



# **KERALAM MUSEUM OF HISTORY & HERITAGE**

**Park View, Thiruvananthapuram-33**

(Nodal agency of all museums under Cultural Affairs Dept. Govt. of Kerala)

Website: [www.museumkeralam.org](http://www.museumkeralam.org) | Email: [info@museumkeralam.org](mailto:info@museumkeralam.org)

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**KIM- K2/515/2018**

**Date 07/08/2020**

## **REQUEST FOR PROPOSAL**

### **Selection of Museum Consultancy Firm for Setting up of galleries and allied works related with museum at Handloom Museum, Kannur**

Request For Proposal is invited by Interactive Museum of Cultural History of Kerala (Keralam Museum of History and Heritage) from the Empanelled/Non Empanelled, reputed, experienced, and competent Consultancy Firms for Setting up of galleries and allied works related with Handloom Museum, Kannur. The Non-Empanelled and empanelled firms should furnish company details and other required data with in the prescribed format and should get pre-qualification before fixing the bid. The details relating to the nature and scope of the project, eligibility criteria, terms and conditions and other information relating to the Request For Proposal are as detailed below.

**Executive Director**

Interactive Museum of Cultural History of Kerala  
(Keralam Museum of History and Heritage)

## **Setting up of galleries and allied works related with Handloom Museum, Kannur**

### **Introduction**

The Kaithari Museum will house an exquisite variety of different types of handlooms of Kerala, elucidate their origin and development, and narrate the story of Handloom industry. The museum will enthrall the visitor with a unique experience by immersing the visitor in the loom culture of Kerala to the fullest through its displays, dioramas and interactive enclaves. The museum will act as a medium in educating the present and future generations, the necessity to preserve the priceless traditions of the handloom industry and to devise ways to revive its lost glory.

### **Vision:**

This museum is an exploration into the history of handloom. It is a demonstration of handloom technology with real time models, paintings, sculptures, handloom products etc. For the visitors, it will be a visual treat rooted in history which synergizes the historical technological advancements in weaving with the immersive experiences provided by modern display technology. The traditions and customs intricately intertwined with the handloom technology are woven into the galleries of this museum..

### **Proposed Theme of Museum**

#### **Gallery 1 History of Kannur Handloom**

The earliest mention of handloom in Kannur is found in The Periplus of the Erythraean Sea, written around AD 60

“Then there are the islands called Sesecrienae and that of the Aegidii, and that of the Caenitae, opposite the place called Chersonesus (and in these places

there are pirates) and after this the White Island. Then come Naura (Kannur) and Tyndis, the first markets of Damirica or Limyrike, and then Muziris and Nelcynda, which are now of leading importance.” — The Periplus of the Erythraean Sea, 53

“Greeks send large ships to these market-towns on account of the great quantity and bulk of pepper and malabathrum. They are imported here, in the first place, a great quantity of coin; topaz, thin clothing, not much; figured linens, antimony, coral, crude glass, copper, tin, lead; wine, not much, but as much as at Barygaza; realgar and orpiment; and wheat enough for the sailors, for this is not dealt in by the merchants there. There is exported pepper, which is produced in quantity in only one region near these markets, a district called Cottonara. Besides this there are exported great quantities of fine pearls, ivory, silk cloth, spikenard from the Ganges, malabathrum from the places in the interior, transparent stones of all kinds, diamonds and sapphires, and tortoise-shell; that from Chryse Island, and that taken among the islands along the coast of Damirica [=Limyrike]. They make the voyage to this place in a favorable season who set out from Egypt about the month of July that is Epiphi.” — The Periplus of the Erythraean Sea, 56

This shows that even in the 1st century AD, textile trading was a feature of Kannur. Since trading required production, it can be reasonably assumed that even 2000 years ago, the area around Kannur region had textile production.

Corroborative evidence for the same is found in various historical records and travelogues. For instance, Sangam Literature, which is a product of the period when the region known today as Kerala was under the unified Tamilagam in the early Christian era contains a work ‘ Puranaanuru’ which states that people of the period knew about cotton cloth and the process of dyeing

### **Gallery 2: The origin of handloom technology**

According to modern historians, Kerala, saw major developments in science and technology in the millennium between BC 200 and AD 800. Historians opine that social life in Kerala converged around handicrafts based on science and technology in this period.

The society of the period might not have developed the technique of weaving for clothing; rather, they would have used it predominantly for making baskets for storing

food and fruits, making nets for fishing and making roofing material using palm leaves. Wild rattan, long grasses and palm leaves when woven would create baskets, nets and palm leaf mats. In those days, a type of grass called horse grass or flax (linen fibre) would be commonly found near streams and water bodies. It is probably because of this that linen cloth became a trading item in the port of Noura (Kannur).

The humans of the time would have realized that when the grasses near the water bodies were woven, it could create convenient fishing nets. For creating such nets, the fishermen would have tied one end of the grass strands to a horizontal branch of a tree and the other end to a dried twig on the ground. Now, by running other strands perpendicular to these hanging grass strands, fishermen would have a net like fabric

### **Gallery 3: The development of handloom**

If grass strands which were used to make the fishing nets were soaked in water and once their chorophil decompose, they could be used to weave a much softer and closely woven cloth (known as thorth in Malayalam) on a loom. Today we can understand how these realizations would have occurred to the fishermen during their attempts to create fishing nets. Probably by then, instead of using the tree loom based on tree branches, primitive loom technology might have developed. The Mangad Thorth cloth of Perumjaloor (Modern day Taliparambu) is similar to the oldest types of woven clothes.

After the birth of ‘thorth’, further development of the production process transformed this cloth into a multipurpose textile. Thorth must’ve been closely connected to the agriculturists, as a food pouch for the herders, and as an aid in fishing for the fishermen.

### **Gallery 4A: References to handloom in Sangam literature and in travelers accounts**

Sangam literature and travellers accounts to this part of the world are rich in various references of handloom. This enclave proposes to show a few of those references and mentions to give the visitors a perspective of the stature and availability of handloom based clothing in that period.

- A line from Sangam Literature (Neytal pattu): “Azhakutta Valakalodukoodi neduthimilil (padaku) poya perum kadalparappile chiraamil (sraavu) nanadungumaaru...”
- Egyptian traveler Kasmos writes (AD 550): “Malaibar is the great market of Bharat. Exports mainly happen through the ports of Mangaruth (Managlore), Salopatnam (Dharmadam), Nalopatnam (Valapattanam). Pepper, copper articles, black tree and cloth are the main exports.” (Quote translated from Malayalam)

- The notes of traveler Al-Biruni: “The main towns Ezhimala and Pantalayani of Malabar show heavy Buddhist influence. Dharmapatnam (Dharmadam) and Kollam have a lot of weavers who weave smooth cloth...”
- The notes of traveler al-Idrisi (AD 1150): “Baril, Fantrina (Panthalayani), Jarfathar (Sreekantapuram) are main commercial centres...”
- Chinese traveler Chow Ju Qua (AD 1178): “Pearls, cotton cloth and fragrances reach China from Malaibar...”
- Marcopolo (AD 1275): “One cannot find a tailor anywhere here. You don’t need one either. No one wears a coat or a shirt. They just hang a cloth around their waist. Rest of the body is naked. The King’s attire is no different. The king is half naked. Coconut, ginger and pepper grow in abundance in Limala (Ezhimala). Smooth textiles are woven here.”
- Chinese traveler Wang Tha Yun (AD 1330): “Visited Ezhimala and Sreekantapuram. Sreekantapuram is a commercial centre to the north of Kozhikkode. Even though the land is flat and the fertile, cultivation is less. Weaving is the main occupation. This place exports most of the cotton cloth. The cloth is of high quality. They weave the best quality cloth here.”
- Chinese traveler Feyseen (AD 1436) about Kozhikkode: “People wear clothes similar to what they wear in Kochi. A cloth below the waist and above the knees. Few women wear a small cloth above the waist (Raouka)”
- Vasco da Gama (AD 1498) describing his meeting with the Zamorin after he landed in Kozhikkode: “ The king is an old brown man. He was lying in a silk bed. On his half naked body he wore a white calico dress that reached upto his knees. He had a silk thread around his waist...”

#### **Gallery 4B: Feudal Kings and handloom industry**

When foreigners had set up camps in various parts of Kannur, what welcomed them where the numerous tiny little feudal lords, the friendship and enmity between them and the resultant atmosphere of arguments, fights, battles and wars. However the common people where the uncivilized victims or preys of hardened narrow minded religious and casteist rituals and customs such as untouchability. The Kolathiri kings that came to power after the decline of Mooshaka kings based in Ezhimala and Sreekantapuram, were a group of regional or local feudal lords from six lineages who often fought amongst themselves.

1. Aduthila Kovilakom
2. Meethalae Kovilakom
3. Chirakkal Kovilakom
4. Kavinicherry Kovilakom
5. West Thovananghode Kovilakom
6. Chengal Kovilakom

The condition in that period was such that the foreigners who protected their body in all seasons and weather and wore ornate clothes from head to toe, came face to face with the people who wore barely enough cloth on their waist and the feudal lords who covered their upper body with certain symbolic clothes.

#### **Gallery 5: Foreign influence in handloom industry**

Even though many foreign travellers- Arabs, Chinese and Europeans had come here in the period up to 15th century AD, deep foreign influence in the administration, trade, economic and social structures began only with the visit of Vasco da Gama as a representative of the Portuguese King in 1498 in Kozhikode and Kannur. In the 16th century AD, many people including soldiers arrived in these lands from Portugal, France, Netherlands and England, where industrial revolution had already happened. They wanted to profiteer from the trading in Malabar Coast which was until then a monopoly of the Arab and Chinese merchants by interfering in the power centres here. In their attempts to achieve their goals, they enabled the progress of handloom industry.

It is understood that the inhabitants of Malabar at that period learned the importance of covering the body in clothes from these foreigners.

#### **Gallery 6: Development of weaving technology in Malabar**

The development of weaving technology in Malabar is closely linked to the spread of Missionary work. Before Vasco ds Gama, the Portuguese diplomat and linguist Pêro da Covilhã arrived in Kannur in 1468. He interacted with the natives wearing Arabic attire as he was very familiar with both the Arabic language and attire. He thought to be the first person to carry out Christian service in Kannur. The chapel established by the Franciscan Missionaries Society with the permission of the Kolathiri King at the beginning of the 16th century AD went on to become the Kannur Holy Trinity Church. In 1549, St. Francis Xavier of Roman Society of Jesus came to Kannur and spread

Catholicism. In 1505 AD, when Almeida established Kannur Fort, St Johns Church was established inside the fort. Coupled with foreign hegemony, few locals who had joined the foreigners as assistants converted to Christianity as a result of proselytization. When the coverts and non-coverts started imitating the foreigners dressing practices and covered themselves, a new social problem arose.

When the converts started intermingling with the foreigners and changed their lifestyle, the strict caste system and traditions expelled them from society and obstructed their traditional means of livelihood. At this juncture, various Christian missionaries attempted to provide them with a means of livelihood.

They rejuvenated the weaving technology with the help of carpenters and brought out a loom that rested on four pillars known as the Malabar Frameloom (Malabar Maggathari). They went on to establish weaving factories with the help of Malabar Framelooms. They also diversified their production and made shirts, towels, sheets, blankets etc. Thus the north Keralites who were described as clothing averse by the foreign travelers started wearing regular clothes as a result of the weaving industry established by the Christian missionaries.

The industries commission under Basel Mission started factories for rehabilitating the newly converted. Printing, carpentry, Handloom and tiles manufacturing were the activities in the factories. In 1852, handloom factory was started in Kannur. The German handloom expert James Haler then introduced the Malabar Frame loom with fly shuttle for weaving in Kannur.

### **Gallery 7: Looms through the ages**

Gallery 7 will feature a series of looms that show the progression of the weaving technology through the ages

### **Gallery 8: Social renaissance, National Movement, Labour Movements, and handloom industry**

From the beginning of 19th century itself several big and small social reform movements gained strength in Kerala. Establishing modern industrial units was seen as a means to achieve socio economic progress. The major families who were workers of SNDP, Atmavidyasangam etc. later on became handloom industrialists. The handloom production units in parts of Kannur, Kakkad, Puzhati, Azhikode, Chirakkal, Pallikunnu, Kannothumbal Elayavur Chowa, Kanjirode, Kannadiparambu etc. started functioning as factories.

From 1928 the National Movement strengthened in Kannur. Various strikes were organized to improve the wages of workers and gain other trade union rights through collective bargaining. It was in the wake of this that British government gave shape to cooperatives. The formation of weaver cooperative societies in handloom field were a result of the national leaders attempts to improve work conditions by utilizing this protection of law. In the backdrop of World War II handloom declined in 1946 because of scarcity of thread, the input material

A plan was devised by Madras government to distribute thread to weavers through ration card method. The All India Handloom Board had come into existence in 1945 itself to support industrial matters of handloom. It was All India Handloom Board that devised the plan to distribute threads to weavers at ration rates. By making use of this situation, freedom movement leaders formed a meeting of traditional weaver workers on Chirakkal Taluk basis in 1946 and 99 weaver members took shares to form Chirakkal Weavers Cooperatives Society which started functioning from 11 February 1947. This is the first weaver cooperative society in Kannur region.

### **Gallery 9: History of Weavers Streets of Kannur**

The ruling feudal lords established the weaver streets of Kannur by bringing the weaver families to Malayaladesh by contacting the kings of Mysore, Cholamandalam, Pandyanaadu (Dravida region outside of Chera Kingdom) in order to produce clothes, robes, headgears, ceremonial robes etc. that suited their prestige and position.

The weaver streets such as Shaleeya, Devanga, Padmashaleeya etc. came into existence between 15th to 19th centuries. Through these, the throwshuttle pitlooms become popular in North Malabar.

### **Gallery 10: Looms through the ages**

Gallery 10 will feature a series of looms that show the progression of the weaving technology through the ages

### **Gallery 11: Documentaries on Kannur handloom**

Gallery 11 will portray the history, growth and development of handloom industry in Kannur from 1st century AD, till present day using visual media.



## **Eligibility Criteria For Application**

Those who are including Empanelled/Non Empanelled firms should attend the **Pre-bid meeting**.

**Pre-bid meeting date - 19.08.2020 Time – 11 am**

**Medium of meeting – Online (Zoom/Google meet)**

Non Empanelled/Empanelled firms who are willing to participate in the Request Of Proposal shall submit their Firm details (General qualification) as described below on /before **17.08.2020**. They will be informed the eligibility before the Pre-bid meeting. Consultants/Firms attending the Pre-bid meeting will get more details about nature and scope of the project, eligibility criteria, terms and conditions and other information relating to the Request For Proposal. Those who are participated in the bid shall pay Rs 5000/- by way of DD drawn in the name of Executive Director, Interactive Museum of Cultural history of Kerala towards cost of documents along with Bid documents in separate cover.

## **General Qualifications for not empanelled with Keralam Museum**

1. The details of minimum 3 years experience in the Museum related works.
2. The details of minimum turnover of 2 crore in last 2 years.
3. The details of completed work with Project cost in last 3 years – Minimum value of project 5 crores.
4. The firm should have a consortium containing the following Technical persons.
  - a. Curator
  - b. Museum designer
  - c. Historian with sufficient experience in said subject
  - d. Implementation team with minimum 5 years experience
  - e. Graphic Designer
  - f. MEP consultant
  - g. Other experts

Kindly submit the testimonials proving qualifications of the above persons.

## **1. Technical bid - Evaluation**

### **1. History of the Firm** – Turn over, when established, full time staff etc

#### **Total - 20 Marks**

Up to 3year - 10 marks

Up to 5year - 15 marks

Above 5 year - 20 marks

### **2. Technical competence** – Details of projects done, similar projects executed

#### **Total - 20 Marks**

Works executed up to 2crore/2year - 10 marks

Works executed up to 3crore/2year - 15 marks

Works executed above 3crore/2year - 20marks

### **3. Specific experience** - Experience in designing museums or galleries, experience in Kerala

#### **Total - 30 Marks**

1 Work - 10 marks

3 Works - 20 marks

More than 3 Works - 30 marks

### **4. Understanding of this project brief** – a note on their understanding and approach

#### **Total – 30 Marks**

The marks shall be given on evaluation of understanding the project brief.

The Marks secured out of 100 will be converted to out of 40 marks. The Technical bid of ALL the firms should be evaluated against total marks of 100. Empanelled firms should

also submit the full technical bids.. The firm/company who secure at least 50 % of score in the evaluation will be treated as qualified for Technical presentation.

## **2. Technical Presentation**

Eligible candidates can participate in the presentation after qualifying Technical bid evaluation.

### **Medium of Presentation – Offline / Online (Zoom/Google meet)**

The technical presentation should be entirely based on the design already prepared.

**20 marks** - Understanding the brief

**20 marks** - Respecting the historicity of the building and demonstrative adaptive reuse

**20 marks** – Understanding the Design flow/strength

**20 marks** - Economics of design

**20 marks** - Confidence in executing

**Total marks = 100 marks**

Awarded marks out of 100 will be converted to out of 30 marks. The firm/company who secure at least 50 % marks (15/30) will be treated as qualification for submitting financial bid.

Those Who secure 50% marks in technical bid evaluation and technical presentation shall be eligible for the financial bid. The financial bid of those are not eligible shall not opened for competition.

## **3. Financial Bid**

The Financial bid should be based on the design and estimate already prepared

**Estimate Amount = ₹ 1,38,98,669,96 + GST**

a) The bidder who secure at least 50% of score in the presentation will be treated as technically qualified.

b) The Financial Bids of the technically qualified bidders will be opened on the prescribed date in the presence of the bidder or their representatives who are authorized by bidder.

c). The lowest financial bidder (L1) will be awarded 100% score.

d) Financial Scores for other than L1 bidders will be evaluated using the following formula:

$$\text{Financial Score of a Bidder} = \left\{ \left( \frac{\text{Financial Bid of L1}}{\text{Financial Bid of the Bidder}} \right) \times 100 \right\} \% \text{ (Adjusted to two decimal places)}$$

e) Only fixed price financial bids indicating total price for all the services specified in this bid document will be considered.

f) The bid price will include all taxes and levies and shall be in Indian Rupees.

g) Errors & Rectification: Arithmetical errors will be rectified on the following basis: “If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail”.

### **Combined Evaluation of Technical bid, presentation & Financial Bids**

a) The technical bid, presentation and financial scores secured by each bidder will be added using weightage of 40 for technical evaluation, 30 for presentation and 30 for financials respectively to compute a Composite Bid Score.

b) The bidder securing the highest Composite Bid Score will be declared as the Best Value Bidder for award of the Project.

c) In the event of the bid, if the composite bid scores are ‘tied’, the bidder securing the highest technical score will be declared as the Best Value Bidder for award of the Project.

d). The successful bidder has to provide a letter of acceptance to Interactive Museum of Cultural History of Kerala (Keralam Museum of History and Heritage, Trivandrum) within seven days of receiving communication about his/her selection from the Department.

e). The successful bidder shall to sign an agreement with payment schedule at the time of award of the work.

f). Keralam Museum of History and Heritage reserves all the rights to accept or reject any/all Request For Proposal applications, without assigning any reason. The Department takes no responsibility for the delay, loss or non-receipt of any submission or letter sent by post, within the prescribed time period.

### **Conditions and Notes**

\*Completion of work is 4 months

\*Cost of RFP document mentioned above should be in the form of separate Demand Draft in favour of Executive Director Interactive Museum of Cultural History of Kerala, Trivandrum

\*Excess over estimate/ below estimate rate shall be allowed by the committees constituted for Museum setting works if necessary.

\*DPR details will be available in the Keralam Museum at the Office time. You can contact directly for getting details of the project.

\*The drawings and estimates are separately attached along with documents

\*The presentation should be entirely based on the design already prepared.

\*The Financial bid should be based on the design, drawing and estimate already prepared

\*If the mentioned brand and model equipments is not available in the market, other brands with the equivalent specification can be used at their present market rate

\*Lumsum (LS) works enclosed in the estimate can be finalized as per work executed on consulting with Keralam Museum

Application / Request For Proposal in sealed cover with complete details in all respects and superscribed as Selection of Museum Consultancy Firm for Setting up of galleries and allied works related with Handloom Museum, Kannur shall be submitted at the following address. A soft copy of Presentation shall be sent along with this application. Interested consultants/ consortia of consultants can download the Request For Proposal documents from the website [www.museumkeralam.org](http://www.museumkeralam.org). The last date for receipt of application (hard copy ) is 2 PM on September 4. 2020 and date of presentation is fixed on 8<sup>th</sup> September.

**The Executive Director**  
**Interactive Museum of Cultural History of Kerala**  
**(Keralam Museum of History and Heritage), Park View**  
**Vikas Bhavan P.O,**  
**Trivandrum – 695033.**

# Ground Floor Plan

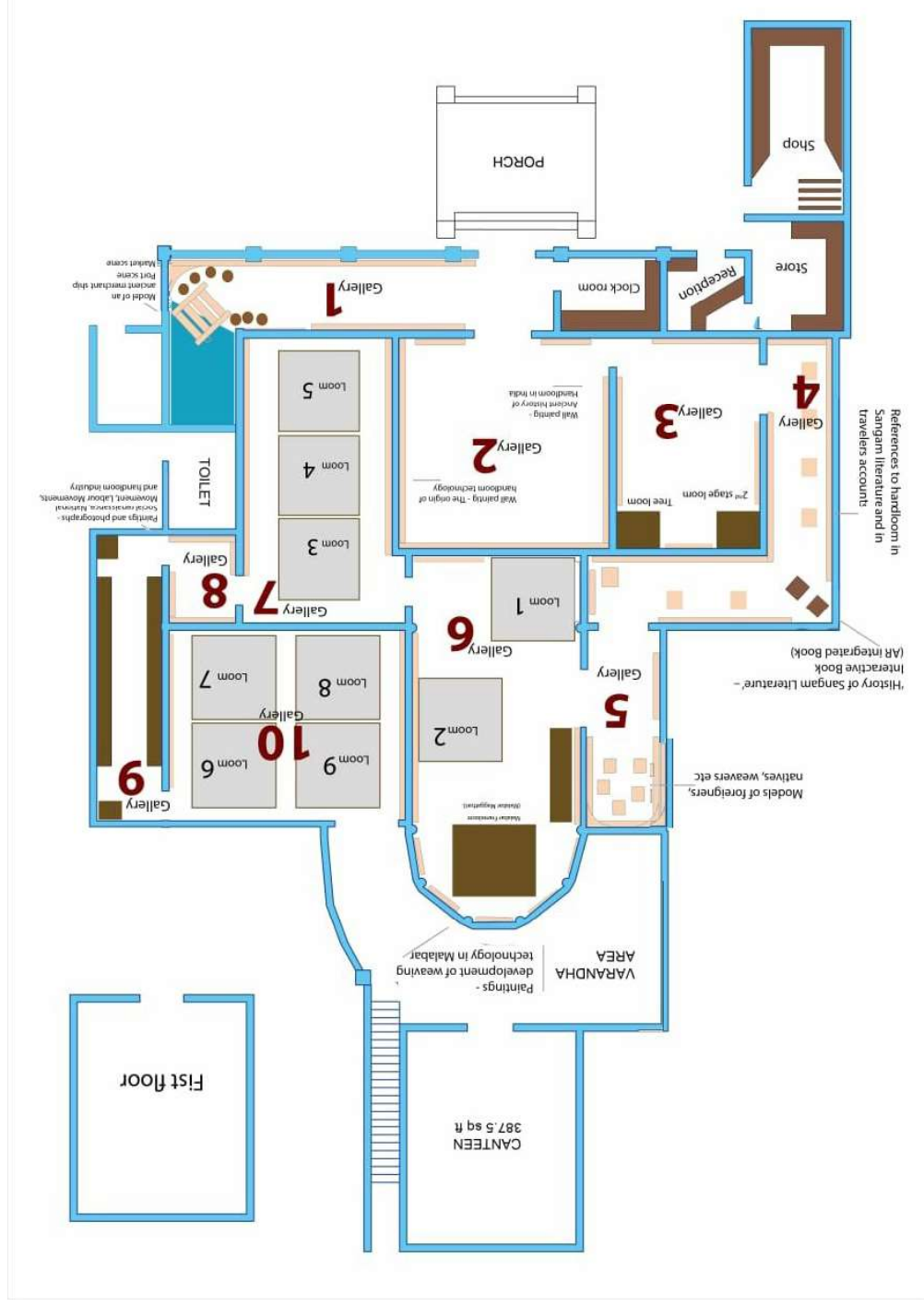


Figure 9: Ground Floor plan of the Proposed Museum Building

## Ground Floor Section Plan



Figure 10: Ground Floor section plan of the Proposed Museum Building



### ABSTRACT

#### Setting up of galleries and allied civil works in Hand loom Museum, Kannur

Sl No	Description	Amount
1	Setting up of galleries in Handloom Museum	12700010.16
2	Minor Civil works	1198659.80
	<b>TOTAL</b>	<b>13898669.96 +GST</b>

I agree to execute the work at  
Estimate rate / \_\_\_\_% below / \_\_\_\_% above

Consultant

## Estimate for Setting up of galleries in Handloom Museum, Kannur

	Item	Type/Description	Size	Quantity	Unit	Rate	Amount
Gallery Room 1	History of Kannur handloom and foreign trading	1 Painting (on wall) Mural including artistic work,artist labour charges as per suitable theme and design of proposed gallery	32.6ft X 6 ft = 195.6 ft	195.6	sft	929.20	1,81,751.52
		Drawings (Sketch)	2ft X 1ft 6	4	No	3,907.29	15,629.16
		Frame (Fiber Framing )	7 ft X 4 =28 ft	28	4No	487.83	13,659.24
	Installation - Ancient Kannur port and market	Model of an ancient merchant ship (fiber casting)	400 cm X 300 cm = 13.3 ft X 10 ft	1	Ls	1,30,000.00	1,30,000.00
	Wall painting	Mural Painting	1236 X300 cm = 41.2 ft X 10 ft	412	sft	929.20	3,82,830.40
	Sculptures	Sculpture of crowd (fiber casting)	5 ft height each 3 Nos	1	Ls	82,500.00	82,500.00
	Cut outs	Ancient merchant (fiber glass sheet)3mm	3 ft height each	3	No	5,981.73	17,945.19
	Display boards	History of Kannur handloom and foreign trading- Data including fixing charges, data collection, labour charges as per suitable theme and design of proposed gallery	6ft X 2 ft	1	No	5,970.11	5,970.11
Gallery	Title display boards	Displayed items (Acrylic sheet)3mm including fixing charges, data collection, labour charges as per suitable theme and design of proposed gallery	1.5 ft X0.6 ft	6	No	1,440.26	8,641.56
	Display 1	Different types of "Odams"	5X6 ft Framing	1	No	29,966.70	29,966.70
		Display material with teak wood framing and wooden paneling 5 x 6 ft including cost of material, labour cost, cost conveyance etc		2	No	28,787.48	57,574.96
	Display 2	Different types of weaving methods (fiber casting)	5X6 ft	1	Ls	16,000.00	16,000.00
		Different types of weaving methods (fiber casting)		1	LS	18,000.00	18,000.00
		Display Material (Fiber casting)		2	Ls	30,000.00	60,000.00
	Painting	The origin of handloom technology	2ftX3ft each	4	No	22,881.55	91,526.20
	Framing	The origin of handloom technology (WoodenFrame)	10 ft	4	No	4,878.30	19,513.20

Room 2	Display boards	The origin of handloom technology (Data)(WoodenFrame/Acrylic sheet) including fixing charges, data collection, labour charges as per suitable theme and design of proposed gallery	6ft X 3ft	3	No	8,885.48	26,656.44
	Title	Display board (Acrylic sheet)3mm including fixing charges, data collection, labour charges as per suitable theme and design of proposed gallery	1.5 ft X0.6 ft	4	No	1,440.26	5,761.04
	Horizontal LED Tv display 55 inch	LED Tv display Full HD	55 inch Led Display	1	No	1,10,342.50	1,10,342.50
		Glass fabrication		1	Ls	25,000.00	25,000.00
		Content creation (Graphics, animation, Data collection) and development	Full HD	1	Ls	5,00,000.00	5,00,000.00
Gallery Room 3	Paintings	The development of handloom (Mural)	3ftX4ft each	2	No	27,910.85	55,821.70
	Framing	The development of handloom (wooden)	14ft X2 = 28 ft	2	No	6,829.62	13,659.24
	Display 1	Tree loom model (fibre casting and wood)including artistic work	Real size	1	Ls	55,000.00	55,000.00
	Display 2	Second generation loom model – cut tree looms (fibre casting and wood)including artistic work	Real size	1	Ls	40,000.00	40,000.00
	Display 3	Old loom parts display material cost wood)including artistic work	Real size	1	Ls	55,000.00	55,000.00
	Display boards	The development of handloom(Data)	(6ft X 3ft) X 2	2	No	8,885.48	17,770.96
	Display boards	Title display boards (Acrylic sheet)3mm	(1.5 ft X0.6 ft) X 5	5	No	1,440.26	7,201.30
	Display 1	'History of Sangam Literature' – Interactive Book (AR integrated Book)	Logitech Brio Ultra HD 1080p	1	No	24,739.95	24,739.95
		Epson 536Wi Short Throw	536Wi Short Throw	1	No	82,466.50	82,466.50
		Intel real sense camera (Dev Kit)	Full HD	1	No	9,059.70	9,059.70
		Dell Inspiron 7559-8045 15.6-inch FHD Laptop	Intel Core i7 6th GEN 6700HQ/8GB/1TB/	1	No	72,013.00	72,013.00
		Content creation and development (Graphics, animation, Data collection)	Full HD 4min	1	Ls	6,20,000.00	6,20,000.00
		Other Fabrication		1	Ls	20,000.00	20,000.00
	Display 2	Different types of old cloth samples Framing	10X6 ft	1	Ls	25,000.00	25,000.00
		Display Material cost	Cloths	1	Ls	25,000.00	25,000.00
	Display 3	Foreign travelers' documents Framing	7X6 ft	1	Ls	25,000.00	25,000.00

Gallery Room 4	Display 1	Display Material cost	Real size	1	Ls	20,000.00	20,000.00
	Sculptures	Models of 7 human with old style clothing real size including artist work, artistic labours, material cost etc	6 ft each	7	No	75,497.50	5,28,482.50
	Sound document	'Sangam Literature' surround speaker	Philips SPA5190B 5.1	1	No	9,512.69	9,512.69
	Display boards	Foreign travelers' documents (Data) including fixing charges, data collection, labour charges as per suitable theme and design of proposed gallery	6ft X 3ft	2	No	8,885.48	17,770.96
	Display boards	Title display boards (Acrylic sheet)3mm including fixing charges, data collection, labour charges as per suitable theme and design of proposed gallery	1.5 ft X0.6 ft	1	No	1,440.26	1,440.26
Gallery Room 5	Display boards	Foreign influence in handloom industry (Data) including fixing charges, data collection, labour charges as per suitable theme and design of proposed gallery	(6ft X 3ft)	1	No	8,885.48	8,885.48
	Display boards	Title display boards (Acrylic sheet)3mm including fixing charges, data collection, labour charges as per suitable theme and design of proposed gallery	1.5 ft X0.6 ft	10	No	1,440.26	14,402.60
	Display showing "foreigners purchasing wares in Indian markets"	Old Photographs (Wooden Frame) including fixing charges, data collection, labour charges as per suitable theme and design of proposed gallery	15 X8inch	10	No	8,362.80	83,628.00
	Paintings	Development of weaving technology in Malabar including fixing charges, data collection, labour charges as per suitable theme and design of proposed gallery	3ftX4ft each	5	No	28,456.75	1,42,283.75
	Framing	Development of weaving technology in Malabar	14ft X5 = 70 ft	5	No	6,829.62	34,148.10
	Display 1	Malabar Frameloom (Malabar Maggathari)Procuring and displaying of Actual malabar frame loom including cost of object, procuring and transportation charges, display of objects and display of half weaved cloth, maintenance of loom, polishing charges etc as per suitable theme and design of proposed gallery	Actual Model	1	No	1,39,380.00	1,39,380.00

Gallery Room 6	Display 2	Primitive loom (Procuring and displaying of Actual Primitive loom including cost of object, procuring and transportation charges, display of objects and display of half weaved cloth, maintenance of loom, polishing charges etc as per suitable theme and design of proposed gallery)	Actual Model	1	No	1,39,380.00	1,39,380.00
	Display 3	Primitive pit loom (Procuring and displaying of Actual Primitive pit loom including cost of object, procuring and transportation charges, display of objects and display of half weaved cloth, maintenance of loom, polishing charges etc as per suitable theme and design of proposed gallery)	Actual Model	1	No	1,39,380.00	1,39,380.00
	Video Display- Dying process and weaving pattern making	Video Display sony 43inch tv	Full HD	1	No	65,044.00	65,044.00
		Content creation (Videography, Data collection) And development	Full HD	1	Ls	5,00,000.00	5,00,000.00
Gallery Room 7	Display 1	Raised pit loom (Procuring and displaying of Actual Raised pit loom including cost of object, procuring and transportation charges, display of objects and display of half weaved cloth, maintenance of loom, polishing charges etc as per suitable theme and design of proposed gallery)	Actual Model	1	No	1,39,380.00	1,39,380.00
	Display 2	Frame loom (Procuring and displaying of Actual Frame loom including cost of object, procuring and transportation charges, display of objects and display of half weaved cloth, maintenance of loom, polishing charges etc as per suitable theme and design of proposed gallery)	Actual Model	1	No	1,39,380.00	1,39,380.00
	Display 3	Dobby loom (Procuring and displaying of Actual Dobby loom including cost of object, procuring and transportation charges, display of objects and display of half weaved cloth, maintenance of loom, polishing charges etc as per suitable theme and design of proposed gallery)	Actual Model	1	No	1,39,380.00	1,39,380.00
	Display of main parts of looms including procuring charge ,transporting and fixing	Framing	5X6 ft	2	No	11,498.85	22,997.70
		Display Material cost	Actual Model	2	Ls	50,000.00	1,00,000.00
	Drawings	loom parts – assembling sketch	2ft X 3ft	4	No	5,807.50	23,230.00
		Framing	10 ft X 4 = 40 ft	4	No	5226.75	20,907.00
	Display boards	Display boards(Data)- loom assembling	(6ft X 3ft)	2	No	8,885.48	17,770.96
	Display boards	Title display board (Acrylic sheet)3mm	1.5 ft X0.6 ft	9	No	1,440.26	12,962.34

Gallery Room 8	Wall paintings mural	Social renaissance, National Movement, Labour Movements, and handloom industry	16.6 X 10 ft = 166 ft2	166	1No	929.2	1,54,247.20
	Photographs with frame		2ftX3ft each	4	No	11,150.40	44,601.60
	Display boards	Social renaissance, National Movement, Labour Movements, and handloom industry (data)	(6ft X 3ft)	1	No	8,885.48	8,885.48
	Display boards	Title display boards including fixing charges, data collection, labour charges as per suitable theme and design of proposed gallery	1.5 ft X0.6 ft	5	No	1,440.26	7,201.30
Gallery Room 9	Miniatures	Weaver's street	4ftX3ft X1ft each	1	LS	24,000.00	24,000.00
	Installation - A Weaver's street model	Wall paintings (Mural)	68.2 ft X 8 ft = 545.6 ft2	546	Sqft	929.20	5,07,343.20
		Relief	24X6 = 144 ft2	1	No	71,083.80	71,083.80
		Sculpture	4 ft height 3 nos 60000 for 1 no	1	LS	1,80,000.00	1,80,000.00
	Display board	Display boards(Data) (Acrylic sheet)3mm	(6ft X 3ft)	1	No	8,885.48	8,885.48
	Display board	Title display boards (Acrylic sheet)3mm	1.5 ft X0.6 ft	3	No	1,440.26	4,320.78
Gallery Room 10	Display 1	Providing Jacquard loom including cost of object, procuring and transportation charges, display of objects , maintenance , polishing charges etc as per suitable theme and design of proposed gallery	Real size	1	No	1,39,380.00	1,39,380.00
	Display 2	Providing Vertical warping mill including cost of object, procuring and transportation charges, display of objects , maintenance , polishing charges etc as per suitable theme and design of proposed gallery	Real size	1	No	55,752.00	55,752.00
	Display 3	Type/Description	Real size	1	No	55,752.00	55,752.00
	Display 4	Providing Peg warping frame including cost of object, procuring and transportation charges, display of objects , maintenance , polishing charges etc as per suitable theme and design of proposed gallery	Real size	1	No	19,164.00	19,164.00
	Display 5	Providing Charkha set including cost of object, procuring and transportation charges, display of objects , maintenance , polishing charges etc as per suitable theme and design of proposed gallery	Real size	1	No	19,164.00	19,164.00
		Framing	(5X6 ft)	4	No	11,498.85	45,995.40

	Display 5,6,7 &8 Loom parts display	Display Material cost (Loom parts)	Real size Total 4 nos 50000rs for 1 no	1	No	2,00,000.00	2,00,000.00
	Display boards	Display boards(Data)- Different type of looms including fixing charges, data collection, labour charges as per suitable theme and design of proposed gallery	(6ft X 3ft)	1	No	8,885.48	8,885.48
	Display boards	Title display boards (Acrylic sheet)3mm including fixing charges, data collection, labour charges as per suitable theme and design of proposed gallery	1.5 ft X0.6 ft	8	No	1,440.26	11,522.08
Gallery Room 11	Video projection mapping (Documentaries on Kannur handloom)	Surface mapping- content Design	Full HD 15 min video	1	LS	10,00,000.00	10,00,000.00
		Surface mapping- technical compositing + Video programming player	Full HD	1	LS	64,000.00	64,000.00
		Supply and fixing of BenQ W 1110 projector with their projector mounts ( roofing type) including cost of VGA cable , fixing cost, conveyance etc .	Full HD	4	No	1,03,921.73	4,15,686.92
		VGA 6 port hub with video signal booster	6 port	1	No	8,711.25	8,711.25
	Personal computer	8th Generation Intel® Core™ i7-8550U Processor (8MB Cache, up to 4.0GHz) 8GB, DDR4, 2400MHz; up to 16GB + AMD Radeon™ 520 Graphics with 2G GDDR5 graphics memory		1	No	73,174.50	73,174.50
	Audio system	Providing JBL 5.1 Speaker system	5.1	1	No	48,781.84	48,781.84
Allied works	Furnitures	Supply of furnitures including reception furnitures, clock room and store room shelves, library and canteen furnitures etc	-	1	LS	3,50,000.00	3,50,000.00
	Wall decorations	Wall Decorations and Materials (Handhold loom, frame looms, books, magazine etc) in Library	-	1	No	1,00,000.00	1,00,000.00
	Pedestal fan	Providing Usha Maxx Air 400mm Pedestal Fan (White)		25	No	4,599.54	1,14,988.50
		Procuring and displaying of frame loom to visitors including cost of object, procuring and transportation		5	No	19,164.75	95,823.75

	Loom - Experience	Procuring and displaying of Honeycomb loom for working experience including cost of object, procuring and transportation charges, display of objects, maintenance, polishing charges etc as per suitable theme and design of proposed gallery		1	No	1,39,380.00	1,39,380.00
Electrical	General Electrical	Upgradation of main electrical connection and drawing of new lines with transformer from KSEB		1	LS	6,00,000.00	6,00,000.00
		UPS if necessary		1	No	10,00,000.00	10,00,000.00
	Spot Light	Providing Bajaj Alpha 12WW 'ALPHA' Track mounted spotlight luminaire suitable for 1 Phase track including cost of conveyance, labour cost, artistic work etc	12WW	102	No	2,787.60	2,84,335.20
	COB Spot Light	Providing Bajaj Alpha 'ALPHA' Track mounted spotlight luminaire suitable for 1 Phase track including cost of conveyance, labour cost, artistic work etc	30WW	21	No	4,762.15	1,00,005.15
	LED Tubes	Bajaj T8 BLRB LED tube with aluminium Heat sink including cost of conveyance, labour cost, artistic work etc	DB218 2X 18W	34	No	551.71	18,758.14
	LED Tubes with Acrylic sheet covering	Bajaj T8 BLRB LED tube with aluminium Heat sink including cost of conveyance, labour cost, artistic work etc	DB118 2X 18W	20	No	551.71	11,034.20
Lighting	Light channel mixer	HDTV Compatibility Video Compatibility 3D Compatibility (Please refer to User's Manual for detailed support timing.) 480i, 480p, 576i, 576p, 720p, 1080i, 1080p NTSC, PAL, SECAM, SDTV Frame Sequential: Up to 720p Frame Packing: Up to 1080p Side by Side: Up to 1080i/p Top Bottom: Up to 1080p	DMX 1024	1	LS	28,000.00	28,000.00
	Light programming	Light programming software + DMX to USB adaptor	DB218 2X 18W	1	No	68,000.00	68,000.00
	Additional needed	Additional fittings, clamps, rods, framing etc		1	LS	60,000.00	60,000.00



	Additional needed	Additional fixings, clamps, rods , framing etc		1	LS	00,000.00	00,000.00
Ceiling	Weaving patterns	Providing and fixing tiled false ceiling of Weaving pattern material with suitable theme of museum in true horizontal level in GI channel framing including cost of conveyance, labour cost, artistic work etc	1000 ft2	1000	Sqft	280.52	2,80,520.00
Wall Fabrics	Fixing of Fabrics materials	adhering fabric to the gallery walls with suitable theme of museum including cost of conveyance, labour cost, artistic work etc	2000 sq ft	2000	Sqft	182.94	3,65,880.00
Other Expenses	Expencse of workshop	Unforseen	-	1	No	5,00,000.00	5,00,000.00
<b>Grand Total</b>							1,27,00,010.16

### Civil Works - Hand loom Museum

SI No	Description	Unit	Quantity	Rate	Total
1	2.8.1 Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.All kinds of soil	Cum	9.088	219.71	1996.72
2	4.1.10 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	Cum	2.272	5557.63	12626.94
3	7.1.1 Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plinth level with:Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	7.988	5236.51	41829.24
4	13.33.2 Pointing on stone work with cement mortar 1:3 ( 1 cement : 3 fine sand):Raised and cut pointing	Sqm	6.39	403.65	2579.32

5	2.25 Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m.	Cum	1.705	166.04	283.10
6	9.118.2 Providing and fixing to existing door frames 30 mm thick factory made Polyvinyl Chloride (PVC) door shutter made of styles and rails of a uPVC hollow section of size 60x30 mm and wall thickness 2 mm ( $\pm$ 0.2 mm), with inbuilt decorative moulding edging on one side. The styles and rails mitred and joint at the corners by means of M.S. galvanised/plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 25x20 mm and 1 mm ( $\pm$ 0.1 mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x30 mm and 2 mm ( $\pm$ 0.2 mm) wall thickness fixed to the shutter styles by means of plastic/galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having overall thickness of 20 mm and 1 mm ( $\pm$ 0.1 mm) wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineerin-	Sqm	6.301	2572.14	16207.05

7	9.9.1.1 Providing and fixing glazed shutters for door, windows and clerestory windows using 4 mm thick float glass panes including ISI marked M.S. Pressed butt hinges bright finished of required size with necessary screws.Second class teak wood35 mm thick	Sqm	53.25	4039.9	215124.68
8	14.42.1 White washing with lime to give an even shade:Old work ( two or more coats)	Sqm	1440	13.53	19483.20
9	14.54.1 Painting with synthetic enamel paint of approved brand and manufacture of required colour to an give even shade:One or more coats on old work	Sqm	115.65	67.74	7834.13
10	13.52.1 Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete.On steel work	Sqm	300	161.75	48525.00
11	14.67.1 Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade:Old work ( Two or more coats applied @ 1.43 ltr/10 sqm) over existing cement paint surface	Sqm	1440	93.42	134524.80
12	13.46.1 Finishing walls with Acrylic Smooth exterior paint of required shade:New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	Sqm	58.2	126.82	7380.92
13	14.69.1 Varnishing with varnish of approved brand and manufacture:One or more coats with copal varnish	Sqm	115.65	61.99	7169.14

14	6.40 Providing and laying Gypsum panel partitions 100 mm thick with water proof Gypsum panels of size 666x500x100 mm, made of calcite phosphor Gypsum fixed with tongue and groove, jointed with bonding plaster as per manufacturers specifications in superstructure above plinth level up to floor V level. Gypsum blocks will have a minimum compressive strength of 9.3 kg/cm2	Sqm	118.26	914.05	108095.55
15	Unforeseen and other contingencies if any				275000
16	Landscaping works if necessary				300000
16	<b>TOTAL</b>				1198659.80