FACULTY OF VISUAL ARTS AND PERFORMING ARTS

SYLLABUS

FOR

BACHELOR OF VOCATION (B.Voc.)
SOUND TECHNOLOGY
(Semester: I – VI)

Session: 2019-20

GURU NANAK DEV UNIVERSITY,
AMRITSAR.

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(ii) Subject to change in the syllabi at any time.
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**Semester – I:**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Subject</th>
<th>Theory</th>
<th>Practical</th>
<th>Total Marks</th>
<th>Time Allowed for Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Introduction to Computers and Digital Audio</td>
<td>50</td>
<td>50</td>
<td>100</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>2.</td>
<td>Basics of Music - I</td>
<td>50</td>
<td>50</td>
<td>100</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>3.</td>
<td>Audio Production Lab. – I</td>
<td>–</td>
<td>50</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>4.</td>
<td>Performing Arts</td>
<td>50</td>
<td>–</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>5.</td>
<td>Communication Skills in English–I</td>
<td>50</td>
<td>–</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>6.</td>
<td>Punjabi (Compulsory) OR</td>
<td>50</td>
<td>–</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>*</td>
<td>भूरंगी पंजाबी OR</td>
<td>50</td>
<td>–</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>*</td>
<td>Punjab History &amp; Culture (From Earliest Times to C 320)</td>
<td>50</td>
<td>–</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>7.</td>
<td>** Drug Abuse: Problem, Management and Prevention (Compulsory Paper)</td>
<td>50</td>
<td>–</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
</tbody>
</table>

**Semester – II:**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Subject</th>
<th>Theory</th>
<th>Practical</th>
<th>Total Marks</th>
<th>Time Allowed for Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Introduction to Sound Technology</td>
<td>50</td>
<td>50</td>
<td>100</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>2.</td>
<td>Basics of Music - II</td>
<td>50</td>
<td>50</td>
<td>100</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>3.</td>
<td>Audio Production Lab. – II</td>
<td>–</td>
<td>50</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>4.</td>
<td>Media Appreciation</td>
<td>50</td>
<td>–</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>5.</td>
<td>Communication Skills in English–II</td>
<td>35</td>
<td>15</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>6.</td>
<td>Punjabi Compulsory OR</td>
<td>50</td>
<td>–</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>*</td>
<td>भूरंगी पंजाबी OR</td>
<td>50</td>
<td>–</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>*</td>
<td>Punjab History &amp; Culture (C 320 to 1000 B.C.)</td>
<td>50</td>
<td>–</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>7.</td>
<td>** Drug Abuse: Problem, Management and Prevention (Compulsory Paper)</td>
<td>50</td>
<td>–</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
</tbody>
</table>

**Note:**

* Special Paper in lieu of Punjabi Compulsory for those students who are not domicile of Punjab.

** Marks of this Paper will not be included in the Total Marks.
### Semester – III:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Subject</th>
<th>Theory</th>
<th>Practical</th>
<th>Total Marks</th>
<th>Time Allowed for Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Sound Recording and Mixing (Theory)</td>
<td>50</td>
<td>—</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td></td>
<td>Sound Recording and Mixing (Practical)</td>
<td>—</td>
<td>50</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>2.</td>
<td>Basics of Musical Composition (Theory)</td>
<td>50</td>
<td>—</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td></td>
<td>Basics of Musical Composition (Practical)</td>
<td>—</td>
<td>50</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>3.</td>
<td>Audio Production Lab. – III (Practical)</td>
<td>—</td>
<td>50</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>4.</td>
<td>Personality Development – I (Practical)</td>
<td>—</td>
<td>50</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>5.</td>
<td>Production Management (Theory)</td>
<td>50</td>
<td>—</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td></td>
<td>Production Management (Practical)</td>
<td>—</td>
<td>50</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td></td>
<td><strong>Total:</strong></td>
<td><strong>150</strong></td>
<td><strong>250</strong></td>
<td><strong>400</strong></td>
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</table>

### Semester – IV:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Subject</th>
<th>Theory</th>
<th>Practical</th>
<th>Total Marks</th>
<th>Time Allowed for Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Sound Studio Management (Theory)</td>
<td>50</td>
<td>—</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td></td>
<td>Sound Studio Management (Practical)</td>
<td>—</td>
<td>50</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>2.</td>
<td>Electronic Music Production (Theory)</td>
<td>50</td>
<td>—</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td></td>
<td>Electronic Music Production (Practical)</td>
<td>—</td>
<td>50</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>3.</td>
<td>Audio Production and Multimedia (Practical)</td>
<td>—</td>
<td>100</td>
<td>100</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>4.</td>
<td>Personality Development – II (Practical)</td>
<td>—</td>
<td>50</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>5.</td>
<td>Production Design Workshop</td>
<td>50</td>
<td>—</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td><em>(ESL-221): Environmental Studies</em></td>
<td>100</td>
<td>—</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total:</strong></td>
<td><strong>150</strong></td>
<td><strong>250</strong></td>
<td><strong>400</strong></td>
<td></td>
</tr>
</tbody>
</table>

* Marks of EVS will not be included in the Total Marks.
## Semester – V:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Subject</th>
<th>Theory</th>
<th>Practical</th>
<th>Total Marks</th>
<th>Time Allowed for Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Advertising, Marketing &amp; Event Management</td>
<td>50</td>
<td>–</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>2.</td>
<td>Radio Journalism</td>
<td>50</td>
<td>50</td>
<td>100</td>
<td>3 Hrs. each</td>
</tr>
<tr>
<td>3.</td>
<td>Music Composition and Arrangement</td>
<td>–</td>
<td>100</td>
<td>100</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>4.</td>
<td>Studio and Live Music Recording</td>
<td>–</td>
<td>100</td>
<td>100</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>5.</td>
<td>Audio Post Production</td>
<td>–</td>
<td>50</td>
<td>50</td>
<td>3 Hrs.</td>
</tr>
</tbody>
</table>

## Semester – VI:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Subject</th>
<th>Total Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Portfolio Development (Practical)</td>
<td>200</td>
</tr>
<tr>
<td>2.</td>
<td>Professional Skills (Viva–Voce)</td>
<td>50</td>
</tr>
<tr>
<td>3.</td>
<td>Industrial Training (6–8 weeks)</td>
<td>150</td>
</tr>
</tbody>
</table>
Instructions for the Paper Setters:

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

**Section -A**

- Introduction to Computers: Application, Input and Output Devices
- Storage Technologies: Optical Disks such as CDROM, DVD and Blue–Ray Disc Removable Media such as Memory Cards, USB Drives, External HDD

**Section -B**

- Working with Windows, Difference between Windows and Macintosh
- Working with MS-Office, Introduction to MS-Word and MS-PowerPoint, various operations on a file, Page setup

**Section -C**

- Social Media, Blogs, Video Channels, Mobile Devices (Smartphone, Tablets, etc.)

**Section -D**

- Digital Audio: Audio Sampling Rate, Bit Depth,
- Various File Formats: MP3, WMA, WAVE (PCM), AIFF, M4A, OGG, RA & RM Mono v/s Stereo, Role of Sound Card
INTRODUCTION TO COMPUTERS AND DIGITAL AUDIO (Practical)

Time: 3 Hrs.  Practical: 50 Marks

Practical will be based on operational Knowledge of:

- Basic Window Functions
- MS-Office (Basic MS-Word & MS-Powerpoint)
- Internet and Digital Audio

Suggested Readings:

1. Windows Based Computer Courses by Gurvinder Singh and Rashpal Singh
2. MS-Office by BPB Publications
3. Computer Fundamentals by P.K. Sinha
4. Introduction to Computers by N. Subramanian
5. Introduction to Computers by Peter Norton
6. Introduction to Software Packages by R.K. Taxali
7. How to Do Everything with MP3 and Digital Music by Dave Johnson and Rick Broida
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – I

PAPER – II: BASICS OF MUSIC – I (Theory)

Time: 3 Hrs. each

Total: 100 Marks

Theory: 50 Marks

Instructions for the Paper Setters:-
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Section-A
Definitions: Swar, Alankar, Laya, Matra, Taal, Sam, Tali, Khali, Aaroh, Avroh, Pakad

Importance of Laya in Music, Introduction to Thatas

Section-B
Study of Various Instruments: Harmonium, Tanpura, Tabla, Keyboard, Guitar

Writing of Taals: Teen Taal, Kehrawa in Ekgun & Dugun Layakaries in proper Notation, Notation of Drut Khyal in raag yaman.

Section-C
Fundamentals of "Western" Music

Music Genres (Country, Hip Hop, Jazz, Pop, Rock, Folk, Blues, Electronic)

Concepts and Applications of Melody

Section-D
Harmony, Form, Chord Music Notation, Oral and Written intervals, Rhythm, Scales, Chords Octave, Semitone.
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – I

BASICS OF MUSIC – I (Practical)

Time: 3 Hrs. Practical: 50 Marks

Basic Playing Techniques: Harmonium, Tanpura, Tabla, Keyboard, Guitar
One Cinematic Song Presentation in Raag Yaman Teen Taal & Kehrawa on Tabla
Practical knowledge of Notes & Scale
Practice of Alankars, Presentation of Drut Khyal in Raag Yaman
One Cinematic Song Presentation in Raag Yaman

Suggested Readings:

1. Rag Parichya Part – I, II, and III by Shri Harish Chnder Srivastava
2. Sangeet Vishard Sangeet Karayalya, Hathras
3. Sangeet Nibandhavli, Dr. Gurnam Singh, published by Punjabi University, Patiala
4. Raag Parichey (Part 1, 2) by H.C.Shrivastava
5. Sangeet Shaster Darpan (Part–1, 2) by Shanti Gowardhan
6. Sangeet Subodh by Dr. Davinder Kaur
7. Alfred's Basic Guitar Method, Book 1 by Morton Manus, Ron Manus
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – I

PAPER – III: AUDIO PRODUCTION LAB. – I (Practical)

Time: 3 Hrs.  
Practical: 50 Marks

Unit-I
Understanding Digital Audio  
Working with various Audio file formats  
Basic file operations  
Working with Mono and Stereo Files  
Audio Sampling Rate and Audio Bit Depth

Unit-II
Function of a Sound Card  
Speakers, Microphone, Line-in Levels, Aligning sound systems  
Working of a Sound Studio,  
Workspace Health and Safety

Unit-III
Setting-up / disassembling Sound Equipment Capturing sound, Basic Sound Editing, editing tools, make a selection Trim/Cut/Crop,  
Inserting Markers, use of Markers  
Adjusting Volume

Software: Sound Forge

Suggested Readings:
1. Sound Check: The Basics of Sound and Sound Systems by Tony Moscal  
2. Back to Basics Audio by Julian Nathan  
4. Sound Forge Power! by Scott R. Garrigus  
5. The Audio Expert: Everything You Need to Know About Audio by Ethan Winer  
6. How to Do Everything with MP3 and Digital Music by Dave Johnson and Rick Broida
PAPER – IV: PERFORMING ARTS (Theory)

Instructions for the Paper Setters:-
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Section-A
Indian Music: Vedic, Traditional, Classical, Devotional, Ghazal, Folk, Sufi, Film Music
Traditional Indian Instruments

Section-B
Western/Other Music Forms, Styles, Genres
Theatrical Styles and Techniques

Section-C
Skit, Mimicry, Mime, One Act Play
Radio Theatre, Musical Plays

Section-D
Classical Dance, Indian Folk and Tribal Dance
Contemporary Dance, Dance Dramas, Ballet

Suggested Readings:
1. Indian Theatre by N.C. Jain
2. A Guide to North Indian Classical Vocal Music by Indurama Srivastava
3. Sangeet Nibandhavli by Dr. Gurnam Singh
4. Indian Music History & Structure by Emmie Te Nijenhuis
5. Art of Theatre by Gordan Craig Edward
6. Indian Classical Dance by Shovan Narayan
7. Exploring Dance Forms and Styles by Helena Scheff, Marty Sprague, Susan McGreevy-Nicholas
9. Genre in Popular Music by Fabian Holt
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – I

PAPER – V: COMMUNICATION SKILLS IN ENGLISH–I

Time: 3 Hours
Max. Marks: 50

Instructions for the Paper Setters:-
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

The syllabus is divided in four sections as mentioned below:

**Section–A**
**Reading Skills:** Reading Tactics and strategies; Reading purposes–kinds of purposes and associated comprehension; Reading for direct meanings.

**Section–B**
Reading for understanding concepts, details, coherence, logical progression and meanings of phrases/expressions.

**Activities:**
- Comprehension questions in multiple choice format
- Short comprehension questions based on content and development of ideas

**Section–C**
**Writing Skills:** Guidelines for effective writing; writing styles for application, personal letter, official/business letter.

**Activities:**
- Formatting personal and business letters.
- Organising the details in a sequential order

**Section–D**
Resume, memo, notices etc.; outline and revision.

**Activities:**
- Converting a biographical note into a sequenced resume or vice-versa
- Ordering and sub-dividing the contents while making notes.
- Writing notices for circulation/boards

**Recommended Books:**
- *Oxford Guide to Effective Writing and Speaking* by John Seely.
- *English Grammar in Use* (Fourth Edition) by Raymond Murphy, CUP
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – I

PAPER – VI: यूजिङ (स्वच्छता)

मंजूर : 3 पृष्ठ
चक्क आयर : 50

मैवमल-अ

मात्र अरूम (बजिंड़ ड्राज़ा),
(भी. सुमिरित बीज 484 ठाकरा विएप विज्ञान)
बजींड़ ड्राज़ केब पुरुशुरमहिलात, आर्थिकमत
(भूमा मार्ग लक्षणार्थण, मान)

मैवमल-बी

टिकिताधर जात (टिकिताधर लेख-मार्गविगत)
मध्य. म.म.अभिन्न,
पैरामा मैत्रित प्रवास, सुविधादि। (कथा 1 ते 6)
(लिखयं दे मार्ग, लिखय-पैली)

मैवमल-मी

(अ) पेसे मरता
(ब) पेतु भवज वे पृथकं ये हृदप्त

मैवमल-डी

(अ) पैरामा पूली टिकिताध : टिकिताध भर्गा, टिकिताध प्रवास वे लिखय, मन्त्र, तिष्काल, रूढ-पृथपा।
(ब) बामा टिकिताधः : बामा वा टिकिताधी गुप्त, बामा भि बामा टिकिताध वा भर्गा, पैरामा टिकिताधः वे पृथकं-हसु।

आून-शेड अूं तत्त्विकक्ष सधी उपागितां

1. पृथकं पृथकं वे चतु जगा भर्गा गन्वलो। उव जगा हिंदें वे पृथकं पृथकं सम्पन्तृ।
2. टिकिताधः वे बुड़ू भर्ग पृथकं चतु जगा गन्वलो। उव जगा हिंदें दिह पृथकं हिंडी वे।
3. पृथकं पृथकं वे पृथकं भर्ग गन्वलो।
4. पृथकं पृथकं वे पृथकं भर्ग गन्वलो। उव जगा हिंदें दिह दलं वे दलं जगा दिह-पृथकं दिह वे गन्वलो।
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – I

PAPER – VI: भूलरी विभागी
(In lieu of Compulsory Punjabi)

पाठ-खूब

मैरमरह-दे

पैंडी अद्वती, अद्वत कृष्ण, पैंड विश्वी दरें हंद घड़े पैंड हिंद घड़े
हंदे हंद घड़े भुजा भुजा (भूलरी सार-धार)
स्त्रा वाल (विश्वी, विश्वी, विश्वी) : पाठ-घड़े घड़े

मैरमरह-ची

भूलरी सार-धार : भूलरी सार-धार
(भागार महर, महर महर, म्हिसार महर, म्हिसार महर, म्हिसार महर भजे पिंडे)

मैरमरह-भी

हंदे हंदे दे दे भूलरी मधरन्दी : ब्रह्माज, ब्रह्माज, ब्रह्माज-घड़े, ब्रह्माज घड़े दे दे मुहिम भांति घड़े दे दे मधरन्दी।

मैरमरह-बी

उड़े दे मूंड दिलां दे दे, घात भाँतियाँ दे दे, हुंकार दे दे, घड़े दे मे मुह महिम घड़े दिि

भूल-चौंद अद्वे भविष्याच बूंदी उतारठिकां

1. भूमा घड़े दे चुंब भ्रज देके जी। उत भ्रज दिशें दे भूमा घड़े देके जी।
2. दिशें भ्रज दे चुंब भूमा घड़े दे कधे जी। उत भ्रज दिशें दे भूमा घड़े दे कधे जी।
3. चुंब भूमा घड़े दे चुंब भ्रज दें।
4. महर महर घड़े महर महर घड़े दे भूमा घड़े दे कधे भ्रज दें।
PAPER – VI: Punjab History & Culture (From Earliest Times to C 320)  
(Special Paper in lieu of Punjabi Compulsory)  
(For those students who are not domicile of Punjab)

Time: 3 Hours  
Max. Marks: 50

Instructions for the Paper Setters:-
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Section–A
1. Physical features of the Punjab and its impact on history.
2. Sources of the ancient history of Punjab

Section–B
3. Harappan Civilization: Town planning; social, economic and religious life of the Indus Valley People.

Section–C
5. Social, Religious and Economic life during Rig Vedic Age.

Section–D
7. Teachings and impact of Buddhism
8. Jainism in the Punjab

Suggested Readings:
Instructions for the Paper Setters:-
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Section – A

Meaning of Drug Abuse:

Section – B

Consequences of Drug Abuse for:
- Family: Violence.
- Society: Crime.
- Nation: Law and Order problem.

Section – C

Management of Drug Abuse:
Medical Management: Medication for treatment and to reduce withdrawal effects.

Section – D

Psychiatric Management: Counselling, Behavioural and Cognitive therapy.
Social Management: Family, Group therapy and Environmental Intervention.
References:
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – II

PAPER – I: INTRODUCTION TO SOUND TECHNOLOGY (Theory)

Time: 3 Hrs. each

Instructions for the Paper Setters:-
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Section-A
Basic Physics of Sound
Sound and Vibration, Samples
Waveforms & Wave Tables, Characteristics of Sound Waves
Frequency, Amplitude

Section-B
Wavelength, Phase and Phase Shift, Harmonic content Behavior of sound in rooms, Echoes, Reverberation, Modulation
Aesthetics of Sound

Section-C
Sound Recording, Sound Design, Editing & Mixing
Visual perception versus Sound perception
Dubbing & Post Synchronization
Foley Recording

Section-D
The future of Sound Technology
Surround Sound, Dolby Digital in cinema
Digital sampler and synthesizer generated sounds
Film music in the 21st century

Total: 100 Marks
Theory: 50 Marks
INTRODUCTION TO SOUND TECHNOLOGY (Practical)

Time: 3 Hrs.  Practical: 50 Marks

Basic Sound Recording Operations

Difference between Analogue & Digital Recording

Recording Speech and Voice Over

Introduction to Dubbing, Foley Recording

Suggested Readings:

1. Sound Check: The Basics of Sound and Sound Systems by Tony Moscal
2. Back to Basics Audio by Julian Nathan
3. Surround Sound by Tomlinson Holman
4. The Audio Expert: Everything You Need to Know About Audio by Ethan Winer
5. Computer Sound Design: Synthesis techniques and programming (Music Technology) by Eduardo Miranda
6. Computational Thinking in Sound: Teaching the Art and Science of Music and Technology by Gena R. Greher and Jesse M. Heines
7. Dhwani Aur Sangeet by Lalit Kishore Singh
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – II

PAPER – II: BASICS OF MUSIC – II (Theory)

Time: 3 Hrs. each
Total: 100 Marks
Theory: 50 Marks

Instructions for the Paper Setters:--
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Section -A

Definitions: Sangeet, Naad, Shruti
Notation of Drut Khayal in Raag Bhairav

Section -B

Light Music, Bhajan.Devotional, Folk Songs, Sufi, Gazhal
Study of Various Instruments: Drums, Octapad, Flute, Sitar

Section –C

Writing of Taals:
Teen Taal, Ek Taal,
Dadra and Kehrawa upto Chargun Layakaries in proper Noation
Explanation of different forms of music

Section –D

Notes and Stems, Note Heads
Dynamics and Symbols, Bar Lines
Major and Minor Chords
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – II

BASICS OF MUSIC – II (Practical)

Time: 3 Hrs.  Practical: 50 Marks

One Cinematic Song in Raag Bhairav

Basic Playing Techniques: Keyboard and Guitar
Presentation of Prescribed Taals on hand and tabla

Practical Knowledge of Chord Progression (Major & Minor)
Presentation of Drut Khyal in Raag Bhairav

Suggested Readings:

1. Rag Parichya Part – I, II, and III by Shri Harish Chnder Srivastava
2. Sangeet Vishard Sangeet Karayalya, Hathras
3. Sangeet Nibandhavli, Dr. Gurnam Singh, published by Punjabi University, Patiala
4. Raag Parichey (Part 1, 2) by H.C.Shrivastava
5. Sangeet Shaster Darpan (Part–1, 2) by Shanti Gowardhan
6. Sangeet Subodh by Dr.Davinder Kaur
7. Alfred's Basic Guitar Method, Book 1 by Morton Manus, Ron Manus
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – II

PAPER – III: AUDIO PRODUCTION LAB. – II (Practical)

Time: 3 Hrs. Max. Marks: 50

Unit – I

Sound Recording
Sound Editing: Audio Restoration, Noise Reduction
Mix and Cross-fade
Choosing an input device & adjust levels

Mark in and Mark out
Convert marker to region

Unit – II

Sound Processes: Auto trim/crop, Bit–depth converter, Channel converter

Fade, Insert silence, Invert / flip, Mute
Normalize, Pan / expand, Resample
Reverse, Smooth/ enhance
Swap channel. Time stretch, Volume

Unit – III

Sound Mixing

Sound Effects: Acoustic mirror, Amplitude modulation, Chorus

Delay / Echo, Distortion, Dynamic, Envelope
Flange/ Wah–Wah, Crapper/ Snipper, Noise gate
Pitch, Reverb, Vibrate, Wave hammer

Software: Sound Forge

Suggested Readings:

1. Sound Forge Pro in Simple Steps by Kogent Learning Solutions Inc.
2. Sound Forge Power! by Scott R. Garrigus
3. The Audio Expert: Everything You Need to Know About Audio by Ethan Winer
4. Understanding Digital Music and Sound Forge by D. Sen
5. PC Audio Editing: From broadcasting to home CD by Roger Derry
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – II

PAPER – IV: MEDIA APPRECIATION (Theory)

Time: 3 Hrs. Max. Marks: 50

Instructions for the Paper Setters:-
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Section-A
Origin and growth of Films in the world
Development of Cinema in India
Types of Films: War Films, Horror Films, Detective, Thriller and Spy Films, Science Fiction, Documentary Films, Ad Films

Section-B
Brief history of sound and music in Films
Silent films, early sound films (Talkies)

Section-C
Directors as sound pioneers
Audience reception on image and music
Psychological, Associative, and Emotional impact of Sound & Music

Section-D
Growth and Development of Radio and Television in India
Emerging trends of Radio and Television, FM Radio
Satellite Radio & TV, D2H, IPTV

Suggested Readings:
1. Film History: An Introduction (2nd ed.) by Kristin Thompson & David Bordwell
2. History of Indian Cinema by R Saran
4. Genre and Contemporary Hollywood by Steve Neal
6. An Introduction to Film Studies by Jill Nelmes
7. Broadcasting in India by P.C. Chatterjee
8. This is All India Radio by P.C. Chatterjee
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – II

PAPER – V: COMMUNICATION SKILLS IN ENGLISH–II

Time: 3 Hours

Max. Marks: 50
Theory Marks: 35
Practical Marks: 15

Instructions for the Paper Setters:-
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Course Contents:

SECTION–A
Listening Skills: Barriers to listening; effective listening skills; feedback skills.
Activities: Listening exercises – Listening to conversation, News and TV reports

SECTION–B
Attending telephone calls; note taking and note making.
Activities: Taking notes on a speech/lecture

SECTION–C
Speaking and Conversational Skills: Components of a meaningful and easy conversation; understanding the cue and making appropriate responses; forms of polite speech; asking and providing information on general topics.
Activities: 1) Making conversation and taking turns
2) Oral description or explanation of a common object, situation or concept

SECTION–D
The study of sounds of English,
Stress and Intonation,
Situation based Conversation in English,
Essentials of Spoken English.
Activities: Giving Interviews

PRACTICAL / ORAL TESTING

Marks: 15

Course Contents:-
1. Oral Presentation with/without audio visual aids.
2. Group Discussion.
3. Listening to any recorded or live material and asking oral questions for listening comprehension.

Questions:-
1. Oral Presentation will be of 5 to 10 minutes duration (Topic can be given in advance or it can be student’s own choice). Use of audio visual aids is desirable.
2. Group discussion comprising 8 to 10 students on a familiar topic. Time for each group will be 15 to 20 minutes.

Note: Oral test will be conducted by external examiner with the help of internal examiner.
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – II

PAPER – VI: सैक्सन (छठांश)

सत्व-बृह अठे सत्व-प्रमतवं

मेंबर-धे

हिंदिमन मात्र (हिंदी वाक्य)
(मात्र. मुझे मीठ अठे हिंदभाष मीठ मनु)।
वाले मात्र खेत मूलभूतता, अभिव्यक्त।
(हिंद-ब्रह्म, पावत विद्वद)

मेंबर-धी

हिंदिमन जाता (हिंदिमन शेड-संज्ञाति)
मात्र. मात्र.मात्र,
बैंधाकी मात्रित पृथग्न, ज्ञातिसारा। (खेम 7 औं 12)
(गन्ध, हिमपत गैली)

मेंबर-भी

(थ) मध्य-मंडल अठे मध्य उच्चता : विंगमण, खुंबे मेंवाल

(भ) भवन पृथक्के

मेंबर-दी

(थ) मध्य उच्चता

(भ) भवनों अठे भवन

चौ-चूं अठे वहिविशव सती उपाधियाँ

1. पृथग पृष्ठ वै चाद दाता ठेकते। उत दाता हिकें वै पृथग पृष्ठ ठड़े ठटले।
2. हिंदिमन वाले वै खेत पृथग चहले उठा। उत दाता हिकें मिर दाता सत्ता की।
3. वलेव पृथग वै खेतव अठे उठ।
4. पहेल चमंत वै नव नेवल चले वैं पृथग सी ठंडा घंटी ढंप उं ढंप चाद शुष्प-पृथग हिक चल मबरा वै।
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BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – II

PAPER – VI: ਪ੍ਰੀਤਸ਼ਿਕ ਪ੍ਰਸ਼ਾਂਦਿ (In lieu of Compulsory Punjabi)

ਸਮਾਂ: 3 ਮਿਨਿਟ
ਬੁੱਲ ਅਂਕ: 50

ਪਠਨ-ਖੂਫ

ਮੇਕਸ਼ਲ-ਪੈਟਾ

ਮੇਕਸ਼ਲ-ਦੌੜ:

ਪ੍ਰੀਤਸ਼ਿਕ ਲਾਖ ਘਟਤਾ : ਪ੍ਰੀਤਸ਼ਿਕ ਸਾਡਾ-ਪ੍ਰੋਪਰ
(ਦੋਵੋ, ਮਾਣਵਦ ਲਾਚ, ਮਾਣਵਦ ਲਾਚ ਅਤੇ ਰੋਸ਼ਨਦ ਲਾਚ (ਪ੍ਰਥਮ ਅਤੇ ਦਿਲ੍ਹਾਣ))
(ਅ) ਵਿਕਾਸ਼ਕ ਲਾਚ, ਪ੍ਰਥਮਦਾਸ ਲਾਚ ਅਤੇ ਰੂਬਨੀ ਲਾਚ (ਪ੍ਰਥਮ ਅਤੇ ਦਿਲ੍ਹਾਣ)

ਮੇਕਸ਼ਲ-ਸੰਕ੍ਰਾਨਤ

ਪ੍ਰਥਮ ਕਾਸਟ
ਸੇਵਾ ਕਾਸਟ

ਮੇਕਸ਼ਲ-ਫੈਕ੍ਸ

ਪ੍ਰੀਤਸ਼ਿਕ ਭੂਜਗ (ਪ੍ਰਤਿਬੰਧ ਅਤੇ ਚਾਰਦੁਆਰ)
ਅਧਾਰਤ ਅਤੇ ਪ੍ਰੀਤਸ਼ਿਕ

ਅੰਵ-ਚੈਦ ਅਤੇ ਪ੍ਰਤੀਵਿਧਆ ਸਾਰੀ ਉਪਕਾਰਾਂ

1. ਪ੍ਰਸ਼ਾਂਦ ਭੂਜਗ ਦੇ ਚਲ ਕਾਲ ਸਨਤਾ। ਉਹ ਕਾਲ ਦੀਆਂ ਦੀਆਂ ਪ੍ਰਸ਼ਾਂਦ ਪੁਸ਼ਤੇ ਸਤਾਣਾ।
2. ਪ੍ਰਸ਼ਾਂਦ ਦੀਆਂ ਦੀਆਂ ਪ੍ਰਸ਼ਾਂਦ ਚਲ ਕਾਲ ਸਨਤਾ। ਉਹ ਕਾਲ ਦੀਆਂ ਦੀਆਂ ਪ੍ਰਸ਼ਾਂਦ ਸਨਤਾ ਹੀ।
3. ਪ੍ਰਸ਼ਾਂਦ ਨਵੀਂ ਕੋਲੀ ਦੀਆਂ ਦੀਆਂ ਪ੍ਰਸ਼ਾਂਦ ਚਲ ਕਾਲ ਸਨਤਾ।
4. ਪ੍ਰਸ਼ਾਂਦ ਕਾਲ ਸਨਤਾ ਦੀ ਨਵੀਂ ਦੀਆਂ ਦੀਆਂ ਪ੍ਰਸ਼ਾਂਦ ਹੀ ਦੀਆਂ ਦੀਆਂ ਪ੍ਰਸ਼ਾਂਦ ਹੀ ਮਕਸਵਲ ਹੀ।
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – II

PAPER – VI: Punjab History & Culture (C 320 to 1000 B.C.)
(Special Paper in lieu of Punjabi compulsory)
(For those students who are not domicile of Punjab)

Time: 3 Hours

Max. Marks: 50

Instructions for the Paper Setters:-
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Section–A

1. Alexander’s Invasion and its Impact
2. Punjab under Chandragupta Maurya and Ashoka.

Section–B

3. The Kushans and their Contribution to the Punjab.
4. The Panjab under the Gupta Empire.

Section–C

5. The Punjab under the Vardhana Emperors
6. Socio-cultural History of Punjab from 7th to 1000 A.D.

Section–D

7. Development of languages and Education with Special reference to Taxila
8. Development of Art & Architecture

Suggested Readings:

1. L. M Joshi (Ed), History and Culture of the Punjab, Art-I, Punjabi University, Patiala, 1989 (3rd Edition)
DRUG ABUSE: MANAGEMENT AND PREVENTION

Time: 3 Hours \hspace{1cm} \text{Max. Marks: 50}

Instructions for the Paper Setters:
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Section – A
Prevention of Drug abuse:
Role of family: Parent child relationship, Family support, Supervision, Shaping values, Active Scrutiny.

Section – B
School: Counselling, Teacher as role-model. Parent-teacher-Health Professional Coordination, Random testing on students.

Section – C
Controlling Drug Abuse:
Media: Restraint on advertisements of drugs, advertisements on bad effects of drugs, Publicity and media, Campaigns against drug abuse, Educational and awareness program

Section – D
References:
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – III

PAPER – I: SOUND RECORDING AND MIXING (Theory)

Time: 3 Hrs

Instructions for the Paper Setters:
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Section A
Advanced Sound Editing Techniques
Balance output levels and pan
Superimposing Sounds

Section B
Types and characteristics of Microphones
Microphone Inputs
Mono and Stereo Compatibility

Section C
Introduction to Studio Equipment
Production Mixing and Mastering
Compressing Techniques

Section D
Microphone Choice and Placement
Audio Cables and Connectors
Aesthetics and Techniques of multi–track
Working with various Sound Effects

Suggested Readings:
- Sound Check: The Basics of Sound and Sound Systems by Tony Moscal
- The Audio Expert: Everything You Need to Know About Audio by Ethan Winer
- Surround Sound by Tomlinson Holman
- Professional Microphone Techniques (Mix Pro Audio) by David Miles–Huber, Philip Williams
- Stereo Microphone Techniques by Bruce Bartlett
SOUND RECORDING AND MIXING (Practical)

Time: 3 Hrs
Practical: 50 Marks

Note: Practical Examiner can ask questions from the theory portion also.

Advanced Sound Editing Techniques
Balance output levels and pan
Superimposing Sounds

Types and characteristics of Microphones
Microphone Inputs
Mono and Stereo Compatibility

Introduction to Studio Equipment
Production Mixing and Mastering
Compressing Techniques

Microphone Choice and Placement
Audio Cables and Connectors
Aesthetics and Techniques of multi–track
Working with various Sound Effects
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – III

PAPER – II: BASICS OF MUSICAL COMPOSITION (Theory)

Time: 3 Hrs

Instructions for the Paper Setters:-
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Section A

(Vocal & Instrumental Musical Composition)
Training of Voice Culture (Kanth Sadhana)
Musical Composition according to themes of Lyrics/Moods (Romantic, Sad, Cinematic, Devotional and other various forms)
Knowledge of four types of Instruments
Use of Percussion Instruments with various Compositions
Use of Manual and Electronic Non–Percussion Instruments

Section B

(Western Composition)
Training of Voice through Sound Equipment (Microphone)
Western Musical Composition of variety of Lyrics, Moods and Beats
Knowledge of Western Percussion Instrument
Knowledge of Tone Quality of Non–Percussion Instruments

Section C

(Music Arrangement)
Basic Knowledge of Western Instrument Tone through Microphone
Use of Western Instruments in Indian Musical Composition

Section D

Pronunciation of Words and Clarity of Voice in different Languages
Knowledge of stress of Words and Musical Notes of sound according to Mood
Introductory Music of Various Compositions and their Interlude
Backing of Musical Composition and Contour Music
Suggested Readings:

- Raag Parichay, Part I, II, III, IV – Shri Harishchander Srivastava
- Sangeet Vishard Sangeet Karayalya, Hathras
- Sangeet Subodh by Dr. Davinder Kaur
- The Art of Recording by William Moylan
- Creative Music Composition: The Young Composer's Voice by Margaret Lucy Wilkins
- Teaching Music Through Composition: A Curriculum Using Technology by Barbara Freedman
- Musical Creativity: Strategies and Tools in Composition and Improvisation by Guerino Mazzola, Joomi Park, Florian Thalmann
- Indian Music in Performance: A Practical Introduction by Neil Sorrell, Ram Narayan
(Vocal & Instrumental Musical Composition)
Training of Voice Culture (Kanth Sadhana)
Musical Composition according to themes of Lyrics/Moods (Romantic, Sad, Cinematic, Devotional and other various forms)
Knowledge of four types of Instruments
Use of Percussion Instruments with various Compositions
Use of Manual and Electronic Non–Percussion Instruments

(Western Composition)
Training of Voice through Sound Equipment (Microphone)
Western Musical Composition of variety of Lyrics, Moods and Beats
Knowledge of Western Percussion Instrument
Knowledge of Tone Quality of Non–Percussion Instruments

(Music Arrangement)
Basic Knowledge of Western Instrument Tone through Microphone
Use of Western Instruments in Indian Musical Composition

Pronunciation of Words and Clarity of Voice in different Languages
Knowledge of stress of Words and Musical Notes of sound according to Mood
Introductory Music of Various Compositions and their Interlude
Backing of Musical Composition and Contour Music
PAPER – III: AUDIO PRODUCTION LAB. – III
(Practical)

Time: 3 Hrs.  Marks  
Practical: 50 Marks

- Multitrack Arrangement
- The Multi track View
- Wave Display
- Recording in Edit view

- Tracks Control
- Stereo Enhancement

- Recording Device, Monitor Record Level
- MIDI Recording

- Additional Effects
- Graphic Equalizer
- Effects Channels

Software (s): Sound Forge, Audition and Cubase

Suggested Readings:
- Mixing & Mastering with Cubase by Matthew Loel T. Hepworth
- The Power in Cubase: Tracking Audio, MIDI, and Virtual Instruments by Matthew Loel T. Hepworth
- Alfred's Teach Yourself Cubase by Alfred Publishing Co., Inc
- Adobe Audition Classroom in a Book by Adobe Creative Team
- The Focal Easy Guide to Adobe Audition by Antony Brown
- Sound Forge Power: The Official Guide by Brian Smithers and Premier Development
- Understanding Digital Music and Sound Forge by D. Sen
- Sound Forge in Simple Steps by Kogent Learning Solutions
• Meaning and Definition of Personality
• Aspects of Personality (Physical, Intellectual, Emotional and Social)
• Indicators of a Developed Personality

• Positive Attitude: Concept, traits of Positive thinking and high achievers
• Techniques and Strategies for positive thinking
• Motivation: Techniques for self–motivation

• Goals Setting and Time Management
• Goals: Meaning and Types
• Strategies for Time Management, identifying and avoiding time–wasters

• Personality Development: Need and Importance
• Indicators of Positive Attitude
• Time Management: Meaning and Concept, importance

Suggested Readings:
• Personality Development By John Aurther
• Social and Personality Development: An Advanced Textbook edited by Michael E. Lamb, Marc H. Bornstein
• Personality Development: A Psychoanalytic Perspective edited by Debbie Hindle, Marta Vaciago Smith
• Personality Development By Hurlock Mn
• You Can Win by Shiv Khera, McMillan Publishers
• The Ultimate Power of Positive Thinking by Stephen Richards
• Personality Development by Rajan K. Mishra, Richa Publication
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – III

PAPER – V: PRODUCTION MANAGEMENT
(Theory)

Time: 3 Hrs

Theory: 50 Marks

Instructions for the Paper Setters:-
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Section A

- Pre–Production and Development Phase
- Script, Screenplay, Adaptations, Story Boarding
- Common Crew Members, Set Design

Section B

- Production Phase
- Role and responsibilities of above the line Production Crew
- Role of Directors and Actors

Section C

- Post–Production and Manipulation
- Shooting Schedule

Section D

- Visual Effects, Sound Effects, Dubbing
- Audio and Video Editing
- Censorship, Distribution

Suggested Readings:
- TV Production by Gerald Millerson, Focal Press
- Film Production by Steven Bernstein, Focal Press
- Fundamentals of Television Production by Donald, Ralph & Span, Blackwell Publishing
- Film Production Management by Bastian Cleve, Focal Press
- Television Production Handbook by Zettl, Herbert, Thomson Wadsworth
- Art and Production by N.N Sarkar
- Television Karyakrama Nirman Prakriya (Hindi) by Ashok Jailkhani and Manaraj Shah, Ranth Academy, New Delhi
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – III

PRODUCTION MANAGEMENT
(Practical)

Time: 3 Hrs  Marks: 50

Note: Practical Examiner can ask questions from the theory portion also.

- Pre–Production and Development Phase
- Script, Screenplay, Adaptations, Story Boarding
- Common Crew Members, Set Design

- Production Phase
- Role and responsibilities of above the line Production Crew
- Role of Directors and Actors

- Post–Production and Manipulation
- Shooting Schedule

- Visual Effects, Sound Effects, Dubbing
- Audio and Video Editing
- Censorship, Distribution
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – IV

PAPER – I: SOUND STUDIO MANAGEMENT
(Theory)

Time: 3 Hrs

Instructions for the Paper Setters:-
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Section A
Sound Studio Design and Setup
Fundamentals of Studio Design and Layout
Control Room, Studio (Performance), Booth (Vocal)
Sound Lock

Section B
Professional Sound Card, Sound Monitors, Amplifier, Headphones
Microphones: types and features
Accessories: Audio cables and connectors
Connecting Electronic Musical Instruments

Section C
Set up for Recording or Mixing space for optimal Acoustic balance
Appropriate Recording and Listening levels
Session Management: Media Transfer: Record to digital media

Section D
Studio Acoustic and Soundproofing
Diffusers and Absorbers
Role of Audio Mixer, MIDI Controller
Troubleshoot a Recording System/Setup
SOUND STUDIO MANAGEMENT
(Practical)

Time: 3 Hrs.  Practical: 50 Marks

Practical Study of Sound Studio Design and Layout
Understanding the role of Studio Acoustic, Diffusers and Absorbers
Understanding the various Digital Audio Mixer Settings and Presets
Documenting a recording session or project (track lists and proposals)

Suggested Readings:

- RA, the Book: The Recording Architecture Book of Studio Design by Black Box Press
- Recording Studio Design By Philip Newell
- Handbook of Sound Studio Construction: Rooms for Recording and Listening By Ken Pohlmann
- Sound Studio: Audio techniques for Radio, Television, Film and Recording By Alec Nisbett
- Chasing Sound: Technology, Culture, and the Art of Studio Recording from Edison to LP By Susan Schmidt Horning
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – IV

PAPER – II: ELECTRONIC MUSIC PRODUCTION
(Theory)

Time: 3 Hrs

Theory: 50 Marks

Instructions for the Paper Setters:-
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Note: Practical Examiner can ask questions from the theory portion also.

Section A

MIDI Recording
Input MIDI data using physical controllers
Synchronize MIDI tracks with recorded audio tracks

Section B

Working with Loops
Creating and Editing Loops
Understanding Tempo/BPM
Mixing and Creating Tracks with Loops

Section C

Digital Music Sequencing
Recording Loops
Generating Electronic Music
Software Synthesizers

Section D

Virtual Studio Technology
VST Plugins: VST instruments, VST effects, VST MIDI effects
Composing, Arranging, Editing, Mixing, Rendering the Music

Software (s): Cubase/Nuendo/FL Studio
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – IV

Suggested Readings:
- FL Studio Power!: The Comprehensive Guide by Stephen Pease
- Fruity Loops: The Ultimate Electronic Virtual Music Studio by Jim Aikin
- The Fruity Loop's Beginner's Guide: The Absolute Basics
- Fruity Loops Bible
- Mixing & Mastering with Cubase by Matthew Loel T. Hepworth
- Get Creative with Cubase VST by Gemmell (PC Publishing)
- The Power in Cubase: Tracking Audio, MIDI, and Virtual Instruments by Matthew Loel T. Hepworth
- Alfred's Teach Yourself Cubase by Alfred Publishing Co., Inc
- Nuendo 5 Power!: The Comprehensive Guide by Ashley Shepherd
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – IV

ELECTRONIC MUSIC PRODUCTION
(Practical)

Time: 3 Hrs

Note: Practical Examiner can ask questions from the theory portion also.

MIDI Recording
Input MIDI data using physical controllers
Synchronize MIDI tracks with recorded audio tracks

Working with Loops
Creating and Editing Loops
Understanding Tempo/BPM
Mixing and Creating Tracks with Loops
Digital Music Sequencing
Recording Loops
Generating Electronic Music
Software Synthesizers

Virtual Studio Technology
VST Plugins: VST instruments, VST effects, VST MIDI effects
Composing, Arranging, Editing, Mixing, Rendering the Music

Software (s): Cubase/Nuendo/FL Studio
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – IV

PAPER – III: AUDIO PRODUCTION AND MULTIMEDIA
(Practical)

Time: 3 Hrs. Practical: 100 Marks

Study of audio production techniques for Radio, Video, Film, Theatre and Multimedia.

Media production
Audio for Internet
Advanced digital audio workstation techniques

Narration, Music, Silence, Dialogue, Ambience, Background score and Foley
Sound effects, Sound Design, Sync Sound, ADR

Mixing criteria for Broadcast and Visual Productions
Elements of Sound Track

Software (s): Cubase/Nuendo/Sound Forge

Suggested Readings:
- Sound and Recording sixth edition by Francis Rumsey and Tim McCormick
- Sound Engineering Explained second edition by Michael Talbot–Smith
- Sound for film and Television third edition by Tomlinson Holman
- Master Handbook of Audio Production by Jerry C.Whitaker
- Producing Great Sound for Film and Video third edition by Jay Rose
- Sound and Music for the theatre by Dena Kaye and James Lebrecht
- Audio Production and Post– Production by Woody wood hal
- The Art of Recording by William Moylan
- Nuendo 5 Power!: The Comprehensive Guide by Ashley Shepherd
- Alfred's Teach Yourself Cubase by Alfred Publishing Co., Inc
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – IV

PAPER – IV: PERSONALITY DEVELOPMENT – II
(Practical)

Time: 3 Hrs.                              Practical: 50 Marks

Soft Skills: Meaning and Importance
Concepts: Work and Professional Ethics,
Self-Presentation, Self Confidence, Problem Solving Skills, Stress and Conflict Management
Team Spirit: Leadership Skills, Synergy and Team Building

Placement Preparations: Group Discussions, Rules for Group Discussion
Personal Interview: Mock Interview and its Rules

Strategies/Tips for grooming into an all-round groomed individual
Profile and Biography of: Abraham Lincoln, Dr. APJ Abdul Kalam, Amitabh Bachchan, Indira Nooyi

Do’s and Don’t’s: Dressing Sense, Strategies before and during the interview
Overcoming shyness, nervousness and fear
Grooming: meaning and concept, various dimensions
Role of manners and etiquette in grooming

Suggested Readings:

- Personality Development By John Aurther
- Social and Personality Development: An Advanced Textbook edited by Michael E. Lamb, Marc H. Bornstein
- Personality Development: A Psychoanalytic Perspective edited by Debbie Hindle, Marta Vaciago Smith
- Personality Development By Hurlock Mn
- You Can Win by Shiv Khera, McMillan Publishers
- The Ultimate Power of Positive Thinking by Stephen Richards
- Personality Development by Rajan K. Mishra, Richa Publication
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – IV

PAPER – V: PRODUCTION DESIGN WORKSHOP
(Theory)

Time: 3 Hrs
Theory: 50 Marks

Instructions for the Paper Setters:-
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four
Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are
required to attempt five questions, selecting at least one question from each Section. The fifth
question may be attempted from any Section.

Section A
Basic Camera Operations
Camera Accessories, Lenses and its types
Shot Composition, Camera Movements, Camera Shots and Camera Angles

Section B
Basic Production Techniques
Indoor and Outdoor Shooting
Different TV and Film Formats

Section C
Graphic Designing and Editing
Working with Vectors and Raster Graphics

Section D
Video Editing: NLE Software Interface and Basic Operations
Introduction to Animation and Types

Software(s): Basic Knowledge of Adobe Photoshop, Corel Draw, Adobe Premiere Pro, Adobe
Flash and Autodesk 3D Studio Max
Suggested Readings:

- Production for Graphic Design, Fourth edition by Alan pipes
- The Adobe Photoshop CS5 Book for Digital Photographers (Voices That Matter) by Scot Kelby
- TV Production: Gerald Milerson, Focal Press
- Film Production: Steven Bernstein, Focal Press
- Creating Special Effects for TV and Video: Barnard Willkie
- Single Camera Video Production: R.B. Musburger
- Television Production Handbook: Zettl, Herbert, Published, Thomson Wadsworth
- Adobe Flash Professional Classroom in a Book by Pearson
- Adobe Premiere Pro Classroom in a Book by Pearson
- Introducing 3Ds Max: 3D For Beginners by Wiley India Pvt Ltd
Teaching Methodologies
The Core Module Syllabus for Environmental Studies includes class room teaching and field work. The syllabus is divided into 8 Units [Unit-1 to Unit-VII] covering 45 lectures + 5 hours for field work [Unit-VIII]. The first 7 Units will cover 45 lectures which are class room based to enhance knowledge skills and attitude to environment. Unit-VIII comprises of 5 hours field work to be submitted by each candidate to the Teacher in-charge for evaluation latest by 15 December, 2019.

Exam Pattern: 
End Semester Examination- 75 Marks  
Project Report/Field Study- 25 Marks [based on submitted report]  
Total Marks- 100

The structure of the question paper being:

Part-A, Short answer pattern with inbuilt choice – 25 Marks  
Attempt any five questions out of seven distributed equally from Unit-I to Unit-VII. Each question carries 5 marks. Answer to each question should not exceed 2 pages.

Part-B, Essay type with inbuilt choice – 50 Marks  
Attempt any five questions out of eight distributed equally from Unit-I to Unit-VII. Each question carries 10 marks. Answer to each question should not exceed 5 pages.

Project Report / Internal Assessment:

Part-C, Field work – 25 Marks [Field work equal to 5 lecture hours]  
The candidate will submit a hand written field work report showing photographs, sketches, observations, perspective of any topic related to Environment or Ecosystem. The exhaustive list for project report/area of study are given just for reference:

1. Visit to a local area to document environmental assets: River / Forest/ Grassland / Hill / Mountain / Water body / Pond / Lake / Solid Waste Disposal / Water Treatment Plant / Wastewater Treatment Facility etc.
2. Visit to a local polluted site – Urban / Rural / Industrial / Agricultural
3. Study of common plants, insects, birds
4. Study of tree in your areas with their botanical names and soil types
5. Study of birds and their nesting habits
6. Study of local pond in terms of wastewater inflow and water quality
7. Study of industrial units in your area. Name of industry, type of industry, Size (Large, Medium or small scale)
8. Study of common disease in the village and basic data from community health centre
9. Adopt any five young plants and photograph its growth
10. Analyze the Total dissolved solids of ground water samples in your area.
11. Study of Particulate Matter (PM$_{2.5}$ or PM$_{10}$) data from Sameer website. Download from Play store.
12. Perspective on any field on Environmental Studies with secondary data taken from Central Pollution Control Board, State Pollution Control Board, State Science & Technology Council etc.
Unit-I
The multidisciplinary nature of environmental studies
Definition, scope and importance, Need for public awareness

(2 lectures)

Unit-II
Natural Resources: Renewable and non-renewable resources:
Natural resources and associated problems.
(a) Forest resources: Use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people.
(b) Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems.
(c) Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies.
(d) Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies.
(e) Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources, case studies.
(f) Land resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification.
• Role of an individual in conservation of natural resources.
• Equitable use of resources for sustainable lifestyles.

(8 Lectures)

Unit-III
Ecosystems
• Concept of an ecosystem
• Structure and function of an ecosystem
• Producers, consumers and decomposers
• Energy flow in the ecosystem
• Ecological succession
• Food chains, food webs and ecological pyramids
• Introduction, types, characteristic features, structure and function of the following ecosystem: Forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystems (ponds, streams, lakes, rivers, ocean estuaries)

(6 Lectures)

Unit-IV
Biodiversity and its conservation
• Introduction – Definition: genetic, species and ecosystem diversity
• Biogeographical classification of India
• Value of biodiversity: consumptive use, productive use, social, ethical aesthetic and option values
• Biodiversity at global, national and local levels
• India as a mega-diversity nation
• Hot-spots of biodiversity
• Threats to biodiversity: habitat loss, poaching of wildlife, man wildlife conflicts
• Endangered and endemic species of India
• Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity

(8 Lectures)
Unit-V

Environmental Pollution:

Definition:
- Causes, effects and control measures of Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution, Nuclear pollution
- Solid waste management: Causes, effects and control measures of urban and industrial wastes.
- Role of an individual in prevention of pollution
- Pollution case studies
- Disaster management: floods, earthquake, cyclone and landslides

(8 Lectures)

Unit-VI

Social Issues and the Environment

- From unsustainable to sustainable development
- Urban problems and related to energy
- Water conservation, rain water harvesting, watershed management
- Resettlement and rehabilitation of people; its problems and concerns. Case studies.
- Environmental ethics: Issues and possible solutions
- Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies.
- Wasteland reclamation
- Consumerism and waste products
- Environmental Protection Act, 1986
- Air (Prevention and Control of Pollution) Act, 1981
- Water (Prevention and control of Pollution) Act, 1974
- Wildlife Protection Act
- Forest Conservation Act
- Issues involved in enforcement of environmental legislation
- Public awareness

(7 Lectures)

Unit-VII

Human Population and the Environment

- Population growth, variation among nations
- Population explosion – Family Welfare Programmes
- Environment and human health
- Human Rights
- Value Education
- HIV / AIDS
- Women and Child Welfare
- Role of Information Technology in Environment and Human Health
- Case Studies

(6 Lectures)
Field Work

- Visit to a local area to document environmental assets River / forest / grassland / hill / mountain
- Visit to a local polluted site – Urban / Rural / Industrial / Agricultural
- Study of common plants, insects, birds
- Study of simple ecosystems-pond, river, hill slopes, etc

(Field work equal to 5 lecture hours)

References:

2. Down to Earth, Centre for Science and Environment, New Delhi.
9. State of India’s Environment 2018 by Centre for Sciences and Environment, New Delhi
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – V

1. ADVERTISING, MARKETING & EVENT MANAGEMENT
(THEORY)

Time: 3 Hrs. Max. Marks: 50

Instructions for Paper Setters:

Section A: 7 Very short answer type questions should be set out of which 5 have to be attempted of 6 marks each. (5x6= 30)

Section B: 3 long answer type questions should be set out of which 2 have to be attempted of 10 marks each. (10x2=20)

UNIT–I
Introduction to Advertising; Types of Advertising; Print, Electronic and New Media
Relevance of Advertising in Marketing
Four P’s of Marketing (Product, Price, Place and Promotion)
Importance of TRP
Understanding Market Trends

UNIT–II
The principles of Public relations
Staff of PR Department
Press Conferences and Interactions,
Social Media Campaigns and Promotions

UNIT–III
Planning of an Event, Types of Event
Role of Event Manager in Planning Team
Marketing the event
Budget Planning, Budgetary Control

Suggested Readings:
1. Advertising Made Simple by Frank Jefkins
2. Advertising Management by Aaker, Myers & Batra
3. Handbook on Public Relations by D.S. Mehta
4. P.R. Tools, Concepts Tools and Strategies by NN Sarkar
5. Business Public Relations by S.R. Sardana
2. RADIO JOURNALISM
(THEORY)

Time: 3 Hrs. 

Marks: 50

Instructions for Paper Setters:

Section A: 7 Very short answer type questions should be set out of which 5 have to be attempted of 6 marks each. (5x6=30)

Section B: 3 long answer type questions should be set out of which 2 have to be attempted of 10 marks each. (10x2=20)

UNIT– I
Brief history of Radio from early years to the present stage
Print vs Electronic Media
Characteristics of Radio

UNIT– II
Public broadcasting, Private broadcasting systems in India
Radio Broadcasting Systems—MW, SW, FM;
Internet Radio, Satellite Radio, Community Radio

UNIT– III
Types and formats of Radio programmes— News, Interviews, Talks, Dramas, Discussions, Features, Documentaries, Jingles, Phone–ins, Roadshows, Spots, Sponsored programmes, Sponsorship and Info–commercials

Suggested Readings:
1. Broadcasting in India by P.C. Chatterjee, Sage Publication, New Delhi
2. Broadcast Journalism by Boyd Andrew, Focal Press
3. This is All India Radio by P.C. Chattergee, Publication Division, New Delhi
4. Radio and TV Journalism by K.M. Shrivastava

2. RADIO JOURNALISM
(PRACTICAL)

Time: 3 Hrs. 

Marks: 50

Recording and submission of any one of Radio Formats

News Interviews, Talks, Dramas, Discussions, Features, Documentaries, Jingles, Phone–ins, Roadshows, Spots, Sponsored Programmes, Sponsorship and Info–commercials.
3. MUSIC COMPOSITION AND ARRANGEMENT
(PRACTICAL)

Max. Marks: 100

UNIT–I
Composition: Material, Development, Balance, Contrast
Compositional strategies, Thematic Development,
Composing melody
Musical Form, Song Forms, Phrase structure
Beginnings and Endings

UNIT–II
Compositional terminology
Rhythmic Pattern
Rhythm: Designing Beats, using MIDI, VST
Patterns: Rhythmic and Melodic patterns

UNIT–III
Composition and Advanced Sound Manipulation
Sonic Manipulation: Filters, Effects, Processes, Audio Levelling
BACHELOR OF VOCATION (B.Voc.)
(SOUND TECHNOLOGY) SEMESTER – V

4. STUDIO AND LIVE MUSIC RECORDING
(PRACTICAL)

Max. Marks: 100

UNIT–I
Multitrack Studio procedures with an emphasis on microphone and recording techniques
Music Recording and Production techniques

UNIT–II
Critical Listening and Discussion of Recording techniques, Concepts, and Aesthetics
Importance of Dubbing
Difference in Technique for Studio and Live Recording

UNIT–III
Recording Live to Single Track
Multitrack Recording
Difference between Single Track and Multitrack Recording
Importance of Live Sound Balancing
5. AUDIO POST PRODUCTION  
(PRACTICAL)

Max. Marks: 50

UNIT–I
Post Processing
Multitrack Mixing
Adjusting Audio/track Levels, Equalization

UNIT–II
Advanced Post Production Techniques
Emphasis on Signal processing
Mixdown Techniques

UNIT–III
Mastering/Delivery
Format digital audio for delivery via physical media or Internet
Convert mix files to standard formats for use in multimedia
1. PORTFOLIO DEVELOPMENT  
(PRACTICAL) 

Max. Marks: 200

Students would complete a minimum of three individual Studio based Projects/Assignments during the semester:

1. Production of Radio Jingle/Ad
2. Production for TV/Film/Theatre/Multimedia
3. Song/Album in any Form/Genre of Music
2. PROFESSIONAL SKILLS (VIVA-VOCE)

Max. Marks: 50

The Examiner can ask questions from all the skill based subjects covered in the semester.
3. INDUSTRIAL TRAINING

- Industrial Training for minimum 6–8 weeks

Max. Marks: 150