

# Savitribai Phule Pune University

(formerly University of Pune)

## Syllabus for Ph.D. ( PET ) Entrance Exam : Fine Art and Visual Art

### Research Methodology

1. **Research:** Meaning & Objectives, Skills and qualities necessary for good researcher, Relations of research and literary criticism, Relations of research and history of literature, Difference between research in literary subject and in scientific and social studies

2. **Hypothesis:** Definition, Formulation of hypothesis

3. **Basic terms and concepts** used in research methodology

4. **Types of Research-** Inductive and Deductive methods, analytical, comparative, historical, textual analysis, textual editing and criticism, intercultural and interdisciplinary study, discourse analysis etc.

5. **Design of Research-** Necessity of planning, Steps in design- a) Preparation of working bibliography b) Review of Literature c) Collection of material d) Identification of the topic e) Defining the scope and limitations of the topic f) Text editing h) annotated bibliography

6. **Writing Process** - Method of Research Writing, Methods of giving references and citations, Ethics in writing, Research papers/ book reviews/ dissertation/ thesis etc.

7. **Tools of Research-** a) library sources b) e-sources c) survey and questionnaires , books/, journals, encyclopedias, bibliographies etc. , Primary & secondary sources , Authenticity of sources

### 8. **Research Problem, Variables, Hypothesis Population and Sampling**

a) Selection and finalization of research problem, Operational/dictionary/conceptual definitions b) Review of related literature Sources (Data Bases) Searching (Use of technology) Review writing c) Variables: Concept, Nature, Characteristics and Types d) Hypothesis: Concept, Characteristics and Forms, hypothesis testing e) Assumptions: Meaning and Role f) Population: Concept g) Sampling and Sample: Need of Sampling, Probability and non-Probability h) based sampling, characteristics of good sample, errors in sampling

### 9. **Data Collection tools/techniques:**

1. Questionnaire 2. Interview 3. Observation 4. Psychological tests 5. e-tools  
Qualities of good data collection tools.

## **10. Data Analysis and interpretation**

a) Scales of Measurement b) Measures of central tendency and variability c) Measures of relative positions: Deciles, Percentiles, Percentile rank and standard scores d) Correlation - Concept, types and uses e) Concepts of: Parameter and statistic, Type I and Type II errors, Degrees of Freedom, Confidence limits and intervals, Parametric and non-Parametric tests f) t- test, F test, Chi-Square test

## **11. Report writing and other**

a) Format of research report b) Characteristics of good research report c) Research ethics d) Plagiarism, Citation guidelines e) Use of computers in various phases of research

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## Syllabus for Ph.D. ( PET ) Entrance Exam : Fine Art and Visual Art

### Subject Paper

The visual arts consist of creative expression that considers innovation and individuality as its primary determinants. Objects-of-art thus produced with great skill or accomplishment invariably gains a degree of invested value that is culturally significant, which is why visual art has also been known as fine arts. A range of disciplinary specialization in studio-practice has led to sub-categories like drawing, painting, sculpture, printmaking, design etc. which are also medium specific categories within practice. In contemporary times visual art has moved beyond the singular discipline towards multi-media expressions that have even significantly transgressed the studio and gallery/museum as spaces and the market as its economic determinant. Thus, it now includes and incorporates the applied arts within it, while photography and digital modes are integrated into its world of postmodern practice. On the theoretical perspective, art history and criticism examines and analyses the past and present developments and innovations, providing a contextual awareness to studio-practice about the present and possible future(s). This syllabus thus integrates all of the above into a holistic understanding of the discipline(s).

### Scheme of Syllabus

#### UNIT:-I

Fundamentals of visual art (line, shape, form, space, colour, texture, tonal values, perspective, design etc.). Understanding visual principles of composition (proportion, unity, harmony, rhythm, contrast, balance, foreshortening and emphasis etc.). Representation through two and three dimensions in visual art. Environmental, conceptual and perceptual aspects of art.

#### UNIT:-II

Various forms of visual arts and their inter-relationship with other modes of creative expression, e.g. performing art, cinema and literature.

#### UNIT:-III

Knowledge of traditional medium, materials and techniques, and their application in all disciplines of visual expression – e.g. carving and casting processes; handling of colour/pigment (impasto, glazing, etc.); intaglio/relief print; fresco; preparation of ground for murals, preparation of *wasli* for miniatures, etc.

**UNIT:-IV**

Developments in modern techniques, processes and procedures and their application in contemporary visual practices (installation; multi-colour print; computer-aided design – vector & rector; multimedia and digital technologies in art; *trompe l'oeil* illusory hyper-realism etc.)

**UNIT:-V**

The study of Indian and Western aesthetics and art appreciation.

**UNIT:-VI**

Study of chronological periods from prehistory to post-modern art and artists of the West, with a focus on the various movements that transformed its history

**UNIT:-VII**

Study of chronological periods and developments in Indian art from prehistory to the 19th century.

**UNIT:-VIII**

Contemporary practices in Indian art during the 20th & 21st centuries with reference to art movements & major exponents; modern concept of advertising, designing and visual communication; experimental modes in contemporary visual expression; development of art education in India from colonial (British) art schools till the present.

**UNIT:-IX**

The study of art in the Far East, South East and Central Asia and the ancient Near-East

**UNIT:-X**

Understanding visual practices of traditional communities and their contemporary transformations – the 'folk', 'tribal' and craft practices in India

**Syllabus for Visual Arts Electives*****Elective: I: Art History***

Principles of Art Historical methodology – Formalism; Iconology; Semiotic analysis; Psychoanalytic method in Art History; Gestalt Theory of Visual Perception; impact of theories in class and gender on the discipline; Deconstruction and its transformative role for Art History; contemporary shifts towards a "New" Art History; art history as an evolving discipline in India from colonial period to post-Independent era; introduction of curatorial practices – confluence of museum, gallery and art history; aesthetic theories and their relevance to art historical/critical analysis of the visual object

**Indian Iconography:**

Antiquity of image worship in India and principles of iconometry; iconography and its development through Vedic to Brahmanical images: Indra, Surya, Agni, Varuna, Kubera, Yama, *Ashta-dikpalas*, Vishnu, Shiva, Shakti, the *Saptamtrikas*, Kartikeya, Ganesha, and river goddesses (Ganga and Yamuna) etc.

Buddhist iconography: the evolution of the Buddha image (including *Dhyani* Buddhas, *Manushi* Buddhas, etc.), Bodhisattva (Avalokiteshvara, Manjushri, Maitreya etc.), Tara, Kubera etc.

Jain iconography: Tirthankara (Adinath, Parshvanath, Neminath, Mahavira), Bahubali; Ambika, Saraswati, Yaksha and Yakshi (in the Jain context) etc.

**Indian Sculpture (pre-modern developments):**

A comprehensive study of early Indian sculpture from Indus valley civilization to the post-Gupta period – dynasties like Maurya, Sunga, Satavahana, Kushana, Gupta, Pala-Sena, Chandela, Solanki, Parmar, Chalukya, Pallava, Rashtrakuta, Ganga, Chola, Hoysala, etc..

**Indian Architecture:**

*Early Indian architecture* (with reference to ancient literature and *shilpa* texts): Indus valley; Maurya *Origin and development of the stupa*: Bharhut, Sanchi, Sarnath and Amaravati

*Evolution of rock-cut caves* (Lomas-rishi, Khandagiri, Udaigiri, Bhaja, Karle, Kanheri, Ajanta, Elephanta, Ellora and Mamallapuram)

*Evolution of temple architecture* & their classification into *Nagara*, *Dravida* and *Vessara* categories: Gupta temples; Orissan developments (Parashurameshwara, Mukteshwara, Lingaraj and Konark); Chandella, Pratihara, Parmara and Solanki temple styles; Chalukyan, Rastrakuta and Hoysala temple architecture (including Virupaksha, Kaliashnatha in Ellora, Hoyasaleshwara; Pallava monolithic and structural temples; Chola temples; Martand Sun temple in Kashmir)

*Imperial architecture during Sultanate & Mughal rule*: features of provincial Indo-Islamic architecture; Mughal architecture (Humayun's Tomb, Fatehpur Sikari and Sikandra, Taj Mahal, Red Fort and Jama Masjid)

*Colonial & Modern architecture*: Le Corbusier, Charles Correa, B.V. Doshi and others.

**Indian painting (pre-modern developments):**

A comprehensive study of pre-historic painting, wall paintings at Ajanta and later mural tradition (Bagh, Badami, Ellora, Sittanvasal, Lepakshi, Kerala murals such as Mattancherry palace etc.); manuscript painting & the miniature traditions: Eastern and Western Indian manuscripts; Sultanate painting (the *Chaurpanchasika* and pre-Mughal schools), Mughal miniature painting from Akbar to Shah Jahan; Rajasthani miniature painting; Pahari miniature painting ; Deccani painting (Ahmednagar, Bijapur and Golconda).

**Modern Indian Art:**

Modernity in Indian Art; Ravi Varma; E.B. Havell, A.K. Coomaraswamy, Stella Kramrisch, Abanindranath Tagore and the “Bengal School”; Nandalal Bose, Benodebehari Mukherjee and Ramkinkar Baij; Amrita Sher-Gil; Jamini Roy; the 1940s artists’ collectives: Calcutta Group (Kolkata), Progressive Artists Group (Mumbai), Delhi Shilpi Chakra (Delhi), Cholamandala Artists’ Village (Chennai); Indigenism and the trends in 1950s and 1960s; trends in abstraction since the 1970s; the 20<sup>th</sup> & 21<sup>st</sup> century contemporary trends towards globalization (including the introduction of installation, performance, digital/video etc.) with a study of select individual artists

**Western Art:**

Overview of Western art from prehistory to the present: Prehistoric art, art in ancient Egypt, Aegean art, Greece and Rome; Early-Christian and Byzantine art; Romanesque and Gothic art; Renaissance painting and sculpture; Mannerism and Baroque painting and sculpture; Rococo, Neoclassicism and Romanticism; Modern movements including Realism, Impressionism, Post-Impression, Fauvism, Expressionism, Cubism, Constructivism, Futurism, Dada and Surrealism, Abstract Expressionism, Op art, Pop art; Post-modern developments including, Minimal and Conceptual Art, Fluxus movement, Arte Povera, Body art, Land and Environment Art, Graffiti, Process art, Performance art, Installation, Neo-figuration, Happening, Feminist and Gay art.

**Art of Ancient Near-East:**

Visual expression from ancient Mesopotamia (Sumer, Akkad, Babylonia, Assyria); art in Achaemenid and Sassanian Persia.

**Art of Far East, Central and South-East Asia:**

Introduction to cultural exchange between India and these ancient cultures and the emergence of distinctive visual expressions: ancient China (Shang, Zhou, and Han dynasties); Buddhist sculpture from upto Tang dynasty; Six Dynasties and Tang painting; Chinese landscape tradition from Song to Qing; Japan (*Haniwa* pottery figures; Buddhist sculptures from Nara to Kamakura periods); late Heian and Kamakura painting including the *Tale of Genji* and the *Heiji Monogatari Emaki* scrolls; Japanese scroll painting in the Momoyama & Edo periods; *ukiyo-e* woodblock prints from the Edo period); Tibet (Buddhist icons and the *thangka* painting tradition); Nepal (Buddhist and Brahmanical sculptures and painting); Sri Lanka (sculpture and painting – including Sigiriya murals); Cambodia (sculpture and architecture, especially Angkor Wat and Angkor Thom); Java (sculpture and architecture, including the Dieng plateau *candi*-s, the Borobudur stupa, and Prambanan complex); Buddhist art in Myanmar/Burma and Siam/Thailand etc..

**Indian Folk and Tribal Art:**

*Phad*, *Pichhwai* and *Kavad* painting (Rajasthan); *Pata* painting in Bengal and Orissa; Madhubani/Mithila painting (Bihar), Warli painting (Maharashtra), Pithora painting (Gujarat); *Dhokra* bronze casting; votive terracotta objects (including votive horses offered across various states in India); wood carving and wooden dolls (Kondapalli, Karnataka, Bengal, Madhya Pradesh); leather puppets (Andhra Pradesh,

Karnataka); traditional and modern textiles and functional objects (textiles of Banaras, Kanchipuram, Gujrat, Orissa, and the North-Eastern states; tie-and-dye fabrics; embroidery; *kantha*, *Phulkari*, Chamba *rumal*; metal-ware including Bidri, repousse, enamelling; jewellery including jade, beads etc.

## **Elective-II: Drawing and Painting**

### **Aesthetics:**

Fundamental elements of drawing and painting. Imagery in visual arts. Origin and development of art (visual). Classification of Arts. Conceptual and Visual reality.

Relevance of study of aesthetics in painting: The early philosophical thoughts in Indian Culture. Nature and Function of Art in the society.

*Indian aesthetics*: Concept of Ras-Sutra and its commentaries: The Theory of Rasa, Sadharanikarana, Dhvani, Alankara, Auchitya, etc; *shilpa* texts like the *Chitrasutra* of the *Vishnudharmottara Purana*, *Shadanga* from Yashodhara's commentary on the Kamasutra, etc.; A.K. Coomaraswamy and Rabindranath Tagore's contributions towards Indian aesthetics

*Western Aesthetics*: Theory of imitation and representation, catharsis (Plato and Aristotle). Aesthetical views of Kant, Hegel, Croce, Tolstoy, Baumgarten, Schopenhauer, Clive Bell, Roger Fry, I. A. Richards, Susanne Langer, Sigmund Freud, and George Santayana.

### **History of Drawing and Painting:**

*Indian painting*: Prehistoric Paintings in India, Wall paintings of Ajanta, Bagh, Badami and Sittanavasal. Manuscript painting tradition Pala and Western Indian. Tradition of Miniature paintings: Pre-Mughal, Mughal, Rajasthani, Pahari (Basohli, Guler-Kangra and Garhwal) and Deccani painting (Ahmendagar, Bijapur & Golconda). Company School of painting. Advent of Modernism with Raja Ravi Varma, Bengal School: Abanindranath Tagore and his disciples, Nandalal Bose and his disciples.

Breakthrough in Indian painting: Contribution of Amrita Sher-Gil. Progressive artist group – Bombay, Calcutta Group – Calcutta, Shilpi Chakra – Delhi, Chola mandala – Madras and Baroda School – Baroda.

In Indian Art the Major trends of Indigenous since 1970, Contemporary painting and eminent artists: Impressionistic, Expressionistic, Abstraction, Decoration, Neo-Tantric, Figurative and Non-figurative, Surrealistic, Representational and Non-representational painting.

*Western Painting*: Prehistoric paintings of France and Spain. Egyptian, Aegean Art, Greece and Roman painting. Byzantine, Gothic, Renaissance, Mannerism, Baroque, Rococo, Neo-Classicism, Romanticism, Realism, Impressionism, Post Impressionism, Fauvism & Symbolism, Cubism, Futurism, Dada & Surrealism Expressionism, Abstract Expressionism, Op and Pop Art, Minimal Art & Post Modern Trends, New Media, Installation and Illusory Hyper Realism, etc.

### **Material and Method:**

Application of Materials, Support in Painting (Canvas, Paper, Wall surface, Panels), Mix media. Oil painting and its technique – Traditional and Non-traditional. Techniques of Wall paintings – Traditional (Fresco Secco and Buono) and Modern. Water color painting, wash technique, pastel and crayon, Acrylic color, color preparation and technical aspect of pigments. Color theory and color harmony.

### **Art Schools and Art Education:**

The introduction of formal training in art through Colonial Art Schools, and the transition from Colonial understanding to Post-Independent art education in the art schools at Chennai, Kolkata, Lahore, Mumbai, Delhi, Lucknow, Jaipur; art promotion and education through art academies; rethinking institutional art education at Santiniketan and Baroda; role of art galleries and museums in art education; increase in curatorial venture as a collaboration between the museum, galleries and practicing artists and historians; role of art journals and magazines in the dialogue between viewing public and the artist.

### ***Elective III: Applied Art***

#### **Elements & principles of design**

The term 'Graphic Design' and William Addison Digging; Basics of Graphic Design/Applied Art: Image and Text; Developing message to promote product.

Terms and terminologies relevant to advertising Industry: Understanding of the 'Portmanteau' terms such as, Advertorials, Info graphics, Infomercials, Edutainment etc.

#### **Innovations and Movements**

History of advertising in India and rest of the world; Calligraphy, Advent of moveable types, Typefaces, fronts and families; Architecture and anatomy of letters; Classifications of types and size, Early Typographers and study of traditional hand writing and script like Indian manuscripts, Persian, Chinese, Japanese and Roman etc.

Development of printing processes in India and rest of the world: letterpress, gravure, silk-screen and Offset etc.

Movements that influenced graphic design: Art Nouveau, The Art of War), The ISMs of Art: Futurism, Dada, De Stijl, & Constructivism, Art and Craft movement, Bauhaus movement and new typography, history of graphic design and the nature of advertising history, Illustrated Modernism & Psychedelia, New Wave and Post Modernism, Digital Expressionism & Postscript, The Digital Future.

#### **Advertising forms and media**

Print, outdoor, electronic and new media advertising; Media Options: newspapers and magazines, radio, TV and cinema, posters, Direct Mail, Ambient and Guerrilla advertising, digital and online advertising. Viral Advertising. Boom in Outdoor advertising: billboards and transits, innovative Materials and advantages.

Emergence of Poster as a 'new genre of art': Study of posters with reference to Poland, Japan, UK and America and Bolshevik Russia. Placards and propagandas, Protest and Wartime posters, Subway culture.

Cultural frames of advertising phases: Idolatry, Iconology, Narcissism, and Transition from 'Totemism' (the fourth cultural frame) to 'Mise-en-Scene' (Fifth Frame); Evolution from Traditional to Industrial to



Consumer society & development of communications media. Future of advertising and advertising agencies. Blurring the lines between advertising and entertainment  
The impact of Graphic Design with advance technology; Re-defining “Graphic design”; Attributes needed by the modern designers.

### **Design, campaign and packaging**

Designing of logo, rebus, symbol, mark and corporate identity; stories behind the development of most well-known symbols/identities the world; Brands, rebranding and brand positioning; Precursors and prophets of advertising theories and principles; Designing events –Event Mascots and other global entertainments, films and festivals.

Campaign planning and strategy: the client, market research, account planning, creative brief.

Developing visuals and messages for print-ads (newspaper and magazines), Direct Mail, posters, outdoor advertising (billboards and transits), merchandising, show-windows and supermarket items (Point of sales / Point of Purchase items, dispensers, stands, stalls etc.)

Media selection, Approaches& the target audience. Innovations in media. New technologies, TV graphics, multimedia presentation, web-page designing and understanding of vector and vector software; Internet – its use in advertising products and services, net marketing.

Prepress, Printing presses, and Post-press: manipulations of pixels and resolutions, colour corrections, knowledge of computer-to-plate graphic reproductions, offset printing, Finishing and Converting. Additive and subtractive colours, four colour printing mechanics, Spot Colours and Lamination, UVs etc. Design of packaging, merchandising and novelties.

### **Advertising corporate and new trends**

Origin and growth of advertising agencies: Role and responsibilities of a Graphic designer. Creative core: Creative/Art Director, Visualizer, and Copywriter, interaction in developing concepts.

World’s leading Advertising Corporates, Multinationals and Indian scenario: Indian Advertising Agencies with all India branches. Ad-Gurus or remarkable Ad-Men and epoch making advertising campaigns by them. Highest honours, Awards in the advertising creativity and extraordinary contribution.

Famous designers of the world on branding and corporate identity design, Film titles.

Interdisciplinary participation approach with disciplines of art, collaboration and internship with industries and corporates.

Computers and its role in creating new visual effects (Photography, Digital Graphics, Film titles, Multimedia presentations, Image Editing, Web Graphics and types of online Advertising, Web page designing); Importance of market research in advertising. Print media vs. Electronic Media.

## ***Elective –IV: Printmaking (Graphic Art)***

### **Aesthetics and history:**

Understanding of fundamentals of visual art (space, form, size, shape, line, colour, texture, tonal values, perspective, design and aesthetic) in relation to print making.

Understanding visual principles of composition (proportion, unity, harmony, rhythm, contrast, balance and emphasis). Reproduction of two dimensional identical prints.

Knowledge of history, invention, development and definition of print making (Graphic Art) process, techniques and materials in Asia and Europe. Japanese woodcuts and important masters of *Ukiyo-e* School and works of masters such as Hokusai, Hiroshige, Utamaro etc.

Print making as a mode of creative expression during 19<sup>th</sup> –20<sup>th</sup> century from book production to establishing of atelier/workshops, groups, experiments and influences on advertising.

### **Mode, medium and process:**

Knowledge of types of print making techniques (i) wood-cut and lino-cut (ii) intaglio- wood and metal (iii) etching – line, aquatint, soft ground, etc. (iv) surface printing (planography, offset, oleograph etc.), (v) stencil and serigraph (iv) other techniques- colography, *chine-collé*, monoprint, unique print, dry-point, engraving, mezzotint, viscosity, digital imaging, mix medium etc.

Knowledge on use of different kinds of mediums, materials and printing process used in print making (wood, lino, copper, zinc, plywood, stone, acrylic, paper, cardboard, gum, acids, chemicals, ink, resin, software, tools, machine, equipment etc. Preparation of different types of surface from identification of material to designing till printing.

### **Work of art:**

Knowledge of works of master print makers and their contribution in development of printmaking from historic to modern like Durer, Rembrandt, Hogarth, Goya, Gauguin, Degas, Lautrec, Daumier, German expressionists (Kathe Kollwitz, Nolde, Heckel, Grosz, Munch etc.), Picasso, Pop and figurative artists (Rauschenberg, Lichtenstein, Jim Dine), David Hockney, Krishna Reddy, Peter Daghish, Stanley Jones, Paul Lingren, Carol Summers etc.

Development of Printmaking in India, contribution and influence of British during colonial period, establishment of press and schools, popular printmaking in mid-19<sup>th</sup> century till pre independence. Print making trends in India post independence.

Contribution of Indian print makers: Raja Ravi Varma, member of Vichitra club, Mukul Dey, Gangendranath Tagore etc. Santiniketan School, Nandalal Bose, Binode Behari Mukherjee, Ramkinkar, Biswarup Bose, Ramen Chakraborty, Haren Das, Somnath Hore, Chittaprasad, Jyoti Bhatt, Kanwal Krishna, Devyani Krishna, Y.K. Shukla, Vasant Parab, Jagmohan Chopra, Paramjeet Singh, Lalita Lajmi, Naina Dalal, Laxma Goud, R.B. Bhaskaran, R.M. Pallaniappan, Sanat Kar, Lalu Prasad Shaw, Amitabh Banerjee, Debraj Dakoji, Bhupen Khakhar, Waman Chincholkar, Paul Koli, Deepak Banerjee, Jai Zharotia, Prayag Jha, Rini Dhumal, Anupam Sud, Jayant Parikh, Kanchan Chander etc.

### **Print and issues:**

Good quality prints - criteria (technically and aesthetically), conventions to identify the authenticity of prints – signature, editions, artists proof etc. Display - mounting and preservation of prints. Various issues related to the contemporary printmaking (mechanical production, computer graphics, influences of advertising, atelier, workshops and groups etc.)

## ***Elective –V: Sculpture***

### **Elements & principles of sculpture**

Fundamentals and elements of sculpture; origin and development of imagery in sculpture; classification of sculpture; sculptural form vis-a-vis conceptual reality.

Relevance of the study of aesthetics for sculptural practice: the early philosophical ideas in India and the West; the role and function of sculpture in the society.

History of sculpture in Western and Oriental traditions; traditional sculptural program as integral part of architectural structures such as churches, temples and secular buildings

Study of form, material, methods, and techniques relevant to sculptural practice; clarity of understanding of terminologies related to the art of sculpture.

### **Study of varied media in sculptural practice:**

#### 1. Clay and wax

Preparation of natural clay for sculpture; modelling and casting with clay; terracotta & firing of clay; types of kilns; possibilities in the range of colours and pigments in ceramic works; two-dimensional and three-dimensional modes in clay sculptures; modelling and carving in wax.

#### 2. Plaster of Paris (POP)

History, chemical composition and physical nature of POP; advantages and disadvantages of working with POP; accelerating and retarding agents; surface treatment of POP; casting and carving in POP.

#### 3. Wood

Nature and varieties of wood; carving tools and methods of carving for sculpting in wood; seasoning and preservation of wood; finishing and staining of wood.

#### 4. Stone

Origin of sculpting in stone; tools and equipment, methods and approach relevant to stone carving; treatment and preservation of stone against weathering.

#### 5. Metal

History of metal sculptures; processes involved in the use of metal as medium for sculpture; physical properties and classification of metals as ferrous and non-ferrous, alloy, etc.; bronze as the primary sculptural metal; the Lost-wax method (*cire-perdue*); indigenous methods including “gravity casting”, “sand casting”, etc.; melting points of metals; surface treatment viz. anodising, oxidation and patination; welding and forging processes for working with metals; preservation of metal sculptures.

### **Assemblage and Installation**

History & background of mix-media; new hybrid forms of 1960's and more recent developments; public sculptures; environmental art.

**Monumental sculpture:**

Scope, problems, limitations, concept and development; eminent exponents such as D.P. Roychowdhary, Ramkinkar Baij, Prodosh Dasgupta, Sankho Chaudhurai, Pilo Pochkhanawla, Chintamani Kar, Sarbari Roy Chowdhury, Amarnath Sehgal, Dhanraj Bhagat, Kanayi Kunhiraman, M. Dharmani, Nagji Patel, Balbir Singh Katt.

**Contemporary Indian Sculptors:**

Combine indigenous knowledge with new materials and techniques; select individuals – B.C Sanyal, Somnath Hore, K.G. Subramanyan, Biman B. Das, Meera Mukherjee, Raghav Kaneria, Himmat Shah, Latika Katt, Jeram Patel, Ajit Chakraborty, Sushen Ghose, Satish Gujral, Ved Nayar, P.V Janakiram, Shiv Singh, Balan Nambiar, S. Nandgopal, Mahendra Pandya, Rajnikant Panchal, Mrinalini Mukherjee, K.S. Radhakrishnan, S. Nandgopal, Dhruva Mistri, Pritpal Singh Ladi, Anita Dube, Ravindra Reddy, N.N. Rimzon, Pushpamala N., Sudarshan Shetty, Subodh Gupta, Anish Kapoor, etc.

**Contribution of select modern & contemporary sculptors from the West:**

Honore Daumier, Auguste Rodin, Camille Claudel, Paul Gauguin, Aristide Maillol, Antoine Bourdelle, Henri Matisse, Ernst Barlach, Constantin Brancusi, Pablo Picasso, Aleksandr Archipenko, Raymond Duchamp-Villon, Jacques Lipchitz, Henri Laurens, Umberto Boccioni, Vladimir Tatlin, Naum Gabo, Sophie Tauber, Jean Arp, Max Ernst, Antoine Pevsner, Alexander Calder, Henry Moore, Barbara Hepworth, David Smith, Louise Bourgeois, Isamu Noguchi, Alberto Giacometti, Cesar, Marino Marini, Lucio Fontana, George Segal, Claes Oldenburg, Anthony Caro, Tony Smith, Donald Judd, Carl Andre, Eva Hesse, Duane Hanson, Judy Chicago, Joel Schapiro, Barry Flanagan, Georg Baselitz, Jimmie Durham, Jeff Koons, Kiki Smith.

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