



Name: Roll No.:

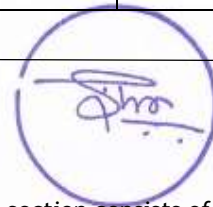
Branch: Signature of Invigilator:

Semester: VIth Date: 28/04/2022 (MORNING)

Subject with Code: AR353 CONSERVATION AND HERITAGE MANAGEMENT

Marks Obtained	Section A (30)	Section B (20)	Total Marks (50)

INSTRUCTION TO CANDIDATE



1. The booklet (question paper cum answer sheet) consists of two sections. First section consists of MCQs of 30 marks. Candidates may mark the correct answer in the space provided / may also write answers in the answer sheet provided. The Second section of question paper consists of subjective questions of 20 marks. The candidates may write the answers for these questions in the answer sheets provided with the question booklet.
2. The booklet will be distributed to the candidates before 05 minutes of the examination. Candidates should write their roll no. in each page of the booklet.
3. Place the Student ID card, Registration Slip and No Dues Clearance (if applicable) on your desk. All the entries on the cover page must be filled at the specified space.
4. Carrying or using of mobile phone / any electronic gadgets (except regular scientific calculator)/chits are strictly prohibited inside the examination hall as it comes under the category of unfair means.
5. No candidate should be allowed to enter the examination hall later than 10 minutes after the commencement of examination. Candidates are not allowed to go out of the examination hall/room during the first 30 minutes and last 10 minutes of the examination.
6. Write on both side of the leaf and use pens with same ink.
7. The medium of examination is English. Answer book written in language other than English is liable to be rejected.
8. All attached sheets such as graph papers, drawing sheets etc. should be properly folded to the size of the answer book and tagged with the answer book by the candidate at least 05 minutes before the end of examination.
9. The door of examination hall will be closed 10 minutes before the end of examination. Do not leave the examination hall until the invigilators instruct you to do so.
10. Always maintain the highest level of integrity. Remember you are a BITian.
11. Candidates need to submit the question paper cum answer sheets before leaving the examination hall.

**BIRLA INSTITUTE OF TECHNOLOGY
MESRA, RANCHI
(END SEMESTER EXAMINATION)**

CLASS: B.Arch

BRANCH: ARCHITECTURE

SUBJECT: Architectural Conservation and Heritage Management

TIME: 2 HOURS

SEMESTER: VI

SESSION: MO 22

AR. 353

FULL MARKS: 50

INSTRUCTIONS:

1. This question paper contains 30 MCQ questions each of 1 mark each and 5 questions of 4 marks each.
2. All questions are compulsory
3. Before attempting the question, paper be sure that you have got the correct question paper

1	To check rising water in absence of DPC, which of the following is used?
A.	Ethyl silicate
B	Asbestos Sheet
C	Tin sheet
D	All the above
2	Process of extraction of salts using Fuller's earth from building materials is known as:
A	Pitting
B	Cosmetic repair
C	Efflorescence
D	Poulticing
3	In analysis of mortar, Instrumental techniques for the analysis of organic materials is done using
A	Scanning electron microscopy (SEM)
B	Gas chromatography with mass spectrometry
C	Radiocarbon dating
D	polarised light microscopy
4	Soot and dust found in contaminated air causes _____ of the building material
A	Embrittlement
B	Staining
C	Bleaching & tendering
D	Blackening of lead pigments
5	Structural systems often found in historic buildings include
A	Load bearing wall with RSJ and Tees
B	Load bearing wall strengthened with RSJ stanchions
C	Load bearing wall with Jack arch
D	All the above
6	Which one of the following is an intrinsic threat to historic buildings
A	Vibrations

B	Ground water and drainage
C	Unconcerned overload
D	Encroachments
7	Which one of the following is not an option proposed while identifying the feasibility of restoration of a heritage building by the owner?
A	Capable and willing to take up on his own resources
B	May require soft loan assistance
C	May require sponsors and donors
D	Willing to sell off the property
8	“Enactment of ancient monument preservation act” was the first act on conservation in India put to act in the year
A	1900
B	1904
C	1908
D	1912
9	Which one of the following is a technique to determine dead and living cracks
A	Tale-tell method
B	Strain-guage
C	Demec-guage
D	All the above
10	Which one of the following is not considered as an Analysis of urban function
A	Original function
B	Present function
C	Housing Occupancy ratio
D	Ground floor use
11	Which of the statement is incorrect as a reason for conservation of structure?
A	Showing the future generation
B	Testimony of degradation
C	For artistic values
D	For resource mobilisation
12	Ethnic values come under
A	Emotional values
B	Cultural values
C	Use value
D	Townscape values
13	Short lived materials like reeds or muds are conserved using ____ degree of intervention
A	Restoration
B	Rehabilitation
C	Reproduction
D	Consolidation

14	For cold weather concreting _____ is used as accelerator
A	Calcium Chloride
B	Ferric oxide
C	Sodium chloride
D	Magnesium sulphate
15	Continuity in conservation should be durable, useful and _____
A	Impacting
B	Beautiful
C	Reversible
D	None of the above
16	For medium cracks in buildings, width ranges from
A	0.1-1 mm
B	1-10 mm
C	More than 10 mm
D	None of the above
17	To protect wood from ground termites we
A	Spray boric acid
B	Use parasitic nematodes
C	Creosote oil
D	All the above
18	Drywood termites can be removed through
A	Injecting permethrin
B	Fumigation
C	Use parasitic nematodes
D	All the above
19	Lithium treatment may be done based on results of
A	Petrograph test
B	Litmus test
C	Chromatography test
D	None of the above
20	UV radiation causes fading of unprotected wood @ _____ to _____ mm/ century
A	2 to 3
B	5 to 6
C	8 to 9
D	11 to 12
21	Which one of the following are chemical reactions in construction materials
A	Sulphate attack on cement products
B	Carbonation in cement based materials
C	Alkali aggregate reaction
D	All the above

22	Wakf property is a type of
A	Public property
B	Private property
C	PSU property
D	All the above
23	When moderate foundation damage for building on grade happens, the damage is identified by colour
A	Red
B	Yellow
C	Green
D	None of the above
24	In Stitching, reinforcement bars of dia are provided across cracks
A	2-4 mm
B	4-6 mm
C	6-8 mm
D	8-10mm
25	Abstraction of water from the ground due to absence of DPC can be responded by drip-feeding of
A	Silicone solutions
B	Sulphate solutions
C	Nitrate solutions
D	None of the above
26	Burra charter is the charter on conservation for which country
A	India
B	Austria
C	Australia
D	Canada
27	Photography: visual inspection are examples of
A	Non-invasive techniques
B	Light microscopy
C	Instrumental techniques for the analysis of component materials
D	Physical testing
28	In splint or bandage technique, the cross ties are placed
A	250-500 mm apart
B	500-750 mm apart
C	750-1000 mm apart
D	All of the above
29	Silverfish in parts of building is caused due to
A	Heat
B	Excessive wetness

C	Contaminated air
D	All the above
30	Genesis of conservation movement in India started with
A	Maintenance of Taj Mahal
B	Maintenance of Red fort
C	Maintenance of currency building
D	None of the above

31. [a] How do you check rising water in absence of DPC? [2+2]
 [b] "In conservation there is no place for conjecture"- Elaborate

32. Write short notes on: (1 X 4)
 [a] Poulting, [b] Cosmetic repair, [c] Spalling & splitting, [d] Pitting & dishing.

33. Discuss the methodology for conservation of Historic towns. [4]

34. What are the possible causes for failure in foundation? [4]

35. Throw light on the salient features of Bombay Heritage Act. [4]