VIDYASAGAR UNIVERSITY
MIDNAPORE

COMMON ENTRANCE TEST FOR PG ADMISSION, 2019

Question Booklet No. 2618783

Subject: REMOTE SENSING & GIS
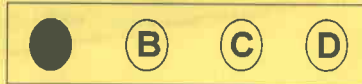
Subject Code No.: 26

Full Marks : 200

Question Booklet Series: A

Answer all the questions. Each question has the same weightage.

<u>Read the following instructions carefully before you start answering.</u>

INSTRUCTIONS

1. The question Booklet is printed in four Series e.g. (A), (B), (C) and (D). The candidate has to indicate the Series of the question booklet in the space provided in the OMR Answer Sheet . For example, if the candidate gets Series (A) booklet, he / she has to indicate on the front side of the OMR Answer Sheet with Black ink ball point pen only as indicated below:

    ● (B) (C) (D)

2. There are 50 questions inside this question booklet. Immediately after you have been instructed to open this question booklet, ensure that any page / question is not missing / not printed / torn /repeated. In case you find any defect anywhere in the question booklet, immediately get it replaced by the Invigilator.

3. Each question carries 4 marks. 1(one) mark will be deducted for each wrong answer(negative marking).

4. Write your Form No and put signature in the space provided.

5. Before answering, write down the necessary information on the OMR Answer Sheet as per your Application Form and Admit Card in the specific space provided.

6. With each question you will find 4 possible answers marked by the letters A, B, C & D. Read each question carefully and find out which answer, according to you, is correct / most appropriate / best. Indicate your answer by darkening the appropriate circle completely in the OMR Answer Sheet corresponding to the question. For marking answers, use black ink ball pen only. If 'B' is the correct answer in a case, mark as below:

    (A) ● (C) (D)

7. Do not fold or make any stray marks on the OMR Answer Sheet.

8. You can use the blank space of the last page for rough work. Do not tear it off from the Question Booklet.

9. After the examination has been over, you must submit OMR Answer Sheet to the Invigilator.

10. OMR Answer Sheet is designed for computer evaluation. If you do not follow the instructions given above and shown in the OMR Answer Sheet, it may make evaluation by computer difficult. Any resultant loss to the candidate on the above account shall be of the candidate only.

11. No candidate shall be allowed to use Mobile phone. Log tables or Calculator of any description in the examination hall / room.

1. Southern India is mostly a Deccan Plateau, which is separated from northern plain by the
   (A) Himalayan mountains   (B) Vindhya mountains
   (C) Satpura hills   (D) Mount Everest

2. The mass of water vapour per unit volume of air is known as ?
   (A) Relative humidity   (B) Specific humidity   (C) Absolute humidity   (D) Variable humidity

3. In the structure of planet Earth, below the Mantle, the core is mainly made up of which one of the following ?
   (A) Aluminium   (B) Chromium   (C) Iron   (D) Silicon

4. The light of distant stars is affected by
   (A) the earth's atmosphere   (B) interstellar dust
   (C) both (A) and (B)   (D) None of these

5. Look at this series: 201, 202, 204, 207, ... What number should come next?
   (A) 205   (B) 208   (C) 210   (D) 211

6. Where is RAM located ?
   (A) Expansion Board   (B) External Drive   (C) Mother Board   (D) All of these

7. Full form of URL is
   (A) Uniform Resource Locator   (B) Uniform Resource Link
   (C) Uniform Registered Link   (D) Unified Resource Link

8. To represent Earth's features, topographic maps use
   (A) solid lines   (B) dotted lines   (C) colors   (D) shades

9. Indian moon mission Chandrayan I was launched from
   (A) Balasore   (B) Hyderabad   (C) Sriharikota   (D) Delhi

10. Which one of the following factors does not affect the scale of the air photographs?
    (A) Focal length   (B) Flying height   (C) Ground elevation   (D) None of these

11. Raster data represent digital image in_____
    (A) point   (B) Line   (C) Polygon   (D) Grid

12. Which of the following is a programming language?
    (A) Adobe reader   (B) Java   (C) Microsoft Office   (D) Paint

13. Evaporation of water from plants is called:
    (A) Radiation   (B) Transpiration   (C) Evapotranspiration   (D) Evaporation

14. The greenhouse gases absorb mostly:
    (A) Ultraviolet ray   (B) Infrared (IR)   (C) Visible   (D) Microwave

15. To find location of a moving object how many satellites required
    (A) 2   (B) 3   (C) 4   (D) 5

16. The elevation of the Sun synchronous satellites from the earth surface is about;
    (A) 700-900 km   (B) 36,000 km   (C) 10,000 km   (D) 12000 km

17. The Himalayan rivers in the Gangetic Basin form a spatial type of drainage pattern known as
    (A) Trellis   (B) Circular pattern   (C) Radial pattern   (D) Dendritic pattern

18. All planets of solar system revolve round the sun in
    (A) Circular orbits   (B) Elliptical orbits   (C) Hyperbolic orbits   (D) Parabolic orbits

19. The term used to describe the shape of the earth is
    (A) Ellipsoid   (B) Circle   (C) Great Circle   (D) Geoids

20. Ocean Surface currents are mainly caused by
    (A) Wind   (B) Tides   (C) Salinity differences   (D) Density differences

21. The value of earth's gravity varies with--
    (A) Altitude   (B) Latitude   (C) both (A) and (B)   (D) None of these

22. Peninsular rivers form
    (A) Dendritic pattern of drainage   (B) Trellis pattern
    (C) Annular pattern   (D) Centrifugal pattern

23. Which of the following Remote Sensing techniques is a passive system?
    (A) Thermal infrared   (B) Colour infrared   (C) Aerial photos   (D) All of the above

24. Region of earth's atmosphere extends from 80 km to 400 km from earth's atmosphere is called
    (A) Mesosphere   (B) Troposphere   (C) Ionosphere   (D) none of these

25. On planet Earth, there is no centrifugal force at the
    (A) Poles   (B) Equator   (C) Tropic of Capricorn   (D) Tropic of Cancer

26. A part of hurricane which bears warm and low pressure is the
    (A) eye   (B) eye wall   (C) band   (D) updraft

27. Theory which proclaims that an explosion created universe is called the
    (A) law of gravity   (B) Big Bang theory   (C) Darwin theory   (D) Earth theory

28. According to particle theory radiation is composed of photons or quanta. The nature of photons are
    (A) Continuous   (B) Contiguous   (C) Discrete   (D) Linear.

29. The Image magnification means
    (A) Edge Sharpening   (B) Contrast enhancement
    (C) Zooming   (D) Rectification

30. Histogram equalization is related with
    (A) Linear contrast enhancement   (B) Non linear Contrast Enhancement
    (C) Image Rectification   (D) Image Sub setting

31. Buffer function is used for
    (A) Overlay analysis   (B) Shortest path analysis
    (C) Proximity Analysis   (D) Network analysis

32. In negatively skewed diagram the median value lies — the modal value
    (A) After   (B) Before   (C) With in   (D) Diagonally

33. CZCS is best applied for
    (A) Geology Mapping   (B) Biodiversity Mapping
    (C) Ocean monitoring   (D) Cloud monitoring

34. A sliver line is formed due to
    (A) Line Smoothening   (B) Edge Matching
    (C) Overlaying Polygon   (D) Overshoot

35. Multispectral remote sensing allows researchers to obtain data about Earth in areas of the electromagnetic spectrum beyond what the eye can see. If you were studying the effects of drought on vegetation, which portion of the electromagnetic spectrum would provide the most pertinent data?

   (A) thermal infrared   (B) middle infrared   (C) near infrared   (D) blue spectrum

36. Living vegetation appears _____ on standard false-color IR images.
   (A) white   (B) black   (C) blue   (D) red

37. Which of the following are essential components of a GIS?
   (A) Spatial data.
   (B) A fast Internet connection.
   (C) Data input and output devices such as digitizers/scanners and printer/plotters.
   (D) A computer with sufficient memory and processing power to run the software.

38. The circumference of the Earth at the equator is:
   (A) 60,075 km   (B) 50,075 km   (C) 40,075 km   (D) None of these

39. The most common salt in the ocean is
   (A) Calcium chloride   (B) Sodium nitrate   (C) Sodium chloride   (D) Calcium nitrate

40. The depletion of ozone in atmosphere is caused by…

   (A) Chlorofluorocarbon   (B) Cloud   (C) Oxygen   (D) Nitrogen

41. Which one of the following Indian satellite was launched for observation of climate and environment of earth?
   (A) SARAL   (B) IRNSS   (C) INSAT   (D) None of the above

42. Which of the following is formed as a result of tectonic forces?
   (A) Hanging valley   (B) V-shaped valley   (C) Rift valley   (D) Blind valley

43. Which of the following earthquake waves are most destructive?
   (A) S-waves   (B) P-waves   (C) R-waves   (D) L-waves

44. Pushbroom satellites are
   (A) Along track satellites   (B) Across track satellites
   (C) Side track satellites   (D) None of the above

45. The visible range of EM spectrum roughly ranges between
   (A) $0.2 - 0.7$ μm   (B) $0.4 - 0.7$ μm   (C) $0.4 - 1.3$ μm   (D) $0.2 - 1.3$ μm

46. The velocity of light is about
   (A) 2.98×10^{10} m/sec   (B) 2.98×10^8 km/sec   (C) 2.98×10^8 m/sec   (D) 2.98×10^{10} km/sec66.

47. Which is not an example of remote sensing
   (A) Satellite sensor   (B) Mobile Camera
   (C) Hand-held spectro-radiometer   (D) Thermometer

48. Ground water level can be directly measured by
   (A) Visual remote sensing data   (B) Microwave remote sensing data
   (C) Hyperspectral remote sensing data (D) None of the above

49. Which one is an example of operating system
   (A) UNIX   (B) Microsoft Office   (C) COBOL   (D) Python

50. Richter Scale is used for measuring the :
   (A) Relative Humidity of atmosphere
   (B) Intensity of earths tremor
   (C) Electric Conductivity of water
   (D) Speed of wind