Master of Rural Studies (M.R.S) Examination, 2025

Semester – III

Paper – CC- XXIII [New Syllabus]

Geomatics

Time – 3 hours **Full marks – 40**

Questions are of value as indicated in the margin

Group – A

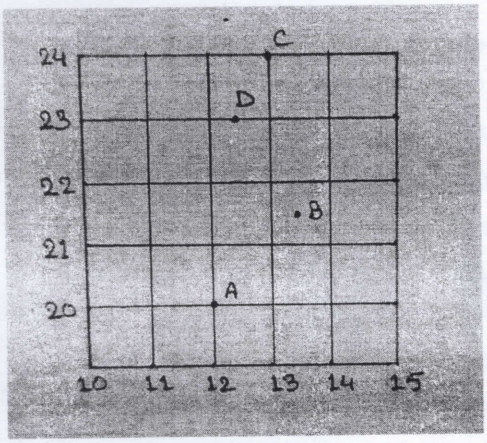
Answer any 4 questions [4x2=8]

1. What is Geoinformatics? What are the components of Geoinformatics?
2. What is the difference between passive remote sensing and active remote sensing?
3. What are the different types of maps? What are its elements?
4. What are contours? What is contour interval?
5. What is the difference between Isopleth & Choropleth map?
6. What are the types of spatial data? What are its characteristics?

Group – B

Answer any 2 questions [2x4=8]

7. Illustrate the concept of Remote Sensing with the help of a diagram.
8. What is the difference between precision & accuracy of data? Illustrate with a diagram.
9. What are the different colours used in a toposheet? State its uses.
10. Find the 4 figure grid reference of the following points:



Group – C

Answer any 3 questions [3x8=24]

11. What are the different types of drainage pattern? Illustrate with diagrams.
12. With the help of contour diagrams show a conical hill and a plateau formation.
13. With the help of double bar graph show the change in population density of the following states:

Sl. No.	State	Density 2011	Density 2001
1	Uttar Pradesh	829	690
2	Maharashtra	365	315
3	Bihar	1,106	881
4	West Bengal	1,028	903
5	Andhra Pradesh	308	277

Source: Census of India, 2011

14. Show the following land use pattern of West Bengal with the help of a pie diagram.

Land Use	Area (in thousands) (ha)
Total geographical area	8875
Reporting area for land utilization	8685
Forests	1174
Not available for cultivation	1814
Permanent pastures and other grazing lands	7
Land under misc. tree crops and groves	55
Culturable wasteland	32
Fallow lands other than current fallows	22
Current fallows	287
Net area sown	5294

Source: Land use Statistics, Ministry of Agriculture, GOI (2011)

15. Study the area in Toposheet no. F45D16 and answer the following questions:
    a) Define R.F. What is the R.F of the map?
    b) Convert the RF of the map into statement scale. (Show the conversion).
    c) What is the latitudinal & longitudinal extent of the area shown in the toposheet?
    d) What is the slope of the land? Give reason for your answer.
    e) Measure the distance of the highway NH2 in grid F2.
    f) What are the different ways by which height is represented in a toposheet?
    g) What are the different modes of transportation in the region?
    h) What is the area (in km^2) covered by grid nos. B1, C1 & D1?

Master of Rural Studies (M.R.S.) Examination, 2025
Semester-III (New Syllabus)
Rural Studies
Course-XXIV
(Research Methods)

Time-3 hrs

Full marks: 40

Questions are of value as indicated in the margin.

1. Answer **any four** questions from the following: 4x2.5=10

(a) Define the concept of action research.

(b) What is Likert Scale?

(c) Define the concept of research hypothesis.

(d) What is questionnaire?

(e) What is Focus Group Discussion (FGD)?

2. Answer **any two** questions from the following: 2x5=10

(a) Discuss the methods of collecting primary data. 5

(b) Write the contents of research proposal. 5

(c) Describe the principles of PRA / PLA. 5

3. Answer **any two** questions from the following: 2x10=20

(a) Define the concept of study design. Describe the types of quantitative study design based on the numbers of contacts with the study population. 5+5=10

(b) Define the concept of stratified random sampling. Describe the different types of non-random sampling in quantitative research. 3+7=10

(c) What are the types of study designs based on nature of investigation. Describe the experimental study design. 3+7=10

Masters of Rural Studies (M.R.S.) Examination, 2025
Semester-3 (New Syllabus)
Rural Studies
Paper- CC-XXV
(Tools of Project Management and Appraisal)

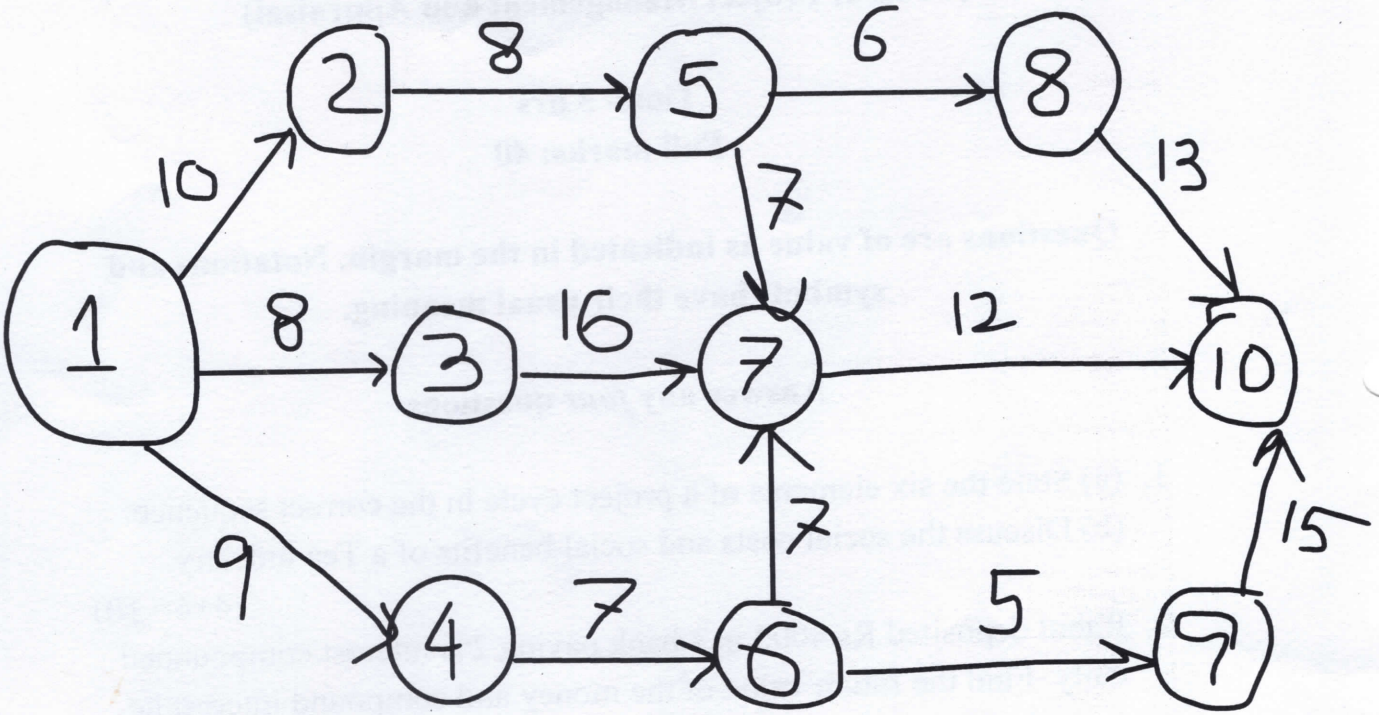
Time- 3 hrs
Full marks: 40

Questions are of value as indicated in the margin. Notations and symbols have their usual meaning.

Answer any *four* questions

1. (a) State the six elements of a project cycle in the correct sequence.
   (b) Discuss the social costs and social benefits of a Tea industry.
   (4+6= 10)
2. Rahul deposited Rs 4000 in a bank paying 2% interest compounded daily. Find the future value of the money and compound interest he earned at the end of 5 years. (10)
3. If an investment had an outlay of Rs 500 and net cash inflows of Rs 300 in the first year and Rs 400 in the second year, calculate the IRR (Internal rate of return). (10)
4. An industry is installing an equipment. The cost of installation is Rs 5 lakhs and it will operate for the following four years. Annual maintenance cost is Rs 1 lakh. The benefits are estimated as Rs 3 lakhs in each year. Find the Net present values for the discount rates 3% and 7%. (10)
5. A proposal has been given to start a 5-year project with an investment of Rs 100. The cash flows are: Rs 34, Rs 32, Rs 31, Rs 30 and Rs 79 respectively for the five years. The cost of capital is 15%. Should you accept the project based of Net present value? (10)

6. Find the critical path for the following network: (10)



Master of Rural Studies (MRS) Examination, 2025

Semester III

Core Course XXXI

Development of Child and Women

Time: Three Hours | Full Marks: 40

Questions are of value as indicated in the margin

Part-A Answer any four questions 4x2=8

1.Define gender roles.

2.What is gender inequity?

3.What are beliefs?

4.What is marriage?

5.What is your opinion on women representation in general?

Part-B Answer any four questions 4x3=12

6.Classify the type of Feminism.

7.Distinguish between post-modern and post colonial feminism.

8.What is your view on women empowerment?

9.State child rearing in different cultural settings.

10.Compare and contrast between kinship and marriage.

Part-C Answer any four questions 4x5=20

11.Describe childhood years and adolescent issues.

12.Discuss aggression during preschool years.

13.Explain lying and stealing behavior disorders in middle childhood years.

14.What are preventive and promoting approaches adopted to reform child life?

15.Analyse constitutional provisions and legislations followed to safeguard the interest of women and children.

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Master of Rural Studies (M.R.S.) Examination, 2025
Semester-III (New Syllabus)
Rural Studies
Course-XXXII
(Agrarian Question)

Time-3 hrs Full marks: 40

Questions are of value as indicated in the margin.

Answer **any four** questions from the following: 4x10=40

1. Describe the propositions of Ashok Rudra drawn from his survey conducted in Punjab in 1969. On which grounds Utsa Patnaik disagreed with such propositions? 5+5=10

2. Describe the rural class structure as envisaged by Jon Mencher (1974), Pradhan Prasad (1979-80) and John Harris (1979). 10

3. Discuss the successful agrarian transition of Japan and Taiwan / South Korea as described by T.J.Byres. 10

4.What are the drawbacks of Marshallian share tenancy system. Explain Cheung model of share tenancy system. 3+7=10

5. Describe equilibrium situation of monopolistic credit market. Under what situation, money lender earns more profits under monopolistic credit market? 7+3=10

6. Define the concept of collateral price. Describe the relationship between collateral price and interest rate. 3+7=10