

T.B.C. : STS-K-TPT
Serial No.:

Test Booklet Series

TEST BOOKLET

Subject : Test 17 – CSAT Sectional Test 2
Question Paper



Time Allowed : Two Hours
Marks : 200

Maximum**INSTRUCTIONS**

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET DOES NOT HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS, ETC. IF SO, GOT IT REPLACED BY A COMPLETE TEST BOOKLET.

2. Please note that it is the candidate's responsibility to encode and fill in the Roll Number and Test Booklet Series A, B, C or D carefully and without any omission or discrepancy at the appropriate places in the OMR Answer Sheet. Any omission/discrepancy will render the Answer Sheet liable for rejection.

3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside. DO NOT write anything else on the Test Booklet.

4. This Test Booklet contains 100/80 items (questions).

Each item is printed in English. Each item comprises of four responses (answers). You will select the response

which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response, mark the response which you

consider the best. In any case, choose ONLY ONE response for each item.

5. You have to mark all your responses ONLY on the separate Answer Sheet provided. See directions in the Answer Sheet.

6. All items carry equal marks

7. Before you proceed to mark in the Answer Sheet the response to various items in the Test Booklet, you have to fill in some particulars in the Answer Sheet as per instructions sent to you with your Admission Certificate.

8. After you have completed filling in all your responses on the Answer Sheet and the examination has concluded, you should hand over to the Invigilator only the Answer Sheet. You are permitted to take away with you the Test Booklet.

9. Sheets for rough work are appended in the Test Booklet at the end.

10. Penalty for wrong answers:

THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY A CANDIDATE IN THE OBJECTIVE TYPE QUESTION PAPERS

(i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, **one third** if the marks assigned to that question will be deducted as penalty.

(ii) If a candidate gives more than one answer, it will be treated as a wrong answer even if one of the given answers happens to be correct and there will be same penalty as above to that question.

(iii) If a question is left blank, i.e., no answer is given by the candidate, there will be no penalty for that question.

1. A, B, and C start a business with investments in the ratio 5 : 7 : 8. After 4 months, A withdraws half his investment. After 6 months B doubles his investment. At the end of 12 months, total profit is ₹1,20,000. What is C's share?

- A. ₹44,000
- B. ₹52,000
- C. ₹54,000
- D. ₹56,000

2. A and B start a partnership with ₹60,000 and ₹80,000. After 6 months C joins with ₹1,20,000. If the total profit after a year is ₹39,000, find B's share.

- A. ₹12,000
- B. ₹13,200
- C. ₹14,000
- D. ₹15,600

3. A invests ₹40,000 and B invests ₹50,000 in a business. After 3 months A withdraws ₹10,000 and B adds ₹20,000. If the annual profit is ₹22,400, find A's share.

- A. ₹7,466
- B. ₹10,456
- C. ₹11,200
- D. ₹12,000

4. A, B and C invest ₹12,000, ₹16,000 and ₹20,000 respectively. After 5 months C withdraws ₹5,000. If total profit after 1 year is ₹27,600, find B's share.

- A. ₹8,800
- B. ₹9,200
- C. ₹9,800
- D. ₹10,000

5. A and B invest ₹30,000 and ₹45,000. After 4 months C joins with ₹60,000. At the end of the year total profit is ₹36,000. What is C's share?

- A. ₹10,000
- B. ₹12,521
- C. ₹14,322
- D. ₹16,000

6. A invests ₹20,000 for 8 months and B invests ₹30,000 for 10 months. Total profit is ₹16,000. Find B's share.

- A. ₹10,435
- B. ₹11,005
- C. ₹12,035
- D. ₹13,000

7. A, B, C start a partnership with ₹50,000, ₹40,000 and ₹30,000 respectively. After 6 months A withdraws ₹20,000. If the profit after a year is ₹36,000, find A's share.

- A. ₹12,000
- B. ₹13,091
- C. ₹14,091
- D. ₹15,000

8. A can complete a work in 12 days and B in 18 days. They work together for 4 days and then B leaves. How many days will A take to finish the remaining work?

- A. 4
- B. 5
- C. 6
- D. 7

9. A can do a job in 20 days, B in 30 days and C in 60 days. They start together but B leaves after 5 days. In how many days will the work finish?

- A. 10.5
- B. 7.5
- C. 15
- D. 18

10. A and B together can do a work in 8 days, B and C in 12 days, C and A in 16 days. In how many days will A alone finish the work?

- A. 16
- B. 19
- C. 24
- D. 32

11. A does half the work in 6 days. B completes the remaining work in 9 days. If both worked together, how long would they take?

- A. 6 days
- B. 6.5 days
- C. 7.5 days
- D. 8 days

12. A can complete a work in 10 days and B in 15 days. They start together but after 3 days A leaves. In how many days will B finish the remaining work?

- A. 6
- B. 7
- C. 7.5
- D. 9

13. 6 men can complete a work in 15 days. After 5 days, 4 more men join. In how many days will the remaining work be completed?

- A. 5
- B. 6
- C. 7
- D. 8

14. A is twice as efficient as B. If A alone can complete a work in 12 days, how long will A and B together take?

- A. 6 days
- B. 8 days
- C. 9 days
- D. 10 days

15. A car travels 240 km at 60 km/h and returns at 80 km/h. What is the average speed?

- A. 68.6 km/h
- B. 69.2 km/h
- C. 70 km/h
- D. 72 km/h

16. A man travels $\frac{1}{3}$ distance at 30 km/h, $\frac{1}{3}$ at 45 km/h, and the rest at 60 km/h. Find average speed.

- A. 41.5 km/h
- B. 42.3 km/h
- C. 43.6 km/h
- D. 44 km/h

17. Two trains start simultaneously from A and B towards each other. Their speeds are 60 km/h and 40 km/h. Distance between them is 500 km. When will they meet?

- A. 4 hrs
- B. 5 hrs
- C. 6 hrs
- D. 7 hrs

18. A man covers half the distance at 40 km/h and remaining at 20 km/h. What is average speed?

- A. 26.6 km/h
- B. 28 km/h
- C. 30 km/h
- D. 32 km/h

19. A train running at 72 km/h crosses a pole in 25 seconds. What is the train length?

- A. 400 m
- B. 450 m
- C. 500 m
- D. 550 m

20. A car increases speed by 20%. How much time will it save on a journey?

- A. 16.67%
- B. 18%
- C. 20%
- D. 25%

21. A cyclist rides 20 km at 10 km/h and another 20 km at 20 km/h. What is the average speed?

- A. 12 km/h
- B. 13.33 km/h
- C. 14 km/h
- D. 15 km/h

22. A train 200 m long crosses a pole in 10 seconds. What is speed?

- A. 54 km/h
- B. 60 km/h
- C. 72 km/h
- D. 80 km/h

23. A train 180 m long passes a platform 120 m long in 12 seconds. Find speed.

- A. 72 km/h
- B. 90 km/h
- C. 108 km/h
- D. 120 km/h

24. Two trains 120 m and 180 m long run in opposite directions at 54 km/h and 72 km/h. Time to cross each other?

- A. 6 secs
- B. 8 secs
- C. 10 secs
- D. 12 secs

25. A train crosses a man walking at 6 km/h in same direction in 20 sec. Train speed 54 km/h. Find train length.

- A. 240 m
- B. 260 m
- C. 280 m
- D. 300 m

26. Two trains each 200 m long are moving in the **same direction** with speeds 72 km/h and 54 km/h. How much time will the faster train take to completely cross the slower train?

- A) 40 secs
- B) 50 secs
- C) 60 secs
- D) 80 secs

27. A 300 m train crosses a bridge of 200 m in 25 sec. Find speed.

- A. 60 km/h
- B. 72 km/h
- C. 80 km/h
- D. 90 km/h

28. A train passes a pole in 15 sec and a platform in 25 sec. Find ratio of train length to platform length.

- A. 3:2
- B. 2:3
- C. 3:1
- D. 5:3

29. Pipe A fills a tank in 12 hours and B in 18 hours. Both opened together. How long to fill?

- A. 6 hrs
- B. 7.2 hrs
- C. 8.2 hrs
- D. 9 hrs

30. A pipe fills tank in 10 hr and leak empties in 15 hr. Time to fill?

- A. 25 hrs
- B. 30 hrs
- C. 20 hrs
- D. 18 hrs

31. Pipe A fills in 20 hr and B in 30 hr. If both opened for 10 hr then B closed, how long for A to finish?

- A. 3 hrs
- B. 6 hrs
- C. 5 hrs
- D. 7 hrs

32. A pipe fills in 8 hr and another empties in 12 hr. If both opened together, tank fills in?

- A. 24hrs
- B. 20hrs
- C. 18hrs
- D. 16hrs

33. Two pipes fill in 15 and 20 hr respectively. A third empties in 30 hr. If all open together, find time.

- A. 10hrs
- B. 12hrs
- C. 15hrs
- D. 18hrs

34. Pipe A fills tank in 16 hr. Pipe B fills in 24 hr. Both opened but B closed after 4 hr.

Remaining time?

- A. 6hrs
- B. 7hrs
- C. 8hrs
- D. 9hrs

35. A pipe fills $\frac{1}{4}$ tank in 2 hr. How long for full tank?

- A. 6hrs
- B. 8hrs
- C. 10hrs
- D. 12hrs

36. Boat speed in still water = 15 km/h, stream speed = 3 km/h. Find downstream speed.

- A. 12 km/h
- B. 15 km/h
- C. 18 km/h
- D. 20 km/h

37. Boat speed still water = 20 km/h, stream = 5 km/h. Find upstream speed.

- A. 10 km/h
- B. 12 km/h
- C. 15 km/h
- D. 18 km/h

38. A boat goes 30 km downstream in 2 hr and upstream in 3 hr. Find boat speed.

- A. 12.5 km/h
- B. 15.5 km/h
- C. 18 km/h
- D. 20 km/h

39. Boat speed 18 km/h still water. Stream 6 km/h. Time for 48 km downstream?

- A. 2hrs
- B. 2.5hrs
- C. 3hrs
- D. 4hrs

40. Boat takes 4 hr downstream and 6 hr upstream for same distance. Ratio of speeds of upstream to downstream?

- A. 2:3
- B. 3:2
- C. 4:3
- D. 5:3

41. A man rows 12 km upstream in 4 hr and same distance downstream in 2 hr. Stream speed?

- A. 1 km/h
- B. 1.5 km/h
- C. 2 km/h
- D. 3 km/h

42. Boat speed still water 10 km/h and stream 2 km/h. Distance covered upstream in 4 hr?

- A. 28 km
- B. 30 km
- C. 32 km
- D. 36 km

43. If $x+1/x=5$, find the value of x^3+1/x^3

- A. 110
- B. 115
- C. 120
- D. 125

44. If $a+b+c=6$ and $ab+bc+ca=11$, find $a^2+b^2+c^2$.

- A. 12
- B. 14
- C. 16
- D. 18

45. If $x^2-7x+10=0$, find the value of $x^2 + \frac{1}{x^2}$

- A. 10
- B. 22
- C. 14
- D. 25

46. If $x+y=10$ and $xy=21$, find x^3+y^3 .

- A. 370
- B. 430
- C. 460
- D. 490

47. If $\frac{x}{y} + \frac{y}{x} = 5$ Find $x^2/y^2 + y^2/x^2$

- A. 21
- B. 23
- C. 25
- D. 27

48. In how many ways can the letters of the word "MISSISSIPPI" be arranged?

- A. 34650
- B. 34600
- C. 34750
- D. 34800

- 49.** From 10 different books, in how many ways can 4 books be selected?
- A. 120
 - B. 180
 - C. 210
 - D. 240
- 50.** In how many ways can 5 boys and 4 girls be arranged in a row so that no two girls sit together?
- A. 7200
 - B. 14400
 - C. 41600
 - D. 43200
- 51.** How many 4-digit numbers can be formed using digits 1,2,3,4,5 without repetition?
- A. 60
 - B. 100
 - C. 120
 - D. 240
- 52.** From a group of 6 men and 4 women, how many committees of 4 persons can be formed if at least one woman must be included?
- A. 160
 - B. 185
 - C. 195
 - D. 210
- 53.** A die is thrown twice. What is the probability that sum is 8?
- A. $1/12$
 - B. $5/36$
 - C. $1/9$
 - D. $7/36$
- 54.** A card is drawn from a deck of 52 cards. What is the probability of getting a king or a heart?
- A. $4/13$
 - B. $17/52$
 - C. $13/52$
 - D. $1/4$
- 55.** Two coins are tossed simultaneously. What is the probability of getting at least one head?
- A. $1/2$
 - B. $1/3$
 - C. $3/4$
 - D. $2/3$
- 56.** A bag contains 3 red, 4 blue, and 5 green balls. One ball is drawn randomly. Find probability that the ball is blue.
- A. $1/4$
 - B. $1/3$
 - C. $1/2$
 - D. $2/3$
- 57.** A card is drawn from a pack of 52 cards. What is the probability that it is neither a king nor a queen?
- A. $44/52$
 - B. $48/52$
 - C. $42/52$
 - D. $40/52$
- 58.** A tree is 10 m tall. The angle of elevation from a point on the ground is 45° . What is the distance of the point from the tree?
- A. 5 m
 - B. 10 m
 - C. 15 m
 - D. 20 m

59. Five students — P, Q, R, S, T — are ranked based on marks.

Conditions:

P scored more than only Q

R scored less than S but more than T

S is not the highest

T is not the lowest

Who is ranked **3rd**?

A) P

B) R

C) S

D) T

60. Seven people — A, B, C, D, E, F, G — live on 7 different floors of a building

(1 = lowest, 7 = highest).

Conditions:

A lives above D but below G

C lives on an even-numbered floor

B lives immediately above E

F lives on floor 1

Only two people live between D and E

G does not live on the top floor

Who lives on the **4th floor**?

A) A

B) B

C) C

D) D

61. A dice has numbers 1 to 6. It is observed:

1 is opposite to 6

2 is adjacent to 1 and 3

4 is opposite to 2

Which number is opposite to 3?

A) 5

B) 6

C) 1

D) 4

62. Two views of same dice:

View 1: Top = 1, Front = 2, Right = 3

View 2: Top = 1, Front = 3, Right = 5

What is opposite to 2?

A) 3

B) 5

C) 6

D) 1

63. A dice shows: 2 adjacent to 3, 4, 5 3 adjacent to 1, 2, 6. Which faces are opposite?

A) 2-6

B) 3-5

C) 4-1

D) 2-5

64. A dice has faces:

Top = 1, Bottom = 6, Front = 2, Back = 5, Left = 3, Right = 4. If the dice is rotated so that

front becomes top, what will be the new bottom?

A) 5

B) 2

C) 6

D) 1

65. A cube is painted on all sides and cut into 64 smaller cubes. How many cubes have exactly **2 faces painted**?

A) 12

B) 24

C) 36

D) 4

A company has **5 departments** — Sales, Marketing, HR, Finance, and IT — each with a different number of employees. Last month, the employees worked on **different projects**, and each project required a different number of days to complete. The data is summarized below:

Department	Employees	Project	Days to Complete
Sales	25	P1	10
Marketing	20	P2	12
HR	15	P3	8
Finance	30	P4	15
IT	35	P5	20

Additional Info:

- Efficiency of a department = Employees / Days
- The project requiring the **least days** is not handled by the department with the most employees.
- Marketing has more employees than HR but fewer than Sales.
- IT worked on the **longest project**.

66. Which department is the most efficient (highest Employees/Days ratio)?

- A) Sales
- B) Marketing
- C) HR
- D) Finance

67. Which project required the fewest total employee-days? (Employee-days = Employees × Days)

- A) P1
- B) P2
- C) P3
- D) P4

68. If Finance doubles its employees while keeping days same, which department becomes most efficient?

- A) HR
- B) Marketing
- C) Finance
- D) IT

69. Which department handled the project with median number of days?

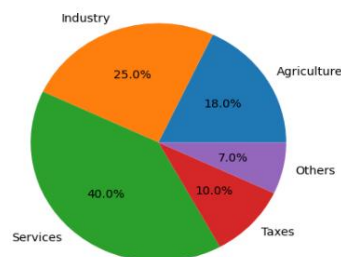
- A) Sales
- B) Marketing
- C) HR
- D) Finance

70. Total employees in departments handling projects >10 days?

- A) 65
- B) 85
- C) 90
- D) 95

Q No. 71 to 75: Observe the pie chart and answer the given questions

Sector-wise Contribution to GDP (Hypothetical Data)



71. If the Services sector grows by 10% while all other sectors remain constant, what will be the new approximate share of Services in total GDP?

- A. 41%
- B. 42%
- C. 43%
- D. 44%

72. Which of the following sectors combined contribute less than Industry but more than Taxes?

- A. Agriculture + Others
- B. Taxes + Others
- C. Agriculture + Taxes
- D. Others + Services

73. If a policy shift increases Agriculture's share by 5 percentage points by reducing Industry proportionately, what will be the new Industry share?

- A. 18%
- B. 20%
- C. 22
- D. 25%

74. Which of the following statements is most consistent with structural transformation in developing economies like India?

- A. Agriculture dominates GDP contribution
- B. Industry consistently remains the largest sector
- C. Services sector overtakes both Agriculture and Industry
- D. Taxes form the majority of GDP

75. If "Others" category includes emerging sectors like gig economy and digital platforms, which recent trend best explains its gradual increase?

- A. Decline in manufacturing productivity
- B. Rise of platform-based digital economy
- C. Reduction in tax compliance
- D. Agricultural mechanization

Q No. 76 to 80: Observe the given details and answer the given questions

A district administration introduced a Smart Village Development Program in five villages — A, B, C, D, and E. The total fund allocated was ₹100 lakh.

The allocation was based on three criteria:

- Population weight (50%)
- Development deficit (30%)
- Performance index (20%)

The following information is known:

- Village A received the highest allocation, mainly due to its very high population.
- Village C and D together received exactly 40% of the total funds.
- Village B received twice the amount of Village E.
- Village D received more than Village C, but less than Village A.
- Village E received the least allocation, which was ₹10 lakh.

Additionally:

- Village B had moderate population but high performance.
- Village C had low performance but high development deficit.
- Village D had balanced scores across all three criteria.

76. What is the amount allocated to Village B?

- A. ₹15 lakh
- B. ₹20 lakh
- C. ₹25 lakh
- D. ₹30 lakh

77. What is the allocation of Village D?

- A. ₹20 lakh
- B. ₹22 lakh
- C. ₹24 lakh
- D. ₹26 lakh

78. Which village likely had the highest development deficit?

- A. Village A
- B. Village B
- C. Village C
- D. Village D

79. What percentage of total funds did Village A receive?

- A. 28%
- B. 30%
- C. 32%
- D. 35%

80. Which of the following is a correct ranking (highest to lowest allocation)?

- A. $A > D > B > C > E$
- B. $A > C > D > B > E$
- C. $D > A > C > B > E$
- D. $A > B > D > C > E$