HARI VIDYA BHAWAN

Date – 15/12/2020

PRACTICE WORKSHEET-56
SUBJECT – MATHEMATICS
CLASS – IX
CHAPTER-15
(PROBABILITY)
SESSION - (2020-21)

Instructions to be followed: -

1: -From now onwards students do your worksheets in your particular subject notebook respectively. Don't use rough sheets, old copies or anything else. All the stationary shops have already opened. So, you can purchase it.

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3: - Read each and every topic (which will be given in worksheets) of the chapters from NCERT books.

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5: - If you have any query related to worksheet, ask your queries in WhatsApp group between 8:00 am to 3:00 pm.

1.) In a cricket match, a batsman hits a boundary 6 times out of 30 balls he plays. Find the probability that he did not hit a boundary.

2.) An organization selected 2400 families at random and surveyed them to determine a relationship between the income level and the number of vehicles in a family. The information gathered is listed in the table below:

Monthly income (in Rs.)	Number of vehicles per family			
	0	1	2	3 or more
Less than Rs.25000	10	160	25	0
Rs.25000 - Rs.30000	0	305	27	2
Rs.30000 - Rs.35000	1	535	29	1
Rs.35000 - Rs.40000	2	469	59	25
Rs.40000 or more	1	579	82	88

Suppose a family is chosen at random. Find the probability that the family chosen is
(i) earning Rs.25000 - Rs.30000 per month and owning exactly 2 vehicles.
(ii) earning Rs.40000 or more per month and owning exactly 1 vehicle.
(iii) earning less than Rs.25000 per month and not owning any vehicle.
(iv) earning Rs.35000 - Rs.40000 per month and owning 2 or more vehicles.
(v) owning not more than 1 vehicle.

3.) The table given below shows the mark obtained by 30 students in a test.

Marks (Class interval)	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50
Number of students (Frequency)	7	10	6	4	3

Out of these students, one is chosen at random. What is the probability that the marks of the chosen student

(i) are 30 or less?
(ii) are 31 or more?
(iii) lie in the interval 21-30?

4.) The table given shows the ages of 75 teachers in a school.

Age (in years)	18 - 29	30 - 39	40 - 49	50 - 59
Number of teachers	3	27	37	8

A teacher from this school is chosen at random. What is probability that the selected teacher is
(i) 40 or more than 40 years old?
(ii) of an age lying between 30-39 years (including both)?
(iii) 18 years or more and 49 years or less?
(iv) 18 years or more old?
(v) above 60 years of age?
NOTE Here 18 - 29 means 18 or more but less than or equal to 29.

5.) Following are the ages (in years) of 360 patients, getting medical treatment in a hospital:

Age (in years)	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70
Number of patients	90	50	60	80	50	30

One of the patients is selected at random. What is probability that his age is
(i) 30 years or more but less than 40 years?
(ii) 50 years or more but less than 70 years?
(iii) 10 years or more but less than 40 years?
(iv) 10 years or more?
(v) less than 10 years?

6.) The marks obtained by 90 students of a school in mathematics out of 100 are given as under:

Marks	0-20	20-30	30-40	40-50	50-60	60-70	70 and above
No. of students	7	8	12	25	19	10	9

From these students, a student is chosen at random. What is the probability that the chosen student
(i)   get 20% or less marks?
(ii)   (ii) get 60% or more marks?

7.) It is known that a box of 800 electric bulbs contains 36 defective bulbs. One bulb is taken at random out of the box. What is probability that the bulb chosen is non defective?

8.) In a sample survey of 645 people, it was found that 516 people have a high school certificate. If a person is chosen at random, what is the probability that he/she has a high school certificate?

9.) In a medical examination of students of a class, the following blood groups are recorded:

Blood group	A	B	AB	O
Number of students	11	15	8	6

From this class, a student is chosen at random. What is the probability that the chosen student has blood group AB?

10.) In a survey of 364 children aged 19 - 36 months, it was found that 91 liked to eat potato chips. If a child is selected at random, the probability that he/she does not like to eat potato chips is.

HARI VIDYA BHAWAN

SUBJECT- SOCIAL SCIENCE

CLASS – IX

SESSION – 2020 – 21

WORK SHEET - 56

Date –15-12-2020

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Chapter-2 What is Democracy? Why Democracy?

Long Question Answer:

1. How is Democracy better than any other form of government? Explain giving at least five arguments in the favour of Democracy?
2. Distinguish between Democratic government and Non-Democratic government.
3. Give argument against Democracy?

हरि विद्या भवन
विषय - हिंदी

सामान्य निर्देश

* प्रस्तुत कार्य अपनी हिंदी साहित्य की पुस्तिका में कीजिए। किसी अन्य पुस्तिका में किया गया कार्य स्वीकार नही किया जायेगा ।

* सभी विद्यार्थियों को परीक्षा हेतु यह कार्य करना अनिवार्य है।

* वर्कशीट में दिए गए पाठ और कविता को ध्यानपूर्वक पढ़े।

* वर्कशीट से सम्बंधित समस्या पूछने के लिए आप अपने कक्षा ग्रुप पर सुबह 8 बजे से 3 बजे तक मैसेज कर सकते।

पुस्तक :- स्पर्श

सम्पूर्ण गद्य खंड

पुनरावृति कार्य

प्र0 क) निम्नलिखित प्रश्नो के उत्तर दीजिए|

1)   शिक्षा को लेकर बड़े भाई साहब का क्या मत था?

2)   लेखक द्वारा समय - सारिणी क्यों बनाई गई?

3)   निकोबार के लोग तताँरा को क्यों पसंद करते थे?

4) वामीरो से मिलने के बाद तताँरा के जीवन में क्या परिवर्तन आया?

5) बड़े - बड़े बिल्डर समुद्र को पीछे क्यों धकेल रहे थे?

6) अरब में लश्कर को नूह के नाम से क्यों याद करते है?

7) बढ़ती हुई आबादी का पर्यावरण पर क्या प्रभाव पड़ा?

8) कर्नल कालिंज का खेमा जंगल में क्यों लगा हुआ था?

9) वज़ीर अली एक जाँबाज़ सिपाही था, कैसे? स्पष्ट कीजिए|

10) वज़ीर अली ने किस प्रकार कारतूस हासिल किए?

HARI VIDYA BHAWAN
Worksheet-59
Class-X
Subject-Science
Session-2020-21
Ch-10: Light – Reflection and refraction
Ch-11: Human Eye and Colourful World
(Practice Questions)

Date: 15/12/2020

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Short Answer Type Question: -

Q.1 What is meant by dispersion of white light ?

Q.2 Why do we see a rainbow in the sky only after rainfall ?

Q.3 The refractive index of Ruby is 1.71. What is meant by this statement?

Q.4 Why do different components of white light deviate through different angles when passing through a triangular glass prism?

Q.5 What will be the colour of the sky, when it is observed from a place in the absence of any atmosphere? Why ?

Q.6 Why is red colour selected for danger signal lights?

Long   Answer Type Question: -

Q.7   A 10 cm tall object is placed perpendicular to the principal axis of a convex lens of focal length 30 cm. The distance of the object from the lens is 20 cm.
Find the:
(a)Position
(b)Nature
(c)Size of the image formed.

Q. 8 Draw a ray diagram to show the refraction of light through a glass prism. Mark on it (a) the incident ray. (b) the emergent ray and (c) the angle of deviation.

Q.9   Explain why do the planets not twinkle but the stars twinkle

Q.10 A 6 cm object is placed perpendicular to the principal axis of a convex lens of focal length 15 cm. The distance of the object from the lens is 10 cm. Find the position, size and nature of the image formed, using the lens formula.

Note –
- This worksheet is for your self assessment. To solve the above questions read all the notes of chapter 10 & 11 and try to answer them.
- All the practice worksheets have to be done in same notebook wherever you are writing notes.