RET/14/Test B

898 Geography

Question Booklet No. .....

*(To be filled up by the candidate by **blue/black ball-point pen**)*

Roll No. | | | | | | | | | |

Roll No. (Write the digits in words) .....

Serial No. of OMR Answer Sheet .....

Day and Date ....

(Signature of Invigilator)

INSTRUCTIONS TO CANDIDATES

(Use only ***blue/black ball-point pen*** in the space above and on both sides of the ***Answer Sheet***)

1. Within 10 minutes of the issue of the Question Booklet, Please ensure that you have got the correct booklet and it contains all the pages in correct sequence and no page/question is missing. In case of faulty Question Booklet, bring it to the notice of the Superintendent/Invigilators immediately to obtain a fresh Question Booklet.
2. Do not bring any loose paper, written or blank, inside the Examination Hall ***except the Admit Card without its envelope.***
3. ***A separate Answer Sheet is given. It should not be folded or mutilated. A second Answer Sheet shall not be provided.***
4. Write your Roll Number and Serial Number of the Answer Sheet by pen in the space provided above.
5. ***On the front page of the Answer Sheet, write by pen your Roll Number in the space provided at the top, and by darkening the circles at the bottom. Also, wherever applicable, write the Question Booklet Number and the Set Number in appropriate places.***
6. ***No overwriting is allowed in the entries of Roll No., Question Booklet No. and Set No. (if any) on OMR sheet and Roll No. and OMR sheet No. on the Question Booklet.***
7. ***Any changes in the aforesaid-entries is to be verified by the invigilator, otherwise it will be taken as unfair means.***
8. ***This Booklet contains 40 multiple choice questions followed by 10 short answer questions. For each MCQ, you are to record the correct option on the Answer Sheet by darkening the appropriate circle in the corresponding row of the Answer Sheet, by pen as mentioned in the guidelines given on the first page of the Answer Sheet. For answering any five short Answer Questions use five Blank pages attached at the end of this Question Booklet.***
9. For each question, darken only one circle on the Answer Sheet. If you darken more than one circle or darken a circle partially, the answer will be treated as incorrect.
10. ***Note that the answer once filled in ink cannot be changed.*** If you ***do not wish to attempt*** a question, leave all the circles in the corresponding row blank (such question will be awarded zero marks).
11. For rough work, use the inner back page of the title cover and the blank page at the end of this Booklet.
12. Deposit ***both OMR Answer Sheet and Question Booklet*** at the end of the Test.
13. You are not permitted to leave the Examination Hall until the end of the Test.
14. If a candidate attempts to use any form of unfair means, he/she shall be liable to such punishment as the University may determine and impose on him/her.

Total No. of Printed Pages : 15

FOR ROUGH WORK

Research Entrance Test – 2014

No. of Questions : 50

Time : 2 Hours *Full Marks : 200*

Note : (i) This Question Booklet contains **40** Multiple Choice Questions followed by **10** Short Answer Questions.

(ii) Attempt as many MCQs as you can. Each MCQ carries **3 (Three)** marks. **1 (One)** mark will be deducted for each incorrect answer. Zero mark will be awarded for each unattempted question. If more than **one** alternative answers of MCQs seem to be approximate to the correct answer, choose the closest one.

(iii) Answer only 5 Short Answer Questions. Each question carries **16 (Sixteen)** marks and should be answered in **150-200** words. Blank **5 (Five)** pages attached with this booklet shall only be used for the purpose. Answer each question on separate page, after writing Question No.

1. Which of the following is ***not*** a greenhouse gas ?
   (1) Carbon dioxide (2) Methane
   (3) Sulphur dioxide (4) Nitrogen

2. The saliva of mammals contains starch splitting enzyme. The name of that enzyme is :
   (1) Amylase (Ptyalin) (2) Secretin
   (3) Lysozyme (4) Mucin

3. Cytosine in DNA combines with :
   (1) Adinosine (2) Uracil
   (3) Guanine (4) Thiamine

4. If Vectors $2i-j+k,\ i+2j-3k,\ 3i+\lambda j+5k$ are coplanar, then the value of λ is :
   (1) -2 (2) -3 (3) -4 (4) -5

5. The value of $\left(-1+i\sqrt{3}\right)^{3/2}$ is :
   (1) $\sqrt{2}$ (2) $2\sqrt{2}$ (3) $2+\sqrt{2}$ (4) $2-\sqrt{2}$

6. The number of electrons contained in 1 Coulomb of charge equals to :
   (1) 6.25×10^{17} (2) 6.25×10^{18} (3) 6.25×10^{19} (4) 1.6×10^{19}

7. A unit mass of solid is converted to liquid at its melting ; the heat required for this process is the :
   (1) Specific heat (2) Latent heat of vaporization
   (3) Latent heat of fusion (4) External latent heat

8. Granite is :
   (1) a sedimentary rock (2) a metamorphic rock
   (3) a volcanic rock (4) a plutonic igneous rock

9. Coal is a :
   (1) Sedimentary rock (2) Hydrothermal deposit
   (3) Low-grade metamorphic rock (4) High-grade metamorphic rock

10. Which one of the following gases is present in the stratosphere that filters out some of the sun's ultraviolet light and provides an effective shield against radiation damage to living things ?
    (1) Oxygen (2) Methane (3) Ozone (4) Helium

11. First fundamental concept of geomorphology relates to :

(1) Physical process
(2) Structure
(3) Landforms
(4) Geomorphological scale

12. Soil horizons are basically divided into :

(1) Organic and mineral horizons
(2) Organic, mineral and acid horizons
(3) Organic, mineral and salt horizons
(4) Mineral, acid and salt horizons

13. Which one of the following is a wrong statement ?

(1) Coriolis force acts at right angle to the direction of moving air.
(2) Coriolis force alone can change the speed of the moving air.
(3) At given latitude the magnitude of coriolis force is directly proportional to the speed of moving air.
(4) Coriolis force is maximum at the poles.

14. Which one of the following climatic classification scheme does not belong to the empirical approach ?

(1) Budyko
(2) Koppen
(3) Thornthwaite
(4) Miller

15. Kyoto Agreement of 1997 is related to :

(1) Sustainable development
(2) Climatic Change
(3) Reduction of chlorofluoro carbon
(4) Maintenance of ozone layer

16. The first Earth Summit was held at Rio de Janero in :

(1) 1972
(2) 1982
(3) 1992
(4) 2002

17. Which one of the following does not serve as a source of heat for evaporation process ?

(1) Direct solar energy

(2) Sensible heat of the air

(3) Stored heat of the water

(4) Energy released from radioactive decay process within the earth crust

18. In the field of geodesy, the first scientific experiment to know the dimension of the earth was made by :

(1) Herodotus (2) Eratosthenes

(3) Hipparchus (4) Ptolemy

19. Antipode journal was started from :

(1) Clark University (2) Lund University

(3) Cambridge University (4) London University

20. Author of 'Postmodern Geographies' is :

(1) Dear (2) Harvey (3) Soja (4) Ley

21. The term 'Megalopolis' was coined by :

(1) Gottmann (2) Geddes (3) Sauer (4) Mumford

22. 'Adaptation' is derived from the theory proposed by :

(1) Darwin (2) Barrows (3) Ritter (4) Aristotle

23. 'The Population Bomb' is authored by :

(1) Paul Ehrlich (2) D. Meadows

(3) F. Osburn (4) Brundtland

24. The demographic transition theory was first propounded by :

(1) G. T. Trewartha (2) W. Thompson

(3) F. W. Notestein (4) Carr-Saunders

25. Edward Ackerman has divided the population - resource regions of the world on the basis of the following factors :

(1) Population and resources

(2) Population and technology

(3) Technology and resources

(4) Population, resource and technology

26. Which one of the following does not belong to the group of non-perspective zenithal projection ?

(1) Polar zenithal Equal Area (2) Polar zenithal Equidistant

(3) Stereographic Normal Zenithal (4) Gnomonic Polar Zenithal

27. If the distance between two places on the ground is 1 mile and on the map it is 2.4 inches, then RF will be :

(1) 1 : 24400 (2) 1 : 25400 (3) 1 : 26400 (4) 1 : 27400

28. WIFS sensor is most suitable in the study of :

(1) Geology (2) Water resources

(3) Topography (4) Vegetation

29. Von Thunen Theory of agricultural location was propounded in :

(1) 1946 (2) 1936 (3) 1926 (4) 1916

30. Who said that 'Regional Development provides nothing more than a set of hypotheses to explain spatial dispersion of economic activities' ?

(1) R. S. Thoman (2) J. Hilhorst

(3) P. D. Malgaokar (4) W. Christaller

31. Largest fish producing nation is :

(1) Japan (2) India (3) Peru (4) China

32. A geostationary satellite orbits in equatorial orbit at the altitude of :

(1) 900 km (2) 15,000 km (3) 20,000 km (4) 36,000 km

33. 'Ecumene' denotes :

(1) Uninhabited space (2) Deserted area

(3) Inhabited world (4) None of these

34. Which one of the following is an ubiquitous resource ?

(1) Nitrogen in atmosphere (2) Aroble land

(3) Water (4) Forest

35. Earth day in the world is celebrated on :

(1) February 7 (2) March 22 (3) April 22 (4) June 5

36. World summit on sustainable development was held at :

(1) Rio-de-Janeiro (2) Johannesberg (3) Stockholm (4) Montreal

37. As per 2011 census the highest population density is found in the state of :

(1) West Bengal (2) Bihar

(3) Uttar Pradesh (4) Kerala

38. Basalt is the example of :

(1) Igneous rock (2) Sedimentary rock

(3) Metamorphic rock (4) Orthometamorphic rock

39. Morg plateau of Jammu & Kashmir is the example of :

(1) Aeolian plateau (2) Fluvial plateau

(3) Glacial plateau (4) Volcanic plateau

40. Settlement Geography was firstly defined by :

(1) Vidal De la Blache (2) E. Jones

(3) Carl Ritter (4) Humboldt

Attempt any five questions. Write answer in 150-200 words. Each question carries 16 marks. Answer each question on separate page, after writing Question Number.

1. Critically examine the views of Davis and Penck on the cycle of erosion.

2. Mention the evidences that support the global warming.

3. How are the different components of observed hydrograph separated ?

4. Critically analyse the 'Limits to Growth' model.

5. Discuss the causes of ecological crisis.

6. Examine the relevance of 'Second Green Revolution' in India.

7. Explain the causes of differential growth rates of population in India.

8. What do you understand by pastoralism ?

9. What is New Economic Geography ?

10. Describe the various approaches of Regional Planning.

Roll No. : .....

Q. No. :

Roll No. : .....

Q. No. :

Roll No. : .....

Q. No. :

Roll No. : .....

Q. No. :

Q. No. :

FOR ROUGH WORK