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ENGLISH — Paper I

Time Allowed : $2\frac{1}{2}$ Hours]

[Maximum Marks : 100

PART - A

(Marks : 32)

I. Answer any *three* of the following questions in about 30 words each : $3 \times 2 = 6$

1. Describe the condition of the forest after the exit of the tortoises.

2. What is an 'arribada' ?

3. What was the new record achieved by Bannister's team ?

4. What does Tagore say about real joy ?

II. Explain any *two* of the following excerpts with reference to the context : $2 \times 3 = 6$

5. 'It's all my fault I forgot him'.

6. 'Cannot you announce your coming like a gentleman ?'

7. 'Your name will be remembered forever as my first helper'.

8. 'It's not that I am so smart, it's just that I stay with problems longer'.

[Turn over

III. Answer any *two* of the following questions, each in a paragraph of about 100 words : 2 × 5 = 10

9. Write about the Turtle walks in Tamil Nadu.

10. How is the element of supernatural brought out in 'St. Joan' ?

11. Discuss Makara's argument for sending out the other reptiles from the forest.

12. Write a paragraph on Einstein's childhood.

IV. Answer any *one* of the following questions in about 200 words : 1 × 10 = 10

13. Describe the author's experiences in the record-breaking race.

14. Describe the experiences of the March girls in their mother's absence.

PART - B

(Marks : 27)

V. Answer any *three* of the following questions each in not more than 30 words :

3 × 2 = 6

15. What kind of place was Chipping-under-Bone ?

16. What is the central idea of the poem, 'Thoughts' ?

17. Write any two images used in the poem, 'Romance'.

18. What was the manner in which the soldiers were moving ?

VI. Answer the questions for any *two* of the following excerpts from the prescribed poems : 2 × 3 = 6

19. 'Joy's like a lark that lives alone

Whose *ties* are very strong, though few;

i) Why is Joy compared to a lark ?

ii) What does 'ties' signify ?

iii) Identify the figure of speech in the first line.

20. 'Now I think that I can cross, but all the same,

I wish I were a gull'

- i) What is a 'gull' ?
- ii) Who speaks these words ?
- iii) What is the speaker's problem here ?

21. 'The enemy faints not, nor faileth'

- i) Whose words are these ?
- ii) What is the mood of the speaker here ?
- iii) Name the figure of speech used here.

22. 'And, though no word at all she said,

I knew that all was known'

- i) What was 'known' to her ?
- ii) Why did the woman turn to stone ?
- iii) How does this woman differ from others of her type ?

VII. Answer any *two* of the following, each in about 100 words : 2 × 5 = 10

23. Explain the plight of Mrs. Alice Bird in the poem, 'Without Due Care'.
24. Highlight the element of pathos in the poem, 'Stone'.
25. Write an appreciation of the poem, 'Thoughts'.
26. How does the poet present a beautiful comparison of 'Joy and Pleasure' ?

VIII. 27. Quote from memory either of the following : 5

I will make my kitchen song to hear.

OR

Pleasure's a moth its sweet hour.

[Turn over

PART - C

(Marks : 18)

IX. Choose the appropriate response which conveys a similar meaning to the italicized word in the main sentence. 5 × 1 = 5

28. Milk was *short* yesterday.

- i) The food at home was not sufficient for all the guests
- ii) The surplus milk was given to the beggars
- iii) Ravi is a short man.

29. Fishing communities do not *consume* turtle eggs.

- i) They do not sell eggs here
- ii) Meena eats only vegetarian food
- iii) Starfishes live without food for months.

30. Individual liberty would have become social *anarchy*.

- i) The teacher kept the class in order
- ii) The murder caused confusion and disorder in the city
- iii) Raju is a disciplined person.

31. Jo *trudged* home again.

- i) She ran across the road
- ii) The farmer plodded his weary way home
- iii) She left home in a hurry.

32. My knowledge of space had *deserted* me.

- i) The abandoned child was handed over to the orphanage
- ii) He lives in a desert
- iii) The empty space was filled with sand.

- X. Choose the response opposite in meaning to the italicized word from the four alternatives given with each sentence. $5 \times 1 = 5$

33. All kinds of *awful* things began to happen.

- i) terrible ii) pleasant
iii) crafty iv) mysterious.

34. Olive Ridley is the most *abundant* of the eight species of turtles.

- i) plenty ii) scarce
iii) bountiful iv) rich.

35. I am *responsible* for her protection.

- i) liable ii) useful
iii) irresponsible iv) accountable.

36. I reached the tape without *slackening* my speed.

- i) slowing ii) accelerating
iii) stopping iv) decreasing.

37. He attempted to *skip* high school.

- i) avoid ii) attend
iii) leave iv) forget.

- XI. Use any *two* of the following words in sentences of your own : $2 \times 1 = 2$

38. endangered

39. consideration

40. forbidding.

- XII. Use any *two* of the following phrases in sentences of your own : $2 \times 1 = 2$

41. on the edge of

42. lose one's temper

43. interfere with.

- XIII. Fill in the blanks, choosing the right alternatives given in the brackets : $2 \times 1 = 2$

44. His business ran into rough (*weather/whether*).

45. The teacher gave us some (*advise/advice*).

[Turn over

XIV. a) Use one word for the phrasal verb or idiom italicized in either of the following sentences : 1

46. An epidemic *broke out* suddenly.

OR

The court declared the will as *null and void*.

b) Use a phrasal verb or an idiom in the place of the italicized word in either of the following sentences : 1

47. Selfish people *pursue* only wealth.

OR

Reena could not *control* her tears.

PART - D

(Marks : 23)

XV. Rewrite as directed. Marks are indicated against each item :

48. Having completed the homework, he went out to play.

(Change into a *Complex sentence*) 1

OR

Despite her sickness she came to school.

(Change into a *Compound sentence*)

49. We do not know the time of his arrival.

(Change into a *Complex sentence*) 1

OR

As he is lazy, he does not succeed.

(Change into a *Simple sentence*)

50. They even carry their houses on their backs.

(Change the *voice*) 1

OR

Makara's eggs had been chewed up by the rats.

(Change the *voice*)

51. The aeroplane flies faster than birds.

(Rewrite using *Positive degree*)

1

OR

Bernard Shaw is one of the most famous dramatists.

(Rewrite using *Comparative degree*)

52. How lovely the Rose is !

(Change into an *Assertive sentence*)

1

OR

Preethi sings sweetly, (Supply a *Question tag*)

53. The day was very hot. I felt tired.

(Combine into a *Simple sentence*)

1

OR

He is rich. He is not contented.

(Combine into a *Complex sentence*)

54. The man is social animal.

(Correct the sentence)

1

55. Identify the types of clauses in the given sentence :

2

When material is in profusion the mind gets lazy.

[Turn over

56. Fill in the blanks with appropriate articles : $4 \times \frac{1}{2} = 2$
 stout lady was walking down middle of
 street in Petrograd to great confusion of the
 traffic.

57. Fill in the blanks with appropriate prepositions : $4 \times \frac{1}{2} = 2$
 Every discovery he made was the betterment the
 world which we are living comfort today.

58. Prem said to the old man, "Don't say that again. What I have seen in my
 village makes me burn with shame".

(Rewrite in the Reported form of speech) 2

OR

Mrs. March asked her daughters if they were satisfied with their
 experiment.

(Rewrite in the Direct form of speech)

59. well prem said the old man have you fallen asleep
 (Punctuate the sentence) 2

60. Fill in the blanks with the correct tense forms of the verbs given in
 brackets : $3 \times 1 = 3$

This (help) to open the door to a whole new world of what we
 today (know) as Quantum Physics and what (give)
 us many devices.

61. No, Leela does not know how to speak French.
 (Frame a suitable question) 1

OR

I returned from Delhi today.

(Frame a 'Wh' question)

62. Identify the sentence pattern : 1

The heavy rains caused a great flood.

63. Frame a sentence on the given pattern : 1

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ENGLISH — Paper II

Time Allowed : $2\frac{1}{2}$ Hours]

[Maximum Marks : 100

PART - A

I. Rearrange the following sentences in logical sequence and rewrite in a paragraph using connectors wherever necessary : 5 + 5

1. So the students were rightly excited about it.
2. Being just an arm's length away from a bear and miss being attacked was perhaps a great adventure.
3. But the guard showed them the pugmarks of a tiger which they had missed seeing crossing the road that same night.
4. Now, what would you say to that !
5. And they were sure that they had not missed the best sight this trip could provide.

II. Read the given passage and answer the questions given below each in a sentence or two :

The young seagull was alone on his ledge. His two brothers and his sister had already flown away the day before. He had been afraid to fly with them. Somehow, when he had taken a little run forward to the brink of the ledge and attempted to flap his wings, he became afraid. The great expanse of sea stretched down beneath and it was such a long way down - miles down. He felt certain that his wings would never support him. So, he bent his head and ran away back to the little hole under the ledge where he slept at night. Even when each of his brothers and his little sister, whose wings were far shorter than his own, ran to the brink and flapped their wings to fly away, he failed to muster up courage to take the plunge which appeared to him so desperate. His father and mother had come around calling him shrilly, upbraiding him, threatening to let him starve on his ledge unless he flew away. But for the life of him he could not move.

1. Why was the seagull alone on the ledge ? 2
2. Where did the seagull sleep at night ? 2
3. Write the comparison mentioned in the passage. 2
4. What was needed for the seagull to take the plunge ? 2
5. Did the seagull's parents show concern for him ? How ? 2

III. Answer any *two* of the following in an essay form within 200 words each :

$2 \times 10 = 20$

1. How was Sivagami able to change her father's attitude ?
2. Narrate the experience of the seagull before it had its first flight.
3. How did Ruskin Bond's grandfather escape from the attack of the ostrich ?
4. Write an essay on the clues that helped Holmes to solve the mystery.

[Turn over

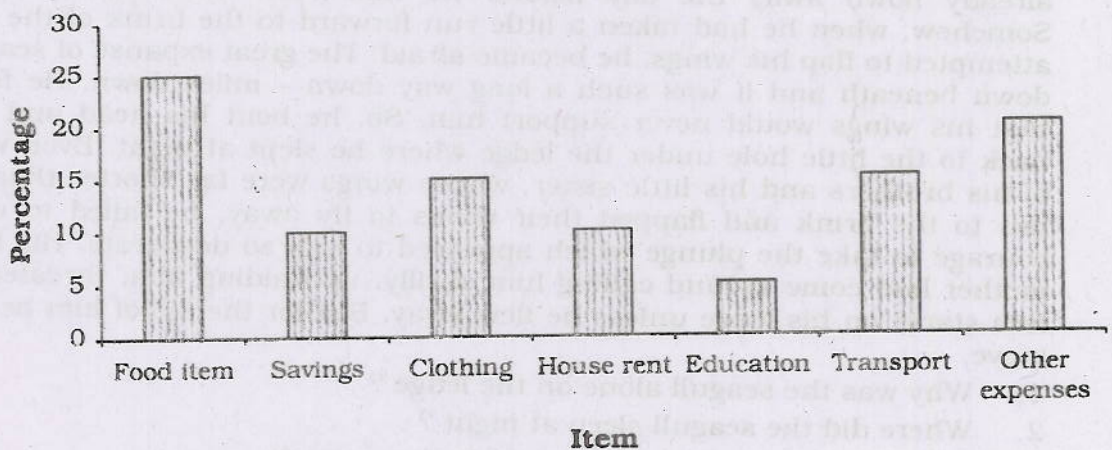
PART - B

- IV. Write a précis of the following passage reducing it to one-third of its length : 10

India is chiefly an agricultural country. The cultivation of crops depends on a proper supply of water throughout the year. From olden times, large parts of our country have suffered from periods of too much of rain, alternating with periods of drought. People have known that if the excess waters of the flood seasons can be stored up for use in the fields during the dry seasons, the problem would be solved. Unfortunately they have neither the knowledge nor the means to do much in this matter. What little they knew they had tried to put into practice. They have dug canals to carry away water from the great perennial rivers. This was a heavy and expensive one practicable over only a small area. Large tanks were excavated, small bunds (or) dams have been built to hold water or hold back floods.

- V. Study the bar chart given below and answer the following questions : 5

This bar graph shows how a family spent its income on different items in a particular month.



Questions :

1. What does the graph represent ?
2. What is the percentage of income spent on clothing ?
3. On which item the family spent the minimum amount ?
4. How many items are represented in the graph ?
5. On which items the family spent the maximum amount ?

OR

Read the following passage and make notes :

Energy is derived from two kinds of energy resources, namely, renewable and non-renewable. We use fuels like coal, diesel and petrol. These cannot be renewed and are called non-renewable resources. But energy from wind, water and sun can be renewed.

VI. Rewrite each of the following sentences correctly : 5 × 1 = 5

1. Time and tide wait for no man.
2. The audience were group of thirty students from Chennai.
3. Neither of us were present.
4. The quality of these oranges are good.
5. I met him at an university tournament.

VII. Read the following poem and answer the questions given below : 10

This is the Night Mail crossing the Border,
 Bringing the cheque and postal order,
 Letters for the rich, letters for the poor,
 The shop at the corner, the girl next door,
 Past cotton-grass and moorland boulder,
 Shovelling white stream over her shoulder,
 Snorting noisily, she passes
 Silent miles of wind-bent grasses,
 Birds turn their heads as she approaches,
 Stare from bushes at her blank-faced coaches,
 Sheep-dogs cannot turn her course;
 They slumber on with paws across,
 In the farm. She passes no one wakes,
 But a jug in a bed room gently shakes.

Questions :

1. What does the Night Mail bring to the people ?
2. Who are getting the letters ?
3. Where does the train go on its way ?
4. What do the birds do when the train comes near them ?
5. With the arrival of the trains, what happens in the farm ?

OR

[Turn over

Paraphrase the poem given below :

Speak gently to the aged one,
Grieve not the careworn heart :
The sands of life are nearly run,
Let them in peace depart.
Speak gently to the erring ones
They must have toiled in vain ;
Perhaps unkindness made them so,
Oh ! win them back again,
Speak gently ! – It is a little thing
Dropped in the heart's deep well,
The good, the joy that it may bring,
The rolling years shall tell.

VIII. (Sign yourself as X. If you write your Name, Reg. No. or Address your answer paper will not be evaluated)

1. Write a letter to your friend inviting him/her to spend the summer holidays with you. 10

OR

2. Write a letter to the manager of a textile mill seeking permission to visit the mill along with your classmates.

OR

3. Write a letter to a Hotel in Kodaikanal booking rooms for your family for a week during this summer.

IX. Write a dialogue between a Doctor and a Patient. 5

OR

Complete the dialogue with at least five exchanges :

Miss X : Dad, I am planning to go abroad.

Father : To which country, my dear ?

Miss X : To England.

Father :

X. Read the given passage and prepare an attractive advertisement : 5

A tour is arranged by a reputed travel company to Singapore, Malaysia and Thailand. The address :

Travel Links

23, City Centre Plaza,

3, Mount Road, Chennai-044 – 24342002.

XI. Expand the idea contained in the following statement in about 100 words : 10

A stitch in time saves nine.

OR

Prevention is better than cure.

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GEOGRAPHY & ECONOMICS

Time Allowed : $2\frac{1}{2}$ Hours]

[Maximum Marks : 100

(Geography : 70

Economics : 30)

- Note :
- The outline map of India should be attached to the answer script after answering on it as asked in **Part - VI**.
 - Draw diagrams wherever necessary.

PART - I

(Marks : 25)

A) Choose the correct answer :

10 × 1 = 10

- The desert is found in the west of India.
 - Gobi
 - Thar
 - Sahara.
- The highest plateau of India is the
 - Deccan plateau
 - Malwa plateau
 - Ladakh plateau.
- The is known as the sorrow of Bihar.
 - Krishna
 - Damodar
 - Kosi.

[Turn over

4. Black soil is ideal for the cultivation of

- a) Rice
- b) Jute
- c) Cotton.

5. The cheapest means of transport is

- a) Roadways
- b) Railways
- c) Waterways.

6. Co-existence of public and private sectors is prevalent in

- a) Capitalist economy
- b) Socialist economy
- c) Mixed economy.

7. The term resources refer to total knowledge, skills, talents as well as population of country.

- a) agricultural
- b) industrial
- c) human.

8. Normal profit is where the total revenue is equal to

- a) Total cost
- b) Marginal cost
- c) Average cost.

9. Trade carried on within the domestic territory of the country is termed as .
- a) internal trade
 - b) external trade
 - c) barter system.
10. Net national product at factor cost is also known as
- a) per capita income
 - b) domestic income
 - c) national income.

B) Fill in the blanks :

10 × 1 = 10

11. is the longest and largest of the peninsular rivers.
12. Eastern Himalayas are called
13. The is the largest dam in the world.
14. The golden fibre of India is
15. Data should be collected from the
16. Open economy is an economy in which plays a predominant role in the country.
17. are called green umbrella.
18. Loss is a situation where the firm's average cost is more than
19. helps to relax rules and regulations which posed restriction on private sector.
20. Tertiary sector is also called as sector.

[Turn over

C) Match the following : 5 × 1 = 5

- | | |
|----------------|--------------------------|
| 21. Rajasthan | a) Seismic zone |
| 22. Kerala | b) Natural source of EMR |
| 23. Earthquake | c) Largest state |
| 24. Faridabad | d) Burst of monsoon |
| 25. The sun | e) Motor cycles. |

PART - II

(Marks : 20)

Note : Write short answers for any *ten* of the following, choosing *eight* from Geography and *two* from Economics : 10 × 2 = 20

GEOGRAPHY

26. What are the neighbouring countries of India ?
27. What is Bhabar ?
28. What are the factors responsible for the formation of soil ?
29. What is a multipurpose project ?
30. What is the necessity of understanding our environment and its issues ?
31. What are the two main aims of introducing latest technology in agriculture ?
32. When was the first jute mill in India established ?
33. Name the different means of communication.
34. What are the steps involved in project design ?
35. What are special signatures ?

ECONOMICS

36. Define the term 'Disguised Unemployment'.
37. Explain the uses of census.
38. Explain private costs and social costs.
39. Define the term 'foreign exchange reserves'.
40. Explain direct taxes with the help of examples.

PART - III**(Marks : 15)**

Note : i) Answer any *five* of the following questions, choosing *three* from Geography and *two* from Economics.

ii) Answer briefly.

5 × 3 = 15

GEOGRAPHY

Distinguish between the following :

41. Himalayas and Western ghats.
42. Laterite soil and red soil.
43. Natural disaster and man-made disaster.
44. Windward side and leeward side of the mountain.
45. Joint sector and co-operative sector industries.
46. Minor irrigation system and major irrigation system.

ECONOMICS

Distinguish between the following :

47. Capitalism and mixed economy.
48. Renewable resources and non-renewable resources.
49. Revenue and cost.
50. Exports and imports.

[Turn over

PART - IV**(Marks : 20)**

- Note :** i) Answer any *four* of the following questions, choosing *two* from Geography and *two* from Economics.
- ii) Answer each question in a paragraph. 4 × 5 = 20

GEOGRAPHY

51. List out the significance of the Himalayas.
52. Explain in brief the cropping patterns of India.
53. Enumerate that automobile industry is the fast growing industry in India.
54. Explain pipeline transportation.
55. Write a short note on GIS.

ECONOMICS

56. Explain the factors affecting economic development.
57. Write in detail about economic importance of mineral resources.
58. Expand the term GLP and explain about globalization.
59. Calculate the following with the help of the data given below :

| CRORES | | |
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| GNP, NNP, NDP | = | ? |
| GDP | = | 20,000 |
| Depreciation | = | 2,000 |
| NFYEA | = | (-) 1200. |

PART - V**(Marks : 10)***Note :* Answer any one of the following questions.

1 × 10 = 10

60. Explain the distribution of rainfall with a sketch map.
61. Mention some of the environmental issues and explain your role in managing the issues.
62. Explain in detail the process involved in Remote Sensing.

PART - VI**(Marks : 10)***Note :* Mark the following on the *outline map of India* which is provided

- | | |
|---|---|
| 63. Port Blair | 1 |
| 64. Mt K2 peak | 1 |
| 65. Aravali range | 1 |
| 66. Laterite soil region | 1 |
| 67. Gir sanctuary | 1 |
| 68. Mettur project | 1 |
| 69. Leading tea producing state | 1 |
| 70. Manchester of India | 1 |
| 71. Vishakhapatnam port | 1 |
| 72. Rail route between Chennai and Kolkata. | 1 |
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HISTORY AND CIVICS

Time Allowed : $2\frac{1}{2}$ Hours]

[Maximum Marks : 100

- Note :
- i) Outline map of Europe or India should be attached to the answer script after marking on it as asked in the question.
 - ii) Draw diagrams wherever necessary.

PART - A

- I. Choose the correct answer and complete each statement : 10 × 1 = 10
1. The European countries adopted method in China.
 - a) Mandatories
 - b) Spheres of influence
 - c) Colonialism.
 2. The victorious powers met in for peace talks.
 - a) London
 - b) Versailles
 - c) Paris.
 3. The Truman Doctrine was announced by
 - a) England
 - b) U.S.A.
 - c) France.
 4. The improvement in helped to carry on national propaganda in every nook and corner of the country.
 - a) industries
 - b) agriculture
 - c) communication.
 5. The European Coal and Steel Community was set up with members.
 - a) 4
 - b) 5
 - c) 6.
 6. East German leader resigned in October 1989.
 - a) Konrad Adenauer
 - b) Stalin
 - c) Erick Honecker.

[Turn over

7. The nuclear power station is at in Uttar Pradesh.
- a) Tarapur b) Kota c) Narora.
8. The presiding officer of the Lok Sabha is the
- a) Speaker b) President c) Prime Minister.
9. Exnora was founded in
- a) 1879 b) 1989 c) 1979.
10. The right to vote is known as
- a) Fundamental rights
- b) Franchise
- c) Constitution.

II. Answer each of the following in a word or phrase : 10 × 1 = 10

11. Name the system introduced by Lord Wellesley.
12. What was the name given to Mussolini's party members ?
13. Name the policy followed by Russia during the course of the Second World War.
14. Give the expansion of ANC.
15. Name the Governor General who passed the 'General Service Enlistment Act'.
16. What caused a backlash against the Soviet leadership ?
17. Give the meaning of the term "Intefadah".
18. What is MSSRF ?
19. What is the writ issued to quash an order or decision of the lower courts called ?
20. When was Sati declared illegal ?

III. A) Match the following : (History)

5 × 1 = 5

- | | |
|---------------------------|------------------|
| 21. Treaty of Nevilly | a) Rasputin |
| 22. Russian monk | b) Kuomintang |
| 23. Dr. Sun Yat-sen | c) Mangal Pandey |
| 24. Barrackpore | d) Leipzig |
| 25. Monday Demonstrations | e) Bulgaria. |

B) Match the following : (Civics)

5 × 1 = 5

- | | |
|------------------------|--------------------|
| 26. Desired direction | a) Nehru |
| 27. Panchsheel | b) Lok Sabha |
| 28. Partition of India | c) Quicker Justice |
| 29. Lok Adalat | d) Communalism |
| 30. Money Bill | e) Progress. |

PART - B

IV. Answer any *eight* of the following (*five* from History, *three* from Civics). Answer all the questions given under each caption :

8 × 5 = 40

HISTORY

31. Reactive Motive or Neo-imperialism
- Who were the adventurers and explorers to promote new wave of imperialism ?
 - What did the exploration of the adventurers pave the way for ?
 - What also contributed to the spread of imperialism ?
 - Why did millions of Europeans emigrate ?
 - Give examples of reactive imperialism.
32. Moroccan Problem :
- Who objected to France and Spain controlling Morocco ?
 - Where did the International Conference take place ?
 - Name the warships sent by Germany.
 - Where were the warships sent ?
 - Who declared that it would help France ?

[Turn over

33. Adolf Hitler :

- a) Who was Hitler ?
- b) What type of a person was Hitler ?
- c) What party was organized by him ?
- d) What did he do in 1923 ?
- e) Name the book written by Hitler.

34. NATO :

- a) When was NATO signed ?
- b) Name the countries which joined it in 1952 ?
- c) What was its chief aim ?
- d) What does NATO have ?
- e) What did NATO strengthen ?

35. Indo-China :

- a) Whose colony was Indo-China ?
- b) Who moved into Indo-China with her forces during World War II ?
- c) What was the reaction of the people of Indo-China ?
- d) Who captured the northern part of Indo-China after 1945 ?
- e) Where was an international conference held ?

36. Revolt at Cawnpore :

- a) Who led the Revolt at Cawnpore ?
- b) How did the sepoys attack the British troops ?
- c) How many British women were imprisoned by Nana Sahib ?
- d) Who defeated the rebels of Cawnpore ?
- e) What happened to Nana Sahib ?

37. The Indian National Congress :

- a) Who took initiative to found the Indian National Congress ?
- b) Where was the first session held ?
- c) Who was the President of this session ?
- d) Where was the second session held ?
- e) Give any one aim of the Congress.

38. European Union :

- a) Where do the historical roots of the European Union lie ?
- b) By whom was this idea of European integration proposed first ?
- c) What made the European leaders unite economically and politically ?
- d) What was proposed by Robert Schumann in 1950 ?
- e) What was the result ?

39. Effects of Reunification :

- a) Write about the cost of reunification.
- b) What is the primary cause of this cost ?
- c) What amount was specially transferred to build the eastern part of Germany ?
- d) Write about the economic standard of East and West Germany during the 1980s ?
- e) What strained the resources of West Germany ?

40. Industries of India :

- a) When and where was Tata Iron and Steel Company set up ?
- b) Where were iron and steel plants set up later ?
- c) Mention two places where fertilizer factories were set up.
- d) Mention two places where textile industries were set up.
- e) Where are ships built ?

[Turn over

CIVICS

41. Cabinet :
- What is a Cabinet ?
 - What type of decisions are taken by the Cabinet ?
 - What are the important legislative functions of the Cabinet ?
 - What does the Cabinet recommend to the President ?
 - What are its administrative functions ?
42. The Rajya Sabha :
- What is the maximum strength of the Rajya Sabha ?
 - How many members are elected by the states and Union Territories ?
 - How many members are nominated by the President ?
 - Whom does the President nominate ?
 - Why is the Rajya Sabha called a permanent house ?
43. Anti-social practices :
- What are the different anti-social practices ?
 - How does bribery occur ?
 - Name the Act enacted by the government against corruption.
 - Who are considered to be the criminals ?
 - What are the things smuggled into India ?
44. Dowry system :
- What are the evil outcomes of the dowry system ?
 - What was the Act passed in 1961 ?
 - What amendments were brought in 1986 ?
 - How is dowry death incorporated in the Indian Penal Code ?
 - Suggest a way to remove the dowry system.

45. Voting Day :

- a) Who will go to the booths on voting day ?
- b) What is the duty of every citizen ?
- c) What should be followed while voting ?
- d) When does a ballot paper become invalid ?
- e) What is the timing for voting ?

46. SAARC :

- a) Expand the term SAARC.
- b) When and where did SAARC meet for the first time ?
- c) Mention the member countries of SAARC.
- d) Mention any one area where the member countries have mutual cooperation.
- e) What was the main aim of the first summit ?

PART - C

V. 47. Answer any *one* of the following in not more than two pages : $1 \times 10 = 10$

- a) Describe the causes and results of the First World War.
- b) Enumerate the causes of the Great Revolt of 1857.
- c) What is the role of India in information technology and telecommunication ?

48. Answer any *one* set of the following. Each sub-question of the set should be answered in 15 lines : $2 \times 5 = 10$

- a) i) How is the President of India elected ? Explain his Legislative powers.
- ii) Write a note on AIDS.

OR

- b) i) Give an account of legislation on woman in free India.
- ii) Write about any two stages of the election process in India.

OR

- c) i) Explain any three features of India's foreign policy.
- ii) What is the composition of the Supreme Court ? How are the judges appointed ?

[Turn over

PART - D

VI. 49. On the outline map of Europe mark the following places during World War II : 10

Axis powers : Italy, Austria, Hungary.

Allies : England, Norway, Latvia.

Neutrals : Portugal, Spain, Ireland, Sweden.

OR

On the outline map of India, mark the following centres of nationalist movement :

i) Amritsar

ii) Ahmadabad

iii) Madras

iv) Vedaranyam

v) Dandi

vi) Champaran

vii) Chauri-Chaura

viii) Calcutta

ix) Surat

x) Hyderabad.

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MATHEMATICS — Paper I

Time Allowed : $2\frac{1}{2}$ Hours]

[Maximum Marks : 100

Instruction : Check the question paper for fairness of printing. If there is any lack of fairness, inform the Hall Supervisor immediately.

PART - I

- Note* :
- i) This Part contains *two* Sections, **Section - A** and **Section - B**.
 - ii) **Section - A** contains Multiple Choice Questions. Answer *all* the 20 questions. Each question carries *one* mark.
 - iii) **Section - B** contains 15 questions. Answer any *ten* questions. Each question carries two marks.

SECTION - A

I. Choose the correct answer from the given alternatives : $20 \times 1 = 20$

1. If $t_1 = n$, $t_2 = n + 1$, $t_3 = n + 2$ and so on, then $t_n =$

- | | |
|-------------|-------------|
| 1) n | 2) $2n - 1$ |
| 3) $2n + 1$ | 4) $2n$ |

2. The n th term of a GP is $\frac{2^{2n-1}}{3}$, then the common ratio is

- | | |
|------|------|
| 1) 2 | 2) 3 |
| 3) 4 | 4) 5 |

[Turn over

3. If m, p, q are consecutive terms in an AP then P is

1) $\frac{mq}{2}$

2) $\frac{m-q}{2}$

3) $\frac{m^2 + q^2}{2}$

4) $\frac{m+q}{2}$

4. The value of $\frac{1^3 + 2^3 + \dots + 10^3}{1 + 2 + \dots + 10}$ is

1) 45

2) 55

3) 385

4) 285.

5. The relation between the volume ' v ' of a sphere of radius ' r ' and its surface area ' s ' is

1) $v = \frac{2}{3}rs$

2) $v = \frac{r}{3}s$

3) $v = \frac{4}{3}sr$

4) $v = 4s.$

6. The ratio of radii and the ratio of heights of two cylinders is 1 : 4. The ratio of their volumes is

1) 1 : 16

2) 1 : 4

3) 64 : 1

4) 1 : 64.

7. If the ratio of the base of a cone is doubled and the height is tripled, then the volume is

1) made six times

2) made twelve times

3) made four times

4) made two times.

8. Identify the wrong statement(s).

I. set of whole numbers is a subset of set of real numbers

II. $f : R \rightarrow R$ defined by $f(x) = -x$ is one-one and into

III. $f : Z \rightarrow R$ defined as $f(x) = \frac{1}{x}$ is not a function

IV. $B - A = B$ if A and B are disjoint sets

1) (II) and (III)

2) (II) only

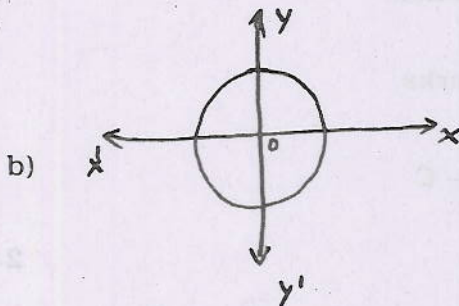
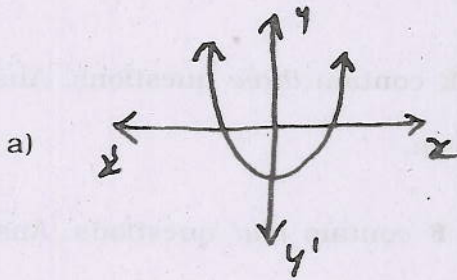
3) (III) only

4) (II) and (IV).

SECTION - B

II. Answer any *ten* questions : 10 × 2 = 20

21. For what value of n , the n th terms of the series $3 + 10 + 17 + \dots$ and $63 + 65 + 67 + \dots$ are equal.
22. Express $0.\overline{325}$ as a fraction.
23. Evaluate : $11^3 + 12^3 + 13^3 + \dots + k^3$ where $k = 50$.
24. The volume of a cylinder is 98π cu.cm and its height is 8 cm. Find its lateral surface area.
25. Two cones have their heights in the ratio 5 : 3 and the radii of their bases in the ratio 2 : 1. Find the ratio of their volumes.
26. The surface area of the sphere is 1386 sq.cm. Find its volume.
27. Use the vertical line test to determine which of the graphs represent a function.



28. Given $f : Z \rightarrow N$ is defined by $f(x) = x + 1$ test whether this represents a function or not. Give reason.
29. If $f(x) = 2x^2$; $g(x) = 3x - 1$, find $f \circ g$ and $g \circ f$.
30. Find the difference between CI and SI on Rs. 8000 at 5% per annum for 3 years.

[Turn over

31. Radha made a fixed deposit with a bank for 3 years paying 11% p.a. If she takes quarterly interest, find the interest she gets on Rs. 1000 deposit.
32. Find the remainder when $f(x) = x^3 - 6x^2 + 2x - 4$ is divided by $1 - 3x$.
33. Factorise $x^3 + 6x^2 + 11x + 6$.
34. Find the sum and product of the roots of the equation $2x^2 - 4x + 1 = 0$.
35. Solve : $3x - \frac{8}{x} = 2$.

PART - II

- Note : i) This Part contains *four* Sections, **Section - C**, **Section - D**, **Section - E** and **Section - F**.
- ii) **Section - C** and **Section - E** contain *three* questions. Answer any *two* questions from each section.
- iii) **Section - D** and **Section - F** contain *four* questions. Answer any *three* questions from each section.
- iv) Each question carries *five* marks.

SECTION - C

III. Answer any *two* questions :

$2 \times 5 = 10$

36. Given that $(p+1)^{\text{th}}$ term of an A.P. is twice the $(q+1)^{\text{th}}$ term. Prove that $(3p+1)^{\text{th}}$ term is twice the $(p+q+1)^{\text{th}}$ term.
37. Find the sum to n terms of the series $6 + 66 + 666 + \dots$
38. In an A.P. the sum of first 10 terms is 175 and the sum of next 10 terms is 475. Find the A.P.

SECTION - D

IV. Answer any *three* questions :

3 × 5 = 15

39. Using Venn diagram, verify $(A \cap B)' = A' \cup B'$.

40. Given $f(x) = x - 2$, $g(x) = 3x + 5$, $h(x) = 2x - 3$, verify that

$$(g \circ h) \circ f = g \circ (h \circ f).$$

41. Ramya invested Rs. 500 every month for 2 years in a bank and collects Rs. 12,500 at the end of 2 years. Find the rate of simple interest paid by the bank on recurring deposit.

42. Which is better investment ?

Rs. 2000 in a fixed deposit with a bank for 3 years, the interest being compounded half-yearly at the rate of 10% (or) Rs. 60 per month in a recurring deposit with a bank paying simple interest of 10% per annum for 36 months.

SECTION - E

V. Answer any *two* questions :

2 × 5 = 10

43. A hollow cylindrical iron pipe is 40 cm long. Its outer and inner diameters are 8 cm and 5 cm respectively. Find the volume of the material, and the weight of the pipe if 1 c.c. of iron weighs 7gm.

44. A sheet of metal in the shape of quadrant of a circle of radius 28 cm is bent into an open cone. Find the curved surface area of the cone.

45. An iron cone of diameter 8 cm and height 12 cm is melted and recast into lead shots of radius 2 mm. How many lead shots are obtained ?

[Turn over

SECTION - F

VI. Answer any *three* questions :

3 × 5 = 15

46. If $x^3 + ax^2 + bx + 6$ has $x - 2$ as a factor and leaves a remainder 3 when divided by $x - 3$, find a and b .
47. Decompose into partial fractions : $\frac{x^2 - 5x - 2}{(x - 3)(x^2 + 1)}$.
48. Find the value of a and b if $49x^4 - 70x^3 + 109x^2 + 9x - b$ is a perfect square.
49. If α and β are the roots of the equation $x^2 + 8x = -15$, form the equation whose roots are $(\alpha + \beta)$ and $3\alpha\beta$.

PART - III

Note : This Section contains *two* questions. Answer any *one* question.

SECTION - G

VII. Answer any *one* question :

1 × 10 = 10

50. Draw the graph of $y = x^2 + 2x - 3$ and hence solve the equation

$$x^2 - x - 6 = 0.$$

51. Solve graphically $x - \frac{3}{x} = 2$.

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MATHEMATICS — Paper II

Time Allowed : $2\frac{1}{2}$ Hours] [Maximum Marks : 100

Instruction : Check the question paper for fairness of printing. If there is any lack of fairness, inform the Hall Supervisor immediately.

PART - I

- Note :**
- This Part contains *two* Sections, **Section - A** and **Section - B**.
 - Section - A** contains Multiple Choice Questions. Answer all the *twenty* Questions. Each question carries *one* mark.
 - Section - B** contains 15 questions. Answer any *ten* questions. Each question carries *two* marks.

SECTION - A

Choose the correct answer from the given alternatives :

$20 \times 1 = 20$

1. If $x + \begin{bmatrix} 7 & 8 & -1 \\ 4 & 3 & -2 \end{bmatrix} = \begin{bmatrix} 9 & 10 & 1 \\ -4 & -3 & 2 \end{bmatrix}$, then $x =$

1) $\begin{bmatrix} 16 & 18 & 0 \\ 0 & 0 & 0 \end{bmatrix}$

2) $\begin{bmatrix} 2 & 2 & 2 \\ 8 & 6 & 4 \end{bmatrix}$

3) $\begin{bmatrix} 2 & 2 & 2 \\ -8 & -6 & -4 \end{bmatrix}$

4) $\begin{bmatrix} 2 & 2 & 2 \\ -8 & -6 & 4 \end{bmatrix}$

2. The order of the matrix $[0 \ 4 \ 8]$ is

1) 3×0

2) 3×1

3) 1×3

4) 1×0

[Turn over

3. If $\begin{bmatrix} 0 & 7 \\ a & 5 \end{bmatrix} + \begin{bmatrix} -3 & 4 \\ 5 & b \end{bmatrix} = \begin{bmatrix} -3 & 11 \\ 6 & 10 \end{bmatrix}$ then the values of a and b are

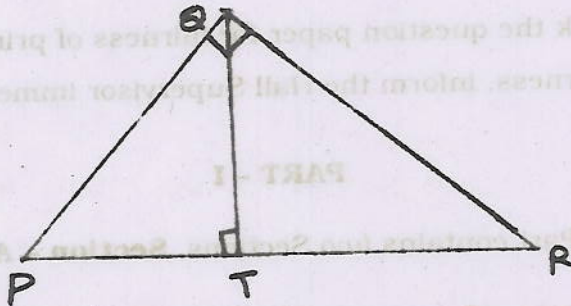
1) 1, 5

2) -1, 5

3) 5, 1

4) -1, -5.

4. In a right triangle PQR , the perpendicular QT on the hypotenuse PR is drawn. Then $PR \cdot PT =$



1) PR^2

2) PT^2

3) QT^2

4) PQ^2 .

5. Chords AB and CD intersect at P inside a circle. If $AP = 4$ cm, $PB = 6$ cm, $CP = 3$ cm, then PD is cm.

1) 5

2) 8

3) 7

4) 11.

6. If the ratio of altitudes of two similar triangles is $4 : 5$, then ratio of their areas is

1) $1 : 2$

2) $16 : 25$

3) $4 : 5$

4) $5 : 4$.

7. In triangle ABC , AD is the bisector of angle A . If $AB = 6$ cm, $AC = 8$ cm, $BD = 4.5$ cm then $DC =$ cm.

1) 5

2) 7.5

3) 6

4) 8.

8. AB is a line segment of length 6 cm and M is the midpoint. Semicircles are drawn with AM , MB and AB as diameter, all on the same side of AB . A circle is drawn to touch all the semicircles. The radius of the circle is
- 1) 6
 - 2) 3
 - 3) 2
 - 4) 1.
9. The angle of inclination with X -axis of the line whose slope is $\sqrt{3}$ is
- 1) 30°
 - 2) 45°
 - 3) 60°
 - 4) 90° .
10. The equation of the line passing through origin and parallel to the line $3x + 2y - 5 = 0$ is
- 1) $3x - 2y - 5 = 0$
 - 2) $2x - 3y = 0$
 - 3) $3x + 2y = 0$
 - 4) $-3x + 2y - 5 = 0$.
11. If $A(5, 5)$, $B(-5, 1)$, $C(10, 7)$ are collinear points, the area of triangle ABC is
- 1) $\frac{13}{2}$
 - 2) 9
 - 3) 25
 - 4) 0.
12. The midpoint of AB is the origin. If A is $(3, -2)$, then B is
- 1) $(3, 0)$
 - 2) $(0, -2)$
 - 3) $(-3, 2)$
 - 4) $(-2, -3)$.
13. The point of intersection of $3x - y = 2$ and $x + y = 6$ is
- 1) $(4, 4)$
 - 2) $(4, 10)$
 - 3) $(10, 4)$
 - 4) $(2, 4)$.
14. If $\cos 2A = \sin 48$, then the possible value of A is
- 1) 24°
 - 2) 42°
 - 3) 21°
 - 4) 12° .

[Turn over

15. The value of $\frac{2 \tan 30^\circ}{1 + \tan^2 30^\circ}$ is
- 1) $\frac{1}{2}$
 - 2) $\frac{1}{\sqrt{2}}$
 - 3) $\frac{\sqrt{3}}{2}$
 - 4) 1.
16. The angle of elevation of a ladder leaning against a wall is 60° and the foot of the ladder is 9.5 m from the wall. Then the length of the ladder is m.
- 1) 10
 - 2) 19
 - 3) 29
 - 4) 9.5.
17. If $\tan 2\theta = \cot (\theta + 6^\circ)$ where 2θ and θ are acute angles, then the value of θ is
- 1) 36°
 - 2) 26°
 - 3) 28°
 - 4) 6° .
18. The simplified value of $\sec A \sqrt{1 - \sin^2 A}$ is
- 1) -1
 - 2) 2
 - 3) -2
 - 4) 1.
19. A and B are mutually exclusive events. If $P(A) = \frac{1}{2}$, $P(B) = \frac{1}{3}$ then $P(A \cap B)$ is
- 1) $\frac{1}{6}$
 - 2) $\frac{5}{6}$
 - 3) 0
 - 4) ∞ .
20. The variance is 289 and its S.D. is
- 1) 17
 - 2) 18
 - 3) 13
 - 4) 21.

SECTION - B

Answer any ten questions :

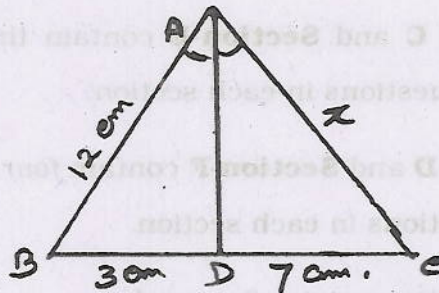
10 × 2 = 20

21. Find the unknowns
- a, b, c, d
- in the following matrix equation :

$$\begin{bmatrix} d+1 & 10+a \\ 3b-2 & c-4 \end{bmatrix} = \begin{bmatrix} 2 & 2a+1 \\ b-4 & 4c \end{bmatrix}$$

22. Solve : $\begin{bmatrix} 2 & 1 \\ 1 & 2 \end{bmatrix} \begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} 4 \\ 5 \end{bmatrix}$.

23. ABT is a secant of a circle which intersects the circle at A and B , and PT is a tangent to circle at P . If $PT = 5$ cm, $BT = 2.5$ cm, find AB .
24. The incircle touches triangle ABC at D, E, F . If $BD = 4$ cm, $CE = 8$ cm, $AF = 3$ cm, find the perimeter of the triangle.
25. In the given figure, AD is the angle bisector of $\angle BAC$. Find x if $AB = 12$ cm, $BD = 3$ cm and $DC = 7$ cm where x is equal to AC .



26. Show that the points $(-2, -1)$, $(1, 0)$, $(4, 3)$ and $(1, 2)$ are the vertices of a parallelogram.
27. Show that the points $A(4, 1)$, $B(-2, -3)$ and $C(-5, -5)$ are collinear.
28. Find the equation of the line cutting of intercepts $\frac{-4}{3}$ and $\frac{3}{4}$ on the x and y -axes respectively.
29. A straight line passes through $(1, 2)$ and has the equation $y = 2x + k$. Find k .
30. Prove that $\frac{\tan^2 \theta}{\sec \theta + 1} = \sec \theta - 1$.

[Turn over

31. Prove that $\cos^4 \theta - \cos^2 \theta = \sin^4 \theta - \sin^2 \theta$.
32. The angle of depression of a stone on the ground from the top of building is 40° . If the stone is at a distance 40 m away from the building, find the height of the building.
33. Evaluate $\tan^2 30^\circ + \tan^2 45^\circ + \tan^2 60^\circ$.
34. Find the S.D. of the first five natural numbers.
35. Three coins are tossed together. Find the probability that exactly two heads turn up.

PART - II

- Note :
- This part contains *four* Sections, **Section-C**, **Section-D**, **Section-E** and **Section-F**
 - Section - C** and **Section-E** contain three questions each. Answer any *two* questions in each section.
 - Section - D** and **Section-F** contain *four* questions each. Answer any *three* questions in each section.
 - Each question carries *five* marks.

SECTION - C

Answer any *two* questions :

$2 \times 5 = 10$

36. State and prove Thales Theorem.
37. Prove that the ratio of the areas of two similar triangles is equal to the ratio of the squares of their corresponding angle bisectors.
38. PQR is a triangle in which $PQ = PR$ and Z is a point on the side PR such that $QR^2 = PR \cdot RZ$. Prove that $QZ = QR$.

SECTION - D

Answer any three questions :

 $3 \times 5 = 15$

39. If $A = \begin{bmatrix} 1 & -1 \\ 2 & -1 \end{bmatrix}$ and $B = \begin{bmatrix} a & 1 \\ b & -1 \end{bmatrix}$ and $(A+B)^2 = A^2 + B^2$, find a and b .

40. If $A = \begin{bmatrix} 3 & 1 \\ -1 & 2 \end{bmatrix}$, show that $A^2 - 5A + 7I_2 = 0$.

41. A two digit number is formed of the digits 2, 5 and 9. Find the probability that it is divisible by 2 or 5. (Repetition of digits is not allowed).

42. Find the variance of the following :

| | | | | |
|------|---------|---------|---------|---------|
| C.I. | 20 - 30 | 30 - 40 | 40 - 50 | 50 - 60 |
| f | 8 | 6 | 5 | 4 |

SECTION - E

Answer any two questions :

 $2 \times 5 = 10$

43. Prove that

$$\frac{\cos \theta}{1 - \tan \theta} + \frac{\sin \theta}{1 - \cot \theta} = \cos \theta + \sin \theta.$$

44. In a right triangle ABC , $\angle C = 90^\circ$, $\angle A = 30^\circ$ and $AB = 8$ cm. Find $\angle B$ and the sides BC and AC .

45. The angle of elevation of a tower at a point is 45° . After going 20 m towards the foot of the tower the angle of elevation of the tower becomes 60° . Calculate the height of the tower.

[Turn over

SECTION - FAnswer any *three* questions :

3 × 5 = 15

46. The vertices of a triangle are $A(1, 8)$, $B(-2, 4)$, $C(8, -5)$. M , N are the midpoints of AB and AC . Show that $MN \parallel BC$ and $MN = \frac{1}{2}BC$.
47. Find the equation of the straight line joining the point of intersection of $3x - y + 9 = 0$ and $2y + x - 4 = 0$ to the point of intersection of $2x + y = 4$ and $2y = x + 3$.
48. Show that the points $(4, 8)$, $(-4, 0)$, $(-3, 1)$, $(-7, -3)$ are collinear.
49. The line joining $(-4, 6)$ and $(-1, -3)$ is perpendicular to the line joining $(0, -4)$ and $(3, a)$. Find a .

PART - III

- Note :
- i) This part contains **Section-G**.
 - ii) Answer any *one* question.
 - iii) The question carries *ten* marks.

SECTION - GAnswer any *one* question :

1 × 10 = 10

50. Construct a triangle ABC in which $BC = 7.5$ cm, $\angle A = 55^\circ$, and the median through A is of length 5.5 cm. Also find the length of the altitude drawn from the vertex A on BC .
51. Draw a circle of radius 3.6 cm. Take a point P on it. Without using the centre of circle draw a tangent to circle at point P .