

COMBINED COMPETITIVE EXAMINATION (MAIN)

GENERAL STUDIES

Paper—II

Time : 3 hours

Full Marks : 200

Note : (1) The figures in the right-hand margin indicate full marks for the questions.

(2) Answer the questions following the instructions strictly.

(Indian Economy)

1. Answer any *one* of the following : 10
 - (a) Examine the trend and pattern of savings and investment in India during the post-liberalized period.
 - (b) Discuss the major recommendations of the National Knowledge Commission towards development of IT sector and Education sector.
 - (c) Distinguish between physical and social infrastructures. Highlight the role of physical infrastructure in Indian economic growth.
2. Answer any *one* of the following : 7
 - (a) What is HDI? Explain the limitations of HDI in formulating economic policies in India.
 - (b) Explain the arguments in favour of and against the public sector in the Indian context.
3. Answer any *three* of the following : 5×3=15
 - (a) Discuss the debate on farm size and productivity in the context of Indian economy.
 - (b) Critically examine the policy changes in the industrial sector since 1990.
 - (c) Enumerate the concept of Regional Disparity in India in the post-reforms period.
 - (d) Examine the role of Planning Commission in the context of Five-Year Plans.

(e) Discuss the problems and prospects of information technology industry in India.

(f) Explain the concept of optimum population.

4. Answer any *two* of the following :

4×2=8

(a) Provide an account on informal economy in India.

(b) What is meant by social engineering?

(c) What is demographic dividend?

(d) Discuss the concept of regional growth rate differentials.

(Indian Geography)

1. Answer any *one* of the following :

10

(a) Give a descriptive account of the importance of India in Asia by virtue of her strategic geographical location.

(b) "The uniqueness of India is its unity within diversity."
Elaborate the above statement citing suitable examples.

(c) Describe a suitable scheme of agricultural regionalization for the development of Indian agriculture.

2. Answer any *one* of the following :

7

(a) Discuss the concept of region. Elaborate why physical regions are formal and agricultural regions are functional in their nature.

(b) Give an account of the role of caste and religion in the process of India's social evolution. Give examples to justify.

3. Answer any *three* of the following :

5×3=15

(a) Discuss the socioeconomic factors causing perpetuation of under-development in India.

(b) Describe the industrial development in India since Independence.

(c) Discuss the impact of population growth on planning and development in India.

(d) Provide an account of geographical conditions required for jute cultivation in India.

- (e) Discuss the trend and pattern of demographic distribution in the Indo-Gangetic plain.
- (f) Write in brief the distribution of petroleum resource in India.
4. Write short notes on any *two* of the following : 4×2=8
- (a) Major physiographic divisions of India
- (b) Geographical factors for industrial location
- (c) Vegetation type of India
- (d) Resource regions of India

(Geography of Arunachal Pradesh and its Economy)

1. Answer any *one* of the following : 10
- (a) Divide Arunachal Pradesh into different agro-climatic zones. Give a detailed description of any one of them.
- (b) Describe in detail the drainage system in Arunachal Pradesh. Elaborate with the help of a drainage map.
- (c) Discuss in detail the various natural resources of Arunachal Pradesh. Suggest means for their sustainable use.
2. Answer any *one* of the following : 7
- (a) Give an account of the major tribal groups of Arunachal Pradesh. Discuss the economic and cultural practices of any one of them.
- (b) Discuss the soil types of Arunachal Pradesh and correlate them with the agricultural practices in the State.
3. Answer any *three* of the following : 5×3=15
- (a) Explain the advantages and disadvantages of practice of Jhum cultivation in the State. Suggest alternative for replacing the practice of Jhum in the hills.
- (b) Describe the major factors responsible for the lack of major industrial growth in the State.
- (c) Briefly discuss about the status of transport and communication in Arunachal Pradesh.
- (d) Write an account on the possibilities of development of plantation agriculture as a tool for economic development of Arunachal Pradesh.

- (e) What are the bottlenecks for development of small-scale cottage industry in the State?
- (f) Provide an account of recent development in surface transport of Arunachal Pradesh.
4. Write short notes on any *two* of the following : 4×2=8
- (a) Irrigation and flood control measures
- (b) Hydropower potential of the State
- (c) Prospects of tourism as an industry
- (d) Commercial farming in Arunachal Pradesh

(Science and Technology)

1. Give reason for the following : 4×3=12
- (a) How can a man skate?
- (b) A hot liquid remains hot and a cold liquid remains cold in a thermos flask.
- (c) Why are white clothes more comfortable in summer than dark or coloured ones?
2. What do you mean by 'black taillight'? 4
- Or*
- What do you mean by 'play box'?
3. What is 'RADAR'? 4
- Or*
- What is artificial radioactivity?
4. What is new about 'BLUEWIRE'? 5
- Or*
- What is new about 'SONICABLE'?
5. Give a brief idea about RNA interference (RNAi) technology. 5
- Or*
- Give a brief idea about CRISPR technology.

6. What is water gas? Explain.

5

Or

What is producer gas? Explain.

7. What is the principle underlying the aeroplane?

5

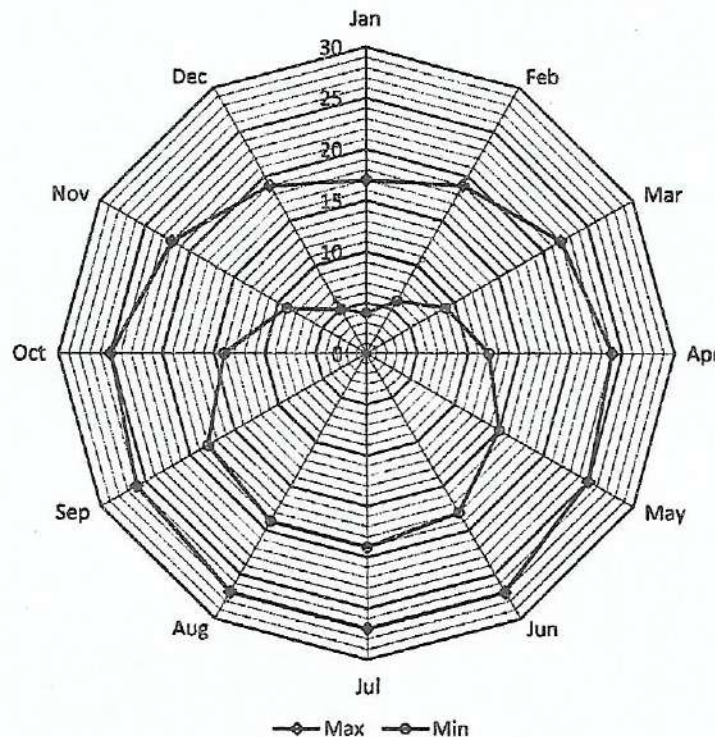
Or

What is the principle of rockets?

(Statistical Analysis, Graphs and Diagrams)

1. Answer the following on the basis of radar chart given below showing maximum and minimum temperature (in whole number) in degree Celsius for place A :

2×4=8



- (a) How many months have maximum temperature above 20 degree Celsius?
- (b) Which month has the highest temperature range?

(c) What is the lowest temperature range?

(d) Which month's minimum temperature equals to maximum temperature of December?

2. Answer the following on the basis of the data table given below : $2 \times 4 = 8$

*Districtwise types of schools **

Districts	Schools				
	Private	Trustee	Govt. Aided	Semi-Govt.	Govt.
V	18	7	15	4	16
W	16	6	25	7	18
X	12	5	13	8	12
Y	20	7	12	4	16
Z	14	7	20	5	13

(a) What is the average number of private schools among these districts?

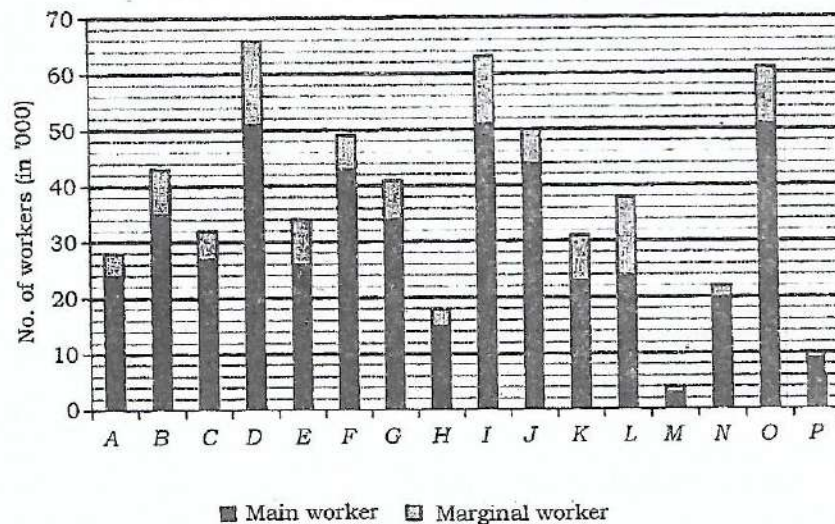
(b) Which type of school has minimum presence among these districts?

(c) What is the percentage of schools in District V out of a total 300 schools?

(d) What is the expected number of private schools in District V?

3. Answer the following on the basis of the bar diagrams given below : $2 \times 4 = 8$

Districtwise Main workers and Marginal workers



(a) In how many districts the number of main workers exceeds 20000?

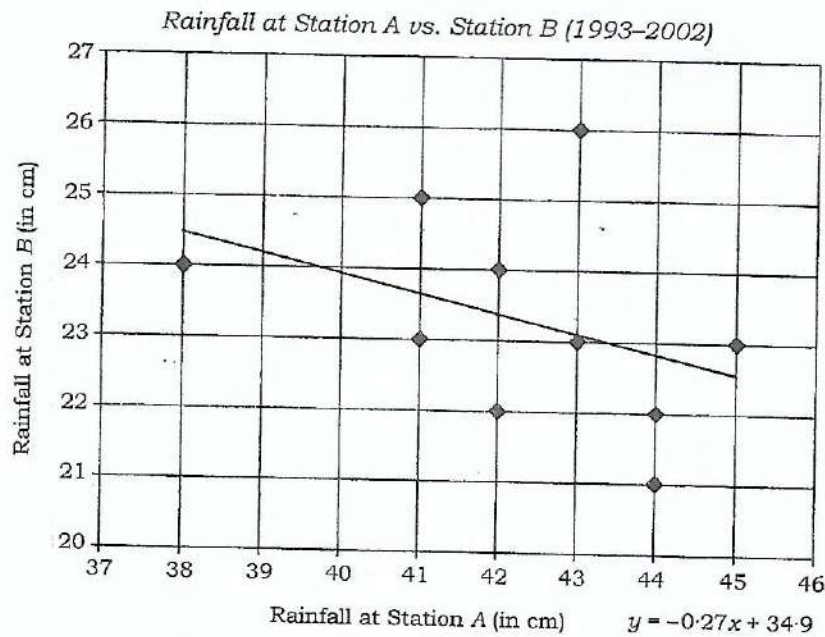
- (b) What are the percentage distributions of the main and the marginal workers in the District J?
- (c) What is the percentage of districts that have total workers above 30000?
- (d) Which district among D, I and O has a higher percentage of main workers?

4. Calculate and plot three-year moving average following 9-year chicken meat production (in '0000 tonnes) in India :

2005	2006	2007	2008	2009	2010	2011	2012	2013
140	152	176	188	209	219	224	228	233

5. Answer the following as directed on the basis of the diagram given below :

1×8=8



- (a) What is the rate of increment in rainfall?
- (b) In how many years the predicted rainfall exceeds the estimated value?
- (c) What will be the sum total of deviations from the trend line?

- (d) In how many years the rainfall in Station A is less than 40 cm?
- (e) What is the highest recorded rainfall in Station B?
- (f) What is the nature of relationship in rainfall between two stations?
 - (i) Positive
 - (ii) Negative
 - (iii) No relation

(Choose the correct answer)

- (g) What would be the rainfall at Station B when the rainfall at Station A is 40 cm?
- (h) What is the range of rainfall observed in Station A during these 10 years?
