INSTRUCTIONS

1. Candidate should check for 90 questions in his/her Question Booklet. In case of any *Discrepancy* or *Defective Question Booklet*, report the matter to the Invigilator immediately.
2. You are given in answer-sheet in which you are to enter your answer to 90 questions.
3. Use **Black/Blue Ball Point Pen** only for horizontal marking for every question in the Answer-sheet.
4. Write your Name, Roll No., Question Booklet No. and Question Booklet Series, in ball point pen, wherever indicated so, in the Answer-Sheet. Fill in the answer-sheet strictly according to the instructions given on it.
5. For every question only one response is to be marked. For any question, for which more than one answer is marked, that question would be deleted in marking and given no marks.
6. For your response, completely darken the respective circle as shown below :



7. Mark your response only in the space provided for that purpose.
8. Use only empty space available in the question booklet for rough work.
9. Do not make any stray marks on the Answer-Sheet.
10. Both the candidate and the invigilator must affix signatures on the front page of the Question Booklet and Answer-Sheet in Ball Point Pen.
11. At the end of the test, return both Question Booklet and the Answer-sheet. Take care that details of Name, Roll No. and Answer-sheet number are filled in on the front page of the Question Booklet.
12. Answer-sheet is not to be folded anywhere, including corners.
13. Answer-Sheet and Question Booklet shall be collected at the end of the test. No candidate shall be allowed to leave earlier.
14. Any attempt of unfair means will disqualify the candidate from the test.
15. Use of calculating aids like Calculators, Diary PC's, Slide rules, Log tables etc., and pagers. Cellular Phone are not allowed.
16. **There is no negative marking.**

Integrated B.Sc. (Hons./Hons. with Research) M.Sc. Geography

1. Pointing to a person, a man said to a woman, 'His mother is the only daughter of your father.' How was the woman related to the person ?

(a) Wife (b) Daughter

(c) Mother (d) Aunt

2. There are six persons A, B, C, D, E and F. C is the sister of F. B is the brother of E's husband. D is the father of A and grandfather of F. There are two fathers, three brothers and a mother in the group. Who is the mother ?

(a) F (b) E

(c) C (d) B

3. A man introduces a lady as the daughter of the daughter of the father of his uncle. His uncle has only one sibling. The lady is the man's :

(a) Wife (b) Mother

(c) Sister (d) Daughter

4. Ms. A's husband is the only son of Ms. B's mother. If Ms. A's brother and Ms. B's husband are cousins, then Ms. A is Ms. B's :

(a) Sister-in-law (b) Sister

(c) Aunt (d) Not related.

5. Pointing to a man in a photograph, Gunjan said, 'His mother's only daughter is my mother.' How is Gunjan related to that man ?

(a) Niece
(b) Daughter
(c) Sister
(d) Wife

6. A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Which letter in this alphabet is the eighth letter to the right of the letter and which is tenth letter to the left of the last but one letter of the alphabet ?

(a) J
(b) W
(c) P
(d) D

7. How many pairs of letters are there in the word 'CASTRAPHONE' which have as many letters between them in the word as in the alphabet ?

(a) 7
(b) 6
(c) 3
(d) 2

8. Arrange these words in alphabetical order and tick the one that comes last

1. Abandon 2. Actuate 3. Accumulate 4. Acquit 5. Achieve

(a) Actuate
(b) Achieve
(c) Acquit
(d) Abandon

9. Biped : Quadruped : : Ostrich : ?

(a) Kangaroo (b) Duck

(c) Cat (d) Peacock

10. Vaunt : Flaunt : : Heterogeneous : ?

(a) Similar (b) Homogenous

(c) Contrast (d) Alike

11. What was the day on 15th August, 1947 ?

(a) Friday (b) Sunday

(c) Saturday (d) Monday

12. A bag contains 50 P, 25 P and 10 P coins in the ratio 5 : 9 : 4, amounting to Rs. 206. Find the number of coins of each type respectively.

(a) 160, 300, 360

(b) 200, 360, 160

(c) 360, 160, 200

(d) 200, 160, 300

13. Find the missing number in the series.

4, 18, ?, 100, 180, 294, 448

(a) 68 (b) 79

(c) 36 (d) 48

14. Find the missing number in the series :

132, 156 ? 210, 240, 272

(a) 182 (b) 204

(c) 199 (d) 196

15. Find the wrong number in the series.

3, 8, 15, 24, 34, 48, 63

(a) 63 (b) 15

(c) 34 (d) 8

16. A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.

DEW, ZAS, VWO, RSK, ?

(a) MPH (b) PQI

(c) NOG (d) DEZ

17. Which of the following terms follows the trend of the given list ?

XYXYXYZZ, XYXYXZZY, XYXYZZXY, XYXZZYXY, XYZZXYXY, ...

(a) XYXYXYZZ (b) XYXYXZZY

(c) XZZYXYXY (d) ZZXYXYXY

18. In a certain code language,

'134' means 'good and tasty';

'478' means 'see good pictures' and

'729' means 'pictures are faint'.

Which of the following digits stands for 'see' ?

(a) 8 (b) 1

(c) 4 (d) 3

19. How many pairs of letters in the word 'CHAIRS' have as many letters between them in the word as in the alphabet ?

(a) 2 (b) 3

(c) 4 (d) 1

20. If South-East becomes North, North-East becomes West and so on. What will West become ?

(a) North-East

(b) South-East

(c) South-West

(d) East-West

21. If FRIEND is coded as HUMJTK, how is CANDLE written in that code ?

(a) DEQJQM (b) ESJFME

(c) DCQHQK (d) EDRIRL

22. If RESEARCH is $#!#%$&@ then SCARE is :

(a) !&%$#

(b) !@%$#

(c) !$%#&

(d) !@%#$

23. If Q = 10 and FAX = 50, then XEROX = ?

(a) 45 (b) 65

(c) 34 (d) 49

24. Pick the odd man out.

(a) Just (b) Fair

(c) Equitable (d) Biased

25. CUP : LIP : : BIRD : ?

(a) GRASS

(b) FOREST

(c) BEAK

(d) BUSH

26. A told B that C is his father's nephew. D is A's cousin but not the brother of C. What relationship is there between D and C ?

(a) Mother (b) Sisters

(c) Aunt (d) Mother

27. Find the odd one out :

(a) Beans : Pulse

(b) Rice : Cereals

(c) Tea : Beverage

(d) Legumes : Nodules

28. Find the odd one out :

(a) Kiwi (b) Eagle

(c) Ostrich (d) Penguin

29. Find the odd one out :

(a) Monastery (b) Cathedral

(c) Temple (d) Mosque

30. A, P, R, X, S and Z are sitting in a row. S and Z are in the centre. A and P are at the ends. R is sitting to the left of A. Who is to the right of P ?

(a) A (b) Z

(c) X (d) S

31. A, B, C, D and E are sitting on a bench. A is sitting next to B, C is sitting next to D, D is not sitting with E who is on the left end of the bench. C is on the second position from the right. A is to the right of B and E. A and C are sitting together. In which position A is sitting ?

(a) Between B and C

(b) Between B and D

(c) Between C and E

(d) Between E and D

Direction (Q. Nos. 32 to 35) :

In an Exhibition seven cars of different companies - Cadillac, Ambassador, Fiat, Maruti, Mercedes, Bedford and Fargo are standing facing to east in the following order :

1. Cadillac is next to right of Fargo.
2. Fargo is fourth to the right of Fiat.
3. Maruti car is between Ambassador and Bedford.
4. Fiat which is third to the left of Ambassador, is at one end.

32. Which of the cars are on both the sides of cadillac car ?

(a) Ambassador and Maruti

(b) Maruti and Fiat

(c) Ambassador and Fargo

(d) Fargo and Mercedes

33. Which of the following statements is *correct* ?

(a) Fiat is next second to the right of Maruti.

(b) Bedford is next left of Fiat.

(c) Maruti is next left of Ambassador

(d) Bedford is at one end.

34. Which of the following groups of cars is to the right of Ambassador ?

(a) Bedford, Cadillac and Fargo

(b) Maruti, Bedford and Fiat

(c) Mercedes, Cadillac and Fargo

(d) Cadillac, Fargo and Maruti

35. Which one of the following is the correct position of Mercedes ?

(a) Fourth to the right of Maruti.

(b) Next to the left of Bedford

(c) Between Bedford and Fargo

(d) Fourth to the right of Maruti.

36. An aeroplane covers a certain distance at a speed of 240 kmph in 5 hours. To cover the same distance in $1\frac{2}{3}$ hours, it must travel at a speed of :

(a) 720 kmph (b) 300 kmph

(c) 600 kmph (d) 360 kmph

37. A train can travel 50% faster than a car. Both start from point A at the same time and reach point B 75 kms away from A at the same time. On the way, however, the train lost about 12.5 minutes while stopping at the stations. The speed of the car is :

(a) 100 kmph (b) 130 kmph

(c) 120 kmph (d) 110 kmph

38. Rohit has to reach Mumbai which is 500 km away in 10 hours. His starting speed for 3 hours was 60 km/hr. For the next 200 km his speed was 50km/hr. By what speed he must travel now so as to reach Mumbai in decided time of 10 hours ?

(a) 60 km/hr (b) 35 km/hr

(c) 40 km/hr (d) 30 km/hr

39. Pratik travels 96 km at a speed of 16 km/hr using a bike, 124 km at 31 km/h by car and another 105 km at 7 km/h in horse cart. Then, find his average speed for the entire distance travelled.

(a) 13 kmph (b) 16 kmph

(c) 18 kmph (d) 12.5 kmph

40. A starts walking at 4 kmph and 4 hours after his start B starts cycling at 10 kmph. After how much distance will B catch up with A ?

(a) 26.2 km (b) 25.7 km

(c) 23.2 km (d) 26.67 km

41. Hiralal wants to build a tank. He employed 7 workers to do the work. It was expected to get completed in 12 days. 5 days after starting the work, 2 workers were fired by him. Remaining workers will take how much time to complete the work ?

(a) 49/5 days (b) 39/7 days

(c) 25/7 days (d) 38/5 days

42. A tank has oxygen for 72 patients and can last for 54 hours for them. If patients reduce their oxygen consumption by 10%, then 90 patients can use this oxygen supply for how many hours ?

(a) 24 hours (b) 48 hours

(c) 36 hours (d) 42 hours

43. 2500 children in a school had enough chocolates for 40 days. But some children never came to school and the chocolates lasted for 50 days. How many children never came to school ?

(a) 700 (b) 1000

(c) 400 (d) 500

44. If X can run 48 m and Y 42 m, then in a race of 1 km, X beats Y by :

(a) 140 m (b) 125 m

(c) 100 m (d) 110 m

45. Pipe R can empty a full tank in 30 hours. But two pipes P and Q can fill a tank in 15 hours and 10 hours respectively. Ram unknowingly opened all three taps. After 2 hours Shyam realized it and closed Pipe R. Due to this mistake how much time more would it take to fill the tank ?

(a) 18 minutes

(b) 24 minutes

(c) 1 hour 20 minutes

(d) 2 hours 15 minutes

46. 280 oranges are divided among some boys and girls whose total number is 50 so that each boy gets 5 oranges and each girl get 7 oranges. The number of girls is :

(a) 30 (b) 35

(c) 15 (d) 20

47. Average of 3 numbers is 87. The 1st number is 4 times the 2nd number and 5 times the 3rd number. What will be difference between first and third number ?

(a) 99 (b) 144

(c) 132 (d) 169

48. Raj got a new chair for 35% discount. Had Raj got no discount, Raj would have had to pay Rs. 224 more. How much did Raj pay for the chair ?

(a) Rs. 416 (b) Rs. 640

(c) Rs. 208 (d) Rs. 224

49. Blackberry announced a discount of 25% on their trousers. Vivek went to shop. He wanted to save Rs. 400 in discount. How many trousers should he buy to do so, if each trouser costs Rs. 320 ?

(a) 5 (b) 4

(c) 10 (d) 50

50. $(8.01)^2 + ? = (8.97)^2$ What will approximately come in place of question mark ?

(a) 13 (b) 14

(c) 19 (d) 16

51. The value of $\sqrt{6+\sqrt{6+\sqrt{6+\sqrt{6+.....}}}}$:

(a) 5 (b) 3

(c) 4 (d) 2

52. If $1^2 + 2^2 + 3^2 + ... + 10^2 = 385$, then $3^2 + 6^2 + 9^2 + ... + 30^2$ is equal to :

(a) 3954 (b) 778

(c) 3465 (d) 654

53. A number is multiplied by its one-third to get 192. Find the number.

(a) 16 (b) 20

(c) 24 (d) 28

54. What is value of $(0.000001)^{1/3}$?

(a) 0.000001 (b) 0.001

(c) 1/100 (d) 0.1

55. The first woman Governor of a state in free India was :

(a) Mrs. Sarojini Naidu

(b) Mrs. Indira Gandhi

(c) Mrs. Sucheta Kripalani

(d) Mrs. Vijaya Laxmi Pandit

56. Chief Minister of a State is responsible to Rajya Sabha :

(a) Governor (b) Rajya Sabha

(c) Prime Minister (d) Legislative Assembly

57. When a State Governor dies or resigns, who normally exercises his functions till a new Governor is appointed ?

(a) Chief Justice of the High Court

(b) Secretary General of the Governor

(c) Advocate General of the State

(d) A person designated by State Cabinet

58. In India, political parties are given recognition by :

(a) Speaker of Lok Sabha

(b) Election Commision

(c) President

(d) Law Commision

59. Mohenjo Daro is situated in :

(a) Gujarat

(b) Sindh Province of Pakistan

(c) Afghanistan

(d) Punjab

60. The battle between Alexander and Porus took place on the bank of river :

(a) Sutlej (b) Ganga

(c) Jhelum (d) Ravi

61. Which among the following states is largest producer of Coffee in India ?

(a) Karnataka (b) Kerala

(c) Tamil Nadu (d) Andhra Pradesh

62. Which of the following peaks of India is known as the 'five treasures of snow' ?

(a) Trishul (b) Kanchenjunga

(c) Kamet (d) Nanda Devi

63. Which among the following is the oldest steel plant in India ?

(a) HSL
(b) TISCO
(c) IISCO
(d) BSL

64. What is the name of the weak zone of the earth's crust ?

(a) Seismic
(b) Anaemic
(c) Cosmic
(d) Formic

65. At which place on earth are there days and nights of equal length always ?

(a) Prime Meridian
(b) Poles
(c) Equator
(d) No where

66. Who is the present Education Minister of India ?

(a) Dharmendra Pradhan
(b) Piyush Goyal
(c) Mansukh L. Mandaviya
(d) Chirag Paswan

67. Where do the Western and Eastern Ghats meet ?

(a) Annamalai hills
(b) Palani Hills
(c) Nilgiri Hills
(d) Cardamom Hills

68. Which of the following is an example of Kharif crop ?

(a) Gram
(b) Cotton
(c) Pea
(d) Wheat

69. Which regulatory body recently launched 'Saarthi 2.0' mobile app for investors ?

(a) RBI
(b) SEBI
(c) FCI
(d) NABARD

70. The Jakham Dam is located in which state ?

(a) Madhya Pradesh
(b) Gujarat
(c) Uttar Pradesh
(d) Rajasthan

71. Tropic of Cancer passes through which of the following groups of Indian States ?

(a) Gujarat, MP, Chattisgarh, Manipur
(b) Rajasthan, Jharkhand, West Bengal, Mizoram
(c) UP, MP, Bihar, Jharkhand
(d) Maharashtra, Chattisgarh, Orissa, Andhra Pradesh

72. Who is the present Agricultural and Farmers Welfare minister of India ?

(a) Shivraj Singh Chouhan
(b) Rajnath Singh
(c) Manohar Lal Khattar
(d) Amit Shah

73. The election commision does not conduct the elections to the ?

(a) Lok Sabha

(b) President's Election

(c) Rajya Sabha

(d) Local Bodies

74. Find the number of permutations of the letters of the word ALLAHABAD.

(a) 7560

(b) 7500

(c) 6550

(d) 8560

75. A committee of 3 persons is to be constituted from a group of 2 men and 3 women. In how many ways can this be done ? How many of these committees would consist of 1 man and 2 women ?

(a) 10, 6 (b) 8, 6

(c) 10, 4 (d) 10, 5

76. A group consists of 4 girls and 7 boys. In how many ways can a team of 5 members be selected if the team has at least 3 Girls :

(a) 84 (b) 91

(c) 210 (d) 140

77. $4^2 + |4| + |-6| - 4^2 = ?$

(a) 10 (b) 8

(c) 6 (d) 4

78. The sum of three consecutive integers is 72. What is the smallest of three integers ?

(a) 21 (b) 22

(c) 23 (d) 25

79. Solve the equation $3x + 7$ less than 22 :

(a) $x < 3$ (b) $x < 5$

(c) $x < 7$ (d) $x < 15$

80. The ratio of the areas of a square and rhombus whose base is same, is :

(a) 1 : 2 (b) 1 : 1

(c) 3 : 1 (d) 2 : 1

81. Find the compound interest on Rs. 5,000 for 9 months at 6% per annum, if the interest is reckoned quarterly :

(a) Rs. 218.98 (b) Rs. 228.39

(c) Rs. 250.69 (d) Rs. 356.50

82. A sum of money doubles itself at compound interest in 10 years. In how many years will it be eight times ?

(a) 22 years

(b) 30 years

(c) 35 years

(d) 25 years

83. A sum was put at simple interest at a certain rate for 2 years. Had it been put at 2% higher rate, it would have fetched Rs. 400 more. Find the sum :

(a) Rs. 10,000

(b) Rs. 12,000

(c) Rs. 9,000

(d) Rs. 8,000

84. John took a loan of Rs. 1,500 with simple interest for as many years as the rate of interest. If he paid Rs. 540 as interest at the end of loan period, what was the rate of interest ?

(a) 6%

(b) 4%

(c) 3%

(d) 2%

85. If a boy sells a book for Rs. 450 he gets a loss of 10%, then find cost price. To gain 10%, what should be the selling price ?

(a) 500,600

(b) 400,450

(c) 500,550

(d) 475,525

86. A boy bought camel and carriage for Rs. 5,000. He sells the camel at a gain of 20% and the carriage at a loss of 10%. If he gains 3% on the whole, then find the cost of the camel :

(a) Rs. 2,170

(b) Rs. 2,200

(c) Rs. 2,075

(d) Rs. 2,480

87. A dishonest shopkeeper sells his grocery using weights 10% less than true weights and makes a profit of 30%. Find his total gain percentage :

(a) 44.44%

(b) 49.4%

(c) 55.55

(d) 34.34%

88. From a pack of 52 cards, one card is drawn at random. Find the probability that the drawn card is a club or a jack.

(a) 8/13

(b) 4/13

(c) 6/13

(d) 17/52

89. What is the definition of a variable in algebra ?

(a) a constant value

(b) a mathematical operation

(c) a symbol representing a quantity

(d) a whole number

90. At what time between 7 O'clock and 8 O'clock, will the hands of a clock be together ?

(a) 33(5/12) minutes past 7 O'clock

(b) 38(2/11) minutes past 7 O'clock

(c) 35(7/11) minutes past 8 O'clock

(d) 32(1/11) minutes before 8 O'clock