

# 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                      |
|--------------------|---------------------------------------|------------------------------|
| Situation Analysis | Current market position and SWOT      | Understanding starting point |
| Target Audience    | Demographics and buyer personas       | Focused marketing efforts    |
| Goals & Objectives | SMART goals with KPIs                 | Measurable outcomes          |
| Strategy Selection | SEO, SEM, Social Media, Email         | Channel optimization         |
| Budget Allocation  | Resource distribution across channels | Cost management              |
| Content Calendar   | Scheduled content publication         | Consistent engagement        |
| Analytics Setup    | 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                     |
|---------------|-----------------------------|-----------------------------|-------------------------------|
| Paid Media    | Purchased advertising space | Google Ads, Facebook Ads    | Immediate reach and control   |
| Owned Media   | Brand-controlled channels   | Website, email lists, blogs | Long-term asset building      |
| Earned Media  | Third-party endorsements    | Reviews, shares, mentions   | Credibility and trust         |
| Managed Media | Influenced but not owned    | Influencer partnerships     | Extended reach 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**

Website elements optimization  
Title tags, meta descriptions  
Content quality and keywords  
Internal linking structure  
Complete control by website owner  
Technical optimization focus

**Off-Page SEO**

External factors optimization  
Backlinks from other sites  
Social media signals  
Domain authority building  
Limited control, depends on others  
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 |
| <b>Quality content</b> creation               | <b>Content scraping</b> and duplication     |
| <b>Natural link building</b>                  | <b>Link farms</b> and paid links            |
| <b>Long-term results</b>                      | <b>Quick but risky gains</b>                |
| <b>Search engine approved</b>                 | <b>Penalty risks</b> 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 → Website Visit → 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                                      |
|-----------------|---|---|
| Unique Visitors | Count of individual users visiting website in specific period | Measures <b>audience reach</b> and growth         |
| Bounce Rate     | 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   |
|--------------------|---|--|---|
| Long Tracking Code | Detailed parameters with extensive information          | <b>Comprehensive data</b> collection, <b>Detailed insights</b>   | <b>Complex URLs</b> , <b>User-unfriendly</b> appearance |
| UTM Code           | Urchin Tracking Module parameters for campaign tracking | <b>Simple implementation</b> , <b>Campaign-specific</b> tracking | <b>Limited data</b> , <b>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)

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

Explain following Key metrics: Pageviews, New Visits.

### Solution

| Metric            | Definition  | Measurement Value                          |
|-------------------|---|--|
| <b>Pageviews</b>  | Total number of pages viewed including repeat views | <b>Content popularity</b> and site usage   |
| <b>New Visits</b> | 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)

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

Describe various types of web analytics tool.

### Solution

| Tool Category                 | Purpose                      | Examples                             | Key Features                          |
|-------------------------------|------------------------------|--------------------------------------|---------------------------------------|
| <b>Content Analytics</b>      | Content performance tracking | Google Analytics, Adobe Analytics    | Page views, time on page, bounce rate |
| <b>Customer Analytics</b>     | User behavior analysis       | Hotjar, Crazy Egg                    | Heatmaps, session recordings          |
| <b>SEO Analytics</b>          | Search optimization          | SEMrush, Ahrefs                      | Keyword rankings, backlink analysis   |
| <b>Social Media Analytics</b> | Social performance           | Facebook Insights, Twitter Analytics | Engagement rates, reach metrics       |
| <b>A/B Testing Tools</b>      | 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  | <b>Audience engagement</b> and value delivery    |
| Channel Optimization | Branding, playlists, descriptions | <b>Professional presence</b> and discoverability |
| Video SEO            | Keywords, thumbnails, titles      | <b>Search visibility</b> and organic reach       |
| YouTube Ads          | TrueView, bumper ads              | <b>Targeted promotion</b> 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</b> campaigns |
| <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</b> definition     |
| <b>Location</b>            | Countries, cities, radius        | <b>Geographic</b> targeting          |
| <b>Interests</b>           | Hobbies, pages liked, activities | <b>Behavioral</b> targeting          |
| <b>Behaviors</b>           | Purchase history, device usage   | <b>Action-based</b> targeting        |
| <b>Custom Audiences</b>    | Website visitors, email lists    | <b>Retargeting</b> existing contacts |
| <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)

### 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)

### 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)

### 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    |

#### 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)

**Organic results** placement  
**Long-term strategy** (3-6 months)  
**No direct cost** per click  
**Sustainable traffic** growth  
**Trust and credibility** higher  
**Requires ongoing** SEO efforts

##### PPC (Pay-Per-Click)

**Paid advertisement** placement  
**Immediate results** (within hours)  
**Cost per click** payment  
**Traffic stops** when budget ends  
**Lower trust** (marked as ads)  
**Requires continuous** budget

#### 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                |
|----------------------|----------------|-------------------------|-------------------------|
| Manual CPC           | Manual         | Traffic control         | Experienced advertisers |
| Enhanced CPC         | Semi-automated | Conversion optimization | Balanced control        |
| Target CPA           | Automated      | Cost per acquisition    | Lead generation         |
| Target ROAS          | Automated      | Return on ad spend      | E-commerce sales        |
| Maximize Clicks      | Automated      | Traffic volume          | Brand awareness         |
| Maximize Conversions | Automated      | Conversion volume       | Campaign scaling        |

## Strategy Selection Framework:

### Mermaid Diagram (Code)

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