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M.J.M.-27

Electronic Media

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**Sample Preview
of the
Solved
Sample Question
Papers**

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QUESTION PAPER

June – 2023

(Solved)

ELECTRONIC MEDIA

M.J.M.-27

Time: 3 Hours]

[Maximum Marks : 100

Note: Answer any five questions. All questions carry equal marks.

Q. 1. Discuss various formats of radio music programmes.

Ans. Ref.: See Chapter-2, Page No. 15, Q. No. 1.

Q. 2. Describe the merits and demerits of outdoor recordings. Give suitable examples.

Ans. Outdoor recording is the term used for an audio recording produced outside a recording studio, and the term applies to recordings of both natural and human-produced sounds. It also applies to sound recordings like electromagnetic fields or vibrations using different microphones like a passive magnetic antenna for electromagnetic recordings or contact microphones. For underwater field recordings, a field recordist uses hydrophones to capture the sounds and movements of whales, or other aquatic organisms. These recordings are very useful for sound designers.

Outdoor recording often involves the capture of ambient noises that are low level and complex, and, in response, the requirements from the field recordist have often pushed the technical limits of recording equipment, that is, demanding low noise and extended frequency response in a portable, battery-powered unit. For this reason, field recordists have favoured high-quality (usually professional) recorders, microphones, and microphone pre-amplifiers. The history of the equipment used in this area closely tracks the development of professional portable audio recording technology. Modern accessories used in the field include, but are not limited to: windscreens (foam, fur, hair, parabolic reflector), shock mounts, microphone cables, digital audio recorders and so on.

Some primary merits of outdoor recording are:

1. Wide open spaces can provide about as non-reflective an environment as is possible. The only reflective surfaces present are the ground (which may even be relatively soft and absorbent), as well as any

distant structures (a grove of trees, buildings), and the performers themselves.

2. The benefits of sunlight and oxygen are too often lost in windowless studios that can seem more like nuclear silos. Natural light and air feed performers energy, and the majority of the time, energy trumps precision. (The ‘Louie, Louie’ phenomenon).

Some primary demerits of outdoor recording are:

1. Wind is certainly enemy number one. Fortunately, this element can be mitigated with some proper wind screens—not foam, but of the furry kind. This relatively minor expense (in the \$30-50 range per microphone) can make or break any project. Whether a world-class vintage mic or an SM57, once any wind gets in, the whole endeavor is unsalvageable.

Here are a few tips that can help with recording guerrilla-style in dynamic versus static environments:

1. Somewhat counter intuitively, artists should face any source of sound—such as roads or crowds. That way the mikes are not receiving any of those sounds directly.

2. Close-mixing is the equivalent of holding a small object up close to your field of vision. You’ll notice that the object you are holding close to your eye will be able to literally block out skyscrapers or mountains in the distance. In audio, as in vision, it’s all about perspective. Whatever sound is loudest and closest will often render the others invisible.

3. Whenever possible, pointing mikes upwards eliminates reflection from the ground. The greatest compliment is when someone is not able to tell that something was recorded outdoors, particularly if they are someone with golden ears like John Golden (who I have had the honor to work on records with since 1987) and his fifty-plus years of mastering experience. Even better is when someone refuses to believe that something was not recorded in a formal studio.

Q. 3. Explain the concept of sound editing and mixing.

Ans. Ref.: See Chapter-4, Page No. 33, 'Concept of Sound Editing' and Page No. 37, 'Equalising and Sound Mixing'.

Q. 4. Enumerate the benefits and pitfalls of modern Information and Communication Technology based sound platforms. Explain your arguments with relevant examples.

Ans. Ref.: See Chapter-5, Page No. 45, 'Modern ICT Based Platforms'.

Q. 5. Give a detailed account of the functioning of DSLR camera.

Ans. Ref.: See Chapter-6, Page No. 57, 'Functioning of DSLR Camera'.

Q. 6. With the advent of smartphones and various mobile-based apps for photo editing, discuss the issue of ethical aspects of digital photography. Cite relevant examples.

Ans. Ref.: See Chapter-9, Page No. 88, 'Introduction', 'What is Photo Editing?' and Page No. 91, 'Ethical Issues'.

Q. 7. Explain the role of scripts for audio and video programmes. Describe the basic rule pertinent to script writing.

Ans. Ref.: See Chapter-10, Page No. 98, 'Writing for Documentaries', Page No. 100, 'Writing for Other Audio-visual Programme, and Page No. 99, 'Role of Scripting in Differentness it Documentaries'.

Q. 8. Compare and contrast the single-camera production vs. multi-camera production techniques.

Ans. Ref.: See Chapter-11, Page No. 110, 'Types of Production'.

Q. 9. Discuss different types of camera movements.

Ans. Ref.: See Chapter-13, Page No. 134, 'Camera Movements'.

Q. 10. Write short answers for any *four* of the following questions.

(a) How to record an audio panel discussion?

Ans. Ref.: See Chapter-3, Page No. 25, 'Recording a Talk Programme' and 'Recording a Panel Discussion'.

(b) What is metadata tagging?

Ans. Ref.: See Chapter-4, Page No. 38, 'Metadata Tagging'.

(c) Explain the salient features of colour the schemes.

Ans. Ref.: See Chapter-7, Page No. 68, 'Colour Schemes'.

(d) Discuss the roles and responsibilities of producer of a video programme.

Ans. Ref.: See Chapter-11, Page No. 114, 'Production Personnel: Roles and Responsibilities'.

(e) Give a brief account of the history of video editing.

Ans. Ref.: See Chapter-15, Page No. 158, 'Historical Background'.

Sample Preview of The Chapter

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ELECTRONIC MEDIA

Production Process

1

INTRODUCTION

The main objective of any radio station is to create engaging and educational programs that effectively cater to its target audience. The success and popularity of a radio station depend on the quality and content of its programs. To ensure this, every program goes through a planning and preparation phase before it is produced. In this unit, we will explore the different stages of program production and gain an understanding of the significant effort and careful consideration required to create effective and broadcast-worthy content.

CHAPTER AT A GLANCE

STAGES OF PROGRAMME PRODUCTION

The program production process consists of three stages: pre-production, production, and post-production. Planning is crucial in each stage, but extensive planning is particularly important in the pre-production stage, where the program is conceptualized and all necessary preparations are made. Without proper planning, even the most interesting theme or creative idea may not have the desired impact.

During the production stage, actual recording takes place after adequate rehearsals. Multiple takes may be recorded for various reasons. The best take is chosen during the editing phase, which is part of the post-production stage. In post-production, additional elements are added to enhance the program. This includes incorporating sound effects and creating a final master copy of the program, known as the Mixed Master.

PROGRAMME PLANNING

Effective planning is crucial for any endeavour, including radio programming. When planning a radio program, it is important to consider the strengths and

limitations of the medium. Communication over radio relies on transmitting messages through sound, which the listener must hear and interpret to understand the message. Effective communication involves both the expression of the communicator and the listening and comprehension abilities of the listener. Therefore, the message must be carefully designed. Obtaining proper audience feedback is necessary to ensure effective communication.

It is important to remember that a radio program is intended for a single listener, even though multiple individuals may tune in to the same program simultaneously. It is a one-to-one form of communication. It is unlikely that a dull and uninteresting program, even if informative, will be listened to. Programs should be planned and executed in a way that captures and retains the listener's attention.

Pre-requisites of a Radio Programme

When planning a program, it is important to understand the requirements of the medium and ensure that the chosen theme and style can effectively utilize its potential. The program should also be suitable for the target audience.

An effective program possesses the following attributes:

Interest: A program should be interesting in terms of content and presentation. Voice quality and acting should captivate listeners to maintain their interest.

Relevance: The program should relate to the lives of the listeners, whether it's about their livelihood, environment, activities, or emotions. It should evoke admiration, curiosity, or depict individuals in unique situations.

Comprehension: The program needs to be understandable to the audience. The content should be

clear and create concrete images, avoiding complex or abstract ideas that may lead to confusion.

Conflict: The element of conflict, whether between people, nations, ideas, or nature, stimulates interest. It can involve controversies, contrasts, struggles, problems, or challenging questions.

Elements of a Radio Programme

A radio programmer needs to carefully plan the use of four elements in their programs: spoken-word, sound effects, music, and pause. Each element serves a specific purpose and contributes to the overall impact of the program:

Spoken-word: This is the most common and important element of radio programs. It uses words to communicate and convey the content of the program. The programmer's voice brings meaning to the words and helps create images in the listener's mind.

Sound effects: Sound effects are universal and can be understood by all language groups. They include natural sounds like wind, water, and birds, as well as artificially created sounds. Sound effects help create an environment, project character images, and indicate specific happenings or events.

Music: Various forms of music, such as film music, light music, folk music, or classical music, can be used in radio programs. Music can serve as the main component of programs like features or operas, or it can be used as a sound effect to create a particular mood or environment.

Pause: In a medium that relies solely on sound, pauses play a significant role. Pauses are used imaginatively to convey meaning and add depth to the program. They evoke images and emotions, and a well-placed pause can communicate powerful messages. Even silence can convey a range of feelings and emotions.

By planning and utilizing these elements judiciously, a radio programmer can enhance the impact and effectiveness of their programs.

Target Planning

Before embarking on a radio program, it is crucial to have a clear understanding of the target audience. This includes their demographics, educational and economic status, preferences, and comprehension level. Gathering information about the audience helps in determining the content, style, format, and pace of the program.

Given the vast and diverse nature of the audience in a country like ours, it is important to cater to a

heterogeneous group with varying cultural, social, regional, and linguistic backgrounds.

Analyzing the audience composition also involves assessing their needs and aspirations. A successful program addresses these needs by providing relevant content. Balancing the principle of demand and supply, radio programs must offer what the listeners want while also offering items that they need. This dual role allows radio to both reflect and shape public opinion.

Sometimes, there may be a need to supply a different type of program to serve the larger interests of society or the nation. In such cases, the program should be designed to create a demand for it.

PRE PRODUCTION

While planning radio programs, certain common elements exist across different formats, although the methodologies for planning specific programs like drama, music, sports, and outside broadcasts (OBs) may vary. Here are some of these common elements in program planning.

Identifying the Aim and Defining the Scope

In planning an effective radio program, the first step is to determine the overall aim of the program, whether it is educational, informative, awareness-generating, enriching, or entertaining. Clearly defining the objectives of the program is crucial as all efforts will be focused on achieving those objectives.

Once a decision is made to produce a program on a specific subject, the next stage is conceptualization. The producer outlines the program, highlighting the main focus and other aspects that require emphasis. The scope of the program serves as the framework for planning, taking into account the program's needs assessment and production requirements.

Content Planning and Research

Content planning involves gathering and organizing all the material related to a subject. Selecting the right material is crucial to ensure that the program effectively covers the chosen topic. It is important to avoid overwhelming the program with excessive information. If the subject is extensive, planning a series of programs allows for a comprehensive treatment of the topic instead of cramming everything into a single program.

For topics like child labor, the producer must conduct thorough research, studying legal, social, anthropological, and other aspects of the subject. Consulting experts in the field is essential. In cases where the subject is complex or technical, engaging an expert to provide research inputs becomes necessary.

PRODUCTION PROCESS / 3

Selection of Format

In radio, the term 'format' refers to the structure or form of a program, such as talk format, story format, or feature format. Radio scripts can be written in various basic formats, including talk, feature, or documentary. The choice of format depends on its suitability for conveying a specific idea to a particular audience. These formats can be used individually or in combination to create engaging and captivating radio programs. Some formats draw their names from literary usage, such as story and drama, while others, like feature and documentary, have different origins for their nomenclature.

Selection of Scriptwriter and Other Talents

In radio broadcasting, a significant portion of the content is prepared in advance. For talk format programs, the producer chooses a speaker who writes the script. In the case of features, the producer either writes the script themselves or hires a scriptwriter. Selecting a skilled scriptwriter is crucial, as the producer needs to provide a clear brief on the program's scope and ensure that the script aligns with the program's requirements. Having a well-written script is half the battle in creating a good program.

Radio stations maintain a classified directory of talents and continuously scout for new talent to add to the directory. When selecting talent, the producer considers the specific requirements of the program at hand. In the case of dramas, the selection of actors is based on the characters in the play and their suitability for the roles, including considering their voice and age.

Selection of Time Slot

Radio stations have a schedule that determines the time slots for different programs aimed at specific target groups. The station management, in consultation with producers, decides the allocation of time slots. The selection of time slots is based on factors such as preferred listening times, which can vary depending on local conditions.

Completing Contractual Formalities

Producers of radio programmes must obtain necessary clearances for copyrighted material they wish to use, such as published works or adaptations of novels. Contracts may need to be established with authors or writers to secure broadcast rights. Similarly, for outside broadcasting (OB) programmes like poetry gatherings or sporting events, clearances must be obtained from the event organizers. Legal agreements

are required with all individuals involved in the broadcast, including talkers, interviewers, artists, and musicians. Obtaining these clearances and agreements is an integral part of the producer's planning process.

SPECIFIC PLANNING FOR PROGRAMMES OF SPECIAL NATURE

Additional planning needs to be made for specific formats, such as drama, music, special audience programmes, and sports programmes.

Planning a Drama Programme: A drama producer seeks good scripts covering various themes, including historical and humorous plays. They persuade local writers to create scripts on specific subjects like women's empowerment and communal harmony. Literary works, including regional language works, are considered for radio adaptation. Writers capable of adapting the material and preparing the broadcast script are identified. Selecting the cast is crucial, considering the roles and voice-age alignment. If a character is 40 years old, the actor chosen should have a similar voice-age, regardless of their actual age.

Planning a Music Programme: Music programmes are diverse in formats, and the planning process varies accordingly. It is essential to achieve a balance between classical, light, folk (vocal and instrumental), and film music. Artists of different levels should be scheduled in their respective time slots, and representatives from various gharanas (music schools) should be featured. For light music programmes, planning involves selecting lyrics, composers, artists, and vocalists. Well-known lyricists may be approached for themed lyrics. The requirements of the orchestra and vocalists (solo or duet) should be coordinated with the composer. Planning for choral music is more elaborate, involving a conductor and multiple vocalists. The placement of artists in the studio also requires meticulous planning.

Planning of Special Audience Programme: When planning special audience programmes, it is important to consult with relevant agencies and stakeholders associated with those audiences. For example, for Agricultural and Industrial Workers programmes, there are consultative panels or advisory committees linked to the radio station, and their inputs should be incorporated. Similarly, for programmes targeting women and children, collaboration with government departments at the state and national levels, as well as NGOs working in those areas, is

necessary. Regular communication and liaison with these entities are essential for effective planning and implementation.

Planning of Sports Programme: In sports programming, the producer must align their coverage with the calendar of sporting activities prepared by state and national level sports organizations. The importance of the event and its timing are key factors in planning the coverage. Depending on the nature of the event, the producer can opt for live commentary, radio reports, or eyewitness accounts. It's important to note that sports organizations typically require a royalty fee for coverage, so the producer must engage in negotiations to finalize the terms and complete the necessary contractual formalities.

REHEARSALS

The production process involves two important steps: rehearsal and recording. Before recording, it is crucial to rehearse to make the most of limited studio time. Radio stations often have a separate rehearsal room called the Read Over Room (ROR). The first stage of rehearsal takes place in the ROR without microphones, while the second stage occurs inside the studios with microphones. Sufficient rehearsal time and attention to detail can reduce or eliminate the need for extensive post-production work.

RECORDING/PRODUCTION

The production stage begins after thorough planning and rehearsals. The producer takes on the responsibility of recording the programme. It is essential to check the studio recorder, clock, and other equipment ahead of time to ensure a smooth recording process. Proper emphasis on pre-production makes the actual production process easy. If the programme has been well-scripted, the content has been verified, and rehearsals have been conducted with the artists, the production phase is smooth sailing. The programme can be recorded in two situations, which are as follows:

Studio Recording

Radio programmes are typically recorded in professional recording studios equipped with the necessary technical facilities to ensure high-quality recordings suitable for broadcast. Different categories of programmes, such as Talk, Music, and Drama, have dedicated studios designed to meet their specific requirements. Talk studios prioritize voice clarity and are smaller in size, suitable for recording talks, interviews, and discussions. Music studios are larger, provide more reverberation, and accommodate a

greater number of microphones. Similarly, Drama studios have their own unique specifications to cater to the needs of recording dramatic performances.

Outside Broadcast (OB)

Outdoor broadcasts (OBs) are necessary to capture events of public interest that cannot be recorded in the studio. They provide an opportunity for broadcasters to engage with the real world and reflect the interests and activities of the community. Whether it's a music concert, religious function, exhibition, sporting event, public meeting, conference, or demonstration, OBs are essential for maintaining the credibility of the radio station and ensuring it remains connected to its audience. By going beyond the studio walls, radio can accurately reflect what is happening in the world and fulfill the diverse interests of its listeners.

Outdoor broadcast (OB) programs can be broadly categorized into two types: 'Live' and 'Recorded.' The preparation for both types is similar, with adjustments based on the location and scale of the program. OB programs are planned according to the specific objectives, treatment, and scope of the program. They typically involve coverage of special events like Republic Day Parade and Independence Day functions, field-based discussions and interviews, exhibitions and fairs, international conferences, national and local events such as funeral processions, religious functions, swearing-in ceremonies, and live broadcast or relay of sports commentaries like cricket matches, Asian Games, and National Games.

The producer and engineering staff in charge of an OB program must plan and prepare for the event. They meet with the organizers to discuss the required support before and during the event. A reconnaissance survey of the venue is conducted to determine the best vantage point for commentary and to assess available resources such as power supply points. The number and types of microphones, cables, and furniture needed are planned after visiting the OB location. It is important to ensure uninterrupted power supply and carry backup batteries for the recorders. If the OB is to be broadcast live, telephone lines for sound transmission should be booked and tested in advance, usually provided by the Telecommunication department or its agency.

POST PRODUCTION

Post-production refers to the work done after the recording process to refine and enhance the recorded material. It involves removing imperfections or defects, such as mistakes or unwanted noises, to ensure