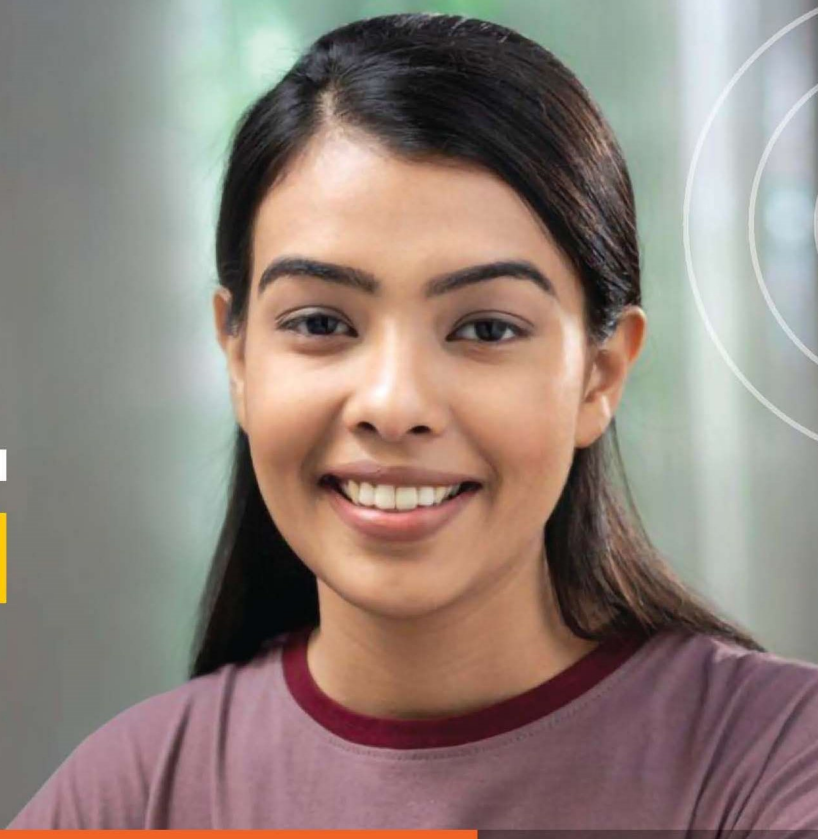
SSC CHSL

(10+2) TIER-II EXAM

LDC/DEO/JSA



20 Practice Sets

With Latest
Solved Paper 2023

LATEST SYLLABUS OF TIER II EXAM

SECTION-1	Module 1 : Mathematical Abilities Module 2 : Reasoning and General Intelligence
SECTION-2	Module 1 : English Language and Comprehension Module 2 : General Awareness
SECTION-3	Module 1 : Computer Knowledge

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Compiled & Edited by
Arihant 'Expert Team'

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卐 **Administrative & Production Offices**

Regd. Office
'Ramchhaya' 4577/15, Agarwal Road, Darya Ganj, New Delhi -110002
Tele: 011- 47630600, 43518550

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Kalindi, TP Nagar, Meerut (UP) - 250002
Tel: 0121-7156203, 7156204

卐 **Sales & Support Offices**
Agra, Ahmedabad, Bengaluru, Bareilly, Chennai, Delhi, Guwahati, Hyderabad, Jaipur, Jhansi, Kolkata, Lucknow, Nagpur & Pune.

卐 **ISBN** 978-93-89204-54-4

卐 **PRICE** ₹285.00

PO No : TXT-XX-XXXXXXX-X-XX

Published by Arihant Publications (India) Ltd.

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Exam Pattern

Scheme of Tier-II Examination

Tier	Paper	Session	Subject	Number of Questions	Maximum Marks	Time allowed
II	Paper-I	**Session-I :** **(2 hours and 15 minutes)**	**Section-I :** **Module-I :** Mathematical Abilities **Module-II :** Reasoning and General Intelligence.	30 30 Total = 60	60*3 = 180	1 hour (for each section)
			Section-II : **Module-I :** English Language and Comprehension **Module-II :** General Awareness	40 20 Total = 60	60*3 = 280	(1 hours and 20 minutes for the candidates eligible for scribe as per Para-8.1 and 8.2)
			Section-III : **Module-I :** Computer Knowledge Test	15	15*3 = 45	15 Minutes (20 minutes for the candidates eligible for scribe as per Para-8.1 and 8.2)
		Session-II : (15 minutes)	**Section-III :** Module-**II :** Skill test/Typing	Part A : Skill test for DEOs	-	15 Minutes (20 minutes for the candidates eligible for scribe as per Para-8.1 and 8.2)
				Part B : Typing Test for LDC/ JSA.		10 Minutes (15 minutes for the candidates eligible for scribe as per Para-8.1 and 8.2)

Module-I of Session-I (Mathematical Abilities)

- **Number Systems:** Computation of Whole Number, Decimal and Fractions, Relationship between numbers.
- **Fundamental arithmetical operations:** Percentage, Ratio and Proportion, Square roots, Averages, Interest (Simple and Compound), Profit and Loss, Discount, Partnership Business, Mixture and Alligation, Time and distance, Time and work.
- **Algebra:** Basic algebraic identities of School Algebra and Elementary surds (simple problems) and Graphs of Linear Equations.
- **Geometry:** Familiarity with elementary geometric figures and facts: Triangle and its various kinds of centres, Congruence and similarity of triangles, Circle and its chords, tangents, angles subtended by chords of a circle, common tangents to two or more circles.
- **Mensuration:** Triangle, Quadrilaterals, Regular Polygons, Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular or square Base.
- **Trigonometry:** Trigonometry, Trigonometric ratios, Complementary angles, Height and distances (simple problems only) Standard Identities like $\sin 2\theta + \cos 2\theta = 1$ etc.
- **Statistics and probability:** Use of Tables and Graphs: Histogram, Frequency polygon, Bar-diagram, Pie-chart; Measures of central tendency: mean, median, mode, standard deviation; calculation of simple probabilities.

Module-II of Section-I (Reasoning and General Intelligence)

- Questions of both verbal and non-verbal type. These will include questions on Semantic Analogy, Symbolic operations, Symbolic/Number Analogy, Trends, Figural Analogy, Space Orientation, Semantic Classification, Venn Diagrams, Symbolic/Number Classification, Drawing inferences, Figural Classification, Punched hole/pattern-folding & unfolding, Semantic Series. Figural Pattern-folding and completion, Number Series, Embedded Figures, Figural Series, Critical Thinking, Problem Solving, Emotional Intelligence, Word Building, Social Intelligence, Coding and de-coding, Numerical operations, Other sub - topics, if any.

Module-I of Section-II (English Language and Comprehension)

- Vocabulary, grammar, sentence structure, synonyms, antonyms and their correct usage; Spot the Error, Fill in the Blanks, Synonyms/ Homonyms, Antonyms, Spellings/ Detecting mis-spelt words, Idioms & Phrases, One word substitution, Improvement of Sentences, Active/ Passive Voice of Verbs, Conversion into Direct/Indirect narration, Shuffling of Sentence parts, Shuffling of Sentences in a passage, Cloze Passage, Comprehension Passage. To test comprehension, two or more paragraphs will be given and questions based on those will be asked. Atleast one paragraph should be a simple one based on a book or a story and the other paragraph should be based on current affairs editorial or a report.

Module-II of Section-II (General Awareness)

- Questions are designed to test the candidates' general awareness of the environment around them and its application to society. Questions are also designed to test knowledge of current events and of such matters of everyday observation and experience in their scientific aspect as may be expected of an educated person. The test will also include questions relating to India and its neighboring countries especially pertaining to History, Culture, Geography, Economic Scene, General policy and scientific research.

Module-I of Section-III of Paper-I (Computer Proficiency)

- **Computer Basics:** Organization of a computer, Central Processing Unit (CPU), input/ output devices, computer memory, memory organization, back-up devices PORTs, Windows Explorer, Keyboard shortcuts.
- **Software:** Windows Operating system including basics of Microsoft Office like MS word, MS Excel and Power Point etc.
- **Working with Internet and E-mails:** Web Browsing & Searching. Downloading & Uploading, Managing an E-mail Account, E-Banking.
- **Basics of Networking and Cyber security:** Network devices and protocols, Network and Information Security threats (like hacking, virus, worms, Trojan etc.) and preventive measures**.**

Practice Sets

(1-20)

SSC CHSL

Tier II Exam

PRACTICE SET 01

- This paper consists of 135 Multiple Choice Questions to be completed in maximum 135 min.
- There will be three sections in this exam Section I–Module I : Mathematical Abilities (30 Ques./ 90 Marks), Module II : Reasoning and General Intelligence (30 Ques./ 90 Marks), Section II–Module I : English Language and Comprehension (40 Ques./ 120 Marks), Module II : General Awareness (20 Ques./ 60 Marks), Section III–Module I : Computer Knowledge Test (15 Ques./ 45 Marks)
- There will be negative marking of 1 mark for each wrong answer.

Section I

Module I : Mathematical Abilities

1. If a nine-digit number $7698x138y$ is divisible by 72, then the value of $\sqrt{4x+y}$ is

(a) 8 (b) 6
(c) 9 (d) 5

2. What is the difference between the compound interest (in ₹) compounded yearly and compounded half-yearly for 18 months at 20% p.a. on a sum of ₹ 12000?

(a) 121 (b) 132
(c) 145 (d) 165

3. Do the points (4, 3), (– 4, – 6) and (7, 9) form a triangle? If yes, then find the longest side of the triangle.

(a) 18.6 units (b) 16.5 units
(c) 24 units (d) 34 units

4. The average weight of the students in four sections *A, B, C* and *D* is 60 kg. The average weight of the students of sections *A, B, C* and *D* individually are 45 kg, 50 kg, 72 kg and 80 kg, respectively. If the average weight of the students of sections *A* and *B* together is 48 kg and that of sections *B* and *C* together is 60 kg, then what is the ratio of the numbers of students in sections *A* and *D*?

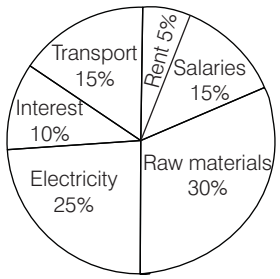
(a) 12 : 7 (b) 4 : 3
(c) 3 : 2 (d) 8 : 5

5. The wages of 45 women amounts to ₹ 15525 in 48 days. If daily wages of a man are double that of a woman, then the number of men required to work for 16 days to receive ₹ 5750 will be

(a) 20 (b) 25
(c) 30 (d) 15

6. The pie-chart shows the breakup (in percent) of the various expenses of a company. Study the diagram and answer the following question.

Breakup of Expenses (in percent)



What is the interest expense, if total expenses are ₹ 25000 approximately?

(a) ₹ 2500 (b) ₹ 1800
(c) ₹ 9000 (d) ₹ 5000

7. *A*, *B* and *C* start together from the same point to travel around a circular Island of 30 km in circumference. *A* and *B* are travelling in the same direction and *C* is in the opposite direction. If *A* travels 5 km, *B* travels 7 km and *C* travels 8 km in an hour, then they all come together again after.

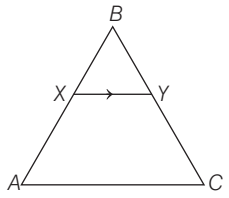
(a) 25 h (b) 30 h (c) 15 h (d) 20 h

8. Simplify,
$2\frac{3}{4}\times\{4+(\overline{16-9\div 3}\times\sqrt{576})\}+\sqrt{324}$.
(a) 887
(b) 624
(c) 913
(d) None of the above

9. A shopkeeper lists the price of an article as ₹ 500. But he gives a certain discount which allows the buyer to pay ₹ 500 for the article including 10% sales tax. The rate of discount is
(a) 10% (b) $10\frac{1}{11}\%$
(c) $9\frac{1}{11}\%$ (d) 11%

10. Srinivasan invests two equal amounts in two banks giving 8% and 12% rate of interest per annum respectively. At the end of year, the interest earned is ₹ 1500. Find the sum he invested in each bank.
(a) ₹ 8500 (b) ₹ 15000
(c) ₹ 7500 (d) ₹ 17000

11. In ΔABC, X and Y are points on sides AB and BC respectively, such that $XY \parallel AC$ and XY divides triangular region ABC into two parts equal in area. Then, $\frac{AX}{AB}$ is equal to



(a) $\frac{2+\sqrt{2}}{2}$ (b) $\frac{\sqrt{2}+3}{2}$
(c) $\frac{2-\sqrt{2}}{2}$ (d) $\frac{3-\sqrt{2}}{2}$

12. From the top of a tree of height 120 m, the angles of depression of two boats in the same line with the foot of the tree and on the same side of it are 45° and 60°, respectively. The distance between the boats is
(a) $40(3-\sqrt{3})$ m
(b) $40(3\sqrt{3}-1)$ m
(c) $120(\sqrt{3}-1)$ m
(d) $120(3-\sqrt{3})$ m

13. Six bells commence ringing together at intervals of 2, 4, 6, 8, 10 and 12 sec, respectively. In 30 min, how many times do they ring together?
(a) 16 (b) 15 (c) 10 (d) 4

14. If $x^4-62x^2+1=0$, where $x>0$, then the value of x^3+x^{-3} is
(a) 500 (b) 512 (c) 488 (d) 364

15. Study the following table and answer the question.
Percentage of marks obtained by six students A, B, C, D, E and F in five subjects.

Students \ Subjects	English (Out of 50)	Math's (Out of 150)	Science (Out of 80)	Hindi (Out of 75)	Social Studies (Out of 100)
A	70	90	65	64	88
B	84	92	75	68	49
C	66	80	85	80	84
D	62	74	75	88	60
E	54	64	55	72	85
F	72	84	65	60	65

Total marks obtained by Student E in all the five subjects are?
(a) 306 (b) 330 (c) 316 (d) 340

16. In circle with centre O, a diameter AB is produced to a point P lying outside the circle and PT is a tangent to the circle at a point C on it. If $\angle BPT = 28°$, then what is the measure of $\angle BCP$?
(a) 62° (b) 45° (c) 28° (d) 31°

17. Study the following table and answer the question.
Percentage of marks obtained by six students A, B, C, D, E and F in five subjects.

Students \ Subjects	English (Out of 50)	Math's (Out of 150)	Science (Out of 80)	Hindi (Out of 75)	Social Studies (Out of 100)
A	70	90	65	64	88
B	84	92	75	68	49
C	66	80	85	80	84
D	62	74	75	88	60
E	54	64	55	72	85
F	72	84	65	60	65

The total marks obtained by students C, D and F in Science is what per cent more than the total marks obtained by B in Science, Hindi and Social Studies?
(a) 12.2% (b) 10.5%
(c) 12.5% (d) 11.1%

18. If $\frac{\sin\theta+\cos\theta}{\sin\theta-\cos\theta}=5$, then the value of $\frac{4\sin^2\theta+3}{2\cos^2\theta+2}$ is
(a) $\frac{75}{17}$ (b) $\frac{75}{34}$ (c) $\frac{1}{2}$ (d) $\frac{3}{2}$

19. Given that, $x^8-34x^4+1=0$, $x>0$. What is the value of (x^3-x^{-3})?
(a) 14 (b) 12
(c) 18 (d) 16

20. A square $ABCD$ is inscribed in a circle of unit radius. Semicircles are described on each side as a diameter. The area of the region bounded by the four semicircles and the circle is
(a) 1 sq unit
(b) 2 sq unit
(c) 1.5 sq unit
(d) 2.5 sq unit

21. If the numbers $\sqrt[3]{9}$, $\sqrt[4]{20}$ and $\sqrt[6]{25}$ are arranged in ascending order, then the right arrangement is
(a) $\sqrt[6]{25}<\sqrt[4]{20}<\sqrt[3]{9}$
(b) $\sqrt[3]{9}<\sqrt[4]{20}<\sqrt[6]{25}$
(c) $\sqrt[4]{20}<\sqrt[6]{25}<\sqrt[3]{9}$
(d) $\sqrt[6]{25}<\sqrt[3]{9}<\sqrt[4]{20}$

22. In a school, the number of boys and girls is in the ratio of 4 : 7. If the number of boys is increased by 25% and the number of girls is increased by 15%. What will be the new ratio of number of boys to that of girls?
(a) 100 : 131 (b) 100 : 151
(c) 100 : 161 (d) 100 : 181

23. Average of the marks of 132 students of a college is 40. If the average of the marks of the passed student is 42 and the average of the marks of the failed students is 20, then what will be the respective ratio of the total marks of passed students and the total marks of failed students?
(a) 21 : 1 (b) 23 : 2
(c) 19 : 11 (d) 9 : 2

24. In a factory, 60% of the workers are above 30 yr and out of these 75% are males and the rest are females. If there are 1350 male workers above 30 yr, then the total number of workers in the factory is
(a) 3000 (b) 2000
(c) 1800 (d) 1500

25. A man bought oranges at the rate of 8 for ₹ 34 and sold them at the rate of 12 for ₹ 57. How many oranges should be sold to earn a net profit of ₹ 45?
(a) 90 (b) 100 (c) 135 (d) 150

26. Two pipes A and B are opened together to fill a tank. Both the pipes fill the tank in time t (in minutes). If A separately takes 4 min more time than t to fill the tank and B takes 64 min more time than t to fill the tank, then find the value of t.
(a) 10 min (b) 12 min
(c) 16 min (d) 20 min

27. An equilateral triangle of side 6 cm has its corners cut off to form a regular hexagon. The area (in cm^2) of this regular hexagon will be
(a) $3\sqrt{3}$ (b) $3\sqrt{6}$ (c) $6\sqrt{3}$ (d) $\frac{5\sqrt{3}}{2}$

28. X bought 4 bottles of lemon juice and Y bought one bottle of orange juice. Orange juice per bottle cost twice that cost of lemon juice per bottle. Z bought nothing but contributed ₹ 50 for his share of the drink which they mixed together and shared the cost equally. It Z's ₹ 50 is covered from his share, then what is the cost of one bottle of orange juice?
(a) ₹ 75 (b) ₹ 50 (c) ₹ 46 (d) ₹ 30

29. The given histogram shows the weekly wages of 4300 workers. The ratio of the number of workers receiving less than ₹ 500 wages to the number of workers receiving more than ₹ 600 is



(a) 17 : 16
(b) 16 : 17
(c) 9 : 11
(d) 17 : 19

30. The table given below shows production of five types of cars by a company from the year 1998-2003. Study the table and answer the question.

Years → / Types ↓	1998	1999	2000	2001	2002	2003	Total
P	10	18	16	15	11	18	88
Q	14	12	13	12	11	14	76
R	16	20	14	13	15	12	90
S	5	8	12	14	20	31	90
T	26	18	24	20	23	21	132
Total	**71**	**76**	**79**	**74**	**80**	**96**	**476**

In which year the production of cars of all types taken together was approximately equal to the average of the total production during the period?
(a) 2002 (b) 1998
(c) 1999 (d) 2000

Module II : Reasoning and General Intelligence

31. Study the given pattern carefully and select the number that can replace the question mark (?) in it.
(17, 9, 4) (13, ?, 7) (14, 3, 13)
(a) 10 (b) 2 (c) 12 (d) 15

32. In a certain code language, 'PHONE' is coded as '78' as 'MOON' is coded as '52'. How will 'PLAN' be coded in that language?
(a) 43 (b) 98 (c) 65 (d) 66

33. Study the given pattern carefully and select the number that can replace the question mark (?) in it.

125	25	10
216	49	13
27	121	?

(a) 16 (b) 8 (c) 12 (d) 14

34. In a horse race, horse E is leading horse D. Horse C is leading horse A but trailing horse B. Horse A is leading horse E. From this point if horse at fourth position runs fast and wins the race. Then, if rest of the horses remains at same position. Then, which horse will in the middle?
(a) C (b) E (c) B (d) A

35. If the first half of the series is reversed, then which of the following letter will be 3rd from the left of 8th from the right end.
A U R R G H R S W C G I O P D S Q T
(a) U (b) W (c) A (d) R

36. A cyclist travels towards the East for 2 km and then turns left to travel 1 km. From there, he turns left and travels another 800 m to reach a tea junction. After a short break, he turns towards the South and travels for 500 m. From there, he turns right and travels for 1.2 km. Finally, he turns right and travels for 1 km. In which direction is he from his starting position?
(a) West (b) North
(c) South (d) East

37. Which of the following equations will be correct when the signs × and ÷ and the numbers 12 and 9 are interchanged?
(a) $12 + 8 \times 9 + (24 \div 5 + 8) - 7 = 35$
(b) $9 \times 17 + 5\,(24 \div 9) - 12 = 46$
(c) $14 \div 2 + 10\,(12 - 6) \times 9 = 37$
(d) $10 + 2 \div 3 + (24 \times 9 + 8) - 12 = 17$

38. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements?
Statements
1. No city is a district.
2. Some districts are zones.
3. Some zones are states.
Conclusions
I. Some zones are districts.
II. Some districts are cities.
III. No state is a zone.
(a) Conclusions I and III follow
(b) Only Conclusion II follows
(c) Conclusions I and II follow
(d) Only Conclusion I follows

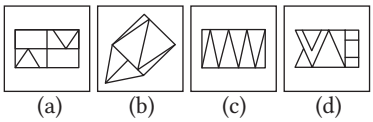
39. Select the option that is related to the third letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster.
DURDG : EFJVZ : : JGFSGR : ?
(a) KIJNVX (b) GIJNWY
(c) GJJNVX (d) KJJNVX

40. Which number will replace the question mark (?) in the following series?
5, 5, 11, 35, 95, 215, ?
(a) 245 (b) 254 (c) 452 (d) 425

41. Select the option that represents the correct order of the given words as they would appear in an English dictionary.
1. Profess 2. Product
3. Prosecute 4. Precaution
5. Proctor
(a) 2,5,4,1,3 (b) 3,5,2,1,4
(c) 4,5,2,3,1 (d) 4,5,2,1,3

42. If 'book' is called 'pen', 'pen' is called 'notebook', 'notebook' is called 'bag' and 'bag' is called 'school', then on what do we usually write?
(a) School (b) Book
(c) Bag (d) Pen

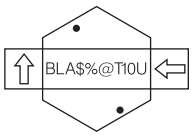
43. Select the option in which the given figure is embedded (rotation is not allowed).
Question Figure

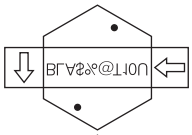
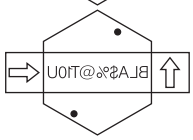
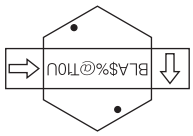
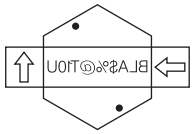
Answer Figures

(a) (b) (c) (d)

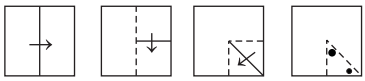
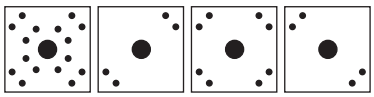
44. Select the option that will fill in the blank and complete the given series.
TMKB, CLNU, VOMD, ____ XQOF
(a) ENPW (b) BQEA
(c) ETRW (d) BQUR

45. 'A & B' means 'A is the sister of B'.
'A % B' means 'A is the brother of B'.
'A $ B' means 'A is the mother of B'.
'A # B' means 'A is the wife of B'.
If U $ Q & Y % D $ S # K, then which of the following statements is not correct?
(a) D is the mother-in-law of K
(b) Q is the sister of D
(c) Y is the daughter of U
(d) U is the mother of D

46. A book which costs ₹ 40 is sold for 25% profit. If the cost of the book is increased by 10% and profit percentage remains the same, what would be the new selling price of the same book?
(a) ₹55 (b) ₹58 (c) ₹52 (d) ₹48

47. Select the correct mirror image of the given figure when the mirror is placed at the right side.
Question Figure


Answer Figures
(a)

(b)

(c)

(d)


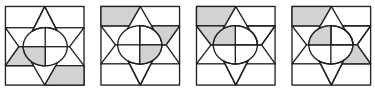
48. The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown in the following figures. How would this paper look when unfolded?
Question Figures

Answer Figures

(a) (b) (c) (d)

49. Select the option that is related to the third letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster.
OESTD : UAVXI : : UISRY : ?
(a) AOVYD (b) AEVVD
(c) EAVVD (d) AEVWD

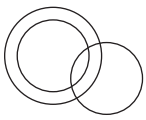
50. P, Q, R, S, T and U are six friends sitting at equal distances from each other around a circular table facing the centre of the table. U is sitting at the 4th position to the left of T. Someone is sitting between S and T but it's not P. R is sitting to the immediate left of U. Who is sitting opposite T?
(a) S (b) P
(c) R (d) Q

51. Four letter-clusters have been given, out of which three are alike in some manner and one is different. Select the letter-cluster that is different.
(a) BKYP (b) GDTW
(c) SXHD (d) XJCQ

52. Select the figure that will come next in the following figure series.
Question Figures

Answer Figures

(a) (b) (c) (d)

53. Four letter-clusters have been given, out of which three are alike in same manner and one is different. Select the letter-cluster that is different.
(a) DJOTY (b) CHMRW
(c) DINSX (d) BGLQV

54. Which of the following options could be correctly depicted by the venn diagram?

(a) Book, Copy, Student
(b) Mother, Doctors, Women
(c) Letter, Post-office, Paper
(d) Musician, Teacher, Engineer

55. Select the option that will fill in the blank and complete the given series.
EBA, ____,UJI, ONO, IRU
(a) PIA (b) QJZ
(c) PJA (d) AFE

56. If '<' means '×', '×' means '–', '÷' means '+', and '+' means '÷', then find the value of the given expression.
$5 \div 3 < 2 + (9 + 3) \times 2 = ?$
(a) 5 (b) 12 (c) 1 (d) 7