

**UNIVERSITY OF MYSORE**  
Postgraduate Entrance Examination October-2022

\*13\*

**QUESTION PAPER  
BOOKLET NO.**

**Entrance Reg. No.**

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**SUBJECT CODE : 13**

**QUESTION BOOKLET**

(Read carefully the instructions given in the Question Booklet)

**COURSE : M.Sc.**

**SUBJECT : Geographical Information System  
(GIS)**

**MAXIMUM MARKS : 50**

**MAXIMUM TIME : 75 MINUTES**

(Including time for filling O.M.R. Answer sheet)

**INSTRUCTIONS TO THE CANDIDATES**

1. The sealed question paper booklet containing 50 questions enclosed with O.M.R. Answer Sheet is given to you.
2. Verify whether the given question booklet is of the same subject which you have opted for examination.
3. Open the question paper seal carefully and take out the enclosed O.M.R. Answer Sheet outside the question booklet and fill up the general information in the O.M.R. Answer sheet. If you fail to fill up the details in the form as instructed, you will be personally responsible for consequences arising during evaluating your Answer Sheet.
4. During the examination:
  - a) Read each question carefully.
  - b) Determine the Most appropriate/correct answer from the four available choices given under each question.
  - c) Completely darken the relevant circle against the Question in the O.M.R. Answer Sheet. For example, in the question paper if "C" is correct answer for Question No.8, then darken against Sl. No.8 of O.M.R. Answer Sheet using Blue/Black Ball Point Pen as follows:

Question No. 8. (A) (B) (C) (D) (Only example) (Use Ball Pen only)
5. Rough work should be done only on the blank space provided in the Question Booklet. Rough work should not be done on the O.M.R. Answer Sheet.
6. If more than one circle is darkened for a given question, such answer is treated as wrong and no mark will be given. See the example in the O.M.R. Sheet.
7. The candidate and the Room Supervisor should sign in the O.M.R. Sheet at the specified place.
8. Candidate should return the original O.M.R. Answer Sheet and the university copy to the Room Supervisor after the examination.
9. Candidate can carry the question booklet and the candidate copy of the O.M.R. Sheet.
10. The calculator, pager and mobile phone are not allowed inside the examination hall.
11. If a candidate is found committing malpractice, such a candidate shall not be considered for admission to the course and action against such candidate will be taken as per rules.
12. Candidates have to get qualified in the respective entrance examination by securing a minimum of 8 marks in case of SC/ST/Cat-I Candidates, 9 marks in case of OBC Candidates and 10 marks in case of other Candidates out of 50 marks.

**INSTRUCTIONS TO FILL UP THE O.M.R. SHEET**

1. There is only one most appropriate/correct answer for each question.
2. For each question, only one circle must be darkened with BLUE or BLACK ball point pen only. Do not try to alter it.
3. Circle should be darkened completely so that the alphabet inside it is not visible.
4. Do not make any unnecessary marks on O.M.R. Sheet.
5. Mention the number of questions answered in the appropriate space provided in the O.M.R. sheet otherwise O.M.R. sheet will not be subjected for evaluation.

ಗಮನಿಸಿ : ಸೂಚನೆಗಳ ಕನ್ನಡ ಆವೃತ್ತಿಯು ಈ ಪುಸ್ತಕದ ಹಿಂಭಾಗದಲ್ಲಿ ಮುದ್ರಿಸಲ್ಪಟ್ಟಿದೆ.

- 1) What percentage of the earth's water is fresh water?
  - (A) 0.75
  - (B) 1.75
  - (C) 2.75
  - (D) 3.75
  
- 2) Earth System is considered as?
  - (A) Open System
  - (B) Closed System
  - (C) Isolated System
  - (D) None of the above
  
- 3) Which is the mid layer of the lithosphere?
  - (A) Core
  - (B) Crust
  - (C) Mantle
  - (D) Soil
  
- 4) Which process involves transfer of heat by the physical movement of the material?
  - (A) Conduction
  - (B) Convection
  - (C) Metamorphism
  - (D) Radiation
  
- 5) The process of moving sediment by wind, moving water, or ice is
  - (A) Erosion
  - (B) Weathering
  - (C) Earth Quake
  - (D) Sedimentation
  
- 6) Which is the largest volcanic Crater Lake in the world \_\_\_\_\_?
  - (A) Lake Taupo
  - (B) Lake Toba
  - (C) Laguna lake
  - (D) Aksai Chin lake

- 7) Which among the following countries tops the list of countries in uranium production?
- (A) India (B) China  
(C) Australia (D) Kazakhstan
- 8) Choose the proper matching pairs from the following
- (A) Plimsoll Line : India and Afghanistan  
(B) Durand Line : India and Myanmar  
(C) McMahon Line : India and Nepal  
(D) Radcliffe Line : India and Pakistan
- 9) Which of the following can be triggered by an earthquake?
- (A) Tsunami (B) Landslide  
(C) Ground Shaking (D) All of the above
- 10) The “Red Tides” which are found in marine coastal areas because of \_\_\_\_\_
- (A) Bacteria  
(B) Algae  
(C) Fungi  
(D) Toxic Wastes of the Industries
- 11) Compass is usually used to find the
- (A) Movement of Moon (B) Movement of Earth  
(C) Direction (D) Distance
- 12) Bathymetry refers to?
- (A) Study of Air Pressure (B) Study of Land Elevation  
(C) Study of Water Depth (D) Study of Geologic Properties
- 13) Climatic map is classified as
- (A) Thematic maps (B) Resource maps  
(C) Airlines maps (D) Political maps

- 14) Basic elements of maps includes
- (A) Title and scale
  - (B) Grid lines and north arrow
  - (C) Legend and names of features
  - (D) All of above
- 15) Trilateration in GPS is based on \_\_\_\_\_
- (A) Geometrical Functions
  - (B) Algebraic Functions
  - (C) Statistical Methods
  - (D) All of the above
- 16) Limnology is a study of
- (A) Aquifer
  - (B) Limestone
  - (C) Lakes
  - (D) River
- 17) Amphibian can live in/on?
- (A) Water and Ice
  - (B) Land and Air
  - (C) Land and Ice
  - (D) Land and Water
- 18) The functional unit of environment is
- (A) Ecosystems
  - (B) Nitrogen
  - (C) Carbon
  - (D) Oxygen
- 19) Which is the largest active volcano in the world?
- (A) Ojos del Salado
  - (B) Erta Ale
  - (C) Mauna Loa
  - (D) Tamu Massif
- 20) The second step in the process of growing rice is
- (A) sowing
  - (B) transplanting
  - (C) preparing the main field
  - (D) ploughing the field

- 21) One Terabyte (1 TB) is equal  
(A) 1018 GB (B) 1020 GB  
(C) 1022 GB (D) 1024 GB
- 22) Which is the standard Keyboard used in computer system?  
(A) QWERTY (B) QWERTZ  
(C) AZERTY (D) All of the above
- 23) Which device is used to backup the data?  
(A) Floppy disk (B) Tape  
(C) Network Drive (D) All of the above
- 24) Which of the following is an example for Impact Printer?  
(A) Inkjet Printer (B) Dot Matrix Printer  
(C) Laser Printer (D) Thermal Printer
- 25) Which of the following is the smallest memory unit of data in a computer?  
(A) Bit (B) Byte  
(C) Nano (D) Nibble
- 26) In how many years the simple interest on a sum of Rs. 725 will be Rs. 87 at 4% per annum?  
(A) 1 Year (B) 5 Years  
(C) 3 Years (D) 4 Years
- 27) A and B take part in a 100 mt race. A runs at 5 Km/h. If A starts after B runs 8m and wins the race by 8 seconds the speed of B is  
(A) 4.15 km/h  
(B) 4.14 km/h  
(C) 4.27 km/h  
(D) 4.41 km/h
- 28) The area of circle is  $1386\text{m}^2$  Find the Circumference of the circle  
(A) 444m  
(B) 70m  
(C) 132m  
(D) 19m

- 29) The fraction of  $\frac{25.025}{0.025}$  is equal to
- (A) 1.01 (B) 1001  
(C) 10.1 (D) 101
- 30) A sum of money at simple interest amounts to Rs. 815 in 3 years and to Rs. 854 in 4 years. The sum is :
- (A) Rs. 650 (B) Rs. 690  
(C) Rs. 698 (D) Rs. 700
- 31) Which of the following is not an example of spatial data?
- (A) Lines  
(B) Polygons  
(C) Time  
(D) Points
- 32) In GIS. the property of connectivity is defined by :
- (A) Neighborhood  
(B) Topology  
(C) Boolean identity  
(D) Location
- 33) BIM Stands for \_\_\_\_\_
- (A) Building Information Model (B) Biological Information Model  
(C) Base Index Model (D) Binary Index Model
- 34) Who is the father of GIS?
- (A) Roger Tomlinson  
(B) George Joseph  
(C) Lan McHarg  
(D) Macmillan

- 35) Which of the following is not a vector data?
- (A) Point
  - (B) Line
  - (C) Polygon
  - (D) Pixel
- 36) Bathymetry is a study of
- (A) Earthquakes
  - (B) Rainfall
  - (C) Ocean depth
  - (D) Sound intensity
- 37) PM<sub>10</sub> Level represents
- (A) Particulate Matter in Air
  - (B) Pre Mature of Crop
  - (C) Post Monsoon Rainfall
  - (D) Promethium Chemical dose
- 38) LST in Remote Sensing represents
- (A) Local Standard Time
  - (B) Land Surface Temperature
  - (C) Large space telescope
  - (D) Local Solar Time
- 39) Cloud Seeding is a concept of :
- (A) Artificial Rain
  - (B) Cloud Computing
  - (C) Artificial Farming
  - (D) Horticulture

- 40) In Electro - Magnetic Spectrum Radio waves are
- (A) Short Wave with Less Energy
  - (B) Short Wave with High Energy
  - (C) Long wave with Less Energy
  - (D) Long wave with High Energy
- 41) Which part of the Indian Constitution deals with the Directive Principles of the State policy?
- (A) Part I
  - (B) Part II
  - (C) Part III
  - (D) Part IV
- 42) Who is the second president of India?
- (A) Ramaswamy Venkataraman
  - (B) Zakir Hussain
  - (C) Sarvapalli Radhakrishnan
  - (D) Zail Singh
- 43) Which of the following is the source of income of the Gram Panchayats?
- (A) Income Tax
  - (B) Sales Tax
  - (C) Professional Tax
  - (D) Levy Duties



- 44) First General Election were held in India during?
- (A) 1949-1950
  - (B) 1950-1951
  - (C) 1951-1952
  - (D) 1956-1957
- 45) Right is Privacy is under \_\_\_\_\_
- (A) Article 21
  - (B) Article 22
  - (C) Article 23
  - (D) Article 24
- 46) If in a code. "ALTERED" is written as "ZOGVIVW", then "RELATED" would be written as
- (A) IVOZGVW
  - (B) LVOZGWW
  - (C) IVOGZVW
  - (D) VIOZGVW
- 47) X and Y are young ones of Z. If Z is the father of X but Y is not the son of Z. How are Y and Z related
- (A) Niece and Uncle
  - (B) Daughter and Father
  - (C) Grand Daughter and Grand Father
  - (D) Daughter and Mother

- 48) If  $0.75 : x :: 5 : 8$ , then  $x$  is equal to :
- (A) 1.12
  - (B) 1.16
  - (C) 1.20
  - (D) 1.30
- 49) Find the missing  $X$  in a sequence  $\{7, 26, 63, X, 215, 342, \dots\}$
- (A) 138
  - (B) 124
  - (C) 143
  - (D) 156
- 50) In following question, a number series is given with one term missing. Choose the correct alternative that will same pattern and fill in the blank spaces. : 1, 4, 9, 16, 25, x
- (A) 35
  - (B) 36
  - (C) 48
  - (D) 49



# Rough Work

