judiciary
- D Employee protection
- 14 _____ environment includes a set of values, beliefs, customs and behaviour that exists within a population.
- A Political

B Socio-cultural

C Demographic

D Economic

15 Labour ____ refers to people shifting from one place to another in search of better job prospects.

A Turnover

B Mobility

C Diversity

D Recruitment

16 ____ implies that people differ based on region, religion, caste and communities.

A Culture

B Values

C Subculture

D Ego

17 ____ audit is compulsory.

A Financial

B Social

C Management

D Environment

18 ____ refers to the set of systems, principles and processes by which a company is governed.

A Audit

B Corporate Governance

C Ethics

D Profession

19 ____ means the way through which a company achieves a balance of economic, environmental and social imperatives.

A CSR

B Corporate Governance

C Social Audit

- D Financial Management
- 20 WTO stands for _____
- A World Trade Organisation
- B World Trade Organs
- C World Ted Organs
- D Wide Trade Organisation
- 21 Leading nations entered into the _____ in 1947-48, this agreement was made for orderly and transparent international trade.
- A GATT
- B TRIMPS
- C TRIPS
- D FEMA
- 22 _____ means expansion of business activities on a global scale.
- A Globalisation
- B Privatisation
- C Liquidation
- D Export
- 23 According to Ohmae, there are ____ stages in the development of a firm into a global company.
- A 5
- B 6
- C 7
- D 4
- 24 In the fifth stage of globalisation, a firm conducts its business in ____ market.
- A Global
- B International
- C Multinational
- D Transnational
- 25 _____ means a company takes or acquires one another company to use its intellectual property, patents, copyrights, technology, brand names etc. to another organisation called as the licensee.

- A Acquisition
- B Takeover
- C Merger
- D Diversification

SUBJECT: PRINCIPLES OF MANAGEMENT		
QUE S NO.	OPTION S	QUESTIONS AND OPTIONS
1		_____ statement is false about Management.
	A	Management is not a group activity
	B	Management is a creative force
	C	Management is a distinct and dynamic process
	D	It is pervasive, universal
2		_____ relates to recruitment, selection and development of all personnel.
	A	Planning
	B	Organizing
	C	Staffing
	D	Controlling
3		Technical skills are mostly required at _____ level of Management.
	A	Top
	B	Middle
	C	Lower
	D	Worker
4		In the five leadership styles of Managerial Grid, when the concern or for production is moderate and concern for people is moderate, it's called as _____.
	A	Task
	B	Impoverished
	C	Team
	D	Middle of the road
5		In the five leadership styles of Managerial Grid, when the concern or for production is low and concern for people is high, it's called as _____.

	A	Task
	B	Impoverished
	C	Team
	D	Country Club
6		Figurehead, Leadership, Liaison roles are categorized as _____ managerial roles by Mintzberg.
	A	Interpersonal
	B	Intrapersonal
	C	Informational
	D	Decisional
7		_____ skills refers to the ability to proceed in step-by step and systematic manner to examine various aspects of specific issues to understand a situation.
	A	Communication
	B	Analytical
	C	Administrative
	D	Effectiveness
8		_____ is a primary function of management, it is the determination of course of action to achieve desired result.
	A	Organizing
	B	Planning
	C	Coordinating
	D	Communicating
9		_____ is an advantage of planning in an organization.
	A	Generates frustration
	B	Delays actions
	C	Unsuitable to small firms
	D	Raises efficiency
10		_____ is a Programmed decision making techniques.
	A	Operations Research
	B	Attribute listening
	C	Brainstorming
	D	Delphi technique
11		_____ are plans that establish a required method and process of handling future activities.
	A	Policies
	B	Missions

	C	Procedures
	D	Goals
12		_____ is a technique devised for determining the optimum combination of limited resources to achieve a given objective.
	A	Linear programming
	B	Network analysis
	C	Operations research
	D	Cost-benefit analysis
13		Operations research is _____.
	A	a technique devised for determining the optimum combination of limited resources to achieve a given objective.
	B	been identified as the scientific method of analysis of decision problems to provide the executive the needed quantitative information in making decision.
	C	a technique of weighing alternatives where the optimum solution cannot be reduced conveniently to monetary terms as in the case of marginal cost analysis.
	D	used for planning and controlling the project activities, through a network diagram.
14		_____ group of experts in different fields attached to head office, to provide advice and help to top management
	A	General
	B	Specialised
	C	Personal
	D	Executive
15		_____ is the right to give orders and the power to exact obedience.
	A	Authority
	B	Responsibility
	C	Delegation of authority
	D	Leadership
16		_____ is not a factor determining an organizational structure.
	A	Size
	B	Strategy
	C	Leadership
	D	Technology

17		_____ staff consists of assistants attached to individual line executives.
	A	Line
	B	Personal
	C	Specialized
	D	General
18		V.A. Graicunas developed the following superior-subordinate relationships.
	A	Direct one-to-one, Direct group and Cross border
	B	Direct one-to-one, Direct group and Cross
	C	Direct one-to-one, Diagonal and Cross
	D	Diagonal, Direct group and Cross
19		Leadership style which takes decisions with subordinate is
	A	Democratic leadership
	B	autocratic leadership
	C	Laissez -faire leadership
	D	Paternalistic leadership
20		Which among the following is not an element of direction
	A	Motivation
	B	Communication
	C	Delegation
	D	Supervision
21		Which among the following statement relating to leadership is false?
	A	leadership is a process of influence
	B	leadership is goal oriented
	C	leadership is bossism
	D	a leader must have followers
22		Corporate social responsibility that extends beyond legal mandates can help meet societal expectations in the absence of
	A	Statutory devices
	B	Social tool
	C	Cost tool and Techniques
	D	Science tool
23		_____ process of monitoring performance and taking action to ensure desired results
	A	Planning
	B	Directing

	C	Controlling
	D	Organising
24		Without the basis of planning, _____ activities becomes baseless.
	A	Planning
	B	Directing
	C	Controlling
	D	Organising
25		Group decision making requires effective _____ and integration of group members.
	A	Coordination
	B	Planning
	C	Controlling
	D	Staffing

BUSINESS MATHEMATICS

1) **What is the compound amount if Rs. 1000 is invested for 10 years at 8% and the interest is compounded annually.**

- a) 2158.9
- b) 1000
- c) 4000
- d) 5000 .

2) **Find the period for Rs. 1000 to yield Rs. 50 in simple interest at 10%.**

- a) 6
- b) 0.5
- c) 9
- d) 3

3) **Which is not an example of constant function.**

- a) $y=f(x)= 5$
- b) $y=f(x)= 3$
- c) $y=f(x)= 4$
- d) $y=f(x)= 3x^4$

4) Which is not an example of a linear function.

a) $y = f(x) = 2x + 5$

b) $y = f(x) = -3x + 10$

c) $y = f(x) = 3x^4$

d) $y = f(x) = 5x - 7$

5) Mr. Sudhir Joshi has taken a loan of Rs. 10,00,000 from a bank for 10 years at 11% p.a. what is his EMI using Flat interest method.

a) 17,500

b) 23,456

c) 45,678

d) 18,000

6) From a group of 16 managers and 20 clerks a committee of 4 managers and 2 clerks is to be formed. Find the number of ways of forming such a committee

a) 13,950

b) 34,456

c) 31,678

d) 81,900

d) A is nonzero matrix

7) $A = \begin{bmatrix} 2 & 9 & 9 & -3 \end{bmatrix}$ is an example of

a) a symmetric matrix

b) a skew-symmetric matrix

c) a diagonal matrix

d) Identity matrix

8) If $A = \begin{bmatrix} 2 & -3 & 3 & 4 \end{bmatrix}$ then A^{-1} is

a) $\frac{1}{17} \begin{bmatrix} 4 & 3 & -3 & 2 \end{bmatrix}$

b) $\begin{bmatrix} -4 & -3 & -3 & -2 \end{bmatrix}$

c) $\begin{bmatrix} 4 & -3 & 3 & -2 \end{bmatrix}$

d) $\begin{bmatrix} -4 & 3 & 3 & -2 \end{bmatrix}$

9) If $y = f(x) = x^5 - 6x^3 + 2x^2 + 10x + 5$, then $f''(x) =$

a) $6x^5 + 4e^x + \frac{1}{x}$

b) $e^x [x^2 + 2x]$

c) $20x^3 - 36x + 4$

d) $-1/x$

10) If $f(x) = x^3 - 3x^2 - 45x + 25$, then $f(x)$ has minimum at $x =$

a) 5

b) 3

c) -3

d) 6

11) $y = (4x^3 + 3x^2 - 2x)^6$ then $\frac{dy}{dx} =$

a) $6(4x^3 + 3x^2 - 2x)^5(12x^2 + 6x - 2)$

b) $(4x^3 + 3x^2 - 2x)^5(12x^2 + 6x - 1)$

c) $(x^3 + x^2 - 2x)^5(x^2 + 6x - 2)$

d) $(4x^3 + 3x^2 - 2x)^5(x^2 + x - 1)$

12) $y = e^{(\log x + 6)}$, then $\frac{dy}{dx}$

a) $e^{(\log x + 6)} - 1/x$

b) $e^{(\log x + 6)} + 1/x$

c) $e^{(\log x + 6)} 1/x$

d) $e^{(\log x + 6)}$

13) Find the rate of change of demand(x) of a commodity with respect to its price (y) if $y = 20 + 15x + x^2$

a) $dx/dy = 1 / 15 + 2x$

b) $dx/dy = 15x$

c) $dx/dy = 2x$

d) $dx/dy = 15 + 2x$

14) If $y = 3x^4$, then $\frac{dy}{dx}$

a) 1

b) $12x^3$

c) 3

d) 2

15) Find $f(1895)$ from the following table using Newton's Forward interpolation formula.

X	1891	1901	1911	1921	1931
f(x)	46	66	81	93	101

- a) 54.8528
- b) 56.894
- c) 53.675
- d) 52.678

16) Find $f(-1)$ from the following table using Newton's Forward interpolation formula.

X	0	1	2	3
f(x)	1	0	1	10

- a)4
- b)-1
- c) -2
- d)-3

17) Find $f(5)$ using Newton's Forward interpolation formula from the following table

X	0	2	4	6	8
Y	4	26	58	112	466

- a) 71.109375
- b) 61.103975
- c)70.103957
- d) 71.103957

18) Using Newton's Forward formula find $\sin(0.1604)$ from the following table.

X	0.160	0.161	0.162
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F(x)	0.1593182066	0.1603053541	0.1612923412
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- a)0.169713084
- b) 0.159713084
- c)0.158713084
- d)0.168713084

19) The shifting operator is denoted by _____

- a) E
- b)T
- c)A
- d)B

20) Find **f(0.18)** from the following table using Newton's Forward interpolation formula.

x	0	0.1	0.2	0.3	0.4
y	1	1.052	1.2214	1.3499	1.4918

- a)1.18878784
- b)1.8878784
- c)1.9878785
- d)0.8878784

21) In how many ways can the letter of the word ' LEADING ' be arranged such that the vowels should always come together

- a)100
- b) 230
- c) 720
- d) 378

22) Three boys and five girls are made to sit in a line for a music competition . how many different arrangements can be made so that no two boys are together.

- a) 14400

- b) 3456
- c) 5678
- d) 1000

23) 12 players are participating in a chess tournament . How many games are needed so that each player plays exactly one game with every other player ?

- a) 100
- b) 39
- c) 66
- d) 24

24) What is the value of ${}^n C_0 + {}^n C_1 + \dots + {}^n C_n = \underline{\hspace{2cm}}$

- a) 1
- b) 2
- c) 0
- d) 2^n

25) The compound interest on Rs 30,000 at 7% per annum is Rs 4347. The period (in years) is _____

- a) 1
- b) 3
- c) 4
- d) 2