1. Fill in the blanks with correct answer from the given option: (8)

1. Image of basaltic lava flow region shows ……drainage pattern.
   a) radial, b) parallel, c) dendritic, d) trellis
2. Pick up the correct statement from the following.
   a) Aerial photographs may be either vertical or oblique,
   b) Vertical photographs are taken with the axis of camera pointing vertically downwards,
   c) Both a and b are correct,
   d) None of these
3. Imageries are obtained by using …… as a platform.
   a) balloon, b) satellite, c) aeroplane, d) land
4. The coverage is least if the photograph is ----------.
   a) high oblique, b) low oblique, c) vertical d) None of these
5. The photographs which we take with our daily use normal camera, represent ----------.
   a) true colors, b) false colors, c) negative colors, d) None of these
6. Parallax on a aerial photograph can be obtained by means of a ----------.
   a) Substance bar, b) Stereo-bar, c) Parallax-bar, d) None of these
7. Visible portion of the electromagnetic spectrum lies between----------micrometer wavelengths.
   a) 0.1 to 0.4, b) 0.4 to 0.7, c) 0.7 to 1.0, d) 0.2 to 0.5
8. _____ grid system is adopted for India.
   a) Universal Transverse Mercator(UTM) Grid, b) Lambert Grid,
   c) Both options are correct, d) None of these

1. c) dendritic
2. c) Both a and b are correct
3. b) satellite
4. c) vertical
5. a) true colors
6. c) Parallax-bar
7. b) 0.4 to 0.7
8. b) Lambert Grid

1. For UTM grid, the world is divided into ….....
   a) 90 zones, b) 60 zones, c) 120 zones, d) 30 zones
2. _____ spectral band is used in satellite remote sensing.
   a) Visible light, b) Gamma rays,
   c) X- rays, d) UV - rays
3. Conventional camera is the most commonly used sensor for ……..region of the electromagnetic spectrum.
   a) x-rays, b) infra red , c) visible, d) ultra violet
4. The ---------- records information about the energy emitted from the earth's surface, dividing it in to more bands of different wavelengths.
   a) panoramic camera, b) multiband camera,
   c) multispectral scanner d) conventional camera
5. _____ satellite has equilateral orbit.
   a) Space shuttle, b) Landsat,
   c) IRS, d) SPOT

6. _____ satellite has geostationary orbit.
   a) NIMBUS, b) GOES, c) IRS, d) AEM
7. The orbit of _____ satellite is not sun-synchronous.
   a) IKONOS, b) Meteosat, c) NIMBUS, d) ERS - 1
8. The orbital period of the geostationary satellites is ….....
   a) 12 hours, b) 24 hours, c) 36 hours, d) 48 hours

1. b) 60 zones
2. a) Visible light
3. c) visible
4. c) multispectral scanner
5. a) Space shuttle
6. b) GOES
7. b) Meteosat
8. b) 24 hours

1. The meteorological satellites use ….....
   a) Near polar orbit, b) Geostationary orbit,
   c) Both a) and b) are correct, d) None of these.
2. An active type of sensor is represented by----------.
   a) camera, b) MSS,
   c) radar, d) film in camera
3. Conventional camera is the most commonly used sensor for ……..region of the electromagnetic spectrum.
   a) x-rays, b) infra red , c) visible, d) ultra violet
4. The ---------- records information about the energy emitted from the earth's surface, dividing it in to more bands of different wavelengths.
   a) panoramic camera, b) multiband camera,
   c) multispectral scanner d) conventional camera
5. Water gives almost nil reflectance in ….....
   a) Visible regions, b) UV regions,
   c) IR regions, d) Both a) & b)
6. Tone in remote sensing is expressed as ……...
   a) different colours, b) shades of grey,
   c) shades of blue, d) None of these
7. RADAR is a type of ….....
   a) Active sensor, b) Passive sensor,
   c Both a) & b) are correct, d) None of these
8. The orbital period of the geostationary satellites is ….....
   a) 12 hours, b) 24 hours, c) 36 hours, d) 48 hours
1. c) Both a) and b) are correct
2. c) radar
3. c) visible
4. c) multispectral scanner
5. c) IR regions
6. b) shades of grey
7. a) Active sensor
8. b) 24 hours

2. Attempt any TWO of the three sub-questions : (16)

A) Define Remote Sensing. Describe importance of remote sensing in Geology.
B) Write a note on elements of photo recognition.
C) Describe components of GIS. Write a note on integration of GIS with Remote Sensing.

A) Define Remote Sensing. Describe the Electromagnetic Spectrum in detail.
B) Write a note on types of Indian and foreign Remote Sensing Satellites.
C) Describe components of GIS. Write a note on integration of GIS with Remote Sensing.
A) Write a note on types of Indian and foreign Remote Sensing Satellites.
B) Write a note on elements of photo recognition.
C) Describe components of GIS. Write a note on integration of GIS with Remote Sensing.

3. Write short notes on any four : (16)

a) Electro-magnetic spectrum.
b) Types of Indian Remote Sensing satellites.
c) Digital Image processing.
d) Scale of aerial photograph.
e) Elements of pattern recognition and image classification.
f) Types of foreign remote sensing satellites.
a) Electro-magnetic spectrum.
b) Geometry of aerial photographs.
c) Types of aerial photographs.
d) Scale of aerial photograph.
e) Elements of pattern recognition and image classification.
f) Introduction to Digital Image Processing.

a) Types of Aerial Photographs.
b) Factors affecting aerial photography.
c) Types of camera, film and filters.
d) Scale of aerial photograph.
e) Fundamental steps in image processing.
f) Applications of remote sensing in identification of geomorphological features.

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