

Signature and Name of Invigilator

PAPER-I

1. (Signature) _____

(Name) _____

2. (Signature) _____

(Name) _____

OMR Sheet No. :

(To be filled by the Candidate)

Roll No.

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(In figures as per admission card)

Roll No. _____

(In words)

J A 0 0 1 7

Time : 1 ¼ hours]

Test Booklet Series **W**

[Maximum Marks : 100

Number of Pages in this Booklet : 24

Number of Questions in this Booklet : 60

Instructions for the Candidates

- Write your roll number in the space provided on the top of this page.
- This paper consists of sixty (60) multiple-choice type of questions, out of which the candidate would be required to answer any fifty (50) questions. In the event of the candidate attempting more than fifty questions, the first fifty questions attempted by the Candidate would be evaluated.
- At the commencement of examination, the question booklet will be given to you. In the first 5 minutes, you are requested to open the booklet and compulsorily examine it as below :
 - To have access to the Question Booklet, tear off the paper seal / polythene bag on the booklet. Do not accept a booklet without sticker-seal / without polythene bag and do not accept an open booklet.
 - Tally the number of pages and number of questions in the booklet with the information printed on the cover page. Faulty booklets due to pages/questions missing or duplicate or not in serial order or any other discrepancy should be got replaced immediately by a correct booklet from the invigilator within the period of 5 minutes. Afterwards, neither the Question Booklet will be replaced nor any extra time will be given.**
 - After this verification is over, the Test Booklet Number should be entered on the OMR Sheet and the OMR Sheet Number should be entered on this Test Booklet.
 - The Series of this booklet is **W**, make sure that the series printed on OMR Sheet and Answer Sheet No. is same as that on this booklet. In case of discrepancy in Series and Answer Sheet no., the candidate should immediately report the matter to the Invigilator for replacement of the Test Booklet/OMR Sheet.
- Each item has four alternative responses marked (1), (2), (3) and (4). You have to darken the circle as indicated below on the correct response against each item.

Example : ① ② ● ④

where (3) is the correct response.
- Your responses to the items are to be indicated in the **OMR Sheet given inside this Booklet only**. If you mark your response at any place other than in the circle in the OMR Sheet, it will not be evaluated.
- Read instructions given inside carefully.
- Rough Work is to be done in the end of this booklet.
- If you write your Name, Roll Number, Phone Number or put any mark on any part of the OMR Sheet, except for the space allotted for the relevant entries, which may disclose your identity, or use abusive language or employ any other unfair means such as change of response by scratching or using white fluid, you will render yourself liable to disqualification.
- You have to return the Original OMR Sheet to the invigilators at the end of the examination compulsorily and must not carry it with you outside the Examination Hall. You are, however, allowed to carry original question booklet on conclusion of examination.
- Use only **Black Ball point pen**.
- Use of any calculator or log table etc., is prohibited.
- There are no negative marks for incorrect answers.
- In case of any discrepancy in the English and Hindi versions, English version will be taken as final.

परीक्षार्थियों के लिए निर्देश

- इस पृष्ठ के ऊपर नियत स्थान पर अपना रोल नम्बर लिखिए।
- इस प्रश्न-पत्र में साठ (60) बहुविकल्पीय प्रश्न हैं, जिनमें से उम्मीदवार को किसी भी पचास (50) प्रश्न का उत्तर देना होगा। उम्मीदवार द्वारा पचास से अधिक प्रश्नों का उत्तर देने पर उम्मीदवार द्वारा दिये गये प्रथम पचास प्रश्नों का मूल्यांकन किया जायेगा।
- परीक्षा प्रारम्भ होने पर, प्रश्न-पुस्तिका आपको दे दी जायेगी। पहले पाँच मिनट आपको प्रश्न-पुस्तिका खोलने तथा उसकी निम्नलिखित जाँच के लिए दिये जायेंगे, जिसकी जाँच आपको अवश्य करनी है :
 - प्रश्न-पुस्तिका खोलने के लिए पुस्तिका पर लगी कागज की सील / पोलिथीन बैग को फाड़ लें। खुली हुई या बिना स्टीकर-सील / बिना पोलिथीन बैग की पुस्तिका स्वीकार न करें।
 - कवर पृष्ठ पर छपे निर्देशानुसार प्रश्न-पुस्तिका के पृष्ठ तथा प्रश्नों की संख्या को अच्छी तरह चेक कर लें कि ये पूरे हैं। दोषपूर्ण पुस्तिका जिनमें पृष्ठ/प्रश्न कम हों या दुबारा आ गये हों या सीरियल में न हों अर्थात् किसी भी प्रकार की त्रुटिपूर्ण पुस्तिका स्वीकार न करें तथा उसी समय उसे लौटाकर उसके स्थान पर दूसरी सही प्रश्न-पुस्तिका ले लें। इसके लिए आपको पाँच मिनट दिये जायेंगे। उसके बाद न तो आपकी प्रश्न-पुस्तिका वापस ली जायेगी और न ही आपको अतिरिक्त समय दिया जायेगा।
 - इस जाँच के बाद प्रश्न-पुस्तिका का नंबर OMR पत्रक पर अंकित करें और OMR पत्रक का नंबर इस प्रश्न-पुस्तिका पर अंकित कर दें।
 - इस प्रश्न-पुस्तिका की सीरीज़ **W** है। यह सुनिश्चित कर लें कि इस प्रश्न-पुस्तिका की सीरीज़ और प्रश्न-पुस्तिका संख्या, OMR पत्रक के सीरीज़ और उत्तर पत्रक नं. से मिलते हैं। अगर सीरीज़ और OMR पत्रक नं. भिन्न हों तो परीक्षार्थी दूसरी समान सीरीज़ और नंबर वाली प्रश्न-पुस्तिका/OMR पत्रक बदलने के लिए निरीक्षक को तुरंत सूचित करें।
- प्रत्येक प्रश्न के लिए चार उत्तर विकल्प (1), (2), (3) तथा (4) दिये गये हैं। आपको सही उत्तर के वृत्त को पेन से भरकर काला करना है जैसा कि नीचे दिखाया गया है।

उदाहरण : ① ② ● ④ जबकि (3) सही उत्तर है।
- प्रश्नों के उत्तर केवल प्रश्न पुस्तिका के अन्दर दिये गये OMR पत्रक पर ही अंकित करने हैं। यदि आप OMR पत्रक पर दिये गये वृत्त के अलावा किसी अन्य स्थान पर उत्तर चिह्नानंकित करते हैं, तो उसका मूल्यांकन नहीं होगा।
- अन्दर दिये गये निर्देशों को ध्यानपूर्वक पढ़ें।
- कच्चा काम (Rough Work) इस पुस्तिका के अन्तिम पृष्ठ पर करें।
- यदि आप OMR पत्रक पर नियत स्थान के अलावा अपना नाम, रोल नम्बर, फोन नम्बर या कोई भी ऐसा चिह्न जिससे आपकी पहचान हो सके, अंकित करते हैं अथवा अभद्र भाषा का प्रयोग करते हैं, या कोई अन्य अनुचित साधन का प्रयोग करते हैं, जैसे कि अंकित किये गये उत्तर को मिटाना या सफेद स्याही से बदलना तो परीक्षा के लिये अयोग्य घोषित किये जा सकते हैं।
- आपको परीक्षा समाप्त होने पर मूल OMR पत्रक निरीक्षक महोदय को लौटाना आवश्यक है और परीक्षा समाप्ति के बाद उसे अपने साथ परीक्षा भवन से बाहर न लेकर जायें। हालाँकि आप परीक्षा समाप्ति पर मूल प्रश्न-पुस्तिका अपने साथ ले जा सकते हैं।
- काले बाल प्वाइंट पेन का ही इस्तेमाल करें।
- किसी भी प्रकार का संगणक (कैलकुलेटर) या लाग टेबल आदि का प्रयोग वर्जित है।
- गलत उत्तरों के लिए कोई नकारात्मक अंक नहीं हैं।
- यदि अंग्रेजी या हिंदी विवरण में कोई विसंगति हो, तो अंग्रेजी विवरण अंतिम माना जाएगा।

W-00



P.T.O.

Paper – I

- Note :**
- This paper contains **Sixty (60)** multiple-choice questions, each question carrying **two (2)** marks.
 - Candidate is expected to answer any **Fifty (50)** questions.
 - In case more than **Fifty (50)** questions are attempted, only the first **Fifty (50)** questions will be evaluated.

1. The principal of a school conducts an interview session of teachers and students with a view to explore the possibility of their enhanced participation in school programmes. This endeavour may be related to which type of research ?

- (1) Evaluation Research (2) Fundamental Research
(3) Action Research (4) Applied Research

2. In doing action research what is the usual sequence of steps ?

- (1) Reflect, observe, plan, act (2) Plan, act, observe, reflect
(3) Plan, reflect, observe, act (4) Act, observe, plan, reflect

3. Which sequence of research steps is logical in the list given below ?

- (1) Problem formulation, Analysis, Development of Research design, Hypothesis making, Collection of data, Arriving at generalizations and conclusions.
(2) Development of Research design, Hypothesis making, Problem formulation, Data analysis, Arriving at conclusions and data collection.
(3) Problem formulation, Hypothesis making, Development of a Research design, Collection of data, Data analysis and formulation of generalizations and conclusions.
(4) Problem formulation, Deciding about the sample and data collection tools, Formulation of hypothesis, Collection and interpretation of research evidence.

4. Below are given two sets – research methods (Set-I) and data collection tools (Set-II). Match the two sets and indicate your answer by selecting the correct code :

Set – I

(Research Methods)

- a. Experimental method
b. Ex post-facto method
c. Descriptive survey method
d. Historical method

Set – II

(Data Collection Tools)

- i. Using primary and secondary sources
ii. Questionnaire
iii. Standardized tests
iv. Typical characteristic tests

Codes :

- | | a | b | c | d |
|-----|-----|-----|-----|----|
| (1) | ii | i | iii | iv |
| (2) | iii | iv | ii | i |
| (3) | ii | iii | i | iv |
| (4) | ii | iv | iii | i |

5. The issue of ‘research ethics’ may be considered pertinent at which stage of research ?

- (1) At the stage of problem formulation and its definition
(2) At the stage of defining the population of research
(3) At the stage of data collection and interpretation
(4) At the stage of reporting the findings.

6. In which of the following, reporting format is formally prescribed ?

- (1) Doctoral level thesis (2) Conference of researchers
(3) Workshops and seminars (4) Symposia

Read the following passage carefully and answer questions from 7 to 12 :

The last great war, which nearly shook the foundations of the modern world, had little impact on Indian literature beyond aggravating the popular revulsion against violence and adding to the growing disillusionment with the 'humane pretensions' of the Western World. This was eloquently voiced in Tagore's later poems and his last testament, Crisis in Civilisation. The Indian intelligentsia was in a state of moral dilemma. On the one hand, it could not help sympathising with England's dogged courage in the hour of peril, with the Russians fighting with their backs to the wall against the ruthless Nazi hordes, and with China groaning under the heel of Japanese militarism; on the other hand, their own country was practically under military occupation of their own soil, and an Indian army under Subhas Bose was trying from the opposite camp to liberate their country. No creative impulse could issue from such confusion of loyalties. One would imagine that the achievement of Indian independence in 1947, which came in the wake of the Allies' victory and was followed by the collapse of colonialism in the neighbouring countries of South-East Asia, would have released an upsurge of creative energy. No doubt it did, but unfortunately it was soon submerged in the great agony of partition, with its inhuman slaughter of the innocents and the uprooting of millions of people from their homeland, followed by the martyrdom of Mahatma Gandhi. These tragedies, along with Pakistan's invasion of Kashmir and its later atrocities in Bangladesh, did indeed provoke a poignant writing, particularly in the languages of the regions most affected, Bengali, Hindi, Kashmiri, Punjabi, Sindhi and Urdu. But poignant or passionate writing does not by itself make great literature. What reserves of enthusiasm and confidence survived these disasters have been mainly absorbed in the task of national reconstruction and economic development. Great literature has always emerged out of chains of convulsions. Indian literature is richer today in volume, range and variety than it ever was in the past.

Based on the passage answer the following questions from 7 to 12 :

7. What was the impact of the last great war on Indian literature ?
 - (1) It had no impact.
 - (2) It aggravated popular revulsion against violence.
 - (3) It shook the foundations of literature.
 - (4) It offered eloquent support to the Western World.
8. What did Tagore articulate in his last testament ?
 - (1) Offered support to Subhas Bose.
 - (2) Exposed the humane pretensions of the Western World.
 - (3) Expressed loyalty to England.
 - (4) Encouraged the liberation of countries.
9. What was the stance of Indian intelligentsia during the period of great war ?
 - (1) Indifference to Russia's plight.
 - (2) They favoured Japanese militarism.
 - (3) They prompted creativity out of confused loyalties.
 - (4) They expressed sympathy for England's dogged courage.
10. Identify the factor responsible for the submergence of creative energy in Indian literature.
 - (1) Military occupation of one's own soil.
 - (2) Resistance to colonial occupation.
 - (3) Great agony of partition.
 - (4) Victory of Allies.
11. What was the aftermath that survived tragedies in Kashmir and Bangladesh ?
 - (1) Suspicion of other countries
 - (2) Continuance of rivalry
 - (3) Menace of war
 - (4) National reconstruction
12. The passage has the message that
 - (1) Disasters are inevitable.
 - (2) Great literature emerges out of chains of convulsions.
 - (3) Indian literature does not have a marked landscape.
 - (4) Literature has no relation with war and independence.

13. Effective communication pre-supposes

- (1) Non-alignment
- (2) Domination
- (3) Passivity
- (4) Understanding

14. When verbal and non-verbal messages are contradictory, it is said that most people believe in

- (1) indeterminate messages
- (2) verbal messages
- (3) non-verbal messages
- (4) aggressive messages

15. The typical feature of an information-rich classroom lecture is in the nature of being

- (1) Sedentary
- (2) Staggered
- (3) Factual
- (4) Sectoral

16. Expressive communication is driven by

- (1) Passive aggression
- (2) Encoder's personality characteristics
- (3) External clues
- (4) Encoder-decoder contract

17. Positive classroom communication leads to

- (1) Coercion
- (2) Submission
- (3) Confrontation
- (4) Persuasion

18. Classroom communication is the basis of

- (1) Social identity
- (2) External inabilities
- (3) Biased passivity
- (4) Group aggression

19. The missing term in the series 1, 4, 27, 16, ?, 36, 343, ... is
- (1) 30 (2) 49
(3) 125 (4) 81
20. The next term in the following series YEB, WFD, UHG, SKI, ___ will be
- (1) TLO (2) QOL
(3) QLO (4) GQP
21. If A is coded as C, M as I, N as P, S as O, I as A, P as N, E as M, O as E and C as S, then the code of COMPANIES will be
- (1) SPEINMOAC (2) NCPSEIOMA
(3) SMOPIEACN (4) SEINCPAMO
22. Among the following, identify the continuous type of data :
- (1) Number of languages a person speaks
(2) Number of children in a household
(3) Population of cities
(4) Weight of students in a class
23. Ali buys a glass, a pencil box and a cup and pays ₹ 21 to the shopkeeper. Rakesh buys a cup, two pencil boxes and a glass and pays ₹ 28 to the shopkeeper. Preeti buys two glasses, a cup and two pencil boxes and pays ₹ 35 to the shopkeeper. The cost of 10 cups will be
- (1) ₹ 40
(2) ₹ 60
(3) ₹ 80
(4) ₹ 70
24. Out of four cities given below three are alike in some manner while the fourth one is different. Identify the odd one
- (1) Lucknow
(2) Rishikesh
(3) Allahabad
(4) Patna
25. Given below are some characteristics of reasoning. Select the code that states a characteristic which is not of deductive reasoning :
- (1) The conclusion must be based on observation and experiment.
(2) The conclusion should be supported by the premise/premises.
(3) The conclusion must follow from the premise/premises necessarily.
(4) The argument may be valid or invalid.

26. If two standard form categorical propositions with the same subject and predicate are related in such a manner that if one is undetermined the other must be undetermined, what is their relation ?
- (1) Contrary (2) Subcontrary
(3) Contradictory (4) Sub-altern

27. Men and woman may have different reproductive strategies but neither can be considered inferior or superior to the other, any more than a bird's wings can be considered superior or inferior to a fish's fins. What type of argument it is ?
- (1) Biological (2) Physiological
(3) Analogical (4) Hypothetical

28. Among the following propositions two are related in such a way that they cannot both be true but can both be false. Select the code that states those two propositions.

Propositions :

- (a) Every student is attentive.
(b) Some students are attentive.
(c) Students are never attentive.
(d) Some students are not attentive.

Codes :

- (1) (a) and (b) (2) (a) and (c)
(3) (b) and (c) (4) (c) and (d)

29. Given below are two premises ((a) and (b)). From those two premises four conclusions (i), (ii), (iii) & (iv) are drawn. Select the code that states the conclusions validly drawn from the premises (taking singly or jointly.)

Premises : (a) Untouchability is a curse.

(b) All hot pans are untouchable.

Conclusions : (i) All hot pans are curse.

(ii) Some untouchable things are hot pans.

(iii) All curses are untouchability.

(iv) Some curses are untouchability.

Codes :

- (1) (i) and (ii) (2) (ii) and (iii)
(3) (iii) and (iv) (4) (ii) and (iv)

30. If the statement 'None but the brave wins the race' is false which of the following statements can be claimed to be true ?

Select the correct code :

- (1) All brave persons win the race.
(2) Some persons who win the race are not brave.
(3) Some persons who win the race are brave.
(4) No person who wins the race is brave.

The table below embodies data on the sales revenue (₹ in lakh) generated by a publishing house during the years 2012-15 while selling books, magazines and journals as three categories of items. Answer questions 31 – 33 based on the data contained in the table.

	Sales Revenue (₹ in lakh)			
Year → Items ↓	2012	2013	2014	2015
Journals	46	47	45	44
Magazines	31	39	46	51
Books	73	77	78	78
Total				

31. In 2015, approximately what percent of total revenue came from books ?
- (1) 45%
 - (2) 55%
 - (3) 35%
 - (4) 25%
32. The number of years in which there was an increase in revenue from at least two categories of items, is
- (1) 0
 - (2) 1
 - (3) 2
 - (4) 3
33. If the year 2016 were to show the same growth in terms of total sales revenue as the year 2015 over the year 2014, then the revenue in the year 2016 must be approximately :
- (1) ₹ 194 lakh
 - (2) ₹ 187 lakh
 - (3) ₹ 172 lakh
 - (4) ₹ 177 lakh

A University professor maintains data on MCA students tabulated by performance and gender of the students. The data is kept on a computer hard disk, but accidentally some of it is lost because of a computer virus. Only the following could be recovered :

		Number of MCA Students			Total
		Average	Good	Excellent	
Gender ↓	Performance →				
				10	
	Male				32
	Female				
	Total		30		

Panic buttons were pressed but to no avail. An expert committee was formed, which decided that the following facts were self evident :

- (a) Half the students were either excellent or good.
- (b) 40% of the students were females.
- (c) One-third of the male students were average.

Answer questions 34 – 36 based on the data given above :

34. How many female students are excellent ?
 (1) 0 (2) 8
 (3) 16 (4) 32
35. What proportion of female students are good ?
 (1) 0 (2) 0.25
 (3) 0.50 (4) 0.75
36. Approximately, what proportion of good students are male ?
 (1) 0 (2) 0.73
 (3) 0.43 (4) 0.27
37. Which of the following statement(s) is/are TRUE ?
S1 : The decimal number 11 is larger than the hexadecimal number 11.
S2 : In the binary number 1110.101, the fractional part has the decimal value as 0.625.
 (1) S1 only (2) S2 only
 (3) Both S1 and S2 (4) Neither S1 nor S2
38. Read the following two statements :
I : Information and Communication Technology (ICT) is considered a subset of Information Technology (IT).
II : The 'right to use' a piece of software is termed as copyright.
 Which of the above statement(s) is/are CORRECT ?
 (1) Both I and II (2) Neither I nor II
 (3) II only (4) I only
39. Which of the following correctly lists computer memory types from highest to lowest speed ?
 (1) Secondary Storage; Main Memory (RAM); Cache Memory; CPU Registers
 (2) CPU Registers; Cache Memory; Secondary Storage; Main Memory (RAM)
 (3) CPU Registers; Cache Memory; Main Memory (RAM); Secondary Storage
 (4) Cache Memory; CPU Registers; Main Memory (RAM); Secondary Storage

40. Which of the following is a characteristic of Web2.0 applications ?
- (1) Multiple users schedule their time to use Web2.0 applications one by one.
 - (2) Web2.0 applications are focused on the ability for people to collaborate and share information online.
 - (3) Web2.0 applications provide users with content rather than facilitating users to create it.
 - (4) Web2.0 applications use only static pages.
41. With regard to a word processing software, the process of combining static information in a publication together with variable information in a data source to create one merged publication is called
- (1) Electronic mail
 - (2) Data sourcing
 - (3) Mail merge
 - (4) Spam mail
42. DVD technology uses an optical media to store the digital data. DVD is an acronym for
- (1) Digital Vector Disc
 - (2) Digital Volume Disc
 - (3) Digital Versatile Disc
 - (4) Digital Visualization Disc
43. **Assertion (A) :** Sustainable development is critical to well being of human society.
Reason (R) : Environmentally sound policies do not harm the environment or deplete the natural resources.
- Choose the correct code :
- (1) Both (A) and (R) are correct and (R) is the correct explanation of (A).
 - (2) Both (A) and (R) are correct, but (R) is not the correct explanation of (A).
 - (3) (A) is true and (R) is false.
 - (4) (A) is false and (R) is true.
44. The dominant source of pollution due to oxides of nitrogen (NO_x) in urban areas is
- (1) road transport
 - (2) commercial sector
 - (3) energy use in industry
 - (4) power plants
45. Which of the following is not a water-borne disease ?
- (1) Typhoid
 - (2) Hepatitis
 - (3) Cholera
 - (4) Dengue

46. Indian government's target for power production from small hydro projects by the year 2022 is

- (1) 1 Giga-Watt (2) 5 Giga-Watt
(3) 10 Giga-Watt (4) 15 Giga-Watt

47. In which country, the recent international agreement on phasing out Hydro Fluoro Carbons (HFCs) was signed ?

- (1) Rwanda (2) Morocco
(3) South Africa (4) Algeria

48. Which of the following natural hazards is not hydro-meteorological ?

- (1) Snow avalanche (2) Sea erosion
(3) Tropical cyclone (4) Tsunami

49. Which of the following are the demerits of globalisation of higher education ?

- (a) Exposure to global curriculum
(b) Promotion of elitism in education
(c) Commodification of higher education
(d) Increase in the cost of education

Select the correct answer from the codes given below :

Codes :

- (1) (a) and (d) (2) (a), (c) and (d)
(3) (b), (c) and (d) (4) (a), (b), (c) and (d)

50. Which of the following statements are correct about deemed universities ?

- (a) The Governor of the State is the chancellor of deemed universities.
(b) They can design their own syllabus and course work.
(c) They can frame their own guidelines regarding admission and fees.
(d) They can grant degrees.

Select the correct answer from the codes given below :

Codes :

- (1) (a), (b) and (c) (2) (b), (c) and (d)
(3) (a), (c) and (d) (4) (a), (b), (c) and (d)

QNO	ANS	QNO	ANS	QNO	ANS	QNO	ANS
1	3	26	3	51	3	76	
2	2	27	3	52	2	77	
3	3	28	2	53	1	78	
4	2	29	4	54	2	79	
5	3	30	2	55	2	80	
6	1	31	1	56	1	81	
7	2	32	3	57	3	82	
8	2	33	4	58	4	83	
9	4	34	1	59	4	84	
10	3	35	2	60	3	85	
11	4	36	2	61		86	
12	2	37	2	62		87	
13	4	38	2	63		88	
14	3	39	3	64		89	
15	3	40	2	65		90	
16	2	41	3	66		91	
17	4	42	3	67		92	
18	1	43	2	68		93	
19	3	44	1	69		94	
20	2	45	4	70		95	
21	4	46	2	71		96	
22	4	47	1	72		97	
23	4	48	4	73		98	
24	1	49	3	74		99	
25	1	50	2	75		100	
