

KATHMANDU UNIVERSITY
End Semester Examination
July, 2024

Marks Scored:

Level : B.Arch.

Year : IV

Exam Roll No :

Time: 30 mins.

Course : ARCH 425

Semester : II

F. M. : 10

Registration No.:

Date

16 JUL 2024

SECTION "A"

[20 Q. × 0.5 = 10 marks]

Choose and encircle in the most appropriate option from each set of choices.

- Through the analysis, selection, synthesis and representation of the _____ characteristics, process of understanding of building's characteristics and their appropriate graphical and visual documentation are determined.
a. Mechanical b. Infrastructural c. Architectural d. Surveying
- The first task you do is _____, as soon you visit the workstation for the documentation work.
a. Laser Scanning b. Damage assessment
c. Lidar Documentation d. Preliminary Investigation
- A tremendous quality of _____ data can be captured, when using a laser scanner.
a. High quality b. Raw survey c. Ortho images d. Triangulation
- Total Station does not carry the functions of –
a. Horizontal Angle b. Slope Distance c. Vertical Angle d. X, Y, Z coordinate
- Spatial resection in Photogrammetry solves?
a. Internal orientation b. External orientation
c. Object point coordinate d. All
- How many collinearity equations do we have in Photogrammetry?
a. 2 b. 3 c. 4 d. 6
- Which is not the component of Exposure triangle in Photography?
a. Focal length b. Shutter Speed c. Aperture d. ISO
- What controls - the Depth of field in photography?
a. Shutter Speed setting b. Aperture setting
c. ISO setting d. All
- Absolute orientation includes which parameter?
a. Three rotation parameters b. One scale factor
c. Three shift parameters d. One displacement
- What do camera measure?
a. Intensity of light b. Direction c. both a and b d. None

11. What percent of forward overlaps is needed for Aerial Photogrammetry?
 - a. At least 40 percent
 - b. At least 50 percent
 - c. At least 60 percent
 - d. D. At least 90 percent

12. Internal Orientation is derived using what kind of Physical parameter -
 - a. Camera calibration
 - b. Dense Point Cloud generation
 - c. Orthophoto generation
 - d. Tie point generation

13. Bundle adjustment is -
 - a. Simultaneous solution
 - b. Sequential solution
 - c. Both
 - d. None

14. Which of the following is not a part of internal orientation parameters or camera intrinsic?
 - a. Focal length or principal distance
 - b. Principal point (offset)
 - c. Distortion parameters
 - d. Distance between object point and image point.

15. Objective of overlapping images in Photogrammetry is -
 - a. To obtain sufficient object's tie points.
 - b. To increase the number of images.
 - c. To get good quality of images.
 - d. To enlarge the object's details.

16. Structure from Motion (SfM) starts with -
 - a. Feature deleting
 - b. Feature matching
 - c. Feature description
 - d. Feature detection

17. In Stereopair image position of same object appear in different position, which is known as parallax. What do we measure with this parallax -
 - a. x-Parallax of the object
 - b. Height of the object
 - c. y-Parallax of the object
 - d. Relief Displacement

18. How should the historical records should be kept and identified?
 - a. Standardized format
 - b. Be preserved in safe and accessible place.
 - c. Most current version of software updated.
 - d. All of the above.

19. BIM full meaning -
 - a. Building Information Modelling
 - b. Built in Model
 - c. Bye-laws inside Monuments
 - d. Building Including Monuments

20. Aim to Sketch drawing in the site is to -
 - a. Understand the critical conditions that has not been reflected in Orthophoto.
 - b. Engage every person in a work.
 - c. Helps for the construction drawing.
 - d. Improving the quality of drawing.