**CHIRANJIV BHARATI SCHOOL, PALAM VIHAR, GURGAON**

**MATHEMATICS – MCQs**

**TIME**

**Q1. Choose the correct option for the given time of the day:**

**a) The Sun sets at**

i) 6.00 a.m. ii) 5:00 a.m. iii) 6:45 p.m. iv) 12 noon

**b) I can count stars at**

i) 7:45 a.m. ii) 1:15 a.m. iii) 4:45 p.m. iv) 6:00 p.m.

**c) You go to school at**

i) 7:00a.m. ii) At midnight iii) 8:00 p.m. iv) 7:45 p.m.

**Q2. Three hours after 10 a.m. is……**

i) 3:00 p.m. ii) 7 a.m. iii) 1:30 a.m. iv) 1 p.m.

**Q3. Two hours after 10 p.m. is….**

i) 12 midnight ii) 12 noon iii) 8 p.m. iv) 2 a.m.

**Q4. Convert the following as directed**

**a) 7 days into hours …..**

i) 1 week ii) 168 hours iii) 140 hours iv) 12 x 7 hours

**b) 8 ½ hours into minutes**…

i) 480 minutes ii) 48 minutes iii) 510 minutes iv) 480.5 minutes

**c) 9 minutes 24 seconds into seconds…**

i) 544 seconds ii) 484 seconds iii) 604 seconds iv) 564 seconds

**d) Half a day into minutes**

i) 12 hours ii) 720 minutes iii) 360 minutes iv) 480 minutes

**e) 3600 minutes into days**

i) 6 days ii) 2 days iii) 2 ½ days iv) 3 days

**Q5. Change the given time into the 24-hour clock time:**

**a) 7:00 p.m.**

i) 1700 hrs ii) 1500 hours iii) 700 hours iv) 1900 hours

**b) 11:15 p.m.**

i) 2315 hours ii) 1115 hours iii) 2115hours iv) 1915 hours

**Q6. Change the 24-hour clock time into 12-hour clock time**

**a) 0645 hours**

i) 8:45 p.m. ii) 6:45 a.m. iii) 6:45 p.m. iv) 1645 a.m.

**b) 1425 hours**

i) 2:25 p.m. ii) 12:25 p.m. iii) 2:25 a.m. iv) 4:25 p.m.

**Q7. When we add 8hours 40 minutes and 12 hours 35 minutes, the answer would be….**

i) 20 hours 65 mins ii) 22 hours 25 mins iii) 21 hours 15 mins iv) 21 hours 35 mins

**Q8. If added 11 hours 14 minutes 40 seconds and 9 hours 45 minutes 45 seconds, we get….**

i) 21 hrs 25 secs ii) 21 hrs 15 mins 5 secs iii) 21 hrs 25 mins iv) 20 hrs 59 mins 25 secs

**Q9.a)** **Rahul :** **Hello mom! I will leave at 5: 30 p.m. from Jammu today and my train will take11 hrs 25 minutes to reach Delhi.**

**Mother: Thats great son! So you will reach at \_\_\_\_\_\_\_\_\_\_\_. We’ll be there at the station.**

i) 6:55 a.m. ii) 6:55 p.m. iii) 4:55 a.m. iv) 5:55 a.m.

**b) Rahul’s train got 7 hrs 05 minutes late because of fog. So, he reached Delhi at ……**

i) 12 noon ii) 11 a.m. iii) 1:10 p.m. iv) 12 midnight

**Q10. Seema’s 41 day camp finished on 6th July. On what date did it begin?**

i) 25th May ii) 26th May iii) 25th June iv) 27th May

**Q11. Diya’s Uncle went to Hong Kong for 56 days. If he reached on 12th January, on what date would he be leaving? ( Include 12th January and it is not a leap year)**

i) 9th March ii) 8th March iii) 10th March iv) 17th November

**Q12. What date is the 48th day after 14 July?**

i) 31st August ii) 1st September iii) 26th May iv) 27th May

**ANSWER SHEET - TIME**

**A1. a) The Sun sets at**

iii) 6:45 p.m.

**b) I can count stars at**

ii) 1:15 a.m. ( it is only at night we can count stars)

**c) You go to school at**

i) 7:00a.m. (all other options are of evening i.e. p.m.)

**A2. Three hours after 10 a.m. is……**

iv) 1 p.m.

**A3. Two hours after 10 p.m. is….**

i) 12 midnight

**A4. a) 7 days into hours ….. 1 day = 24 hrs. 7 x 24 hrs = 168 hrs**

ii) 168 hours

**b) 8 ½ hours into minutes**… **1 hr = 60 minutes. 8 hrs = 8 x60 mins = 480 mins + 30 mins (½ hr) = 510 mins**

iii) 510 minutes

**c) 9 minutes 24 seconds into seconds… 1 min = 60 secs & 9 min = 9 x 60 =540 secs . So, 9 mins 24 secs = 540 + 24 = 564 secs**

iv) 564 seconds

**d) Half a day into minutes. ½ day = 12hrs (as 1 day = 24hrs) and 1 hr = 60 minutes. So, 12hrs = 12 x 60 mins = 720 minutes.**

ii) 720 minutes

**e) 3600 minutes into days. 24 hrs x 60 mins =1440 minutes = 1 day. So, 3600 mins ÷ 1440 = 2 ½ days.**

iii) 2 ½ day

**A5. According to the 24-hour clock time: 1a.m. is written as 0100hrs and 1 p.m. is written as 1300 hrs i.e 12 + 1 = 13 hrs. 24 – hour clock time does not use a.m. and p.m. Time begins from midnight which is indicated as 0000 hrs. The first 2 zeros stand for hours and the next 2 zeros for minutes**

**a) 7:00 p.m. is 12 + 7 = 1900 hrs**

iv) 1900 hours

**b) 11:15 p.m. 12+ 11:15 = 2315 hrs**

i) 2315 hours

**A6.The 12-hour clock uses a.m. and p.m. in showing its time**

**a) 0645 hours**

ii) 6:45 a.m.

**b) 1425 hours. 1200 hrs = 12 noon & 1425 -1200 = 225. So, 1425 hrs means 225 hrs after 12 noon, which will be at 2:25 p.m.**

i) 2:25 p.m.

**A7. When we add 8 hours 40 minutes and 12 hours 35 minutes, the answer would be….**

 **8 hrs 40 mins + 12 hrs 35 mins 20 hrs 75 mins 75 minutes means 1hr 15 mins ( as 1 hr =60 mins, so 75 -60 =15). Thus, this 1 hr when added to 20 hrs makes 21 hrs and minutes left are 15. Hence answer will be**

iii) 21 hours 15 mins

**A8. If added 11 hours 14 minutes 40 seconds and 9 hours 45 minutes 45 seconds, we get….**

 **11 hrs 14 mins 40 secs + 9 hrs 45 mins 45 secs 20 hrs 59 mins 85 secs Now 85 secs = 1minute 25 secs.So, when 1 minute is added to 59 minutes, it makes 60 minutes which becomes 1 hr. That means 00 minutes. Hence, the answer will be**

i) 21 hrs 25 secs

**A9.a)** **If Rahul’s train is leaving Jammu at 5:30 p.m. and takes 11 hrs 25 mins to reach Delhi then**

**11 hrs after 5:30 p.m. will be 4:30 a.m.and if we add 25 minutes to 4:30 a.m. it will be**

iii) 4:55 a.m.

**b) If Rahul’s train got 7 hrs 05 minutes late, it means 4:55 a.m. + 7 hrs 05 mins. So, 5 mins when added to 55 mins make 60 minutes which means 1 hr (5:00 a.m.) and 5hrs + 7 hrs = 12 hrs. Hence, Rahul reached Delhi at ……**

i) 12 noon

**A10. If Seema’s 41 day camp finished on 6th July it means till 6th July was the camp. So we count 6th July as 1 day, remaining 40 days will include 5days of July + 30 days of June and 5 days of May i.e. 27th of May or Days in July = 6, Days in June = 30 ( 30 + 6 = 36 & 41 – 36 = 5) So, 5 days of May when counted backwards from 31st May falls on 27th May. It means Seema’s first day of the camp was**

iv) 27th May

**A11. Diya’s Uncle went to Hong Kong for 56 days. If he reached on 12th January, then**

**Days of January = 31 – 11 = 20 days**

**Days of February = 28 days, (20 + 28 = 48) and (56 – 48 = 8)**

**Days in March = 8 days of March make 56 days. So, Diya’s uncle would be leaving on**

i) 9th March

**A12. The 48th day after 14 July is**

**Days in July = 31 - 14 = 17 ( we do not include 14 because question says after 14th)**

**Days in August = 31 = 31. 31+17 = 48. Hence, 48th day after 14th July is**

i) 31st August

**NOTES :**

* 1 hour = 60 minutes
* 1 minute = 60 seconds
* 1 day = 24 hours
* 1 year = 365 ¼ days
* 1 leap year = 366 days ( In a leap year February has 29 days)
* Seconds hand of a clock is thinnest and fastest.
* Timings between 12 midnight to 12 noon next day are a.m. hours and timings between 12 noon to 12 midnight are p.m. hours.
* Whenever we read time in minutes, if the number of minutes exceed 60, we convert it to hours and minutes.
* The 24-hour clock is always used by the Railways and the Airlines.

**Concepts**

* In Q1. Concept of a.m. and p.m. is cleared.
* In Q2, 3 and 4 the calculation of time according to 12 – hour clock and converting days into hours, hours into minutes, minutes into seconds and vice-versa are taught.
* Q5 and 6 include the 24 – hour clock time calculations and converting 12- hour timings into 24 –hour timings and vice versa.
* Questions 7, 8 and 9 teach the additions of time with proper conversions.
* Calculation of days/ dates with number of days in each month is taught in Q10 – Q12