7

CLOCKS & CALENDARS

1. How many degrees does an hour hand move in 54 minutes?
   A. 304°
   B. 108°
   C. 27°
   D. 54°

2. How many degrees does the minute hand move in the same time in which an hour hand moves by 18°?
   A. 108°
   B. 9°
   C. 256°
   D. 216°

3. If a clock is kept on the table in such a way that at 3:10 pm the hour hand points south, after how much time will the minute hand point east?
   A. 20 minutes
   B. 35 minutes
   C. 50 minutes
   D. 90 minutes

4. The mirror reflection of a clock shows 3.30 hrs. After two hours, what time the mirror reflection of the clock will show?
   A. 8.30
   B. 5.30
   C. 2.30
   D. 1.30

5. There is a clock hanging on the wall. The reflection of the clock in a mirror shows exactly the same time as the clock. How many times does this happen in 6 days?
   A. 11
   B. 12
   C. 22
   D. 24

6. What is the reflex angle when the time is 1:30?
   A. 225°
   B. 135°
   C. 150°
   D. 175°

7. An accurate clock shows 8 O'clock in the morning. Through how many degrees will the hour hand rotate when the clock shows 2 O'clock in the afternoon?
   A. 180°
   B. 150°
   C. 120°
   D. 270°

8. What is the angle between the two hands of a clock when time is 20 minutes past 5?
   A. 0°
   B. 40°
   C. 30°
   D. 15°

9. At what time between 8 p.m. and 9 p.m. will the minute hand coincide with the hour hand?
   A. $43\frac{7}{11}$ past 8
   B. $47\frac{7}{11}$ past 8
   C. 40 past 8
   D. $42\frac{7}{11}$ past 8

10. At what time between 5 O'clock and 6 O'clock will the hands of a watch be at right angles?
    A. $10\frac{10}{11}$ past 5
    B. $43\frac{7}{11}$ past 5

C. Both A & B
D. None of these

11. Find the time between 3 and 4 O'clock at which the minute hand and the hour hand make an angle 60° with each other.
A. $5\frac{5}{11}$ past 3
B. $27\frac{3}{11}$ past 3
C. Both A & B
D. None of these

12. It takes the pendulum of a clock 7 seconds to strike 4 O'clock. How much time will it take to strike 11 O'clock?
A. 18 seconds
B. 20 seconds
C. 19.25 seconds
D. 23.33 seconds

13. A clock strikes once at 1 O'clock, twice at 2 O'clock and so on. If it takes 6 seconds to strike at 3 O'clock, how much time will it take to strike at 9 O'clock?
A. 24 seconds
B. 18 seconds
C. 20 seconds
D. None of these

14. At 6 O'clock the clock ticks 6 times. The time between first and last tick was 30sec. How much time it takes at 12 O'clock?
A. 72
B. 66
C. 60
D. 90

15. A mechanical grandfather clock is at present showing 7 hrs 40 min 6 sec. Assuming that it loses 4 sec in every hour, what time will it show after exactly $6\frac{1}{2}$ hours? A. 2 hr 9 min 40 sec
B. 2 hr 10 min 6 sec
C. 14 hr 9 min 34 sec
D. 14 hr 10 min 32 sec

16. A clock loses 12 minutes every 24 hours. It is set right at 7:25 p.m. on Monday. What will be the time when the clock shows 1:45 p.m. the following day?
A. 1:20:35 p.m.
B. 1:35:50 p.m.
C. 1:25:35 p.m.
D. None of these

17. A clock is currently showing the right time as 12 p.m. If, after this, it starts gaining 10 minutes every hour, what time will it show at 10 p.m.?
A. 10:40 p.m.
B. 11:40 p.m.
C. 1:40 p.m.
D. 10 p.m.

18. A digital wristwatch was set accurately at 8.30 a.m. and then lost 2 seconds every 5 minutes. What time was indicated on the watch at 6.30 p.m. of the same day if the watch operated continuously that time?
A. 5:56 p.m.
B. 5:58 p.m.
C. 6:00 p.m.
D. 6:26 p.m.

19. A clock is showing the right time at 12 p.m. After this it started gaining 15 minutes per hour. So, when this clock shows 5 pm, what is the actual time?
A. 4:00 p.m.
B. 6:00 p.m.
C. 4:15 p.m.
D. 6:15 p.m.

20. Imagine that your watch was correct at noon, but then it began to lose 30 minutes each hour. It now shows 4 p.m., but it stopped 5 hours ago. What is the correct time now?
A. 9.30 p.m.
B. 11 p.m.
C. 1 a.m.
D. 1.30 a.m.

21. How much does a watch gain per day, if its hands coincide every 64 minutes?
A. 96 minutes
B. 90 minutes
C. $36\frac{5}{11}$ minutes
D. $32\frac{8}{11}$ minutes

22. The minute hand of a clock overtakes the hour hand after every 68 minutes of cor-

rect time. How much time does the clock lose or gain in a day of normal time?
A. $61\frac{1}{11}$ minutes loss
B. $53\frac{169}{187}$ minutes loss
C. $61\frac{1}{11}$ minutes gain
D. $53\frac{169}{187}$ minutes gain

23. A man on his way to dinner shortly after 6:00 p.m. observes that the hands of his watch form an angle of 110Âř. returning before 7:00 p.m. he notices that again the hands of his watch form an angle of 110°. The number of minutes that he has been away is
A. $36\frac{2}{3}$
B. 40
C. 42
D. $42\frac{2}{5}$

24. Sangeeta and Swati bought two wristwatches from Jamshedpur Electronics at 11.40 a.m. IST. After purchasing they found that when 60 minutes elapses on a correct clock (IST), Sangeeta's wristwatch registers 62 minutes whereas Swati's wristwatch registers 56 minutes. Later in the day Sangeeta's wristwatch reads 10 p.m., then the time on Swati's wristwatch is
A. 8:40 p.m.
B. 9:00 p.m.
C. 9:20 p.m.
D. 9:40 p.m.

25. The two hands of a clock will be together between h and $h+1$ o'clock at
A. $\frac{60}{11}h$ minutes past h o'clock
B. $\frac{50}{11}h$ minutes past h o'clock
C. $\frac{40}{11}h$ minutes past h o'clock
D. $\frac{30}{11}h$ minutes past h o'clock

26. Today is Monday. After 61 days, it will be
A. Sunday
B. Tuesday
C. Saturday
D. Friday

27. Three days ago Ritu met her friend and asked him to lend her his Physics book. He promised that he will lend it on the eighth day from that day. If today is Thursday, on which day will he lend me the book?
A. Friday
B. Tuesday
C. Monday
D. Sunday

28. If 12^{th} July in particular year is a Tue, then 5^{th} December in that year is
A. Wednesday
B. Monday
C. Saturday
D. Thursday

29. In a month of 31 days, the third Wednesday falls on the 15^{th}. What will be the last day of that month?
A. Fifth Thursday
B. Fifth Wednesday
C. Fourth Sunday
D. Fifth Friday

30. If the 25^{th} of August in a year is Thursday, the number of Mondays in that month is
A. 3
B. 4
C. 5
D. 6

31. If 09/12/2001 (DD/MM/YYYY) happens to be Sunday, then 09/12/1971 would have been a
A. Wednesday
B. Tuesday
C. Saturday
D. Thursday

32. It was Sunday on Jan 1, 2006. What was the day of the week Jan 1, 2010?
A. Tuesday
B. Thursday
C. Friday
D. Saturday

33. If March 1, 2006 was Wednesday, which day was it on March 1, 2002?
A. Monday
B. Thursday
C. Saturday
D. Friday

34. If 2^{nd} October 1807 is a Saturday, then 2^{nd} October 2007 is a
    A. Monday
    B. Tuesday
    C. Wednesday
    D. Thursday

35. How many odd days are there in the year 2200?
    A. 0
    B. 1
    C. 2
    D. None of these

36. When can we use the same calendar of 2017?
    A. 2022
    B. 2023
    C. 2021
    D. 2024

37. The first Republic day was celebrated on 26^{th} January 1950. It was a
    A. Wednesday
    B. Tuesday
    C. Saturday
    D. Thursday

38. If 17^{th} September 1993 was a Friday, then which day of the week was 25^{th} June 1972?
    A. Sunday
    B. Tuesday
    C. Friday
    D. Thursday

39. Assuming that three of the following four dates in the year 2004 are wrong, which one would be right?
    A. Friday, 17^{th} of January
    B. Sunday, 21^{st} of February
    C. Friday, 19^{th} of March
    D. Sunday, 10^{th} of April

40. On what dates of April, 2001 did Wednesday fall?
    A. 1^{st}, 8^{th}, 15^{th}, 22^{nd}, 29^{th}
    B. 2^{nd}, 9^{th}, 16^{th}, 23^{rd}, 30^{th}
    C. 3^{rd}, 10^{th}, 17^{th}, 24^{th}
    D. 4^{th}, 11^{th}, 18^{th}, 25^{th}

41. How many times will Maya's birthday fall on Monday in the year 2001 and 2002, if she was born on 19^{th} April?
    A. Once
    B. Twice
    C. Never
    D. Cannot be determined

42. How many odd days are there from 13^{th} May, 2005 to 19^{th} August 2005 (both inclusive)?
    A. 1
    B. 2
    C. 3
    D. 4

43. Find the number of odd days in 126 years.
    A. 1
    B. 2
    C. 3
    D. 4

44. The calendar of the year 2024 can be used again in the year?
    A. 2030
    B. 2052
    C. 2048
    D. 2036

45. The calendar for the year 2007 will be the same for the year
    A. 2014
    B. 2016
    C. 2017
    D. 2018

46. How many times do the hands of a clock coincide in a day?

47. How many times in a day, are the hands of a clock in straight line but opposite in direction?

48. How many times in a day, the hands of a clock are straight?

49. Arun went for a movie nine days ago. He goes to watch movies only on Thursdays. What day of the week is today?

50. The maximum gap between two successive leap years is?

51. How many leap years does 100 years have?
52. How many days are there in x weeks x days?
53. Second & fourth Saturdays and every Sunday is a holiday. How many working days will be there in a month of 31 days beginning on a Friday?
54. If yesterday were tomorrow, then today would be Friday. What day is today?
55. The last day of a century cannot be?

ANSWER KEY

1. C	2. D	3. C	4. D	5. D	6. A	7. A	8. B	9. A	10. C
11. C	12. D	13. A	14. A	15. A	16. B	17. B	18. D	19. A	20. C
21. D	22. D	23. B	24. B	25. A	26. C	27. B	28. B	29. D	30. C
31. D	32. C	33. D	34. C	35. B	36. B	37. D	38. A	39. C	40. D
41. C	42. A	43. B	44. B	45. D					

46. 22 times	47. 22 times	48. 44 times	49. Saturday	50. 8
51. 24/25	52. 8x	53. 24 days	54. Sunday	55. Tuesday/Thursday/Saturday