UGC NET Management Memory Based Question -7 JAN 2026 SHIFT -1

Q1. Which of the following statements about VRIO is incorrect?
A. VRIO stands for Value, Rarity, Imitability and Organization.
B. If a resource is valuable, rare and hard to imitate but the firm is not organized to exploit it, sustained advantage will not occur.
C. VRIO framework directly assesses industry attractiveness and market growth rate.
D. Valuable but common resources typically yield competitive parity rather than advantage.
Choose the correct answer from the options given below:

A. A
B. B
C. C
D. D

Answer:
C
Sol:
Introduction: VRIO is an internal-resource diagnostic that checks Value, Rarity, Imitability and Organization to judge whether a resource can produce sustainable advantage.
Information Booster:
• VRIO tests: Valuable (creates value), Rare (not widely held), Imitability (costly for others to copy), Organization (firm can capture the value).
• If any test fails, the level of advantage decreases (e.g., failing Organization means no sustained advantage even if V+R+I).
• The incorrect statement is C: VRIO is inward-facing (assesses resources/capabilities) — industry attractiveness/market growth belong to other tools (e.g., GE or BCG).
Additional Knowledge:
• Use VRIO alongside external tools (SWOT, PESTEL, BCG, GE) — they complement each other.
• Valuable but common resources → competitive parity; valuable+rare → temporary advantage; add inimitability + organization → sustained advantage.
• VRIO helps prioritize which resources to protect, invest in, or build.

Q2. Which of the following types of FDI includes creation of new assets and production facilities in the country?

A. Brownfield investment
B. Merger and Acquisition
C. Strategic alliances
D. Greenfield investment

Answer:
D
Sol:

The type of FDI that includes the creation of new assets and production facilities in the country is Greenfield investment. This involves establishing an entirely new operation in the host country from the ground up, such as building new plants, offices, or manufacturing facilities. This allows the investor to have full control over the business setup and operations. Greenfield investments boost economic growth by creating jobs and driving capital and technology infusion.

Information Booster:-

Reasons for choosing greenfield investments

- Customization and Control: Companies can build facilities exactly to their specifications and maintain full control over operations, ensuring brand image consistency and quality control.
- Market Entry Strategy: Greenfield investment can be the preferred method for entering markets where there are no existing businesses to acquire.
- Bypassing Trade Barriers: Establishing local manufacturing or production plants can help companies bypass tariffs or trade restrictions on imports.
- Access to Incentives: Developing countries often offer tax breaks, subsidies, and other incentives to attract greenfield investments, which can stimulate economic growth and enhance local human capital

Additional Knowledge:-

- Brownfield Investment: This involves acquiring or leasing existing facilities, often to start new production or expand existing operations. It leverages existing infrastructure and can be a faster way to enter a market compared to Greenfield investment.
- Merger and Acquisition (M&A): This involves one company acquiring or merging with an existing business in the host country to establish a presence. M&A is often used to gain market share or access to resources or an established customer base.
- Strategic Alliances: This involves two or more companies collaborating to achieve mutual business goals without creating new facilities or acquiring existing assets. Strategic alliances leverage shared expertise, technology, or market access.

Q3. Match the Management Thinkers with their Key Contributions

LIST-I (Thinker)	LIST-II (Contribution)
A. Henry Fayol	I. Scientific Management & Time Study
B. Frederick Taylor	II. Bureaucracy & Principles of Organization
C. Max Weber	III. Administrative Theory & 14 Principles
D. Elton Mayo	IV. Hawthorne Experiments on Motivation

Choose the correct answer from the options given below:

A. A - III, B - I, C - II, D - IV
B. A - II, B - III, C - I, D - IV
C. A - IV, B - II, C - III, D - I
D. A - I, B - IV, C - II, D - III

Answer:

A

Sol:

Introduction: Management thinkers shaped modern theories of management with distinctive contributions.
Information Booster:
- Fayol → Administrative Theory, 14 principles of management
- Taylor → Scientific Management, Time & Motion Studies
- Weber → Bureaucratic structure and formal rules
- Mayo → Hawthorne Studies highlighting motivation and human relations

Additional Knowledge:
- Wrong pairings confuse contributions, e.g., Taylor did not develop administrative principles

Thinker	Main Contribution	Theory Type
Henry Fayol	Administrative Management (14 Principles)	Classical Theory
Frederick Taylor	Scientific Management (Time & Motion Study)	Classical Theory
Max Weber	Bureaucratic Management	Classical Theory
Elton Mayo	Human Relations Movement (Hawthorne Studies)	Neo-Classical Theory

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Q4. Indicate the cost of equity capital, based on the Capital Asset Pricing Model (CAPM), with the following information:
- Beta coefficient – 1.40
- Risk-free rate of interest – 9%
- Expected Rate of Return on equity in the market – 16%

A. 9.8%
B. 18%
C. 18.8%
D. 16%

Answer:
C
Sol:
The Capital Asset Pricing Model (CAPM) is used to calculate the cost of equity, which is given by the formula:

$$\text{Cost of Equity} = \text{Risk-free Rate} + \beta \times (\text{Market Return} - \text{Risk-free Rate})$$

Substituting the values provided:

$$\text{Cost of Equity} = 9\% + 1.40 \times (16\% - 9\%)$$

$$\text{Cost of Equity} = 9\% + 1.40 \times 7\%$$

$$\text{Cost of Equity} = 9\% + 9.8\%$$

$$\text{Cost of Equity} = 18.8\%$$

Information Booster: The CAPM formula incorporates the beta coefficient, which measures the stock's volatility relative to the market, the risk-free rate, and the market risk premium (which is the difference between the expected market return and the risk-free rate). This model helps investors assess the return required on equity, factoring in the risk associated with the investment.

Additional Knowledge:

• Beta coefficient (1.40): A beta greater than 1 indicates that the stock is more volatile than the market, which means it is expected to yield higher returns (or losses) than the overall market.

• Risk-free rate (9%): This is typically the return on government bonds or treasury bills, representing the minimum return an investor expects for taking no risk.

• Market return (16%): This is the expected return of the overall market, used in determining the risk premium.

Q5. As per CAPM model, the required rate of return on a security is:

A. Return on Treasury Bonds + Market Risk Premium
B. Return on individual securities + Beta Premium
C. Return on Government Securities + Unsystematic Risk Premium
D. Return on Corporate Securities + Systematic Risk Premium

Answer:

A

Sol:

Introduction:

According to the Capital Asset Pricing Model (CAPM), the required rate of return on a security is calculated as the risk-free rate (often proxied by return on Treasury Bonds or Government Securities) plus the market risk premium adjusted by the security's beta. The formula is:

Required Return = $R_f + \beta(R_m - R_f)$

Where:

R_f = Risk-free rate (return on Treasury Bonds or Government Securities)

β = Measure of the security's systematic risk relative to the market

$R_m - R_f$ = Market risk premium (excess return expected from the market over the risk-free rate)

This model assumes that only systematic risk (market risk measured by beta) is rewarded, while unsystematic risk is diversified away and hence not priced.

Information Booster:

- CAPM is a widely used model in finance to estimate the expected return on an asset based on its risk relative to the market.
- The risk-free rate is usually represented by the yield on government securities like Treasury Bonds because they are considered virtually risk-free.
- The market risk premium represents the additional return investors require to compensate for market risk.
- Beta measures a security's sensitivity to market movements; a beta >1 means more volatile than market, <1 means less volatile.
- CAPM helps in portfolio management, capital budgeting, and performance evaluation.
- It assumes markets are efficient and investors are rational.
- CAPM ignores unsystematic risk because it can be eliminated by diversification.

Additional Knowledge:
(b) Return on individual securities + Beta Premium:Incorrect because CAPM does not add a “beta premium” to an individual security's return directly. Beta multiplies the market risk premium, not an isolated “beta premium.” Also, “return on individual securities” is not a base rate in CAPM.
(c) Return on Government Securities + Unsystematic Risk Premium:
Incorrect because unsystematic risk is not priced in CAPM since it is diversifiable. Only systematic risk is rewarded.
(d) Return on Corporate Securities + Systematic Risk Premium:
Incorrect because CAPM uses the risk-free rate (government securities) as the base, not return on corporate securities, which carry additional risks.

Q6. The MM hypothesis of the irrelevance of dividends is based on which of the following critical assumptions?
A. investors are able to forecast future prices and dividends with certainty
B. The firm has a given investment policy which does not change
C. All financing is done through retained earnings
D. There are not taxes
E. Perfect capital markets in which all investors are rational
Choose the correct answer from the option given below:

A. A, B and C only
B. C, D and E only
C. A, B, D and E only
D. B, C, D and E only

Answer:
C
Sol:
Investors are able to forecast future prices and dividends with certainty: This assumption implies that investors have perfect foresight and can accurately predict the future prices and dividends of a stock. It is not a critical assumption of the MM hypothesis. B. The firm has a given investment policy that does not change: This assumption suggests that the firm's investment decisions are independent of its dividend policy. It is a critical assumption of the MM hypothesis. D. There are no taxes: This assumption assumes the absence of taxes on dividends, capital gains, or any other financial transactions. It is a critical assumption of the MM hypothesis. E. Perfect capital markets in which all investors are rational: This assumption assumes the presence of perfect capital markets without any transaction costs, information asymmetry, or market imperfections. It is a critical assumption of the MM hypothesis.

Q7. Arrange the steps of Controlling Process in correct order:
A. Measurement of Performance
B. Comparison with Standards
C. Establishment of Standards

D. Taking Corrective Action

A. C, A, B, D
B. C, B, A, D
C. A, B, C, D
D. C, D, B, A

Answer:
A

Sol:
Introduction: Controlling ensures actual performance aligns with planned objectives.
Information Booster:
1. Establishing standards of performance.
2. Measuring actual performance.
3. Comparing results with standards.
4. Taking corrective actions where deviations occur.
Additional Knowledge:
Controlling is a continuous process and linked with planning.

Method	Description	Example
Management Information System (MIS)	Computer-based system providing timely information for decision-making.	Sales dashboard, performance reports
Network Analysis (PERT/CPM)	Planning and controlling complex projects using time and cost estimates.	Construction projects
Responsibility Accounting	Assigning responsibility to managers for specific areas.	Cost center, profit center control
Management Audit	Evaluates the overall effectiveness of management practices.	Reviewing leadership and planning quality
Return on Investment (ROI)	Measures profitability and efficiency of capital employed.	ROI = (Net Profit / Capital Employed) × 100

Q8. "Corporate governance is to conduct the business in accordance with the owner's (shareholders') desires" is conceptualized by:

A. Henry Fayol
B. Milton Friedman
C. Peter Drucker
D. Lord Cadbury

Answer:
B

Sol:
Milton Friedman, a Nobel Prize-winning economist, is closely associated with the shareholder theory of corporate governance, which asserts that a company's primary responsibility is to maximize shareholder wealth. According to Friedman, corporate governance should ensure that managers and

executives conduct business in line with the desires of the owners (shareholders), which fundamentally means increasing profits, as long as it stays within the rules of law and ethical customs.
In his influential 1970 article in *The New York Times*, titled "The Social Responsibility of Business is to Increase Its Profits", Friedman argued that:
"There is one and only one social responsibility of business—to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game…"
This view underpins much of the traditional corporate governance framework, where managers are agents of shareholders (the principals), and mechanisms must be in place to align managerial behavior with shareholder interests.
Information Booster:

- Advocate of Classical Economic Theory and Monetarism.
- Believed shareholder wealth maximization is the sole social responsibility of business.
- His theory shaped agency theory and principal-agent relationships in corporate governance.
- Influenced governance systems with emphasis on transparency, accountability, and profit orientation.
- Supported minimal government interference and market-driven corporate behavior.
- His ideas laid the foundation for contractarian models of governance in Anglo-American systems.

Additional Knowledge :
(a) Henry Fayol – He was a management theorist known for formulating the 14 principles of management and functions of management (Planning, Organizing, Commanding, Coordinating, Controlling). He did not conceptualize corporate governance from a shareholder perspective.
(c) Peter Drucker – A management guru, Drucker focused on management by objectives, leadership, and corporate responsibility. He supported a more stakeholder-inclusive approach rather than Friedman's shareholder-exclusive model.
(d) Lord Cadbury – He is known for chairing the Cadbury Committee in the UK, which produced the Cadbury Report (1992), a landmark in modern corporate governance, focusing on board structure, auditing, and internal controls. However, his work came later and emphasized stakeholder accountability, not just shareholder profit maximization.

Q9. Which of the following are characteristics of monopolistic competition?
A. Large number of sellers
B. Product differentiation
C. Entry barriers are high
D. Firms are not completely price makers
E. No advertising is required
Choose the correct answer from the options given below:

A. A, B, D only
B. A, B, C only
C. B, C, D only
D. A, B, E only

Answer:

A

Sol:

Based on the characteristics of monopolistic competition, the correct statements are:

A. Large number of sellers: There are many firms in the market, each with a small market share.

B. Product differentiation: Firms sell similar but not identical products, distinguishing them through branding, quality, or features.

D. Firms are not completely price makers: While firms have some control over their prices due to product differentiation, this control is limited by the availability of close substitutes.

The statement C. Entry barriers are high is incorrect because monopolistic competition is characterized by low barriers to entry and exit. The statement E. No advertising is required is incorrect because advertising is a critical tool for firms to differentiate their products and attract customers.

Therefore, the correct options are A, B, and D.

Q10. Match the Following: Leverage & Its Impact:

Column A (Type of Leverage)	Column B (Effect/Description)
A. Operating Leverage	I. Increases volatility in EPS due to fixed interest costs.
B. Financial Leverage	II. Measures % change in EBIT due to % change in sales.
C. Combined Leverage	III. Reflects total risk (Operating + Financial).
D. Degree of Financial Leverage (DFL)	IV. % change in EPS divided by % change in EBIT.

Choose the correct answer:

Match the following:

A. A–I, B–II, C–IV, D–III
B. A–IV, B–III, C–II, D–I
C. A–III, B–IV, C–I, D–II
D. A–II, B–I, C–III, D–IV

Answer:

D

Sol:

The correct matching is:

- Operating Leverage (A → II):

Operating leverage results from the use of fixed operating costs. It shows the impact of a change in sales volume on EBIT (Earnings Before Interest and Taxes). High operating leverage means a small change in sales will cause a significant change in EBIT.

- Financial Leverage (B → I):

Financial leverage comes from using debt in the capital structure. It causes fluctuations in EPS due to fixed interest charges, even if EBIT remains stable. Thus, higher debt increases the risk and return for shareholders.

- Combined Leverage (C → III):

Combined leverage measures the impact of both operating and financial leverage together. It reflects total risk by showing how a change in sales affects EPS, encompassing both cost structures.

- Degree of Financial Leverage (DFL) (D → IV):

DFL is a numerical measure calculated by:

$$\text{DFL} = \frac{\%\text{ change in EPS}}{\%\text{ change in EBIT}}$$

It tells us how sensitive EPS is to changes in EBIT.

Q11. In sequencing, Johnson's Rule is applied to:

A. One-machine scheduling
B. Two-machine flow shop scheduling
C. Multi-stage assembly scheduling
D. Job shop random scheduling

Answer:

B

Sol:

Introduction:

Johnson's Rule is a sequencing technique used in operations management to minimize the total job completion time (makespan) for jobs processed through two or three machines in the same order. It provides an optimal sequence that ensures smooth workflow, reduces idle time, and increases machine utilization. The rule is particularly effective in flow shop scheduling, where all jobs pass through the same sequence of operations.

Information Booster:

• Rule: Arrange jobs based on the shortest processing time on either machine:

- If the shortest time is on the first machine, schedule that job as early as possible.
- If the shortest time is on the second machine, schedule that job as late as possible.

• Repeat the process for all remaining jobs until the sequence is complete.

Additional Knowledge:

Objective:

To minimize the makespan, i.e., the total time required to complete all jobs through both machines, by finding an optimal job sequence.

Assumptions of Johnson's Rule:

1. Each job must go through the same two machines in the same order.
2. Processing times for all jobs on both machines are known and constant.
3. No job preemption — once started on a machine, a job must finish before another begins.
4. Setup times are either negligible or included in processing time.
5. Machines are available continuously without breakdowns.

Steps to Apply Johnson's Rule:

1. List processing times for all jobs on both machines.

2. Find the smallest processing time among all jobs and both machines.
3. If the smallest time is on Machine 1, place that job in the earliest available position in the sequence.
4. If the smallest time is on Machine 2, place that job in the latest available position.
5. Eliminate the assigned job from the list and repeat until all jobs are sequenced.
6. Construct a Gantt Chart to visualize the flow of jobs and identify idle times.

Illustrative Example:

Job	Machine 1 Time	Machine 2 Time
A	4	8
B	2	6
C	7	3

Step 1: Smallest time = 2 (B on Machine 1) → Schedule B first.
Step 2: Next smallest = 3 (C on Machine 2) → Schedule C last.
Step 3: Remaining job = A → placed in the middle.
Final sequence: B → A → C (minimizes total makespan).

Gantt Chart Usage:

• Visual Representation: Displays job progression across machines, helping managers identify idle periods and bottlenecks.

• Performance Evaluation: Helps compare actual vs. planned schedules, improving decision-making for future operations.

Extensions and Limitations:

• Johnson's rule works best for two-machine flow shops; for three machines, it applies only if certain conditions are met (e.g., min time on M1 ≥ max time on M2 or vice versa).

• It does not handle parallel machines, random processing times, or machine breakdowns.

• Modern systems extend Johnson's principle using heuristics and algorithms for multi-machine environments.

Modern Relevance:

• Incorporated in ERP and Production Scheduling Software for flow shop optimization.

• Enhanced using AI and simulation tools to handle variable times and multi-stage operations.

• Supports lean objectives by reducing waiting time, bottlenecks, and WIP inventory.

Q12. According to the eclectic theory of foreign direct investment, foreign direct investment will occur under which of the following conditions when they are uniquely combined?

A. Ownership
B. Location
C. Market power
D. Internationalization

E. Vertical integration
Choose the most appropriate answer:

A. B, C, D and E Only
B. A, C, D and E Only
C. D and E Only
D. A, B and D Only

Answer:
D
Sol:
The Eclectic Theory of FDI, also known as the OLI Paradigm by John Dunning, states that Foreign Direct Investment (FDI) will take place when three specific advantages are combined:

- Ownership Advantage (O): The firm possesses unique assets such as brand, technology, or managerial expertise that give it a competitive edge abroad.
- Location Advantage (L): There are specific benefits of operating in a particular foreign country, such as natural resources, labor cost benefits, or market access.
- Internalization Advantage (I): The firm prefers to internalize operations rather than licensing or franchising, to better control resources and reduce transaction costs.

These three combined form the OLI Framework – Ownership, Location, and Internalization. Market power and vertical integration are strategic considerations but are not part of the core OLI model.
Information Booster:

- Ownership gives competitive edge internationally (e.g., patented tech, brand name).
- Location advantages attract FDI due to favorable geographic, economic, or political factors.
- Internalization helps firms avoid risks of external contracts by keeping operations in-house.
- FDI happens when it is more beneficial than exporting or licensing.
- The theory explains why, where, and how companies engage in FDI.
- Used widely in international business and trade policy analysis.

Additional Knowledge:

- C. Market power: While firms may seek FDI to gain market power, it is not a core requirement under the OLI framework. It is an outcome, not a condition.
- E. Vertical integration: This is a strategy of ownership over supply chain stages. Though relevant to international expansion, it is not a formal part of OLI theory.

Q13. Assertion A: The WTO framework promotes predictability and transparency in trade and investment by binding tariff rates and publishing trade regulations.
Reason R: WTO members are required to submit their bilateral investment treaties (BITs) for approval under the General Agreement on Trade in Services (GATS).

A. Both A and R are true and R is the correct explanation of A
B. Both A and R are true but R is not the correct explanation of A
C. A is true, but R is false
D. A is false, but R is true

Answer:

C
Sol:
Correct Answer: (c) A is true, but R is false
Introduction: Assertion A is true as WTO binds tariffs and mandates trade regulation publication for predictability; Reason R is false since WTO/GATS does not require BIT approval, focusing on services trade.
Information Booster:
• A true: WTO's bound tariffs prevent arbitrary hikes; transparency via notifications ensures market access stability.
• R false: GATS covers services liberalization; BITs are bilateral, outside WTO approval—TRIMS addresses investment measures only.
• Explains trade confidence without R's inaccurate BIT mechanism.
Additional Knowledge:
• (a)/(b) require R true.
• (d) falsifies true A.

Q14. Which of the following theories support free trade and specialization?
A) Mercantilism
B) Absolute Advantage Theory
C) Comparative Advantage Theory
D) Heckscher-Ohlin Theory
Choose the correct answer:
A. A and B
B. A and C
C. C and D
D. B and C
Answer:
D
Sol:
The two theories that most clearly support free trade and specialization are the Absolute Advantage Theory and the Comparative Advantage Theory.
- Absolute Advantage Theory, proposed by Adam Smith, states that countries should specialize in producing goods they can produce more efficiently than others. This promotes international trade based on productivity differences, encouraging countries to export goods they are best at producing.
- Comparative Advantage Theory, developed by David Ricardo, builds on Smith's ideas. It states that even if a country has an absolute advantage in producing all goods, it should specialize in goods where it has a relative efficiency advantage. This theory highlights opportunity cost and demonstrates that mutual benefits arise from trade when countries specialize.

Both these theories provide the theoretical foundation for modern free trade policies, emphasizing specialization based on efficiencies and mutually beneficial exchange, leading to overall welfare gains.

Information Booster:

- Absolute Advantage (Adam Smith): Encourages specialization in goods where a nation is the most efficient producer.
- Comparative Advantage (David Ricardo): Focuses on opportunity costs and suggests trade even when one nation is more efficient in all areas.
- Both theories argue against protectionism and promote open markets.
- Comparative Advantage has stronger modern relevance, especially for countries with varying levels of development.
- These models assume free movement of goods but not factors of production (like labor or capital).

Additional Knowledge:

A) Mercantilism:

This is an outdated and protectionist theory that emphasizes accumulation of wealth (especially gold and silver) through trade surpluses. It discourages imports and promotes exports, not aligned with free trade or specialization.

D) Heckscher-Ohlin Theory:

While it supports international trade, its primary focus is on factor endowments (like labor, land, and capital), not on specialization based on comparative or absolute advantage. It assumes countries export goods that use their abundant resources intensively. It doesn't explicitly advocate free trade in the same direct sense as B and C.

Q15. Which of the following are Probability Sampling Methods?

A. Quota sampling

B. Purposive sampling

C. Multistage sampling

D. Cluster sampling

E. Systematic sampling

Choose the correct answer from the options given below:

A. A, B, C only
B. B, C, D only
C. C, D, E only
D. B, D, A only

Answer:

C

Sol:

Introduction:

Probability sampling refers to a sampling technique in which every unit in the population has a known, non-zero chance of being selected. This method ensures randomness, reduces bias, and increases the generalizability of results. The correct probability sampling methods in this question are:

1. Multistage Sampling – A complex form of cluster sampling where multiple stages of random sampling are used to progressively narrow down the sample.

2. Cluster Sampling – The population is divided into clusters, and a random selection of clusters is studied.
3. Systematic Sampling – Every nth unit from a list is selected, ensuring randomness while maintaining order.

These methods ensure that every element in the population has a known probability of selection, making them true probability sampling techniques.

Information Booster:

- Probability sampling methods are essential for conducting statistically valid research, ensuring that samples represent the larger population accurately.
- Random selection is the key characteristic that differentiates probability sampling from non-probability sampling.
- Multistage sampling is commonly used in large-scale surveys, such as national censuses.
- Cluster sampling is useful when a population is spread over a large geographical area.
- Systematic sampling is often used in manufacturing for quality control checks.

Additional Information :

A. Quota Sampling *(*Incorrect)

- Quota sampling is a non-probability method where researchers select participants based on pre-defined characteristics (e.g., age, gender).
- There is no random selection, making it biased and non-representative of the population.

B. Purposive Sampling (Incorrect)

- Purposive sampling, also called judgmental sampling, is a non-probability method where researchers intentionally select individuals based on specific traits or expertise.
- It is commonly used in qualitative research rather than probability-based statistical studies.

Q16. Arrange the following steps of Human Resource Planning in the correct sequence:

A. Forecasting future manpower demand

B. Analyzing current manpower inventory

C. Developing employment programs

D. Implementing control and evaluation

A. B, A, C, D

B. A, B, D, C

C. C, B, A, D

D. A, C, B, D

Answer:

A

Sol:

Introduction: Human Resource Planning ensures the right number and type of employees are available when needed. Information Booster:

1. HRP starts with analyzing current manpower (B).
2. Then forecasts future needs (A).
3. Develops employment programs to bridge gaps (C).

4. Finally, implements and monitors plans (D). Additional Knowledge:

- HRP aligns workforce planning with strategic goals.
- It reduces uncertainty, improves utilization, and supports succession planning.
- Common forecasting techniques: Delphi, regression, trend analysis.

Human Resource Planning (HRP)

Human Resource Planning (HRP) is a systematic process of ensuring that the right number of people with the right skills are available at the right time to achieve organisational goals. It aligns workforce capabilities with strategic objectives through forecasting, gap analysis, and action plans. HRP minimizes talent shortages, controls labour costs, and supports succession planning. It integrates both quantitative (headcount, ratios) and qualitative (skills, competencies) approaches, ensuring effective utilization of human capital in a dynamic environment.

1. Definition

"HRP is the process of anticipating and providing for the movement of people into, within, and out of the organisation."

— *Flippo / Decenzo & Robbins*

Core Purpose: To ensure *optimal workforce availability* for present and future needs.

2. Steps in HRP Process

Step	**Description**	**Key Outputs**
1. Analysing Current Manpower (Manpower Inventory)	Assess existing human resources in terms of quantity, skills, performance, and potential.	HR database, skill matrix, turnover rate.
2. Forecasting Future Manpower Demand	Predict future workforce requirements based on business growth, technology, and strategy.	Demand estimates (by department, skill, or job level).
3. Forecasting Manpower Supply	Estimate internal and external supply (promotions, retirements, labour market).	Supply forecasts, skill gap identification.
4. Developing HR Programs (Action Plans)	Create plans to bridge the gap between demand and supply (recruitment, training, redeployment).	Recruitment plan, training plan, succession plan.
5. Implementation & Monitoring	Execute and review plans regularly. Adjust based on changes in business or labour market.	Feedback, performance metrics, updated forecasts.

Sequence: B → A → C → D (Analyze → Forecast → Develop → Implement)

3. Levels of HRP

- Corporate Level: Align HR strategy with business strategy.
- Business Unit Level: Plan manpower as per operational objectives.
- Departmental Level: Focus on specific roles, skills, and schedules.

4. Objectives of HRP

- Ensure optimum utilization of existing workforce.
- Anticipate and meet future HR needs.
- Minimize redundancy and overstaffing.

- Facilitate succession planning and leadership continuity.
- Support mergers, acquisitions, or downsizing transitions smoothly.

5. Importance of HRP

- Strategic alignment: HRP links HR decisions with long-term business plans.
- Proactive management: Reduces uncertainty and reactive hiring.
- Cost control: Balances manpower supply and demand.
- Talent pipeline: Prepares successors for key roles.
- Adaptability: Helps organisations manage technological and market changes.

6. Forecasting Techniques

Approach	**Technique**	**Description / Example**
Qualitative	*Delphi Technique*	Expert consensus on manpower requirements.
	Managerial Judgement	Forecast based on intuition and experience.
Quantitative	*Trend Analysis*	Uses historical employment data to project future needs.
	Regression Analysis	Establishes relationship between business output and manpower demand.
	Work Study / Ratio Analysis	Calculates labour needs based on production norms.

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7. HRP and Succession Planning

- HRP identifies critical roles and potential successors.
- Enables leadership continuity and risk mitigation.
- Uses talent mapping and competency gap analysis to prepare next-generation leaders.

8. Factors Affecting HRP

- Internal: Organisational growth stage, structure, employee turnover, technology, HR policies.
- External: Labour market conditions, economic trends, government policies, demographic changes.

9. Barriers to Effective HRP

- Resistance from top management.
- Inaccurate data or forecasts.
- Rapid environmental changes.
- Lack of integration with strategic planning.
- Time and cost constraints.

10. Modern Trends in HRP

- AI & HR Analytics: Predict attrition, skill gaps, and workforce needs.
- Flexible workforce models: Gig, remote, and hybrid arrangements.
- Scenario Planning: HRP under multiple future possibilities.
- Strategic Workforce Planning (SWP): Aligns talent with long-term business priorities.
- Dynamic reskilling: Focus on skill agility in digital transformation.

11. Mnemonic for HRP Steps

"A FAD E" → *Analyze – Forecast – Action – Develop – Evaluate*

Key Takeaways

- HRP = Right people, right place, right time, right cost.

- Balances short-term operational needs with long-term strategic vision.
- Continuous monitoring ensures responsiveness to change.
- Integrates closely with recruitment, training, and performance management systems.

Q17. Arrange the stages of Data Mining process in correct order.
A. Data Cleaning
B. Pattern Evaluation
C. Data Selection
D. Data Transformation
Choose the correct answer from the options given below:

A. A, C, D, B
B. C, A, D, B
C. A, D, B, C
D. D, A, C, B

Answer:
A
Sol:
Introduction: Data mining involves extracting useful patterns from large datasets using structured steps.
Information Booster: First, data cleaning ensures removal of noise and missing values, then data selection identifies relevant data, next data transformation converts data into suitable formats, and finally pattern evaluation extracts insights.
Additional Knowledge: Advanced steps often include data integration and knowledge presentation using visualization tools.

Q18. Identify the incorrect statement about Brand Equity.

A. It reflects the value a brand adds to a product.
B. It depends solely on product quality.
C. It influences consumer loyalty.
D. It can be measured by brand awareness and perception.

Answer:
B
Sol:
Introduction:
Brand Equity refers to the value and strength of a brand that determines its influence on consumer choice and the company's profitability.
It represents the added value that a brand name gives to a product beyond its functional benefits.
A strong brand can command premium pricing, create customer loyalty, and ensure long-term competitive advantage.

Brand equity is considered an intangible asset, forming a crucial component of a company's marketing and strategic value.

Information Booster:

Components of Brand Equity (As per David A. Aaker's Model):

Aaker identified five core dimensions that together build brand equity:

1. Brand Awareness:
   - Refers to how easily consumers recognize or recall a brand.
   - High awareness increases consumer trust and consideration during purchase decisions.
   - Example: Consumers easily recalling "Coca-Cola" among soft drinks.
2. Brand Associations:
   - The mental connections consumers make between a brand and its qualities, emotions, or personality.
   - Example: *Nike* is associated with athleticism, performance, and motivation.
   - Strong associations help in differentiation and emotional bonding.
3. Perceived Quality:
   - The customer's perception of the overall quality or superiority of a brand compared to alternatives.
   - It influences brand preference and willingness to pay a higher price.
   - Example: *Apple* products are perceived as premium due to consistent innovation and performance.
4. Brand Loyalty:
   - The extent to which consumers consistently choose the same brand over competitors.
   - Loyal customers act as brand advocates, reducing marketing costs and ensuring stable demand.
   - Example: *Starbucks* customers regularly choosing the same outlet despite competitors.
5. Other Proprietary Brand Assets:
   - Includes patents, trademarks, and channel relationships that provide a brand with legal and competitive protection.
   - These assets safeguard brand identity and prevent imitation.

Additional Knowledge:

1. Importance of Brand Equity:

- Customer Preference: Strong brand equity increases consumer confidence and purchase likelihood.
- Price Premium: Brands with strong equity can charge higher prices (e.g., *Rolex*, *Mercedes-Benz*).
- Brand Extension: Easier to launch new products under an established brand (e.g., *Dove Shampoo* after *Dove Soap*).
- Trade Leverage: Distributors and retailers prefer high-equity brands due to higher sales potential.
- Resilience During Crises: Strong brands recover faster from market downturns or negative publicity.

Building Brand Equity:

Brand equity develops over time through strategic marketing and consistent customer experience:

- Consistent Brand Messaging: Communicating a unified identity across all platforms.
- Superior Customer Experience: Ensuring satisfaction and emotional connection.
- Effective Brand Positioning: Clear differentiation in consumers' minds.
- Integrated Marketing Communication (IMC): Advertising, PR, digital marketing, and sponsorships reinforcing brand image.
- Corporate Social Responsibility (CSR): Positive social involvement enhances brand trust and reputation.

Keller's Customer-Based Brand Equity (CBBE) Model (Pyramid):

Another major framework by Kevin Lane Keller focuses on how customers perceive and relate to a brand.

It has four stages (bottom to top):

1. Brand Identity (Who are you?) – Awareness and recognition.
2. Brand Meaning (What are you?) – Performance and imagery.
3. Brand Response (What about you?) – Judgments and feelings.
4. Brand Resonance (What about you and me?) – Deep psychological bond and loyalty.

At the top of the pyramid lies Brand Resonance, representing the strongest customer–brand relationship.

Factors Affecting Brand Equity:

- Marketing Efforts: Quality advertising and promotions enhance recall.
- Customer Experience: Positive post-purchase experience reinforces trust.
- Competitor Actions: Aggressive competition can affect brand perception.
- Cultural Relevance: Alignment with consumer values and local trends increases acceptance.

Measuring Brand Equity:

Organizations use both financial and consumer-based approaches:

- Consumer-Based Measures: Brand awareness, loyalty, satisfaction surveys.
- Financial Measures: Brand valuation (e.g., *Interbrand's Global Brand Rankings*), price premium, and market share.

Q19. Arrange the following steps in the process of Market Segmentation in the correct sequence.

A. Identifying segmentation variables

B. Developing profiles of resulting segments

C. Market targeting

D. Selecting market segments

E. Market positioning

Choose the correct answer from the options given below:

A. A, B, D, C, E
B. A, D, B, C, E
C. D, A, B, C, E
D. A, C, B, D, E

Answer:

B

Sol:
Introduction: Market segmentation involves dividing a broad consumer or business market, typically consisting of existing and potential customers, into sub-groups of consumers based on some type of shared characteristics.
Information Booster:
- A: Identifying segmentation variables is the first step in understanding how to categorize the market.
- D: Selecting market segments is the second step after identifying which variables to use for segmentation.
- B: Developing profiles of resulting segments involves creating detailed descriptions of the market segments.
- C: Market targeting follows where you evaluate each segment's potential and select the most appropriate one.
- E: Market positioning is the final step where strategies are developed to target the selected segments.

Additional Knowledge:
- Option (a): Incorrect. Market targeting comes after selecting the segments.
- Option (c): Incorrect. Identifying segmentation variables should come first.
- Option (d): Incorrect. Market targeting should come after selecting the market segments.

Q20. Which of the following are types of consumer buying behavior?
A. Complex Buying Behavior
B. Dissonance-Reducing Buying Behavior
C. Habitual Buying Behavior
D. Impulsive Buying Behavior
Choose the correct answer from the options given below:
A. A, B, C Only
B. A, B, D Only
C. A, B, C, D Only
D. B, C, D Only

Answer:
A
Sol:
Introduction:
Consumer buying behavior describes how individuals make decisions to purchase products.
Information Booster:
- Complex → high involvement, significant differences between brands
- Dissonance-Reducing → high involvement, few differences between brands
- Habitual → low involvement, frequent purchase

Additional Knowledge:
- Impulsive → unplanned purchases; sometimes discussed in marketing psychology

Type	Consumer Involvement	Brand Difference	Key Characteristics	Examples
1. Complex Buying Behaviour	High	Significant	- Consumers are highly involved in purchase decisions. - Occurs when the product is expensive, risky, or infrequently bought. - Consumers seek information and compare alternatives.	Buying a car, house, or laptop
2. Dissonance-Reducing Buying Behaviour	High	Few	- Consumers are highly involved but see little brand difference. - They may experience post-purchase dissonance (doubt). - Focus is on finding a reliable brand quickly.	Buying a washing machine, cement, or air conditioner
3. Habitual Buying Behaviour	Low	Few	- Consumers have low involvement and see few differences between brands. - Purchases made out of habit, not brand loyalty. - Little brand evaluation before buying.	Buying toothpaste, salt, milk, or soap
4. Variety-Seeking Buying Behaviour	Low	Significant	- Low involvement but many perceived differences between brands. - Consumers often switch brands for variety or curiosity, not dissatisfaction.	Buying snacks, biscuits, or soft drinks

Q21. Sequence the stages of Collective Bargaining process. A. Preparation B. Negotiation C. Agreement D. Implementation

A. A, B, C, D
B. B, A, C, D
C. C, D, A, B
D. A, C, D, B

Answer:
A
Sol:
Introduction: Collective bargaining is negotiation between employers and employee representatives.
Information Booster:
- Preparation – Gather data and set objectives.
- Negotiation – Discuss terms between parties.
- Agreement – Sign contract upon mutual consent.
- Implementation – Execute agreed terms.

Additional Knowledge:

- (b) B, A, C, D → Incorrect; preparation precedes negotiation.
- (c) C, D, A, B → Incorrect; agreement cannot come first.
- (d) A, C, D, B → Incorrect; negotiation cannot come last.

Q22. Match the following types of rural entrepreneurs with their examples:

LIST–I (Type)	LIST–II (Example)
A. Agricultural entrepreneurs	(i) Dairy farming units
B. Artisan entrepreneurs	(ii) Handloom cooperatives
C. Trading entrepreneurs	(iii) Local retail shops
D. Service entrepreneurs	(iv) Rural transport providers

A. A–i, B–ii, C–iii, D–iv
B. A–ii, B–i, C–iv, D–iii
C. A–iii, B–iv, C–i, D–ii

D. A–iv, B–ii, C–iii, D–i

Answer:
A
Sol:
Introduction:
Rural entrepreneurs operate across agricultural, trading, service, and artisan sectors.
Information Booster:

- A (Agricultural): Farming and allied activities (dairy).
- B (Artisan): Traditional crafts like handloom.
- C (Trading): Buying and selling in rural markets.
- D (Service): Transport, repair, or other services.

Additional Knowledge:
Diversification of rural entrepreneurship boosts local economies and employment
Rural entrepreneurs play a vital role in the economic development of villages and semi-urban areas by engaging in diverse activities that utilize local resources, skills, and demand patterns. They operate mainly across agricultural, artisan, trading, and service sectors, each contributing uniquely to rural growth.
The agricultural sector (A) includes farming and allied activities such as dairy, poultry, horticulture, and fisheries. These ventures ensure food security and create income opportunities within the community. The artisan sector (B) focuses on traditional crafts and cottage industries like handloom weaving, pottery, carpentry, and handicrafts, preserving cultural heritage while generating self-employment. The trading sector (C) involves buying and selling goods—for example, running grocery stores, agricultural input shops, or village markets—facilitating rural commerce and distribution. The service sector (D) covers transportation, repair, tailoring, beauty services, and small-scale hospitality, meeting daily community needs and improving living standards.
The diversification of rural entrepreneurship not only enhances income and self-reliance but also reduces migration to urban areas by creating local employment. It encourages sustainable development

through the optimal use of local resources, innovation, and skill development. Hence, promoting these forms of entrepreneurship is essential for balanced regional growth and inclusive economic progress.

Q23. "Consumer buying behaviour in situations characterized by high consumer involvement in a purchase and significant perceived differences among brands" is termed as:

A. Complex buying behaviour
B. Dissonance-reducing buying behaviour
C. Habitual buying behaviour
D. Variety-seeking buying behaviour

Answer:
A
Sol:
Complex buying behaviour occurs when:

- Consumers face high involvement in the purchasing decision, typically because the product is expensive, infrequent, or highly significant (e.g., a car or a house).
- There are significant perceived differences between brands, requiring extensive research and evaluation by the buyer.
- Consumers gather detailed information about products, compare attributes, and evaluate alternatives before making a decision.

2. Dissonance-reducing buying behaviour: Occurs in high-involvement purchases but with few perceived differences between brands. Buyers may experience post-purchase dissonance (regret).
3. Habitual buying behaviour: Characterized by low involvement and little brand differentiation; buying decisions are routine (e.g., purchasing milk or bread).
4. Variety-seeking buying behaviour: Happens when involvement is low, but there are significant brand differences, leading consumers to switch brands for variety or experimentation.

Thus, the behavior described matches Complex Buying Behaviour.
Information Booster:
Key Factors in Complex Buying Behaviour:

1. High Involvement: Consumers invest time and effort due to the importance of the purchase.
2. Significant Brand Differences: Clear distinctions between product features, quality, or price make comparisons necessary.
3. Consumer Process: Includes extensive problem recognition, information search, evaluation of alternatives, and post-purchase evaluation.

Additional Knowledge:

1. Option B (Dissonance-reducing buying behaviour): Incorrect because it applies to situations with few brand differences, unlike the given scenario.
2. Option C (Habitual buying behaviour): Incorrect because habitual buying involves low involvement and minimal decision-making effort.
3. Option D (Variety-seeking buying behaviour): Incorrect because variety-seeking occurs in low-involvement purchases with frequent brand-switching.

Complex buying behaviour is crucial for industries dealing with expensive, high-stakes, or differentiated products.

Q24. Identify the incorrect statement about Industrial Relations (IR):

A. . IR aims to maintain peaceful employer-employee relations
B. . IR ignores labor laws and regulations
C. . IR enhances productivity and workplace harmony
D. . IR includes trade union management

Answer:
B
Sol:
Introduction: Industrial Relations (IR) deals with relationships between management, employees, and trade unions, ensuring fair practices.
Information Booster:
- Good IR ensures compliance with labor laws and conflict resolution.
- Promotes productivity, harmony, and legal compliance.

Additional Knowledge:
- Statement B is incorrect; IR heavily relies on labor laws.

Q25. Which of the following is NOT a component of Gross Domestic Product (GDP) at market prices?

A. Consumption expenditure by households
B. Government spending on public goods and services
C. Net exports (exports minus imports)
D. Transfer payments by the government

Answer:
D
Sol:
Consumption expenditure by households– This is a key component of GDP (denoted as C in the GDP formula: GDP = C + I + G + (X - M)). It includes spending on goods and services by individuals.
Government spending on public goods and services– This is another major component (denoted as G), covering expenditures on infrastructure, defense, education, etc.
Net exports (exports minus imports)– Represented as (X - M), this accounts for trade balance (exports add to GDP, while imports subtract).
Transfer payments by the government–Correct Answer. These include welfare payments, pensions, and unemployment benefits. Since no goods/services are produced in exchange, they are excluded from GDP.
Information Booster:
GDP measures final production within a country. Transfer payments redistribute income without contributing to current production, hence their exclusion.

Q26. Answer the correct material usage variance from the information given below :
Standard material cost for manufacturing 1000 units of an output is 400 kgs of material at Rs. 2.50 per kg. When 2000 units are produced, it is found that actual consumption was of 825 kgs material at a price of Rs. 2.70 per kg:

A. Rs. 67.50 Favourable
B. Rs. 67.50 Adverse
C. Rs. 62.50 Favourable
D. Rs. 62.50 Adverse
E. Rs. 70.50 Adverse

Answer:
D
Sol:
To determine whether the material cost is favorable or adverse, we need to calculate the material cost variance by comparing the standard cost with the actual cost.
Given: Standard material cost for 1000 units = 400 kgs x Rs. 2.50/kg = Rs. 1000
800 kgs for 2000 units.
Actual Material = 825 kgs for 2000 units.
Standard Price = 2.50/kg
MUV = (Standard quantity of material – Actual quantity of material) x Standard price per unit.
MUV = (800-825) x 2.50
MUV = -25 x 2.50
MUV = Rs. 62.5 adverse

Q27. The Transportation Model in Operations Research is used to:

A. Minimize transportation cost
B. Maximize profit only
C. Schedule machine loading
D. Forecast demand

Answer:
A
Sol:
Introduction: The transportation model is a specialized form of Linear Programming.
Information Booster:
• It aims to minimize cost of distributing goods from sources to destinations.
Additional Knowledge:
• Not meant for forecasting.
• Not a profit maximization tool directly.
• Not for machine scheduling.

Q28. Which of the following are Mass Communication characteristics?
A. Large Heterogeneous Audience
B. Delayed Feedback
C. Mediated Channel
D. Face-to-Face Interaction
Choose the correct answer from the options given below:

A. A, B and C Only
B. B, C and D Only
C. A and D Only
D. A, B and D Only

Answer:
A
Sol:
Introduction: Mass communication targets vast, diverse groups via media (TV/print), with slow feedback, unlike interpersonal immediacy.
Information Booster: One-to-many; gatekept; effects studied via theories like Agenda-Setting.
Additional Knowledge: Option (b) adds Face-to-Face (interpersonal); (c) pairs Mass with Personal; (d) includes Interaction (group). A,B,C define mass.

Q29. Arrange the following steps of New Product Development (NPD) in the correct sequence.
A. Idea Screening
B. Commercialization
C. Product Development & Testing
D. Idea Generation
Choose the correct answer from the options given below:

A. D, A, C, B
B. C, A, D, B
C. D, C, A, B
D. A, D, C, B

Answer:
A
Sol:
Introduction: NPD process ensures systematic development and market launch of new products.
Information Booster:
- Step 1: Idea Generation – Collecting innovative ideas from customers, employees, competitors.
- Step 2: Idea Screening – Filtering feasible & profitable ideas.
- Step 3: Product Development & Testing – Prototyping, technical development, market testing.
- Step 4: Commercialization – Launching the product in the market.

Additional Knowledge:
- Option (b) starts with product development which is impossible before idea generation.
- Option (c) swaps screening and development which is illogical.

• Option (d) starts with screening but we need ideas first.

Q30. Arrange the following components of the Marketing Mix (4Ps) in the correct logical sequence when launching a new product:
A. Place
B. Product
C. Price
D. Promotion
Choose the correct answer from the options given below:

A. B → A → C → D
B. B → C → A → D
C. A → C → B → D
D. C → D → B → A

Answer:
B
Sol:
The Marketing Mix, famously known as the 4Ps — Product, Price, Place, and Promotion — represents the core set of tactical marketing tools a company uses to produce the desired response in the target market. When launching a new product, the logical sequence of these elements is critical to ensure successful market penetration and customer acceptance.

1. Product: This is the first and foremost decision. You must develop or decide the product offering that satisfies customer needs and preferences. Without a clear product concept or development, pricing, distribution, or promotion efforts cannot be effectively planned.
2. Price: After the product is defined, the next step is to set the pricing strategy. The price should reflect the perceived value of the product, costs, competitor prices, and company objectives. Pricing affects how the product is positioned in the market and its acceptance by customers.
3. Place: Once product and price are set, distribution channels must be determined to make the product available to customers at the right place and time. This includes selecting retailers, wholesalers, or direct-to-consumer models.
4. Promotion: Finally, promotional activities are planned and executed to create awareness, generate interest, and persuade customers to buy the product. This involves advertising, sales promotions, public relations, and personal selling.

This sequence ensures a structured approach to product launch, starting from what the customer gets, to how much it costs, how it reaches the customer, and how the customer is informed about it.
Information Booster:

- The Product is the foundation of the marketing mix, without which other decisions lack context.
- Pricing influences customer perception and profitability.
- Place (Distribution) ensures accessibility and convenience for customers.
- Promotion supports the marketing efforts by communicating benefits and encouraging sales.

Q31. Match the LIST-I with LIST-II

LIST – I (Marketing Orientation)	LIST – II (Focus/Approach)
A. Production Concept	I. Focus on aggressive selling & promotion
B. Product Concept	II. Focus on product quality, innovation & features
C. Selling Concept	III. Focus on high production efficiency & wide distribution
D. Marketing Concept	IV. Focus on understanding & satisfying customer needs

Choose the correct answer from the options given below:

A. A - III, B - II, C - I, D - IV
B. A - II, B - I, C - III, D - IV
C. A - III, B - IV, C - II, D - I
D. A - I, B - III, C - II, D - IV

Answer:
A
Sol:
Introduction: Marketing orientation represents the evolution of business philosophy from production to marketing to satisfy customer needs effectively. Information Booster:
• A–III: Production Concept emphasizes mass production and economies of scale to lower costs.
• B–II: Product Concept stresses quality & product innovation to attract customers.
• C–I: Selling Concept is about aggressive promotion & persuasion to push sales.
• D–IV: Marketing Concept prioritizes understanding customer needs and delivering satisfaction. Additional Knowledge:
• Societal Marketing Concept adds focus on society's welfare beyond customer satisfaction.
• Holistic Marketing Concept integrates relationship, internal, integrated, and performance marketing.

Q32. Arrange the following V's of Big Data in the correct conceptual order of significance.
A. Volume
B. Velocity
C. Variety
D. Veracity

A. A, B, C, D
B. B, A, C, D
C. A, C, D, B
D. A, D, B, C

Answer:
A
Sol:
Introduction: The "4 Vs" of Big Data describe its core characteristics.
Information Booster:
• Volume: Scale of data.
• Velocity: Speed of generation.
• Variety: Different formats.

• Veracity: Data reliability.

Additional Knowledge: Other sequences lack the standard conceptual hierarchy used in Big Data literature.

Q33. Gordon's Model assumes that:

A. Firm finances investment only through retained earnings
B. Cost of capital is irrelevant
C. Dividend has no effect on share price
D. Dividend is independent of growth

Answer:

A

Sol:

Introduction

Gordon's Model, also known as the Gordon Growth Model or Dividend Discount Model, is a dividend relevance theory. It emphasizes that the dividend policy of a firm directly affects the value of its shares. The model was proposed by Myron Gordon.

Information Booster

Key assumptions of Gordon's Model include:

1. The firm finances its investment only through retained earnings (no external debt or new equity).
2. The cost of capital (Ke) remains constant.
3. The firm has perpetual life.
4. The internal rate of return (r) is constant.
5. Growth rate (g) = Retention ratio × r.
6. Cost of equity (Ke) is always greater than growth rate (g).

Thus, option (a) is correct because Gordon's Model assumes internal financing through retained earnings only.

Additional Information

- The formula for share price under Gordon's Model is:

  $P = (E \times (1 - b)) \div (Ke - g)$

  where,

  E = Earnings per share,

  b = Retention ratio,

  g = Growth rate (b × r),

  Ke = Cost of equity.
- The model shows that dividend decisions are relevant because investors prefer certain dividends now rather than uncertain future capital gains.
- Unlike Modigliani and Miller (MM), who believed dividend is irrelevant, Gordon strongly argued that dividends do affect share price.