

**ROYAL CIVIL SERVICE COMMISSION
BHUTAN CIVIL SERVICE EXAMINATION (BCSE) 2021
EXAMINATION CATEGORY: TECHNICAL**

PAPER II: GENERAL SUBJECT KNOWLEDGE PAPER FOR ARCHAEOLOGY

Date	: October 30, 2021
Total Marks	: 100
Writing Time	: 90 minutes (1.5 hours)
Reading Time	: 15 Minutes (prior to writing time)

GENERAL INSTRUCTIONS:

1. Write your Registration Number clearly and correctly on the Answer Booklet.
2. The first 15 minutes is to check the number of pages of Question Paper, printing errors, clarify doubts and to read the instructions. You are NOT permitted to write during this time.
3. This paper consists of **TWO Parts: Part I & Part II**
Part I consists of 70 multiple choice questions of 1 (one) mark each, and
Part II consists of 10 short answer questions of 3 (three) marks each.
4. All questions are **COMPULSORY**.
5. All answers should be written on the Answer Booklet provided to you. Candidates are not allowed to write anything on the question paper. If required, ask for additional Answer Booklet.
6. All answers should be written with correct numbering of Part and Question Number in the Answer Booklet provided to you. Note that any answer written without indicating the correct Part and Question Number will NOT be evaluated and no marks will be awarded.
7. Begin each Part in a fresh page of the Answer Booklet.
8. You are not permitted to tear off any sheet(s) of the Answer Booklet as well as the Question Paper.
9. Use of any other paper including paper for rough work is not permitted.
10. **You must hand over the Answer Booklet/s to the Invigilator before leaving the examination hall.**
11. This paper has **11 printed pages**, including this instruction page.

GOOD LUCK

Part I

Multiple Choice Questions [70 marks]

Choose the correct answer and write down the letter of your chosen answer in the Answer Booklet against the question number e.g. 71 (a). Each question carries ONE mark. Any double writing, smudgy answers or writing more than one choice shall not be evaluated.

1. _____ is the first ever scientific archaeological excavation Project executed in Bhutan.
 - a) Chubjkha Dzong ruins
 - b) Drapham Dzong ruins
 - c) Obtsho Dzong ruins
 - d) Dochoeten Geonpa ruins
2. Who devised C-14 dating method?
 - a) Willard Libby
 - b) Daniel Lausses
 - c) Michael Phills
 - d) Tim Williams
3. The concept of stratigraphy was borrowed from
 - a) Anthropology
 - b) Geography
 - c) Geology
 - d) Zoology
4. Obtsho Dzong ruins in Gasa is a
 - a) Zhabdrung's era Dzong
 - b) Pre-Zhabdrung Dzong
 - c) Post Zhabdrung Dzong
 - d) None of the above
5. The study of human activity through the recovery and analysis of material culture is called
 - a) Human Physiology
 - b) Anatomy
 - c) Archaeology
 - d) Anthropology
6. Who is considered as the father of Indian archaeology?
 - a) William Cunnington
 - b) Richard Colt Hoare
 - c) John Aubrey
 - d) Willard Libby
7. Bamiyan valley archaeological site belongs to
 - a) Indonesia
 - b) Cambodia
 - c) Afghanistan
 - d) India

8. Archaeologists primarily study _____ to understand how people lived in the past.
 - a) fossils
 - b) artifacts
 - c) historical documents
 - d) rocks

9. Blacksmithing archaeological sites known as *Gartshang* in Bhutan is associated to
 - a) Thangthong Gyalpo
 - b) Kuenkhen Lonchen Rabjampa
 - c) Pema Lingpa
 - d) Zhabdrung Ngawang Namgyel

10. Who wrote the book titled "*On the origins of species*" in 1859?
 - a) Carl Darwin
 - b) Charles Darwin
 - c) Alfred Wallace
 - d) William Cunnington

11. The ancient city of Pompeii archaeological sites is in which modern country?
 - a) Germany
 - b) France
 - c) Italy
 - d) Switzerland

12. Indus valley civilization is also known as
 - a) Harrapan civilization
 - b) Mahenjodaro civilization
 - c) Lathal civilization
 - d) None of the above

13. Drapham Dzong arcaheology project in Bumthang Dzongkhag was started in the year
 - a) 2008
 - b) 2010
 - c) 2012
 - d) 2014

14. Classification of artifacts is usually based on
 - a) similar size attributes.
 - b) similar shape attributes.
 - c) similar material attributes.
 - d) All of the above.

15. Which one of the following terminologies is also referred to as New Archaeology?
 - a) Processual archaeology
 - b) Post-processual archaeology
 - c) Linguistic archaeology
 - d) Modern archaeology

16. Bhutan Swiss archaeology project is a collaboration project between
- Royal Government of Bhutan, Swiss Agency of Development and Cooperation (SDC) and Swiss Liechtenstein Foundation of Archaeological Research Abroad, Switzerland.
 - Royal Government of Bhutan, HELVETAS Swiss Intercooperation and Swiss Liechtenstein Foundation of Archaeological Research Abroad, Switzerland.
 - Royal Government of Bhutan, Swiss Agency of Development and Cooperation (SDC) and HELVETAS Swiss Intercooperation, Switzerland.
 - Royal Government of Bhutan and Swiss Agency of Development and Cooperation (SDC).
17. Which of the following is NOT used in relative chronology?
- Stratigraphy
 - Typology
 - Dendrochronology
 - Seriation
18. Dendrochronology is based on studying
- Varves
 - Carbon atoms
 - Tree rings
 - Hydrogen atoms
19. Photogrammetry is a
- technique of transforming aerial photography into a scaled measurement.
 - method of taking photographs of huge monuments.
 - method of taking aerial photographs vast landscape.
 - None of the above
20. Thangthong Gyalpo is famous for
- building iron bridge.
 - building dzongs.
 - building chortens.
 - wall paintings.
21. What is the reason behind the early man could use copper first?
- It was easy to work on it.
 - It was a pure metal.
 - Its deposits were easily accessible.
 - It was available frequently.
22. Vertical recording of an excavated site is known as
- Section
 - Plan
 - Profile
 - Features

23. The following are the sites associated to Guru Rinpoche, EXCEPT
- Singye Dzong
 - Paro Taktshang
 - Aja Nye
 - Chhimi Lhakhang
24. Palaeontology is a science which deals with the study of
- Ancient arts
 - Ancient bones
 - Ancient coins
 - Ancient potteries
25. Which metal among the following was used first by the early man?
- Silver
 - Gold
 - Iron
 - Copper
26. Bhutan was called historically by different names, EXCEPT
- Monyul
 - Lhomonkhazhi
 - Baeyul
 - Drukyul
27. Which method of excavation is used for understanding cultural sequence of a site?
- Vertical
 - Quadrant
 - Horizontal
 - Salvage
28. Which of the following is not a Bhutanese dialects?
- Kurtopkha*
 - Khengkha*
 - Dakpakha*
 - Wangkha*
29. Which method would you choose for determining the dating of baked clay remains?
- Carbon – 14
 - Thermoluminescence
 - Dendrochronology
 - Pollen analysis
30. Who is the pioneer of aerial photography in Archaeology?
- O.G.S. Crawford
 - Edward Harris
 - Howard Carter
 - Arthur Evans

31. The following are 8 *lings*/seats associated to Longchen Ramjampa, EXCEPT
- Tharpaling
 - Kunzangling
 - Pemaling
 - Drechaling
32. Which UN agency looks after inscription of cultural and natural properties to World Heritage Sites lists?
- UNESCO
 - UNICEF
 - UNDP
 - UNIDO
33. The term 'Palaeolithic' was introduced by
- Mortimer Wheeler
 - John Lubbock
 - Gordon Childe
 - Henry Delumle
34. Which of the following provides evidences of Bhutanese pre-historic life/period?
- Dzongs
 - Namchag
 - Lhakhangs
 - Stupas
35. Archaeologist use maps to record
- spatial information about a site.
 - the orientation of the excavated site.
 - the topographic orientation of the site.
 - None of the above
36. Dumtse lhakhang, a round temple in Paro was founded by
- Thangong Gyalpo
 - Pema Lingpa
 - Zhabdrung Ngawang Namgyel
 - None of the above
37. Buddha was born at
- Rajir
 - Bodhgaya
 - Lumbini
 - Sarnath
38. What is a moraine?
- A deposit of pollens.
 - A deposit of sediments.
 - A deposit made by glacier.
 - Lake side formation.

39. “Membartsho” the burning lake is associated to
- Dorji Lingpa
 - Pema Lingpa
 - Ratna Lingpa
 - Sherab Mebar
40. Which of the following is synonymous with the second urbanization in Indian subcontinent?
- Stone Age
 - Bronze Age
 - Golden Age
 - Iron Age
41. Who discovered and first excavated the city of Troy?
- Heinrich Schliemann
 - Edward Harris
 - Cunningham
 - Pitre
42. The central tower of Dzong complex is known as
- Shabkhor
 - Kuenrey
 - Utse
 - Dukhang
43. Topographical map is useful for archaeologist as it reveals information on
- Shape of land
 - Ancient vegetation
 - Weather patterns
 - None of the above
44. Cautious excavation involves
- Heavy machineries
 - Detailed maps and grids
 - Aerial photography
 - None of the above
45. Which of the following statement is NOT about Underwater archaeology?
- It is complex and expensive.
 - Highly demanding post excavation conservation and analytical works.
 - Underground excavation is conducted by professional swimmers.
 - It involves shifting of vast quantities of sediments.
46. Which of the following statement is NOT TRUE?
- Archaeological excavation is a destructive documentation.
 - Archaeology is the study of the human past through material remains.
 - These remains can be any objects that people created, modified, or used.
 - Archaeologists excavate artifacts and historians analyze them.

47. Historic Wangduepodrang Dzong was burnt down by fire on
- July 24 2012
 - June 24 2012
 - July 24 2011
 - June 24 2011
48. Aerial Photography captures distinctively the following, EXCEPT
- Shadow sites
 - Cropmark sites
 - Soilmarks
 - Features
49. Which Dzong was built before Zhabdrung's era?
- Paro Rinpung Dzong
 - Gasa Dzong
 - Chubjakha Dzong
 - Punakha Dzong
50. Measuring scale/staff is used while taking photographs of the plan or section profile of an excavated site to
- mark the location of the profile.
 - understand the scale of the profile.
 - mark the north line of the profile.
 - None of the above
51. Which one of the following is NOT an archaeological evidence?
- Features
 - Ecofacts
 - Structures
 - Literature
52. Choose the right chronological order to Local Bhutanese Tertons.
- Pema Lingpa----Drime Lingpa----Jigme Lingpa
 - Jigme Lingpa---Drime Lingpa-----Pema Lingpa
 - Pema Lingpa----Jigme Lingpa-----Drime Lingpa
 - Drime Lingpa---Jigme Lingpa----Pema Lingpa
53. Which method of identifying new sites is adopted in areas where it's heavily vegetated or forested and spatially extensive?
- Open area excavation
 - Shovel test pits
 - Aerial photography
 - Ground penetrating radar
54. Taphonomy is
- the classification techniques based on the attributes of artefacts.
 - the study of how organism/materials ended up in particular place.
 - the dating techniques.
 - the study of bones.

55. Guru Rinpoche erected a stone pillar to take vows to live in peace between Nowawoche and Sindharaja at
- Korphu
 - Nabji
 - Kurjey
 - Chakhar
56. What do archaeologists do when they find an artifact?
- Wash, sort, catalog and store recovered artifacts.
 - Wash, sort, catalog and bury them back at exact location where it was found.
 - Wash, sort, catalog and hand over to museums for display.
 - None of the above.
57. What is the difference between finds and features?
- Both finds and features are portable.
 - Finds are portable and features are not portable.
 - Features are portable and Finds are not portable.
 - Both finds and features are not portable.
58. Salvage archaeology is conducted when the site is under threat from the destruction by
- Building new roads
 - Building new dams
 - Building new buildings
 - All of the above
59. Drawing grid is used for
- drawing and mapping of finds and features.
 - taking photograph of finds and features.
 - to set the orientation of the site.
 - None of the above.
60. Drapham Dzong in Bumthang was the seat of
- Chummey Deb
 - Tang Deb
 - Ura Deb
 - Choekhor Deb
61. Plumbob is used for establishing
- Horizontal line
 - Vertical line
 - North line
 - None of the above
62. Which of the following items does archaeologist use at site?
- Shovel
 - Books
 - Brush
 - All of the above

63. The leading principle of archaeology is
- Stratigraphy
 - Dating
 - Surveying
 - None of the above
64. Virtual reality modelling in archaeology is used for
- 3D Scanning archaeological sites.
 - Reconstruction of 3D model of the site based on archaeological evidences and findings.
 - 3D scanning of features and finds.
 - All of the above.
65. Choose the correct order for the process of excavation.
- Site survey-----Excavation----Recording----Analysis----Interpretation----Publication
 - Excavation-----Site survey---Recording---Analysis---Interpretation---Publication
 - Recording-----Site survey---Excavation---Analysis----Interpretation----Publication
 - Site survey-----Recording---Excavation---Analysis----Interpretation----Publication
66. The archaeologist derives _____ from the analysis of abutted walls, blocked windows and door openings.
- design of the building
 - construction phases
 - design chronology
 - age of the construction
67. Which of the following is Mesolithic sites of Europe?
- Gravettian
 - Aurignacian
 - Maglemosian
 - None of the above
68. History records that Zhabdrung Ngawang Namgyel travelled through _____ while he first arrived in Bhutan.
- Gon Obtsho
 - Lingzhi
 - Pangrizampa
 - Singye Dzong
69. Biological or organic material found at archaeological sites is known as
- Orgafact
 - Ecofact
 - Artifact
 - All of the above
70. Which of the following two temples are considered to be amongst 108 temples built in a day by Songtsen Gampo in Bhutan
- Kichu and Kurjey lhakhangs
 - Jampa and Kurjey lhakhangs
 - Kichu and Jampa lhakhangs
 - Jampa lhakhang and Paro Taktshangs

PART II – Short Answer Questions [30 marks]

Answer ALL 10 short answer questions. Each question carries 3 marks.

1. What is vertical excavation? Describe merits and demerits of vertical excavation.
2. What is relative dating? Describe its principal methods.
3. What is aerial survey? Explain the significance of aerial photography.
4. What is typology? Describe its significance.
5. What kind of data constitute the archaeological record?
6. Explain the principle of stratification.
7. Define landscape archaeology and explain its significance.
8. What is a keyhole excavation?
9. Discuss the merits of Geographical Information System in Archaeology?
10. What is the difference between processual and post processual archaeology?

TASHI DELEK