Roll No.	Signature of Invigilators		
(Write Roll Number from left side exactly as in the Admit Card)		1 2	
0017	Question Booklet Series X		
	PAPER-I	Question Booklet No.	
Subject Code: 00		(Identical with OMR Answer Sheet Number)	

GENERAL

Time: 1 Hour 15 Minutes Maximum Marks: 100

Instructions for the Candidates

- 1. Write your Roll Number in the space provided on the top of this page as well as on the OMR Sheet provided.
- 2. At the commencement of the examination, the question booklet will be given to you. In the first 5 minutes, you are requested to open the booklet and verify it:
 - (i) To have access to the Question Booklet, tear off the paper seal on the edge of this cover page.
 - (ii) Faulty booklet, if detected, should be get 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.
 - (iii) Verify whether the Question Booklet No. is identical with OMR Answer Sheet No.; if not, the full set to be replaced.
 - (iv) After this verification is over, the Question Booklet Series and Question Booklet Number should be entered on the OMR Sheet.
- 3. This paper consists of sixty (60) multiple-choice type questions, out of which the candidate would be required to answer any fifty (50) questions. In the event of candidate attempting more than fifty questions, the first fifty questions attempted by the candidate would be evaluated. Each question carries *two* marks.
- 4. Each Question has four alternative responses marked: (A) (B) (C) (D). You have to darken the circle as indicated below on the correct response against each question.

Example: (A)(B)(D), where (C) is the correct response.

- 5. Your responses to the questions are to be indicated correctly in the OMR Sheet. If you mark your response at any place other than in the circle in the OMR Sheet, it will not be evaluated.
- 6. Rough work is to be done at the end of this booklet.
- 7. If you write your Name, Roll Number, Phone Number or put any mark on any part of the OMR Sheet, except 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.
- 8. Do not tamper or fold the OMR Sheet in any way. If you do so, your OMR Sheet will not be evaluated.
- 9. You have to return the Original OMR Sheet to the invigilator at the end of the examination compulsorily and must not carry it with you outside the Examination Hall. You are, however, allowed to carry question booklet and duplicate copy of OMR Sheet after completion of examination.
- 10. Use only Black Ball point pen.
- 11. Use of any calculator or mobile phone etc. is strictly prohibited.
- 12. There are no negative marks for incorrect answers.

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GENERAL

PAPER I

Read the passage below and answer the questions based on the understanding of the passage (Question Nos. 1 to 5)

A book is written, not to multiply the voice merely, not to carry it merely but to perpetuate it. The author has something to say which he perceives to be true or useful or helpfully beautiful. So far he knows no one has said it, so far as he knows no one else can say it. He is bound to say it clearly and melodiously if he may; clearly at all events. In the sum of his life, he finds this to be the thing or group of things, manifest him; this, the piece of true knowledge, which his share of sunshine and earth has permitted him to seize. That is a book.

- 1. The opening sentence of the passage implies that the aim of writing a book is to
 - (A) repeat the message it contains.
 - (B) enable the author to express his ideas in writing.
 - (C) preserve from extinction the message it contains.
 - (D) propagate the ideology of the author.
- **2.** Which of the following would be the most suitable title of the passage?
 - (A) Contribution of an Author
 - (B) Aim of Writing a Book
 - (C) Books: The Source of True Knowledge
 - (D) Writers and their books
- **3.** According to the writer, a person is impelled to write a book, because
 - (A) he wishes to satisfy his ego.
 - (B) he has something nice and pleasing to say.
 - (C) he is capable of expressing whatever he wants to say.
 - (D) he has discovered something unique, true and good which he must convey distinctly and musically.

4. Which of the following is not implied in the passage?

- (A) A writer is motivated to write a book if he discerns a great truth.
- (B) An author of a book generally gathers some common truths and gives them a popular and pleasing expression.
- (C) A great writer is convinced that whatever he says is not an echo or imitation of what others have said.
- (D) An eminent writer's message is conveyed through plain unambiguous language.
- **5.** Which of the following is opposite in meaning to the word "manifest" given in the passage?
 - (A) Unclear
 - (B) Dark
 - (C) Pure
 - (D) Hard
- **6.** Achievement test, Observation, Interview and Questionnaire are procedures of
 - (A) Measurement
 - (B) Assessment
 - (C) Testing
 - (D) Evaluation
- 7. The basic goal of teaching is to enable the learners for
 - (A) what to learn?
 - (B) how to learn?
 - (C) when to learn?
 - (D) why to learn?

(A) Theory testing

(C) Atheoretical

(B) Theory developing

(D) Validating theory

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8. Which of the following method of teaching does not involve 'learning by doing'? (A) Heuristic method (B) Project method (C) Demonstration method (D) Discovery method	12. Which one of the following is the best measure for conducting research in an ethical manner? (A) Confidentiality of data (B) Participant's consent (C) Participant's anonymity (D) Option of refusing participation	
9. Match the items of <i>List-I</i> with the items of <i>List-II</i> and indicate your answer by selecting the correct code: **List-II** List-II** (a) Pedagogy (i) Jerone Bruner (b) Video-conferencing (ii) Experiential learning (c) Constructivist theory (iii) Multi-sensory experiences (d) Discovery learning (iv) Teaching children	 13. Action research is (A) A classroom research (B) A teacher research (C) A practitioner research (D) A community research 	
Codes: (a) (b) (c) (d) (A) (i) (iii) (iv) (ii) (B) (iv) (iii) (ii) (i) (C) (iii) (ii) (iv) (i) (D) (iv) (i) (ii) (iii)	14. In a study, a researcher used intact classrooms as the experimental and control groups by employing (A) Semi-experimental design (B) True-experimental design (C) Multi-experimental design (D) Quasi-experimental design	
 10. Out of the following which action takes precedence over others by a researcher? (A) Formulation of the hypothesis (B) Review of literature (C) Analysis of research data (D) Preparation of bibliography 	 15. In writing a research report, arrange the following in order and indicate your answer by selecting the correct code 1. Implications 2. Results 3. Suggestions 4. Conclusions 	
11. Quantitative research is normally	Codes:	

(A) 3, 2, 4, 1

(B) 2, 4, 1, 3 (C) 4, 1, 3, 2

(D) 1, 2, 3, 4

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16. Match *List-I* with *List-II* and select the correct answer from the codes given below:

List-I

List-II

- (a) Primary source of data
- (i) Minutes of Meeting
- (b) Case study
- (ii) Ethnography study
- (c) Participant Observation
- (iii) Descriptive method
- (d) Foreshadowed problem
- (iv) Research tool

Codes:

(a) (b)

(iv)

(i)

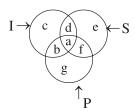
- (c) (d)
- (A) (ii)
- (i) (iii)
- (B) (iv) (i)
- (ii) (iii)
- (C) (i) (iii)
- (iv) (ii)
- (D) (iii)
- (iv) (ii)
- 17. 'Bengal Gazette', the first Newspaper in India was started in 1780 by
 - (A) Dr. Annie Besant
 - (B) James Augustus Hicky
 - (C) A. O. Hume
 - (D) Raja Ram Mohan Roy
 - **18.** Prasar Bharati is also known as
 - (A) Broadcasting Centre of India
 - (B) Indian Broadcasting Authority
 - (C) Broadcasting Association of India
 - (D) Broadcasting Corporation of India
- 19. Which of the following skills has the largest share in communication time in educational institutions?
 - (A) Listening
 - (B) Reading
 - (C) Writing
 - (D) Speaking
- 20. Which of the following is not a principle of effective communication?
 - (A) Persuasive and convincing dialogue
 - (B) Participation of the audience
 - (C) One-way transfer of information
 - (D) Strategic use of grapevine

- 21. Communicating with the spirits and ancestors is termed as
 - (A) Intrapersonal communication
 - (B) Transpersonal communication
 - (C) Spiritual communication
 - (D) Face-to-face communication
- 22. The pioneer of the silent feature film in India was
 - (A) K. A. Abbas
 - (B) Satyajit Ray
 - (C) B. R. Chopra
 - (D) D. G. Phalke
- 23. In a certain code, '367' means 'Blue colour car'; '694' means 'Green colour fan' and '356' means 'White colour car'. What digit in that code means 'Green'?
 - (A) 4
 - (B) Either 4 or 9
 - (C) 5
 - (D) 9
- 24. In the following question, choose the option which shows common feature in the relationship given in the question.

Opium: Resin: Rubber

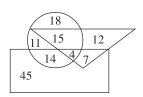
- (A) They are sticky
- (B) They are used in narcotic drugs
- (C) They are imported
- (D) They are obtained from fluids of trees and plants
- **25.** A is the mother of P and Q. C is the father-in-law of A. C is the father of B and D, and grandfather of Q. C has a daughter. D is the aunt of P. How is B related to A?
 - (A) Brother
 - (B) Son
 - (C) Husband
 - (D) Cannot be determined

- **26.** Priyanka remembers that her husband's birthday is after 19th but before 22nd December whereas her mother-in-law remembers that the birthday of her only son is after 20th but before 24th December. If both of them are right, which day is Priyanka's husband's birthday?
 - (A) 23rd December
 - (B) 22nd December
 - (C) 21st December
 - (D) 20th December
- 27. The following diagram having three interlocking circles I, S and P, where circle I stands for Indians, circle S for scientists and circle P for Politicians. Different regions in the figure are lettered from a to g:



Which region represents non-Indian scientists who are Politicians?

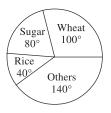
- (A) f
- (B) d
- (C) g
- (D) a
- **28. Direction:** In the following figure, circle represents doctors, triangle represents artists and rectangle represents players.



How many doctors are both players and artists?

- (A) 25
- (B) 4
- (C) 14
- (D) 7

29. Direction: The following pie chart shows the annual agricultural yield of a certain place. Study the following chart and answer the question given below:



If the total production is 8100 tons, then the yield of rice (in tons) is

- (A) 3240
- (B) 900
- (C) 4860
- (D) 1200

- **30.** If a rectangle is called by a circle, a circle by a point, a point by a triangle and a triangle by a square, the shape of wheel is called as
 - (A) Rectangle
 - (B) Circle
 - (C) Point
 - (D) Triangle

- **31.** How many numbers from 1 to 100 are such each of which is divisible by 9 and whose atleast one digit is 9?
 - (A) Four
 - (B) Three
 - (C) Five
 - (D) Nine

32. In the following square, numbers have been filled according to some rule. One space has been left blank. Find the correct number out of those given below for the blank space.

26	28	32
39		48
78	84	96

- (A) 18
- (B) 41
- (C) 42
- (D) 44
- **33. Direction:** The following table shows the number of working hours and the number of employees in a small scale industrial unit:

No. of working hours	No. of employees	
3–5 hours	7	
5–7 hours	10	
7–9 hours	18	
9–11 hours	57	
11–13 hours	14	
13–15 hours	8	

What is the average working hour of an employee?

- (A) 9·5
- (B) 10·22
- (C) 11
- (D) 12
- **34.** The salary of a person is increased by 10 percent and after sometime, reduced by 10 percent. By how much will his salary change from the original?
 - (A) 1 percent
 - (B) -1 percent
 - (C) 2 percent
 - (D) Remains unchanged

35. Person 'A' can complete a work in 10 hours and 'B' can complete it in 5 hours. Both started working together but 'A' left after working for one hour and 'B' finished all the remaining work alone. In how much time the entire work was completed by 'B'?

- (A) 4 hours
- (B) 3.5 hours
- (C) 4.5 hours
- (D) 3.75 hours

36. Which one of the following does not come under the methods of data classification?

- (A) Quantitative
- (B) Normative
- (C) Spatial
- (D) Qualitative

37. Which test is used analysing observed frequency and expected frequency?

- (A) t-test
- (B) F-test
- (C) ANOVA
- (D) chi-square

38. The sum of a number and its reciprocal is $2\frac{1}{20}$. The number is

- (A) $\frac{3}{4}$
- (B) $\frac{5}{4}$
- (C) $\frac{4}{3}$
- (D) $\frac{1}{6}$

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- **39.** Which of the following Indian States/UT has the maximum percentage of mangrove cover in the country?
 - (A) Gujarat
 - (B) West Bengal
 - (C) Andaman and Nicobar
 - (D) Odisha
- **40.** Which one of the following is a radioactive element?
 - (A) Uranium
 - (B) Argon
 - (C) Chromium
 - (D) Cobalt
 - **41.** Fathometer is used to measure
 - (A) Earthquakes
 - (B) Rainfall
 - (C) Ocean depth
 - (D) Sound intensity
- **42.** In a normal human being, how much time does food take to reach the end of the intestine for complete absorption?
 - (A) About 8 hours
 - (B) About 12 hours
 - (C) About 16 hours
 - (D) About 18 hours
 - **43.** Fly ash is a pollutant released mostly from
 - (A) Chloro-alkali plants
 - (B) Tanneries
 - (C) Sugar industries
 - (D) Coal-based thermal power plants

- **44.** Given below are two statements, one labeled as Assertion (A) and the other labeled as Reason (R).
- Assertion (A): The pollutants discharged by industries seriously affect the human health.
- Reason(R): The disease pattern of urban society has a close connection with the deteriorated quality of water and air.

In the context of the above two statements, which one of the following is correct?

- (A) Both (A) and (R) are true and (R) is the correct explanation of (A).
- (B) Both (A) and (R) are true but (R) is not the correct explanation of (A).
- (C) (A) is true but (R) is false.
- (D) (A) is false but (R) is true.
- 45. Match List-I with List-II and indicate your correct answer from the codes given below:

List-I List-II (a) Learning to be–1972 (i) Higher Education (ii) World Education (b) Radhakrishnan Commission-1948 (c) Kothari Commission- (iii) Navodaya Vidyalaya 1964 (d) National Policy on (iv) Common School Education-1986 System Codes: (a) (b) (c) (d) (A) (ii) (iii) (i) (iv) (B) (i) (iv) (iii) (ii) (C) (ii) (iv) (i) (iii)

46. Which of the following is not correct in respect of the functions of the UGC?

(i)

(D)

(iv)

(A) Coordinating university education in the country.

(iii)

(ii)

- (B) Regulating minimum standards at higher education level.
- (C) Not acting as advisory body between the Centre and State Governments for development of higher education.
- (D) Disbursing grants to the universities and colleges.

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- **47.** Which one of the following is not correct concerning the objectives of RUSA?
 - (A) To ensure reforms in the affiliation and examination matters.
 - (B) To create new universities through upgradation of existing autonomous colleges.
 - (C) To recommend closure of higher education institutions for not in confirmity with prescribed norms and standards.
 - (D) To adopt accreditation as mandatory quality assurance framework.
- **48.** Match *List-II* (organizations) with *List-II* (locations) and select the correct answer from the codes given below:

List-I

- (a) Institute of Minerals and Materials Technology
- (i) New Delhi

List-II

- (b) Inter-University Centre for Astronomy and Astrophysics
- (ii) Bengaluru
- (c) Documentation, Research and Training Centre
- (iii) Pune
- (d) Inter-University Accelerator Centre
- (iv) Bhubaneswar

Codes:

- (a) (b) (c) (d) (i) (iv) (iii) (ii)
- (A) (i) (iv) (iii) (ii)
- (B) (i) (iii) (iv)
- (C) (iv) (i) (ii) (iii)
- (D) (iv) (iii) (ii) (i)
- **49.** The computer jargon–WWWW, stands for
 - (A) World Wide Web Worm
 - (B) World Wide Wildlife Web
 - (C) World Wide Women's Web
 - (D) World Wide Women's Week

50. Match the following and select the correct code:

List-I List-II

(a) Twitter

(i) Network Security

- (b) Google (ii) Online Shop
- (c) Amazon(iii) Search Engine(d) Firewall(iv) Social Networking Sites
- Codes:
 - (a) (b) (c) (d)
 - (A) (iv) (iii) (i) (ii) (B) (iii) (iv) (i) (iii)
 - (C) (ii) (i) (iv) (iii)
 - (D) (iv) (iii) (ii) (i)
- **51.** Transistors are associated with
 - (A) First Generation
 - (B) Second Generation
 - (C) Fourth Generation
 - (D) Fifth Generation
- **52.** Which is the full name of the abbreviation 'FTP'?
 - (A) File Transfer Protocol
 - (B) File Transmission Protocol
 - (C) Free Transfer Protocol
 - (D) Free Transmission Protocol
- **53.** Word processing, spreadsheet and photo editing are examples of
 - (A) Application software
 - (B) System software
 - (C) Operating system software
 - (D) Platform software
 - **54.** Integrated Learning System is a programme of
 - (A) Presenting information
 - (B) Extending learning to home
 - (C) Drill and practice
 - (D) Teaching

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- X-10
- **55.** Prof. Yash Pal, a renowned scientist and institution builder passed away in July 2017. He was known for his contributions in which of the following fields?
 - (A) Microbiology
 - (B) Cosmic rays
 - (C) Gravitational studies
 - (D) Machine force
- **56.** Who among the following was elected to the office of the President for the second term?
 - (A) Dr. Zakir Hussain
 - (B) Dr. Rajendra Prasad
 - (C) Dr. V. V. Giri
 - (D) Dr. R. Venkatraman
- **57.** Which one of the following Amendments to the Constitution of India relate to GST?
 - (A) 98
 - (B) 99
 - (C) 100
 - (D) 101

- **58.** Which State has the distinction of having the country's 1st IIT and 1st IIM?
 - (A) Gujarat
 - (B) Maharashtra
 - (C) West Bengal
 - (D) Uttar Pradesh
- **59.** Rabindranath Tagore's 'Jana Gana Mana' has been adopted as India's National Anthem. How many stanzas of the said song were adopted?
 - (A) Only the first stanza
 - (B) The whole song
 - (C) Third and Fourth stanzas
 - (D) First and Second stanzas
- **60.** Which metro will become the India's first metro to have its own FM radio station?
 - (A) Kolkata metro
 - (B) Lucknow metro
 - (C) Delhi metro
 - (D) Nagpur metro

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ROUGH WORK

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ROUGH WORK