

# ENTRANCE TEST - 2025

## 4-year Integrated Programme through Design Your Degree

**Total Questions: 60**

**Time Allowed: 70 Minutes**

**Roll No.**

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**Important Instructions for Candidates:**

1. Candidates shall compulsorily use only **blue/ black ball point pen**. In no case gel/ink pen or pencil should be used.
2. Compulsorily write your **roll number** in the space provided at the top of this page of the question booklet.
3. Fill up the necessary information in the spaces provided on OMR Answer sheet including **Question Booklet Number** and **Question Booklet Series**.
4. OMR Answer sheet has an original copy and a candidate's copy glued beneath it at the top. While making entries in the original copy, candidate should ensure that the **two copies are aligned properly** so that the entries made in the original copy against each item are exactly copied in the candidate's copy.
5. All entries in the OMR Answer Sheet, including answers to questions, are to be recorded in the Original Copy only.
6. **Choose only one correct/most appropriate response** for each question among the options A, B, C and D and darken the circle of the appropriate response completely. Incompletely darkened circle is not correctly read by the OMR scanner and no complaint to this effect shall be entertained.
7. **Do not darken more than one circle of option for any question. A question with more than one darkened response shall be considered wrong.**
8. **There will be negative marking for wrong answers. Each wrong answer will lead to deduction of 0.25 marks per wrong answer from the score.**
9. Only those candidates who obtain positive score in Entrance Test shall be eligible for admission.
10. Do not make any stray mark on the OMR sheet as this may lead to errors while scanning.
11. OMR answer sheet must be handled carefully and it should not be folded or mutilated, as in such case it will not be properly evaluated by the machine.
12. No Electronic gadgets including calculators, mobiles, smart watches, blue tooth etc. shall be permitted inside the examination hall.
13. Rough work, if any, should be done on the blank sheets provided with the question booklet.
14. Ensure that the OMR Sheet is signed by the Examinee as well as by the invigilator.
15. At the end of the examination, fold the OMR Sheet along the crease on the top and tear off the top strip to separate the Original OMR Sheet from the Duplicate Copy.
16. Hand over the Original OMR answer sheet to the invigilator and retain the candidate's copy of OMR, Question Booklet and Admit card for your reference.
17. If any of the information in the response Sheet/Question Paper has been found missing or not mentioned as stated above, the candidate is solely responsible for that lapse.
18. Any deficiency on the OMR shall be the responsibility of the candidate himself/herself.

SEAL

1. Which theorist emphasized the family as the “first school” where children learn societal norms?
  - A) Emile Durkheim
  - B) Talcott Parsons
  - C) Max Weber
  - D) Karl Marx
2. Affirmative action policies for under-represented groups in the workplace are an example of:
  - A) Social stratification
  - B) Structural functionalism
  - C) Inclusive development
  - D) Cultural diffusion
3. The concept of “agenda-setting” in media studies refers to the media’s ability to:
  - A) Dictate public policy
  - B) Control access to technology
  - C) Influence what issues people think about
  - D) Determine legislation in parliament
4. Which technological innovation has most transformed social interaction in the last decade?
  - A) Satellite television
  - B) Social networking platforms
  - C) Fax machines
  - D) Print newspapers
5. Which of the following is a direct indicator of sustainable urban development?
  - A) Per capita income
  - B) Air quality index
  - C) Military expenditure
  - D) Number of television sets per household
6. **Choose the correct tense:** “By the time she \_\_\_, the meeting will have started.”
  - A) arrives
  - B) will arrive
  - C) arrived
  - D) has arrived
7. **Select the appropriate article:** “He is \_\_\_ honest man, but he exaggerates sometimes.”
  - A) a
  - B) an
  - C) the
  - D) – (no article)
8. **Pick the correct preposition:** “She insisted \_\_\_ paying for the meal herself.”
  - A) for
  - B) on
  - C) at
  - D) in
9. **Identify the conjunction:** “I wanted to go for a walk, \_\_\_ it began to rain heavily.”
  - A) because
  - B) so
  - C) although
  - D) but
10. **One-word substitution:** “A person who loves and collects books is called a \_\_\_.”
  - A) Philanthropist
  - B) Bibliophile
  - C) Technophile
  - D) Angophile

11. Who is credited with the invention of the World Wide Web in 1989?

- A. Vint Cerf
- B. Tim Berners-Lee
- C. Steve Jobs
- D. Marc Andreessen

12. World Environment Day, observed annually to raise awareness of environmental issues, falls on which date?

- A. 5 June
- B. 22 April
- C. 2 October
- D. 15 August

13. Which film won the Academy Award for Best Picture at the 96th Oscars held in March 2024?

- A. The Fabelmans
- B. Oppenheimer
- C. Baraboo
- D. Aftersun

14. Who won the 2022 Booker Prize for Fiction for the novel The Seven Moons of Maali Almeida?

- A. Kazuo Ishiguro
- B. Shehan Karunatilaka
- C. Hilary Mantel
- D. Arundhati Roy

15. The 2023 Nobel Peace Prize was awarded to which of the following?

- A. Ales Bialiatski
- B. Maria Ressa and Dmitry Muratov
- C. Narges Mohammadi
- D. Malala Yousafzai

16. Find the next number in the series: 2, 6, 18, 54, \_\_\_\_

- A) 108
- B) 162
- C) 216
- D) 200

17. Complete the series: A,C,F,J,O, \_\_\_\_

- A) U
- B) T
- C) S
- D) V

18. If TABLE is coded as UBCMF, how is CHAIR coded?

- A) DIBJS
- B) DIBKR
- C) DBIJS
- D) DIBIS

19. Pointing to a man, a woman says, "He is the only son of my grandmother's only daughter." How is the woman related to the man?

- A) Mother
- B) Aunt
- C) Sister
- D) Daughter

20. A walks 3 km east, then turns right and walks 4 km, then turns right and walks 3 km, then turns left and walks 2 km. How far and in which direction is he from the starting point?

- A) 2 km north
- B) 6 km south
- C) 2 km south
- D) 4 km west

21. If ₹8,000 is invested at compound interest at 5% per annum compounded annually, what will it amount to in 2 years?  
A) ₹8,400  
B) ₹8,820  
C) ₹8,620  
D) ₹8,600

22. A sum of ₹12,000 is lent at simple interest and amounts to ₹15,600 in 3 years. What is the rate of interest per annum?  
A) 8%  
B) 9%  
C) 10%  
D) 12%

23. **Choose the odd one out:**  
A) Sardine  
B) Salmon  
C) Trout  
D) Tuna

24. **Find the next term in the series:**  
5, 11, 23, 47, 95, ?  
A) 188  
B) 190  
C) 191  
D) 193

25. What is the difference between the compound interest and simple interest on ₹10,000 at 10% per annum for 2 years, compounded annually?  
A) ₹100  
B) ₹110  
C) ₹120  
D) ₹150

26. Statements: All pens are papers. Some papers are books.  
Conclusions:  
I. Some pens are books.  
II. No book is a pen.  
A) Only I follows  
B) Only II follows  
C) Both follow  
D) Neither follows

27. If North-east is  $45^\circ$  from North, what is angle between South and West?  
a)  $90^\circ$   
b)  $135^\circ$   
c)  $45^\circ$   
d)  $180^\circ$

28. A's salary is 25% more than B's. By what percent is B's less than A's?  
A) 20%  
B) 25%  
C) 15%  
D) 10%

29. In 80 students, 40 like Physics, 45 Chemistry, 20 both. How many like neither?  
A) 5  
B) 15  
C) 20  
D) 10

30. **Tree : Forest :: Star : ?**  
A) Sky  
B) Planet  
C) Galaxy  
D) Sun

31. If you add a rational and an irrational number, the result is always:  
A) Rational  
B) Irrational  
C) Integer  
D) Whole number

32. A shop applies a 15% discount on an item marked ₹400. What is the sale price?  
A) ₹340  
B) ₹360  
C) ₹320  
D) ₹380

33. If  $2x + 3y = 16$  and  $x - y = 2$ , find  $(x, y)$ .  
A) (4, 2)  
B) (3, 2)  
C) (5, 3)  
D) None of the Given

34. What is the product of the roots of  $x^2 - 5x + 6 = 0$ ?  
A) 5  
B) 6  
C) 1  
D) -6

35. In two parallel lines cut by a transversal, corresponding angles are:  
A) Supplementary  
B) Equal  
C) Complementary  
D) None of the given

36. A kite is a quadrilateral with:  
A) All sides equal  
B) Two distinct pairs of adjacent equal sides  
C) Opposite sides parallel  
D) All angles right angles

37. For the data set {12, 15, 12, 18, 20, 15, 15}, the median is:  
A) 15  
B) 16  
C) 15.5  
D) 17

38. In a bar chart showing sales over 5 months, the total height of bars is 250 units. If April's bar is 40 units, what percent does April represent?  
A) 16%  
B) 14%  
C) 18%  
D) 20%

39. In a pie chart of  $360^\circ$ , representing population distribution, a sector of  $90^\circ$  corresponds to:  
A) 25%  
B) 20%  
C) 15%  
D) 30%

40. A does a job in 12 days, B in 8 days. Working together, they finish the job in:  
A) 4.8 days  
B) 5 days  
C) 6 days  
D) 7 days

41. According to Newton's third law, if Earth pulls you downward with a force of 600 N, you pull Earth upward with:  
A) 0 N  
B) 300 N  
C) 600 N  
D) 1200 N

42. **Work done in lifting a 5 kg mass by 2 m vertically at  $g = 9.8 \text{ m/s}^2$  is:**  
A) 49 J  
B) 98 J  
C) 196 J  
D) 245 J

43. **The main component of natural gas is:**  
A) Ethane  
B) Propane  
C) Methane  
D) Butane

44. **In a longitudinal sound wave, the particles of the medium vibrate:**  
A) Perpendicular to wave direction  
B) Along the wave direction  
C) In circular motion  
D) Randomly

45. **Which state of matter has definite volume but no definite shape?**  
A) Solid  
B) Liquid  
C) Gas  
D) Plasma

46. **An acid-base indicator that turns pink in basic solution and colorless in acidic solution is:**  
A) Methyl orange  
B) Phenolphthalein  
C) Litmus  
D) Bromothymol blue

47. **pH of a neutral solution at  $25^\circ\text{C}$  is:**  
A) 0  
B) 7  
C) 14  
D) 1

48. **Which of the following non-metals is a good conductor of electricity?**  
A) Sulfur  
B) Phosphorus  
C) Graphite  
D) Oxygen

49. **Which tissue transports water and minerals in plants?**  
A) Phloem  
B) Xylem  
C) Mesophyll  
D) Cortex

50. **Binary fission is a method of reproduction in:**  
A) Amoeba  
B) Hydra  
C) Earthworm  
D) Human

51. **The Rigvedic society was primarily:**  
A) Urban and trade-oriented  
B) Pastoral and tribal  
C) Industrial and craft-based  
D) Maritime and naval

52. **Which Mauryan emperor famously appointed “Dhamma Mahamatras” to propagate moral welfare?**  
A) Bindusara  
B) Ashoka  
C) Chandragupta  
D) Samprati

53. **Who was the first Sultan of Delhi to establish the Iqta (land-grant) system?**  
A) Qutb al-Din Aibak  
B) Iltutmish  
C) Alauddin Khilji  
D) Muhammad bin Tughluq

54. **Who was the first European to establish trading relations on India's Malabar Coast?**  
A) Christopher Columbus  
B) Vasco da Gama  
C) Pedro Álvares Cabral  
D) Ferdinand Magellan

55. **Which social reformer founded the BrahmoSamaj in 1828?**  
A) Raja Ram Mohan Roy  
B) Dayananda Saraswati  
C) Ishwar Chandra Vidyasagar  
D) Swami Vivekananda

56. **The Preamble of the Indian Constitution declares India to be a:**  
A) Sovereign, Democratic, Socialist, Secular, Republic  
B) Sovereign, Secular, Socialist, Republic  
C) Sovereign, Democratic, Secular, Republic  
D) Sovereign, Secular, Democratic, Republic

57. **Which Fundamental Right can be suspended during a national emergency?**  
A) Right to Equality (Article 14)  
B) Right to Freedom of Speech (Article 19)  
C) Right to Life and Personal Liberty (Article 21)  
D) Right against Exploitation (Article 23)

58. **The youngest fold mountains in India are the:**  
A) Aravallis  
B) Himalayas  
C) Vindhyas  
D) Western Ghats

59. **Which river is known as the 'Sorrow of Bihar' due to its frequent floods?**  
A) Ganga  
B) Kosi  
C) Brahmaputra  
D) Gandak

60. **Bauxite, the ore of aluminum, is predominantly found in which region?**  
A) Madhya Pradesh and Bihar  
B) Bihar and Meghalaya  
C) Odisha and Andhra Pradesh  
D) Jammu and Kashmir