

# Subject Name Solutions

4341601 – Summer 2024

Semester 1 Study Material

*Detailed Solutions and Explanations*

## Question 1(a) [3 marks]

Differentiate: Traditional marketing and Digital marketing.

### Solution

#### Traditional Marketing

**Physical presence** required  
**Limited reach** to local audience  
**One-way communication**  
**High cost** for advertising  
**Difficult to measure ROI**  
**Slow feedback** from customers

#### Digital Marketing

**Online presence** through internet  
**Global reach** to worldwide audience  
**Two-way interactive communication**  
**Cost-effective campaigns**  
**Easy tracking** and analytics  
**Instant feedback** and responses

### Mnemonic

“PITCH vs CLICK” (Physical vs Interactive, Traditional vs Trackable, High-cost vs Cost-effective)

## Question 1(b) [4 marks]

Explain working of search engine algorithm.

### Solution

Search engine algorithms work through systematic processes to deliver relevant results:

#### Process Flow:

#### Mermaid Diagram (Code)

```
{Shaded}
{Highlighting} []
graph LR
    A[Web Crawling] --> B[Indexing]
    B --> C[Query Processing]
    C --> D[Ranking Algorithm]
    D --> E[SERP Display]
{Highlighting}
{Shaded}
```

- **Crawling:** Search bots scan websites continuously to discover new content
- **Indexing:** Analyzed content is stored in massive databases with keywords
- **Query matching:** User search terms are matched with indexed content
- **Ranking factors:** Content relevance, authority, and user experience determine position

### Mnemonic

“CIRR” (Crawl, Index, Rank, Results)

### Question 1(c) [7 marks]

Explain the key components of a digital marketing plan.

#### Solution

A comprehensive digital marketing plan includes essential components for success:

Component	Description	Purpose
<b>Situation Analysis</b>	Current market position and SWOT	Understanding starting point
<b>Target Audience</b>	Demographics and buyer personas	Focused marketing efforts
<b>Goals &amp; Objectives</b>	SMART goals with KPIs	Measurable outcomes
<b>Strategy Selection</b>	SEO, SEM, Social Media, Email	Channel optimization
<b>Budget Allocation</b>	Resource distribution across channels	Cost management
<b>Content Calendar</b>	Scheduled content publication	Consistent engagement
<b>Analytics Setup</b>	Tracking tools and metrics	Performance monitoring

#### Key Success Factors:

- **Research-driven** approach with market insights
- **Integration** across multiple digital channels
- **Flexibility** to adapt based on performance data

#### Mnemonic

“STGSBC Analytics” (Situation, Target, Goals, Strategy, Budget, Content, Analytics)

### Question 1(c) OR [7 marks]

Explain the components of the P.O.E.M. framework and their relevance in digital marketing.

#### Solution

P.O.E.M. framework categorizes digital marketing channels for strategic planning:

#### Mermaid Diagram (Code)

```
{Shaded}
{Highlighting} []
graph TD
    A[P.O.E.M Framework] --> B[Paid Media]
    A --> C[Owned Media]
    A --> D[Earned Media]
    A --> E[Managed Media]
{Highlighting}
{Shaded}
```

Component	Definition	Examples	Relevance
<b>Paid Media</b>	Purchased advertising space	Google Ads, Facebook Ads	<b>Immediate reach</b> and control
<b>Owned Media</b>	Brand-controlled channels	Website, email lists, blogs	<b>Long-term asset</b> building
<b>Earned Media</b>	Third-party endorsements	Reviews, shares, mentions	<b>Credibility</b> and trust
<b>Managed Media</b>	Influenced but not owned	Influencer partnerships	<b>Extended reach</b> through others

**Strategic Benefits:**

- **Balanced approach** across all media types
- **Cost optimization** through channel mix
- **Amplified impact** when channels work together

**Mnemonic**

“POEM builds Digital SUCCESS” (Paid, Owned, Earned, Managed)

**Question 2(a) [3 marks]**

Describe need of SEO.

**Solution**

SEO is essential for online visibility and business growth:

- **Organic traffic:** 68% of online experiences begin with search engines
- **Cost-effective:** No direct payment for organic rankings unlike paid ads
- **Trust building:** Higher rankings create credibility with users
- **Long-term results:** Sustainable traffic growth over time

**Mnemonic**

“OCTL” (Organic, Cost-effective, Trust, Long-term)

**Question 2(b) [4 marks]**

Differentiate between on-page and off-page optimization.

**Solution**

On-Page SEO	Off-Page SEO
Website elements optimization	External factors optimization
Title tags, meta descriptions	Backlinks from other sites
Content quality and keywords	Social media signals
Internal linking structure	Domain authority building
Complete control by website owner	Limited control, depends on others
Technical optimization focus	Authority and popularity focus

**Mnemonic**

“IN vs OUT” (Internal optimization vs Outbound authority)

**Question 2(c) [7 marks]**

Explain SEO ranking and ways to improve SEO ranking.

**Solution**

SEO ranking determines website position in search engine results pages (SERPs).

**Ranking Factors Table:**

Factor Category	Techniques	Impact Level
<b>Content Quality</b>	Original, valuable content	High
<b>Keywords</b>	Research and natural placement	High
<b>Technical SEO</b>	Site speed, mobile-friendly	Medium
<b>Backlinks</b>	Quality link building	High
<b>User Experience</b>	Low bounce rate, high engagement	Medium

#### Improvement Strategies:

- **Content optimization:** Create comprehensive, user-focused content
- **Keyword research:** Target relevant, achievable keywords
- **Technical fixes:** Improve site speed and mobile responsiveness
- **Link building:** Earn quality backlinks from authoritative sites
- **User signals:** Enhance engagement metrics

#### Success Metrics:

- **SERP position improvements**
- **Organic traffic growth**
- **Click-through rates increase**

#### Mnemonic

“CKTU for SEO SUCCESS” (Content, Keywords, Technical, User-experience)

### Question 2(a) OR [3 marks]

Define: 1. Backlinks 2. Website Speed 3. Keyword stuffing.

#### Solution

Term	Definition
<b>Backlinks</b>	Incoming hyperlinks from external websites pointing to your site
<b>Website Speed</b>	Time taken for web pages to load completely in browser
<b>Keyword Stuffing</b>	Overuse of keywords unnaturally in content to manipulate rankings

#### Mnemonic

“BWK” (Backlinks, Website speed, Keyword stuffing)

### Question 2(b) OR [4 marks]

Differentiate between Black Hat and White Hat SEO Techniques.

#### Solution

White Hat SEO	Black Hat SEO
<b>Ethical practices</b> following guidelines	<b>Manipulative tactics</b> violating rules
Quality content creation	Content scraping and duplication
Natural link building	Link farms and paid links
Long-term results	Quick but risky gains
Search engine approved	Penalty risks from search engines

## Mnemonic

“GOOD vs BAD” (Guidelines-following vs Penalty-risking)

### Question 2(c) OR [7 marks]

Give name of any three common SEO tools and describe their functions.

#### Solution

SEO Tool	Primary Functions	Key Features
<b>Google Analytics</b>	Website traffic analysis	Visitor behavior, conversion tracking, audience insights
<b>SEMrush</b>	Keyword research and competitor analysis	Keyword difficulty, backlink analysis, site audit
<b>Yoast SEO</b>	On-page optimization (WordPress)	Content optimization, technical SEO, readability analysis

#### Detailed Functions:

- **Google Analytics:** Tracks user journey, bounce rates, and goal completions
- **SEMrush:** Identifies ranking opportunities and monitors competitor strategies
- **Yoast SEO:** Provides real-time optimization suggestions for content and meta tags

#### Benefits:

- **Data-driven decisions** through comprehensive analytics
- **Competitive advantage** with market insights
- **Efficiency** in optimization tasks

## Mnemonic

“GSY Tools” (Google Analytics, SEMrush, Yoast)

### Question 3(a) [3 marks]

Explain any one Multi-touch attribution model with example.

#### Solution

**Linear Attribution Model** distributes credit equally across all touchpoints in customer journey.

**Example Scenario:** Customer journey: Social Media Ad → Email → WebsiteVisit → Purchase

#### Credit Distribution:

- Social Media Ad: 25%
- Email: 25%
- Website Visit: 25%
- Purchase Page: 25%

## Mnemonic

“EQUAL Credit for ALL Touches” (Linear = Equal distribution)

### Question 3(b) [4 marks]

Explain following Key metrics: Unique Visitors, Bounce Rate.

#### Solution

Metric	Definition	Significance
<b>Unique Visitors</b>	Count of individual users visiting website in specific period	Measures <b>audience reach</b> and growth
<b>Bounce Rate</b>	Percentage of visitors leaving after viewing only one page	Indicates <b>content relevance</b> and engagement

#### Optimization Tips:

- **Unique Visitors:** Increase through SEO and social media
- **Bounce Rate:** Improve with better content and site navigation

#### Mnemonic

“UV-BR” (Unique Visitors measure reach, Bounce Rate measures engagement)

### Question 3(c) [7 marks]

Explain following tracking code with their advantage and disadvantage: Long tracking code, UTM code.

#### Solution

Tracking Code Type	Description	Advantages	Disadvantages
<b>Long Tracking Code</b>	Detailed parameters with extensive information	<b>Comprehensive data collection,</b> <b>Detailed insights</b>	<b>Complex URLs,</b> <b>User-unfriendly</b> appearance
<b>UTM Code</b>	Urchin Tracking Module parameters for campaign tracking	<b>Simple implementation,</b> <b>Campaign-specific tracking</b>	<b>Limited data, Manual management</b> required

#### UTM Parameters:

- **utm\_source:** Traffic source (google, facebook)
- **utm\_medium:** Marketing medium (cpc, email)
- **utm\_campaign:** Campaign name (summer\_sale)

#### Best Practices:

- **Consistent naming** conventions
- **URL shortening** for long tracking codes
- **Regular monitoring** of campaign performance

#### Mnemonic

“LONG vs SHORT” (Comprehensive vs Simple tracking)

### Question 3(a) OR [3 marks]

Explain any one Single-touch attribution model with example.

### Solution

**Last-Click Attribution Model** gives 100% credit to the final touchpoint before conversion.

**Example Scenario:** Customer journey: Social Media → Email → GoogleSearch → Purchase

#### Credit Distribution:

- Google Search: 100%
- Other touchpoints: 0%

**Use Case:** Simple e-commerce tracking focusing on immediate conversion drivers

### Mnemonic

“LAST WINS ALL” (Final touchpoint gets full credit)

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## Question 3(b) OR [4 marks]

Explain following Key metrics: Pageviews, New Visits.

### Solution

Metric	Definition	Measurement Value
Pageviews	Total number of pages viewed including repeat views	<b>Content popularity</b> and site usage
New Visits	Percentage of first-time visitors to website	<b>Audience growth</b> and reach expansion

#### Analysis Importance:

- **Pageviews:** Higher numbers indicate engaging content
- **New Visits:** Growth shows effective marketing outreach

### Mnemonic

“PN Metrics” (Pageviews for engagement, New visits for growth)

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## Question 3(c) OR [7 marks]

Describe various types of web analytics tool.

### Solution

Tool Category	Purpose	Examples	Key Features
Content Analytics	Content performance tracking	Google Analytics, Adobe Analytics	Page views, time on page, bounce rate
Customer Analytics	User behavior analysis	Hotjar, Crazy Egg	Heatmaps, session recordings
SEO Analytics	Search optimization	SEMrush, Ahrefs	Keyword rankings, backlink analysis
Social Media Analytics	Social performance	Facebook Insights, Twitter Analytics	Engagement rates, reach metrics
A/B Testing Tools	Conversion optimization	Optimizely, VWO	Split testing, conversion tracking

**Selection Criteria:**

- **Business objectives alignment**
- **Integration capabilities** with existing tools
- **Cost-effectiveness** for organization size

**Implementation Benefits:**

- **Data-driven decisions** for marketing strategy
- **ROI measurement** across channels
- **User experience optimization**

**Mnemonic**

“CCSSA Analytics” (Content, Customer, SEO, Social, A/B testing)

**Question 4(a) [3 marks]**

Explain Social Media Marketing.

**Solution**

Social Media Marketing uses social platforms to promote products and engage audiences.

**Core Elements:**

- **Content creation** for target audience engagement
- **Community building** through consistent interaction
- **Brand awareness** through organic and paid strategies
- **Customer support** via social channels

**Mnemonic**

“CCBC” (Content, Community, Brand awareness, Customer support)

**Question 4(b) [4 marks]**

Explain types of Instagram Ads.

**Solution**

Ad Type	Format	Best Use Case
<b>Photo Ads</b>	Single image with caption	<b>Product showcasing</b> and brand awareness
<b>Video Ads</b>	Short video content	<b>Storytelling</b> and engagement
<b>Carousel Ads</b>	Multiple images/videos	<b>Product catalogs</b> and features
<b>Stories Ads</b>	Full-screen vertical format	<b>Immediate action</b> and urgency

**Mnemonic**

“PVCS Instagram” (Photo, Video, Carousel, Stories)

**Question 4(c) [7 marks]**

Explain YouTube Marketing and its importance in digital marketing.

## Solution

YouTube Marketing leverages video content for brand promotion and audience engagement.

### YouTube Marketing Components:

#### Mermaid Diagram (Code)

```
{Shaded}  
{Highlighting} []  
graph TD  
    A[YouTube Marketing] --> B[Content Strategy]  
    A --> C[Channel Optimization]  
    A --> D[Video SEO]  
    A --> E[Analytics & Growth]  
{Highlighting}  
{Shaded}
```

Component	Strategy	Importance
Content Strategy	Educational, entertaining videos	Audience engagement and value delivery
Channel Optimization	Branding, playlists, descriptions	Professional presence and discoverability
Video SEO	Keywords, thumbnails, titles	Search visibility and organic reach
YouTube Ads	TrueView, bumper ads	Targeted promotion and quick results

### Digital Marketing Importance:

- Visual storytelling builds emotional connections
- Search engine benefits (YouTube is 2nd largest search engine)
- Cross-platform integration with other marketing channels
- Cost-effective compared to traditional video advertising

### Success Metrics:

- Watch time and retention rates
- Subscriber growth and engagement
- Conversion tracking from video to website

## Mnemonic

“CCVA Success” (Content, Channel, Video SEO, Ads for YouTube success)

## Question 4(a) OR [3 marks]

List the metrics available on Instagram for tracking the success of marketing strategies.

## Solution

### Instagram Analytics Metrics:

- **Reach:** Number of unique accounts seeing content
- **Impressions:** Total content views including repeats
- **Engagement Rate:** Likes, comments, shares percentage
- **Profile Visits:** Traffic to Instagram business profile
- **Website Clicks:** Traffic driven to external website
- **Story Completion Rate:** Percentage viewing full stories

## Mnemonic

“RIEPSW” (Reach, Impressions, Engagement, Profile visits, Story completion, Website clicks)

## Question 4(b) OR [4 marks]

Explain types of YouTube Ads.

### Solution

YouTube Ad Type	Format	Duration	Best For
<b>TrueView In-Stream</b>	Skippable video ads	12 seconds+	<b>Brand awareness campaigns</b>
<b>TrueView Discovery</b>	Thumbnail + text	Variable	<b>Content promotion</b>
<b>Bumper Ads</b>	Non-skippable short ads	6 seconds	<b>Quick messaging</b>
<b>Overlay Ads</b>	Banner on video	Static	<b>Website traffic</b>

### Mnemonic

“TTBO YouTube” (TrueView In-stream, TrueView Discovery, Bumper, Overlay)

## Question 4(c) OR [7 marks]

Describe the targeting options available in Facebook advertising.

### Solution

Facebook offers comprehensive targeting for precise audience reach:

Targeting Category	Options	Purpose
<b>Demographics</b>	Age, gender, education, income	<b>Basic audience definition</b>
<b>Location</b>	Countries, cities, radius	<b>Geographic targeting</b>
<b>Interests</b>	Hobbies, pages liked, activities	<b>Behavioral targeting</b>
<b>Behaviors</b>	Purchase history, device usage	<b>Action-based targeting</b>
<b>Custom Audiences</b>	Website visitors, email lists	<b>Retargeting existing contacts</b>
<b>Lookalike Audiences</b>	Similar to existing customers	<b>Audience expansion</b>

#### Advanced Features:

- **Detailed targeting** with inclusion/exclusion options
- **Audience insights** for optimization
- **A/B testing** different audience segments

#### Campaign Optimization:

- **Narrow targeting** for specific products
- **Broad targeting** for brand awareness
- **Dynamic audiences** based on user behavior

#### Performance Benefits:

- **Higher conversion** rates through precision
- **Cost efficiency** with relevant audiences
- **Scalable growth** through lookalike expansion

## Mnemonic

“DLIBCL Targeting” (Demographics, Location, Interests, Behaviors, Custom, Lookalike)

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### Question 5(a) [3 marks]

Explain the concept of LinkedIn marketing.

## Solution

LinkedIn Marketing focuses on professional networking and B2B relationship building.

### Key Concepts:

- Professional audience targeting for B2B sales
- Thought leadership through industry content
- Network expansion via connections and groups
- Lead generation through targeted campaigns

## Mnemonic

“PTNL” (Professional, Thought leadership, Network, Leads)

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### Question 5(b) [4 marks]

Explain different types of email marketing campaigns.

## Solution

Campaign Type	Purpose	Timing
<b>Welcome Series</b>	New subscriber onboarding	<b>Immediate</b> after signup
<b>Newsletter</b>	Regular content updates	<b>Weekly/Monthly</b> schedule
<b>Promotional</b>	Sales and special offers	<b>Event-based</b> campaigns
<b>Abandoned Cart</b>	Recovery incomplete purchases	<b>24-48 hours</b> after abandonment

## Mnemonic

“WNPA Emails” (Welcome, Newsletter, Promotional, Abandoned cart)

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### Question 5(c) [7 marks]

Explain the different types of Google Ads Campaigns.

## Solution

Google Ads offers multiple campaign types for different marketing objectives:

Campaign Type	Platform	Ad Format	Best For
<b>Search Campaigns</b>	Google Search	Text ads	<b>High-intent</b> keyword targeting
<b>Display Campaigns</b>	Partner websites	Banner/image ads	<b>Brand awareness</b> and retargeting

<b>Video Campaigns</b>	YouTube	Video ads	<b>Engagement</b> and storytelling
<b>Shopping Campaigns</b>	Google Shopping	Product listings	<b>E-commerce</b> sales
<b>App Campaigns</b>	Multiple platforms	Automated ads	<b>App downloads</b> and engagement

  

<b>Smart Campaigns</b>	Automated placement	Mixed formats	<b>Small business</b> automation
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### Campaign Strategy Framework:

#### Mermaid Diagram (Code)

```
{Shaded}
{Highlighting} []
graph TD
    A[Marketing Objective] --> B{Campaign Type}
    B --> C[Search Intent]
    B --> D[Display Awareness]
    B --> E[Video Engagement]
    B --> F[Shopping Sales]
{Highlighting}
{Shaded}
```

### Optimization Strategies:

- Keyword research for search campaigns
- Audience targeting for display campaigns
- Creative testing across all formats
- Conversion tracking for ROI measurement

### Budget Allocation:

- Search: 40-50% for high-intent traffic
- Display: 20-30% for brand building
- Video: 15-25% for engagement
- Shopping: 10-20% for e-commerce

### Performance Metrics:

- Click-through rates (CTR)
- Cost per acquisition (CPA)
- Return on ad spend (ROAS)

### Mnemonic

“SDVSAS Google” (Search, Display, Video, Shopping, App, Smart campaigns)

### Question 5(a) OR [3 marks]

Explain the concept of Twitter Marketing.

#### Solution

Twitter Marketing utilizes real-time communication for brand engagement and customer service.

#### Core Elements:

- Real-time engagement with trending topics
- Customer support through direct responses
- Content amplification via retweets and hashtags
- Influencer partnerships for extended reach

### Mnemonic

“RCCI Twitter” (Real-time, Customer support, Content amplification, Influencer partnerships)

### Question 5(b) OR [4 marks]

Give the difference between SEO and PPC.

#### Solution

SEO (Search Engine Optimization)	PPC (Pay-Per-Click)
<b>Organic results placement</b>	<b>Paid advertisement placement</b>
<b>Long-term strategy (3-6 months)</b>	<b>Immediate results (within hours)</b>
<b>No direct cost per click</b>	<b>Cost per click payment</b>
<b>Sustainable traffic growth</b>	<b>Traffic stops when budget ends</b>
<b>Trust and credibility higher</b>	<b>Lower trust (marked as ads)</b>
<b>Requires ongoing SEO efforts</b>	<b>Requires continuous budget</b>

#### Mnemonic

“OLNSTN vs PICRCR” (Organic, Long-term, No cost vs Paid, Immediate, Cost-per-click)

### Question 5(c) OR [7 marks]

Explain various bidding strategies available in Google Ads.

#### Solution

Google Ads provides multiple bidding strategies for different campaign goals:

Bidding Strategy	Type	Goal	Best For
<b>Manual CPC</b>	Manual	<b>Traffic control</b>	<b>Experienced advertisers</b>
<b>Enhanced CPC</b>	Semi-automated	<b>Conversion optimization</b>	<b>Balanced control</b>
<b>Target CPA</b>	Automated	<b>Cost per acquisition</b>	<b>Lead generation</b>
<b>Target ROAS</b>	Automated	<b>Return on ad spend</b>	<b>E-commerce sales</b>
<b>Maximize Clicks</b>	Automated	<b>Traffic volume</b>	<b>Brand awareness</b>
<b>Maximize Conversions</b>	Automated	<b>Conversion volume</b>	<b>Campaign scaling</b>

## Strategy Selection Framework:

### Mermaid Diagram (Code)

```
{Shaded}  
{Highlighting} []  
graph TD  
    A[Campaign Objective] --> B[Business Goal]  
    B --> C[Traffic]  
    C --> D[Maximize Clicks]  
    B --> E[Leads]  
    E --> F[Target CPA]  
    B --> G[Sales]  
    G --> H[Target ROAS]  
    B --> I[Control]  
    I --> J[Manual CPC]  
{Highlighting}  
{Shaded}
```

### Implementation Guidelines:

- **Manual CPC:** Start with bid adjustments and keyword-level control
- **Enhanced CPC:** Allows Google to adjust bids up to 30% for better conversions
- **Target CPA:** Set based on historical conversion data
- **Target ROAS:** Requires sufficient conversion tracking data

### Performance Monitoring:

- **Bid strategy reports** for effectiveness analysis
- **Search term reports** for keyword optimization
- **Auction insights** for competitor comparison

### Advanced Considerations:

- **Conversion tracking** setup is crucial for automated strategies
- **Learning period** of 2-4 weeks for optimization
- **Budget sufficiency** for automated bidding effectiveness

## Mnemonic

“METMM Bidding” (Manual, Enhanced, Target CPA, Target ROAS, Maximize clicks, Maximize conversions)