

**O. P. JINDAL SCHOOL, SAVITRI NAGAR****Weekly Test -2 (2025 – 2026)****Class : XI****Subject: Applied Mathematics****Max Marks : 20****Time: 1 Hour****General Instructions:**

- (i) All the questions are compulsory.
- (ii) The question paper consists of 13 questions divided into 3 sections. Section A has 8 questions of 1 mark each, section B has 3 questions of 2 marks and section C has 2 questions of 3 marks each.
- (iii) There is no overall choice. However, internal choice has been provided in 2 questions You have to attempt only one of the alternatives in all such questions.
- (iv) Use of calculator is not allowed but logarithm table is allowed.

**Section – A**

1. If each observations of the data is increased by 5, then their mean
 

(a) remains same	(b) is increased by 5
(c) is decreased by 5	(d) becomes 5 times the original mean
2. A car covers first 10 km at a speed of 20 km/h, next 20 km at a speed of 40 km/h and the last 10 km at a speed of 15km/h. Then the average speed of the car for the entire journey is ?
 

(a) 24 km/h	(b) 26 km/h	(c) 27 km/h	(d) 28 km/h
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3. How many odd days are there in a century?:
 

(a) 2	(b) 3	(c) 4	(d) 5
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4. What was the day on 15<sup>th</sup> August 1947?
 

(a) Friday	(b) Saturday	(c) Sunday	(d) Monday
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5. If  $A = \{1, 2, 3, 4\}$ , then number of subsets of A containing element 3 are
 

(a) 16	(b) 32	(c) 4	(d) 8
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6. If  $n(\xi) = 50$ ,  $n(A) = 38$ ,  $n(B) = 30$ , then the least value of  $n(A \cap B)$  is:
 

(a) 30	(b) 15	(c) 38	(d) 18
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7. In a group of 70 people, 52 likes soft drinks, 37 likes tea and each person likes atleast one of the two drinks. Then the number of persons who likes both the drinks are
 

(a) 15	(b) 19	(c) 20	(d) 18
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8. A train is running at 72 km/h crosses a pole in 6 seconds. What is the length of the train?
 

(a) 100 m	(b) 110 m	(c) 120 m	(d) 130 m
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**Section – B**

9. At what time between 7:00 and 8:00 will the hands of a clock coincide?

**OR**

Find the angle between the hands of a clock at 4:20 pm?

10. If 10 June 1048 was Thursday, what will be the day on 16 November 1969?

11. Write the power set of set A where  $A = \{1, -2, 3\}$

**Section – C**

12. In a survey of 600 students in a school, 150 students likes playing Badminton and 225 students likes playing Cricket and 100 students likes playing both the games. How many students

- (i) Likes playing only Badminton
- (ii) Likes playing only Cricket
- (iii) Plays neither Badminton nor Cricket

13. Two trains of length 140m and 110m are running in opposite directions. They cross each other in 6 seconds. If the speed of the first train is 80 km/h, find the speed of the second train?

**OR**

A, B and C together can do a piece of work in 15 days. B alone can do it in 30 days and C alone can do it in 40 days. In how many days will A alone will do the work?

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