

2021

GENERAL STUDIES AND ARITHMETIC

Time Allowed — 2 Hours 30 Minutes

Full Marks — 150

Group A: 100 Marks

Group B: 50 Marks

Separate Answer Books to be used for Group A and Group B.

(In case a candidate writes answer to questions on Group B in the answer book meant for Group A and *vice-versa*, such answers will not be evaluated.)

If the questions attempted are in excess of the prescribed number, only the questions attempted first up to the prescribed number shall be valued and the remaining ones ignored.

The figures in the margin indicate marks for each question.

Group A

(General Studies)

Answers may be written in English or in Bengali or in Nepali but all the answers must be in one and the same language.

Part-I

Answer Question No. 1 and any two from the rest.

1. Write a note on the 'One Belt One Road' (OBOR) policy and explain its significance with respect to India. 20
2. What are the salient features of the Ayushman Bharat scheme? Mention your own observations about the problems of health care in India. 15
3. Give a brief account of how the Covid-19 pandemic has affected economic conditions worldwide with special reference to the Indian economy. 15
4. Write a note on the United Nations Climate Change Conference of 2019 held in Spain with special emphasis upon the implications of its considerations and results upon the world climate. 15
5. What is MSP? Give a detailed account of its significance in Indian agriculture. 15

Part-II

Answer all the questions.

6. Write down the full form of the following abbreviations: 2×5=10
 - (a) SAIL
 - (b) TOEFL
 - (c) CTBT
 - (d) ASEM
 - (e) UDDI

7. Mention the year in which the following schemes/programmes was launched: 2×5=10
- Pradhan Mantri Jan Dhan Yojana
 - Digital India Programme
 - Integrated Child Development Services
 - Jawaharlal Nehru National Urban Renewal Mission
 - Pradhan Mantri Ujjwala Yojana
8. Answer the following: 2×5=10
- Through which Indian state does the Shimsha river flow?
 - In which year was Mohenjodaro declared as a UNESCO World Heritage site?
 - In which Indian state is the folk dance of Modse performed?
 - Who is the present Prime Minister of Thailand?
 - What is the name of the current governor of the Reserve Bank of India?
9. Answer the following: 2×5=10
- Who is considered to be the leader of the 'Chipko Movement'?
 - Where is the National Institute of Rural Development (NIRD) situated?
 - What does a Fathometer measure?
 - Who is known as the 'father' of Indian missile technology?
 - Which is a green planet in the Solar System?
10. Answer the following: 2×5=10
- Who said, "Inflation is unjust but deflation is inexpedient. Of the two, deflation is worse."?
 - Federation Cup, World Cup, Allwyn International Trophy and Challenge Cup are awarded to winners in which sport?
 - In which city was the Kempegowda festival organized in 2017?
 - Who is the first Indian woman to win the Man Booker prize?
 - To which country does the telecom country Nokia belong?

Group B

(Arithmetic)

Answers may be given in English or in Bengali but all the answers must be in one and the same language.

Answer any ten questions.

5×10=50

- In a club, every member contributed as many 50 rupees as the number of members to raise the subscription of amount Rs. 31,250. How many members are there in that club?
- A number becomes 600 if it is reduced by 40%. Find the rate of increase to make it 1600.
- Find the simplest value of $\sqrt{1.2 - \sqrt{0.74 - \sqrt{0.99 - \sqrt{0.85 - \sqrt{0.36}}}}}$.

4. 50 kgs. of Type-I mixture contains 10 kgs. of urea, while 80 kgs. of Type-II mixture contains 24 kgs. of urea. A total of 60 kgs. of mixture is collected from these two types to prepare a mixture of Type-III and it is found to contain 15 kgs. of urea. What is the ratio of two types of mixtures in the mixture of Type-III?
 5. 30% of selling price of an article is equal to 40% of its cost price and 45% of its selling price exceeds 50% of its cost price by Rs. 10. Determine the cost price of the article.
 6. Find the rate of increase of the cost price in order to make a profit of 20% by selling an article after giving 10% rebate on marked price to a customer.
 7. Mixing sand and cement in the ratio 6 : 1, a mason prepared a mixture for construction. At the completion of construction, it is found that yet 70 kgs. of mixture were unused. Then he added more cement to it and prepared a mixture of ratio 5 : 1. How much cement did he add to it later?
 8. The length of a rectangular field is three times of its breadth and its area is 972 m^2 . Measure out the perimeter of the field.
 9. A work is completed 6 days earlier when 60 workers are engaged replacing 40 workers to do it. How many persons are required to complete the same work in 10 days earlier?
 10. The food of 90 days is stored up for a troop consisting of 500 soldiers. After 18 days, 100 additional soldiers joined the said troop without any additional food. If the amount of money meant for food of each soldier is reduced from Rs. 30 to Rs. 25, then determine the number of days the food can cater the soldiers.
 11. There are three pipes fitted in a tank. The first one can fill it in 15 minutes, the second one can fill it in 30 minutes. Only through the third one, the filled in tank becomes empty in 20 minutes. If all the three pipes are opened simultaneously when one-fourth part of the tank is filled up, measure out the amount of time the tank will take to make itself full completely.
 12. A person gets 5 items more than earlier at the cost of Rs. 50 when the cost of it is reduced by Rs. 4 per dozen. What is the percentage of reduction of the cost of a dozen of the same items at present?
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4. 30 kg of Type-I mixture contains 10 kg of nuts, while 30 kg of Type-II mixture contains 24 kg of nuts. A total of 60 kg of mixture is collected from these two types to prepare a mixture of Type-III and it is found to contain 12 kg of nuts. What is the ratio of two types of mixtures in the mixture of Type-III?

5. The selling price of an article is equal to $\frac{1}{5}$ of its cost price and $\frac{1}{5}$ of its selling price is equal to $\frac{1}{10}$ of its cost price. Find the cost price of the article.

6. Find the rate of increase of the cost price in order to make a profit of 20% by selling an article after giving 10% rebate on marked price to a customer.

7. A man bought a certain quantity of goods for Rs. 1000. He sold $\frac{1}{4}$ of it at a profit of 20% and the remainder at a loss of 20%. It is found that the total loss was Rs. 100. How much profit did he make on the whole?

8. The length of a rectangular field is three times of its breadth and its area is 12000 sq. m. Find the breadth of the field.

9. A work is completed in 6 days when 50 workers are engaged regularly. If 10 more workers are engaged, how many days are required to complete the same work?

10. The price of 50 kg of sugar is Rs. 1000. After a 10% increase in the price, a man bought 40 kg of sugar. How much more money did he have to pay for the additional 10 kg of sugar? (If the amount of money is not sufficient, then the amount is to be subtracted from the original amount.)

11. There are three pipes fitted in a tank. The first one can fill it in 15 minutes, the second one in 20 minutes and the third one in 30 minutes. If all the three pipes are opened simultaneously, how long will it take to fill the tank? (If the amount of time is not sufficient, then the amount is to be subtracted from the original amount.)

12. A person bought a certain quantity of goods for Rs. 1000. He sold $\frac{1}{4}$ of it at a profit of 20% and the remainder at a loss of 20%. It is found that the total loss was Rs. 100. How much profit did he make on the whole?