# **Haryana Vishwakarma Skill University**

## **Online Entrance Exam-2018**

## Course, Examination Scheme, Syllabus, Sample Paper

#### **COURSE:**

1. B. Voc. (Automotive Mechatronics)

2. B. Voc. (Automotive Manufacturing)

3. B. Voc. (Tool and Die Manufacturing)

4. B. Voc. (Robotics and Automation)

#### • Examination Scheme:

Common Entrance Test (CET)

Time duration: 1 hr
 No negative marking
 No of questions: 70

➤ 1 mark for each correct answer

➤ The Difficulty Level will be of 10<sup>th</sup> Standard

#### • Syllabus:

Sr. No.	Topic	Sub Topics	Approximate No. of Question
1	English Language	Synonyms, Antonyms, Sentence Completion, Spelling Correction, Correct Sentence Selection	05
2	Reasoning (Verbal)	Letter & Symbol Series, Statement and Argument, Alphabet Test, Passage and Conclusions, Blood Relations, Direction Sense Test, Coding-Decoding, Number Ranking, Making Judgments, Analogy, Series, Logical Arrangement of Words, Inserting the Missing Character, Clock, Calendar, Sitting arrangements, Syllogism	10
3	Quantitative Aptitude	Simplification/Approximation, Number Series, Quadratic Equation, Average, Simple & Compound Interest, Profit Loss, Ratio & Proportion, Time & Work, Speed & Distance, Boats & Streams, Area & Volume	10
4	Data Analysis	Tables, Column Graphs, Bar Graphs, Line Charts, Pie Chart, Venn Diagrams	10
5	General Knowledge	Current Affairs	05
6	Haryana State Special	Haryana Current Affairs	05
7	General Science	Science in Everyday Life, Computer Fundamentals	05
8	Subject Specific	Physics, Chemistry, Mathematics	20

#### • Sample Paper (CET)

#### Instructions:

- > This question paper consists of 70 questions
- ➤ Each Question Carries 1 Mark
- > There is no negative marking
- > Use of Electronic/Manual Calculator is Prohibited
- Q1. Which word best express the meaning of BARBARIAN
- a) Unkind
- b) Impolite
- c) Unlike
- d) Uncivilised
- Q2. Give the antonym of MILITARY
- a) Civil
- b) Militant
- c) Civility
- d) Coup
- Q3. Select the word with correct spelling
- a) Benefited
- b) Benefitted
- c) Benifitted
- d) Benifited
- Q4. A person living permanently in a certain place
- a) Resident
- b) Native
- c) Domicile
- d) Subject
- Q5. With open arms
- a) Warmly
- b) Cold blooded
- c) Resemble
- d) Coldly

Q6. The S. I. unit of refractive index is
a) Meter b) Cm c) Watt d) No Unit
Q7. Which of the following is not a primary colour?
a) Red b) Blue c) Green d) Yellow
Q8. Endothermic reactions are those in which
<ul><li>a) Heat is evolved</li><li>b) Heat is absorbed</li><li>c) Temperature increases</li><li>d) Light is produced</li></ul>
Q9. The image formed in a compound microscope is
<ul><li>a) Erect</li><li>b) Inverted</li><li>c) Sometimes erect, sometimes inverted</li><li>d) None</li></ul>
Q10. Which blood cells are called 'Soldiers' of the body
<ul><li>a) WBC</li><li>b) Platelets</li><li>c) RBC</li><li>d) All of the above</li></ul>
Q11. If electrical conductivity increases with the increase of temperature of a substance,

then it is a:

- a) Conductor
- b) Semiconductor
- c) Insulator
- d) Carborator

#### Q12. Electronegativity is the measure of

- a) Metallic character
- b) Non-metallic character
- c) Basic Character
- d) None of these

#### Q13. Energy possessed by a body in motion is called

- a) Kinetic Energy
- b) Potential Energy
- c) Both A and B
- d) None of these

#### Q14. The electric motor converts

- a) Electrical energy into mechanical energy
- b) Mechanical energy into electrical energy
- c) Electrical energy into light energy
- d) None of these

#### Q15. Bolometer is used to measure

- a) Frequency
- b) Temperature
- c) Velocity
- d) Wavelength

#### Q16. What is the scale used for measuring the intensity of the earthquake?

- a) Metric scale
- b) Quake scale
- c) Richter scale
- d) Epicentre scale

#### Q17. Which law is also called the law of inertia?

- a) Newton's first law
- b) Newton's second law
- c) Newton's third law
- d) All of these

#### Q18. When water is added to anhydrous white copper sulphate, the colour will change to:

- a) Yellow
- b) Green
- c) Blue
- d) Red

Q19. The material that can be deformed permanently by heat and pressure is called a
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- a) Thermoset
- b) Thermoplastic
- c) Chemical compound
- d) Polymer

#### Q20. Which of the following is the main ingredient of cement?

- a) Limestone
- b) Silica clay
- c) Gypsum
- d) Ash

#### Q21. Nylon is prepared from

- a) Adipic acid and hexametheylene diamine
- b) Ethylene glycol and nitric acid
- c) Hexametheylene diamine and phthalic acid
- d) Ethylene clycol and adipic acid

#### Q22. Due to rusting the weight of iron

- a) decreases
- b) increases
- c) remains the same
- d) uncertain

#### Q23. Heavy metal pollution of water is caused by:

- a) Acid Plants
- b) Paints
- c) Wood Burning
- d) Domestic Sewage

#### Q24. Which of the following carbon compounds is used as a fire- extinguisher?

- a) Carbon disulphide
- b) Chloroform
- c) Carbon tetrachloride
- d) Methylene chloride

<ul><li>a) Odisha</li><li>b) Madhya Pradesh</li><li>c) Rajasthan</li><li>d) Karnataka</li></ul>
Q26. Which Indian woman wrestler has clinched India's first gold at the 2018 Senior Asian Wrestling Championships?
<ul><li>a) Navjot Kaur</li><li>b) Vinesh Phogat</li><li>c) Sakshi Malik</li><li>d) Sangeeta Phogat</li></ul>
Q27. Which Bollywood personality has won the lifetime achievement award at the 2018 'Political and Public Life Awards' in UK?
<ul><li>a) Amitabh Bachchan</li><li>b) Boman Irani</li><li>c) Jackie Shroff</li><li>d) Shatrughan Sinha</li></ul>
Q28. Which union minister has inaugurated International Conference on Operations and Maintenance "Indian Power Stations 2018"?
<ul><li>a) R.K. Singh</li><li>b) Vijay Sampla</li><li>c) Ajay Tamta</li><li>d) Arjun Ram Meghwal</li></ul>
Q29. Which country is the partner country at the 32nd Surajkund International Crafts Mela 2018?
a) Uzbekistan b) Turkmenistan

Q30. In a top secret message, if LIVING is coded as KGSHLD) How will BUDDHA be coded?

c) Kyrgyzstand) Oman

a) ATEEIBb) ATACFXc) ATCCGZd) KGSHLD

Q25. The world's largest solar park has launched in which state?

brother of Suresh. How is Jia related to Mahesh?
<ul><li>a) Daughter in law</li><li>b) Cousin</li><li>c) Sister in law</li><li>d) Sister</li></ul>
Q32. Choose the most meaningful sequence for the following words.
1. Job 2. Independence 3. Study 4. Income 5. Exam a) 1, 4, 2, 3, 5 b) 2, 5, 3, 1, 4 c) 3, 1, 2, 4, 5 d) 3, 5, 1, 4, 2
Q33. Fill in the blank
ELFA GLHA ILJA MLNA a) OLPA b) KLMA c) LLMA d) KLLA
Q34. Look at this series: 2, 1, (1/2), (1/4), What number should come next?
a) (1/3) b) (1/8) c) (2/8) d) (1/16)
Q35. FAG, GAF, HAI, IAH,
a) JAK b) HAL c) HAK d) JAI
Q36. Fill the blank in the given series.
$B_2CD$ ,, $BCD_4$ , $B_5CD$ , $BC_6D$ a) $B_2C_2D$ b) $BC_3D$ c) $B_2C_3D$ d) $BCD_7$ Q37. Which one will replace the question mark?

A 2	C <sub>4</sub>	E <sub>6</sub>
G <sub>3</sub>	I <sub>5</sub>	?
M <sub>5</sub>	09	Q <sub>14</sub>

- a) L<sub>10</sub>
- b) K<sub>15</sub>
- c) I<sub>15</sub>
- d) K<sub>8</sub>

Q38. Arrange the words given below in a meaningful sequence.

- 1. Police 2. Punishment 3. Crime 4. Judge 5. Judgement
- a) 3, 1, 2, 4, 5
- b) 1, 2, 4, 3, 5
- c) 5, 4, 3, 2, 1
- d) 3, 1, 4, 5, 2

Q39. A man walks 5 km toward south and then turns to the right. After walking 3 km he turns to the left and walks 5 km. Now in which direction is he from the starting place?

- a) West
- b) South
- c) North-East
- d) South-West

Q40. A, B and C can do a piece of work in 20, 30 and 60 days respectively. In how many days can A do the work if he is assisted by B and C on every third day?

- a) 12 days
- b) 15 days
- c) 16 days
- d) 18 days

Q41.A alone can do a piece of work in 6 days and B alone in 8 days. A and B undertook to do it for Rs. 3200. With the help of C, they completed the work in 3 days. How much is to be paid to C?

- a) Rs. 375
- b) Rs. 400
- c) Rs. 600
- d) Rs. 800

Q42. The cost price of 20 articles is the same as the selling price of <i>x</i> articles. If the profit is 25%, then the value of <i>x</i> is:
a) 15 b) 16 c) 18 d) 25
Q43. The average weight of 8 person's increases by 2.5 kg when a new person comes in place of one of them weighing 65 kg. What might be the weight of the new person?
a) 76 kg

- b) 76.5 kg
- c) 85 kg
- d) None of these

Q44. An observer 1.6 m tall is 20V3 away from a tower. The angle of elevation from his eye to the top of the tower is 30°. The heights of the tower is:

- a) 21.6
- b) 23.2
- c) 24.72
- d) None of these

Q45. Two ships are sailing in the sea on the two sides of a lighthouse. The angle of elevation of the top of the lighthouse is observed from the ships are 30° and 45° respectively. If the lighthouse is 100 m high, the distance between the two ships is:

- a) 173 m
- b) 200 m
- c) 273 m
- d) 300 m

Q46. An accurate clock shows 8 o'clock in the morning. Through how may degrees will the hour hand rotate when the clock shows 2 o'clock in the afternoon?

- a) 144°
- b) 150°
- c) 168°
- d) 180°

Q47. The sum of ages of 5 children born at the intervals of 3 years each is 50 years. What is the age of the youngest child?

- a) 4 years
- b) 8 years
- c) 10 years
- d) None of these

Q48. In a shower, 5 cm of rain falls. The volume of water that falls on 1.5 hectares of ground is:

- a) 75 cu. m
- b) 750 cu. m
- c) 7500 cu. m
- d) 75000 cu. m

Q49. Where in the age of Mahabharat, Bheemeshwari temple is located

- a) Dubalghan
- b) Kosali
- c) Bery
- d) Jhajjar

Q50. In kurukshetra district on which route Jyotisar pilgrimage is located

- a) Kurukshetra-Kaithal route
- b) Kurukshetra-Ismailabad route
- c) Kurukshetra-Pehwa route
- d) Kurukshetra-Pipali route

Q51. In which book Haryana is called as 'Bahudhanayak'

- a) Mahabharat
- b) Vishnu Puran
- c) Ramayan
- d) Ashtadhyayi

Q52. The tomb of khwaza khirza made by Ibrahim Lodi is in which city

- a) Hisar
- b) Sonipat
- c) Panipat
- d) Narnaul

Q53. Which Saint's remembrance in month of Fagun in Rohatak ther is a huge fair  a) Baba Mastnath b) Sant haridas c) Guru Gorakhnath d) Baba Chauranginath
Q54. Which freedom fighter was born in Gadhi Sampala  a) Deendayal Sharma b) Chaudhari Devilal c) Lala Lajpat Rai d) Sir Chhoturam
Q55. The number of significant digits in the number 204.020050 is a) 5 b) 6 c) 8 d) 9
Q56. Jacobi's method is also known as a) Displacement method b) Simultaneous displacement method c) Simultaneous method d) Diagonal method
<ul> <li>Q57. A boat can travel with a speed of 13 km/hr in still water. If the speed of the stream is 4 km/hr, find the time taken by the boat to go 68 km downstream.</li> <li>a) 2 hours</li> <li>b) 3 hours</li> <li>c) 4 hours</li> <li>d) 5 hours</li> </ul>
Q58. A motorboat, whose speed in 15 km/hr in still water goes 30 km downstream and comes back in a total of 4 hours 30 minutes. The speed of the stream (in km/hr) is:  a) 4  b) 5  c) 6  d) 10

Q59. A boat running upstream takes 8 hours 48 minutes to cover a certain distance, while it takes 4 hours to cover the same distance running downstream. What is the ratio between the speed of the boat and speed of the water current respectively?

- a) 2:1
- b) 3:2
- c) 8:3
- d) None of these

Q60. Raju age after 15 years will be 5 times his age 5 years back, what is the present age of Raju

- a) 15
- b) 14
- c) 10
- d) 8

Q61. The ratio between the present ages of P and Q is 6:7. If Q is 4 years old than P, what will be the ratio of the ages of P and Q after 4 years

- a) 7:8
- b) 7:9
- c) 3:8
- d) 5:8

Q62. If A:B = 2:3, B:C = 4:5 and C:D = 6:7, then find the value of A:B:C:D

- a) 15:24:30:35
- b) 16:24:30:35
- c) 17:24:30:35
- d) 128:24:30:35

Q63. if x:y = 1:3, then find the value of

$$(7x+3y):(2x+y)$$

- a) 14:5
- b) 15:5
- c) 16:5
- d) 17:5

Q64. Find the HCF of

$$2^2 \times 3^2 \times 7^2$$
,  $2 \times 3^4 \times 7$ 

- a) 128
- b) 126
- c) 146
- d) 434

Q6	5. When water enters the guard cells the stomata
a)	Opens
b)	Closes
c)	Open or closes
d)	No effect
Q6	6. The enzyme Pepsin is inactive in stomach without the presence of
b) c)	Nitric Acid Hydrochloric acid Acetic acid Butyric acid
Q6	7. The place where fertilization take place in the human body is
a)	Uterus
b)	Oviduct
c)	Ovary
d)	vagina
Q6	8. The number of autosomes in a human body cell is a
b) c)	<ul><li>44</li><li>46</li><li>22</li><li>23</li></ul>
Q6	9. Forelimb of frog, lizard, bird and man has some evolutionary relationship. This are
a)	Hand relationship
b)	Missing links
c)	Analogous organs
d)	Homologous organs
Q7	0. An animal which can reproduce by budding is
a)	Bryophyllym
b)	Yeast
c)	Hydra
d)	All of the above

Answer k	ey:						
1)d	11)b	<b>21)</b> a	31)a	41)b	51)a	61)a	
2)a	12)b	22)b	32)d	42)b	52)b	62)b	
3)b	13)a	23)b	33)d	43)c	53)a	63)c	
4)c	14)a	24)c	34)b	44)a	54)d	64)b	
5)a	15)c	25)d	35)a	45)c	55)d	65)a	
6)d	16)c	26)a	36)b	46)d	56)b	66)b	
7)d	17)a	27)d	37)d	47)a	57)c	67)b	
8)b	18)c	28)a	38)d	48)b	58)b	68)a	
9)b	19)a	29)c	39)d	49)c	59)c	69)d	
10)a	20)c	30)b	40)b	50)c	60)c	70)c	

#### **COURSE:**

5. D. Voc. (Industrial Electronics)

## • Examination Scheme:

Online Entrance Test
 Time duration: 1 hr
 No negative marking
 No of questions: 70

> 1 mark for each correct answer

➤ The Difficulty Level will be of 10<sup>th</sup> Standard

## • Syllabus:

Sr No.	Topic	Sub Topics	Approximate No. of Questions
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3	Quantitative Aptitude	Simplification/Approximation, Number Series, Quadratic Equation, Average, Simple & Compound Interest, Profit Loss, Ratio & Proportion, Time & Work, Speed & Distance, Boats & Streams, Area & Volume	10
4	Data Analysis	Tables, Column Graphs, Bar Graphs, Line Charts, Pie Chart, Venn Diagrams	10
5	General Knowledge	Current Affairs	05
6	Haryana State Special	Haryana Current Affairs	05
7	General Science	Science in Everyday Life, Computer Fundamentals	15
8	Subject Specific	Basic Mathematics (up to 10 <sup>th</sup> class)	10

## • Sample Paper (Online Entrance Test):

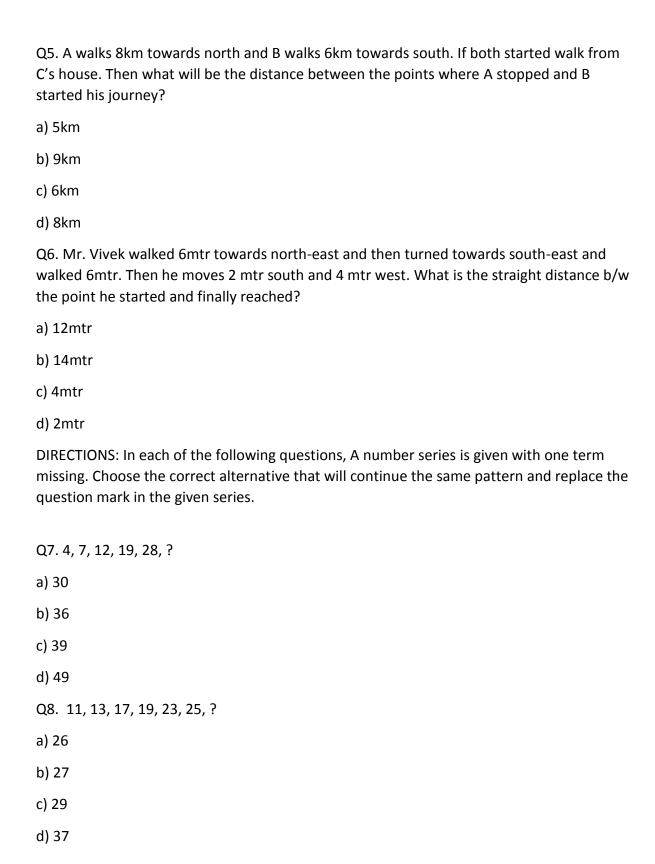
Instructions:

c) XSZMG

d) XSZNG

- > This question paper consists of 70 questions
- > Each Question Carries 1 Mark
- > There is no negative marking

Use of Electronic/Manual Calculator is Prohibited
Q1. Pointing towards a person, a man said to a woman," His mother is the only daughter of your father." How is the woman related to that person?
a) Daughter
b) Sister
c) Mother
d) Wife
Q2. Good: Bad:: Roof:?
a) Window
b) Floor
c) Walls
d) Pillars
Q3. In a certain code language word "SURPRISE" is written as "TWUIKGUK". In the same code language "OPPOSITE" is written as —
a) QRRHLGVK
b) RRQHLGVK
c) RRHQLGVK
d) RQRHLQVK
Q4. In the certain code language "PATROL" is written as "KZGILO". How will "CHANT" be written in that code language?
a) XSZMH
b) XTZMG



DIRECTIONS: Each of the following questions, five words have been given out of which four are alike in some manner, while the 5 <sup>th</sup> one is different. choose out the odd one.
Q9.
a) Curd
b) Butter
c) Oil
d) Cheese
Q10.
a) Feathers
b) Tentacles
c) Scales
d) Pseudopodia
Q11. Steven is always about showing up for work because he feels that tardiness is a sign of irresponsibility.
a) Legible
b) Tolerable
c) Punctual
d) Literal
DIRECTIONS: In the given question 12 $\&$ 13, the word opposite in meaning to the given word $\&$ mark the correct answer.
Q12. Thrifty:
a) Clean
b) Loyal
c) Wasteful
d) Reverent
Q13. Progressive:
a) Repressive
b) Retrogressive
c) Repulsive
d) Aggressive

DIRECTIONS: Out of the 4 alternatives, choose the one which best expresses the meaning of the given word & choose the correct answer.

Q14. Repose

- a) Place
- b) Keep
- c) Rest
- d) Replace

Q15. Nurture

- a) To Encourage
- b) To Grow
- c) To See
- d) To Maintain

Q16. If Rs. 510 be divided among A, B, C in such a way that A gets 2/3 of what B gets and B gets 1/4 of what C gets then their shares are respectively-

- a) Rs. 150, Rs. 300, Rs. 60
- b) Rs. 60, Rs. 90, Rs 360
- c) Rs. 150, Rs. 240, Rs. 120
- d) Rs. 120, Rs. 240, Rs. 150

Q17. A house worth Rs. 1,50,000 is sold by X to Y at 5% profit. Y sells the house back to X at 2% loss. Then in the entire transaction:

- a) X loses Rs. 1350
- b) X gains Rs. 4350
- c) X losses Rs. 4350
- d) X gains Rs. 3150

Q18. The average age of a husband and his wife was 23 years at the time of their marriage. After five years they have a one year old child) The average age of the family now is-

- a) 28.5 years
- b) 19 years
- c) 23 years
- d) 29.3 years

Q19. If the radius of a circle is decreased by 10%, then the area of the circle is decreased by:
a) 25%
b) 18%
c) 89%
d) 19%
Q20. The value of $\frac{(75.8)^2 - (35.8)^2}{40}$ is
a) 111.6
b) 121.6
c) 40
d) 160
Q21. The average weight of 8 persons increases by 2.5 Kg when a new person comes in place of one of them weighing 65 Kg. The weight of the new person is-
a) 76 Kg
b) 84 Kg
c) 85 Kg
d) 76.5 Kg
Q22. Light travels fastest through which of the following materials?
a) Diamond b) Water c )Glass d) Air
Q23. A human eye can focus on objects at different distance by adjusting the focal length of the eye lenses. This phenomenon is due to;
a) Near sightedness
b) Long sightedness
c) Accommodation
d) Persistence of vision

Q24. The net charge following through a cross section of conductor in unit time is known as
a) Ampere
b) Volt
c) Resistance
d) Electric potential
Q25. The magnetic field inside the solenoid is
a) Non-uniform
b) Uniform
c) Same at all points
d) Zero
Q26. The frequency of power supply used in India is?
a) 70hz
b) 60hz
c) 50hz
d) 30hz
Q27. Chief constituent of natural gas is?  a) Methane b) Ethane c) Butane d) Propane
Q28. Which one of the following device works on the basis of principal of mutual induction?
a) Tube light
b) Transformer
c) Photo diode
d) L.E.D

Q.29 Which of the following is not a decomposition reaction?
a) CaCO3→CaO+Co2
b) H2+Cl2→2HCl
c) H2CO3→H2O+CO2
d) 2KClO3→2KCl+3O2
Q30. 2Pb (NO3)2→2PbO++ O2 Complete the reaction
a) 4NO
b) 4NO2
c) 2PbNO2
d) NO2
Q31. The most commonly use indicator in laboratory is?
a) Methyl orange
b) litmus
c) Phenolphthalein
d) Universal indicator
Q32. The value of $x + x(x^x)$ when $x = 2$ is:
a) 10
b) 16
c) 18
d) 36
Q33. The distance light travels in one year is approximately 5,870,000,000,000 miles. The distance light travels in 100 years is:
a) 587 × 10 <sup>8</sup> miles
b) $587 \times 10^{10}$ miles
c) 587 × 10 <sup>-10</sup> miles
d) $587 \times 10^{12}$ miles

Q34. Jones covered a distance of 50 miles on his first trip. On a later trip he travelled 300 miles while going three times as fast. His new time compared with the old time was: a) Three times as much b) Twice as much c) The same d) Half as much, Q. 35 If  $10^{2y} = 25$ , then  $10^{-y}$  equals: a)  $^{-1}/_{5}$ b)  $\frac{1}{625}$ c)  $^{1}/_{50}$ d)  $^{1}/_{5}$ Q36. 7589 - ? = 3434 a) 4242 b) 4155 c) 1123 d) 11023 Q37. 8597-?=7429-4358 a) 5426 b) 5706 c) 5526 d) 5476 Q38. Find the average of all the numbers between 6 and 34. Which are divisible by 5.

a)18

b)20

c)24

d)30

Q39. The average of first five multiples of 3 is:
a) 3
b) 9
c) 12
d) 15
Q40. 3.5 Can be expressed in term of percentage as:
a) 0.35%
b) 3.5%
c) 35%
d) 350%
Q41. What is the 15% of rupees 34?
a) 3.40
b) 3.75
c) 4.50
d) 5.10
Q42. The length of rectangle is 18cm. and its breadth is 10 cm. when the length is increased to 25cm, what will be the breadth of the rectangle, if the area remains the same?
a) 7cm b) 7.1cm c) 7.2cm d) 7.3cm
Q43. A courtyard 25 m long and 16m broad is to be paved with bricks of dimensions 20cm by 10 cm. The total no. of bricks required is ?
a) 18000
b) 20000
c) 25000
d) None of these

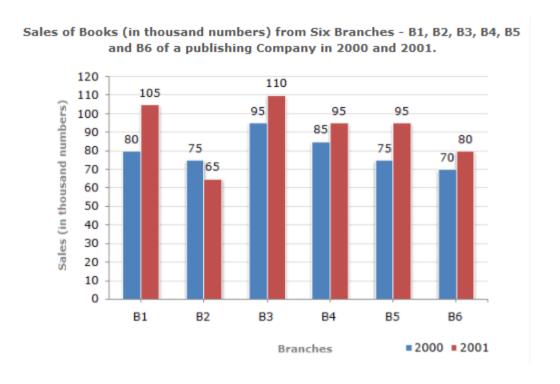
Q44. find the volume and surface area of a cuboid 16m long, 14m broad and 7m high.
a) V = 1789, SA = 957
b) V = 1853, SA = 912
c) V = 1568, SA = 868
d) V= 1657, SA = 868
Q45. The capacity of a tank of dimensions 8m× 6m× 2.5m is?
a) 120 litres
b) 1200 litres
c) 12000 litres
d) 1200000 litres
Q46. How many districts were there when Haryana was formed?
a) 8
b) 7
c) 9
d) 6
Q47. Which is the largest city in population?
a) Faridabad
b) Rohtak
c) Gurugram
d) Hisar
Q48. Which district of Haryana is known as the Bowl of Rice?
a) Panipat b) Karnal c) Sonipat d) Sirsa
Q49. When did the famous Battle of Panipat between Akbar and Hemu take place?
a)1556
b)1558
c)1553
d)1557

Q50. Who is the constitutional Head of the State Government?  a) Governor
b) Chief Minister
c) Chief Justice of India
d) None of these
Q51. Oncology is the study of
a) Birds b) Cancer c) Mammals d) Soil
Q52. Numismatics is the study of
a) Coins
b) Numbers
c) Stamps
d) Space
Q53. The energy of food is measured in a) Calories b) Celsius c) Kelvin d) None
Q54. Name an instrument which is used to measure the density of milk?
a) Lactometer
b) Hydrometer
c) Barometer
d) Hygrometer
Q55. Who had invented zero?
a) Egyptians
b) Greeks
c) Indians
d) Japanese

Q56. What is the currency of Malaysia?
a) Yen
b) Dinar
c) Dollar
d) Ring git
Q57. The Durand cup is associated with which sport?
a) Football
b) Hockey
c) Tennis
d) Golf
Q58. Which city in Madhya Pradesh is known as Lake city?
a) Gwalior
b) Jabalpur
c) Bhopal
d) Rewa
Q59. Which country won the first cricket world cup in 1975?
a) India
b) West Indies
c) South Africa
d) Australia
Q60. Who among the following is the highest wicket taker in all formats of cricket?
a) M Muralitharan b) S Warne c) A Kumble d) G McGrath

#### Q61-65.

The bar graph given below shows the sales of books (in thousand number) from six branches of a publishing company during two consecutive years 2000 and 2001.



Q61. What is the ratio of the total sales of branch B2 for both years to the total sales of branch B4 for both years?

- a) 2:3
- b) 3:5
- c) 4:5
- d) 7:9

Q62. Total sales of branch B6 for both the years is what percent of the total sales of branches B3 for both the years?

- a) 68.54%
- b) 71.11%
- c) 73.17%
- d) 75.55%

Q63. What percent of the average sales of branches B1, B2 and B3 in 2001 is the average sales of branches B1, B3 and B6 in 2000?

- a) 75%
- b) 77.5%
- c) 82.5%
- d) 87.5%

Q64. What is the average sales of all the branches (in thousand numbers) for the year 2000?

- a) 73
- b) 80
- c) 83
- d) 88

Q65. Total sales of branches B1, B3 and B5 together for both the years (in thousand numbers) is?

- a) 250
- b) 310
- c) 435
- d) 560

#### Q66-70.

The following pie-chart shows the sources of funds to be collected by the National Highways Authority of India (NHAI) for its Phase II projects. Study the pie-chart and answers the question that follow.

Sources of funds to be arranged by NHAI for Phase II projects (in Yen.)



Q66. Near about 20% of the funds are to be arranged through:

- a) SPVS
- b) External Assistance
- c) Annuity
- d) Market Borrowing

Q67. If NHAI could receive a total of 9695 Yen as External Assistance, by what percent (approximately) should it increase the Market Borrowing to arrange for the shortage of funds?

- a) 4.5%
- b) 7.5%
- c) 6%
- d) 8%

Q68. If the toll is to be collected through an outsourced agency by allowing a maximum 10% commission, how much amount should be permitted to be collected by the outsourced agency, so that the project is supported with 4910 Yen?

- a) 6213 Yen
- b) 5827 Yen
- c) 5401 Yen
- d) 5316 Yen

Q69. The central angle corresponding to Market Borrowing is

- a) 52
- b) 137.8
- c) 187.2
- d) 192.4

Q70. The approximate ratio of the funds to be arranged through Toll and that through Market Borrowing is

a) 2:9 b) 1:6 c) 3:11

d) 2:5

(Answer key)						
Q. 1 c	Q.11 c	Q.21 c	Q.31 d	Q.41 d	Q.51 b	Q.61 d
Q. 2 b	Q.12 c	Q.22 d	Q.32 a	Q.42 c	Q.52 a	Q.62 c
Q. 3 b	Q.13 b	Q.23 c	Q.33 d	Q.43 b	Q.53 a	Q.63 d
Q. 4 C	Q.14 c	Q.24 a	Q.34 b	Q.44 c	Q.54 a	Q.64 b
Q. 5 d	Q.15 b	Q.25 c	Q.35 d	Q.45 c	Q.55 c	Q.65 d
Q. 6 d	Q.16 b	Q.26 c	Q.36 b	Q.46 b	Q.56 d	Q.66 b
Q. 7 c	Q.17 b	Q.27 a	Q.37 c	Q.47 a	Q.57 a	Q.67 c
Q. 8 c	Q.18 b	Q.28 b	Q.38 b	Q.48 b	Q.58 c	Q.68 c
Q. 9 c	Q.19 d	Q.29 b	Q.39 b	Q.49 a	Q.59 b	Q.69 c
Q.10 a	Q.20 a	Q.30 b	Q.40 d	Q.50 a	Q.60 a	Q.70 b

#### **COURSE:**

6. Advance Diploma (Plastic Technology)

## • Examination Scheme:

Online Entrance Test
 Time duration: 1 hr
 No negative marking
 No of questions: 70

> 1 mark for each correct answer

➤ The Difficulty Level will be of 12<sup>th</sup> Standard

## • Syllabus:

Sr. No.	Topic	Sub Topics	Approximate No. of Question
1	English Language	Synonyms, Antonyms, Sentence Completion, Spelling Correction, Correct Sentence Selection	05
2	Reasoning (Verbal)	Letter & Symbol Series, Statement and Argument, Alphabet Test, Passage and Conclusions, Blood Relations, Direction Sense Test, Coding-Decoding, Number Ranking, Making Judgments, Analogy, Series, Logical Arrangement of Words, Inserting the Missing Character, Clock, Calendar, Sitting arrangements, Syllogism	10
3	Quantitative Aptitude	Simplification/Approximation, Number Series, Quadratic Equation, Average, Simple & Compound Interest, Profit Loss, Ratio & Proportion, Time & Work, Speed & Distance, Boats & Streams, Area & Volume	10
4	Data Analysis	Tables, Column Graphs, Bar Graphs, Line Charts, Pie Chart, Venn Diagrams	10
5	General Knowledge	Current Affairs	05
6	Haryana State Special	Haryana Current Affairs	05
7	General Science	Science in Everyday Life, Computer Fundamentals	05
8	Subject Specific	Physics, Chemistry, Mathematics	20

#### • Sample Paper (Online Entrance Test):

#### Instructions:

- > This question paper consists of 70 questions
- ➤ Each Question Carries 1 Mark
- There is no negative marking
- ➤ Use of Electronic/Manual Calculator is Prohibited
- Q1. Pick out the odd word
- a) Inch
- b) Ounce
- c) Centimeter
- d) Yard
- Q2. Rain is falling vertically downwards to a man running eastwards the rain will appear to be coming from
- a) East
- b) West
- c) North-east
- d) South-east
- Q3. Geetha is older than her cousin Mamatha. Mamatha's brother Bipin is older than Geetha. When Mamtha and Bipin are visiting Geetha all three like to play a game of monopoly. Mamatha wins more often than Geetha does.
- a) Bipin often looses.
- b) Of the three Geetha is the oldest
- c) Geetha hates to lose at monopoly
- d) Of the three Mamatha is the youngest
- Q4. Choose the pair that best represents a similar relationship as
- a) Salt: Pepper
- b) Tire: Bicycle
- c) Puppy: Dog
- d) Sandals: Shoes

Q5. Which of the following will come in next in the series below
ZMA, XNC, VOE, TPG
a)RQI
b)RAJ
c)SAG
d)SQI
Q6. Six students are sitting in a row. K is sitting between V and R,V is sitting next to M, M is sitting next to B who is sitting on the extreme left and Q is sitting next to R. Who are sitting adjacent to
a) Q and K
b) R and Q
c) M and K
d) K and R
Q7. Gorblflur means fan belt
Pixngorbl means cielingfan
Arthtusl means tile roof
Which word could mean "ceiling tile"
a) Gorbitusl
b) Flurgorbl
c) Arthflur
d) Pixnarth
Q8. Choose the word that is a necessary part of the underlined word
<u>Harvest</u>
a) Autumn
b) Stockpile
c) Tractor
d) Crop

Q9. Choose the word that is a necessary part of the underlined word	
<u>Desert</u>	
a) Cactus	
b) Arid	
c) Oasis	
d) Flat	
Q10. Odometer is to mileage as compass is to	
a) Speed	
b) Hiking	
c) Needle	
d) Direction	
Q11. Fill in the blanks with the most appropriate alternative	
His popular books are being into many languages.	
a) Sold	
b) Purchased	
c) Crammed	
d) Translated	
Q12. They are playing cricket in the playground. The tense of the verb in the above sentence is	e
a) Present	
b) Present continuous	
c) Present perfect	
d) Present perfect continuous	
Q13. In the sentence given below, Choose the part which contains error.	
The question was (A)/ so difficult that (B)/ nobody were (C)/ able to answer it (D).	
Q14. Choose the word which is most nearly the same in meaning as the word "REPUTATION"	,,
a) Repetition	
b) Fame	
c) Attention	
d) Report	

Q15. Choose the word which is most opposite in meaning to the word "CURSED"
a) Blamed
b) Hated
c) Blessed
d) Ignored
Q16. A good train runs at the speed of 72Kmph and crosses a 250 m long platform in 26 sec What is the length of goods train?
a) 230m
b) 240m
c) 260m
d) 270m
Q17. Find out the wrong number in the sequence.
582, 605, 588, 611, 634, 617, 600
a) 634
b) 611
c) 605
d) 600
Q18. The cost price of 20 articles is the same as the selling price of $x$ article. If the profit is 25%, then the value of $x$ is
a) 15
b) 16
c) 18
d) 25
Q19. 75% of 220 = ? x 15
a) 26
b) 11
c) 110
d) 165

Q20. In triangle ABC, angle ABC = 90, AB = 6cm and BC = 8cm, find its area
a) 48sq.cm.
b) 24sq.cm.
c) 16sq.cm.
d) None of these
Q21. $x + y = 8$ , $x - y = 2$ , $x^2 - y^2 = ?$
a) 25
b) 9
c) 16
d) None of these
Q22. Price of a book is printed as Rs.4.50,600 copies are sold. If the author gets 13% royalty on the printed price, how much royalty did he get.
a) Rs.2700
b) Rs.2349
c) Rs.351
d) Rs.312
Q23. A certain number of sheaves of fodder lasts 42 animals for 16 days, if each is feed 5 sheaves per day. For how many days will the same quantity lasts 35 animals, if each is given 8 sheaves per day.
a) 11
b) 7
c) 12
d) 16
Q24. $(16)^{0.16}$ x $(16)^{0.04}$ x $(2)^{0.2}$ is equal to
a) 1
b) 2
c) 4
d) 16

Q25. Two numbers are in the ratio of 2:3 and the product of their HCF and LCM is 33750. Then the sum of the numbers is
a) 250
b) 425
c) 325
d) 375
Q26. What was the real name of Bhisma in the Mahabharata
a) Debabrata
b) Parikshit
c) Upamanyu
d) Rajanya
Q27. Who is the chairman of the National Defence Committee
a) The Prime Minister
b) The President
c) The Union Home Minister
d) The Union Defence Minister
Q28. Sir Choturam studied law from which university
a) Peshawar University
b) Jaipur University
c) Agra University
d) Meerut University
Q29. Which one that does not belong to the group of the three
a) Karnataka
b) Jharkhand
c) Assam
d) Mumbai

Q30. Who Coined the slogan "Jai Jawan Jai Kisan"
a) Mahatma Gandhi
b) Jawaharlal Nehru
c) Lal Bahadur Shashtri
d) Indira Gandhi
Q31.In which of the following city don't have railway station
a) Nuh b) Sirsa c) Palwal d) Rewari
Q32. "Birbal ka Chatta" building is located in which of the following City
a) Mahendragarh
b) Rewari
c) Narnal
d) Hansi
Q33. In Haryana, where the first radio centre was established
a) Hisar
b) Gurgaon
c) Rohtak
d) Kurukshetra
Q34.Which of the following king of Ballabgarh sacrifice his life in 1857 uprising
a) Nahar Singh
b) Mahaveer Singh
c) Pratap Singh
d) Vijay singh
Q35. In Mahabharata war, Abhimanyu was entered in the trap(Chakravyu) at which place
a) Kaithal
b) Jeend
c) Jyotisar
d) Ameen

Q36. The Condition called simple goiter is caused due to the deficiency of
a) Lodine
b) Calcium
c) Thyroxine secretion
d) Thyroxine stimulating hormone
Q37. Which among Following is a water borne disease
a) Malaria b) Influenza c) Cholera d) Viral fever
Q38. Ecology is the study of
a) Development of an organism
b) The external structure of an organism
c) The relationship of organisms with their environment
d) Internal organization of organisms
Q39. The instrument used for recording tremors of earth is known as
a) Crescograph
b) Lactometer
c) Seismogram
d) Hydrometer
Q40. Which of the following is not an elementary particle
a) Proton
b) Positron
c) Photon
d) Phonon
Q41. The Percentage of Lead in lead pencil is
a) 0%
b) 31-66%
c) 40-50%
d) 80-90%

Q42. Comets revolve around the
a) Earth
b) Space
c) Moon
d) Sun
Q43. For which invention is Otto Hahn famous
a) Atom Bomb b) Television c) X-rays d) Miner's safety lamp
Q44. A rocket works on the principle of the conservation of
a) Angular momentum
b) Linear momentum
c) Energy
d) Speed
Q45. Which type of fire extinguisher is used for petroleum fire
a) Foam
b) Soda Acid
c) Powder
d) Water
Q46. What is the frequency of ac supply used in india
a) 30Hz
b) 40Hz
c) 60Hz
d) None of these
Q47. What is the S.I unit of Magnetic Field?
a) Webre
b) Tesla
c) Ohm
d) Henry

Q48. Gobar gas (Biogas) mainly contains
a) Propane
b) Methane
c) Propane and Butane
d) Ethane
Q49. The nitrogen present in the atmosphere is
<ul><li>a) Of no use to plants</li><li>b) Injurious to plants</li><li>c) Directly utilized by plants</li><li>d) Utilized through microorganisms</li></ul>
Q50. Petroleum consists of a mixture of
a) Carbohydrates
b) Carbonates
c) Hydrocarbons
d) Carbides
Q51. The gas used for artificial ripening of fruits is
a) Methane
b) Ethane
c) Ethylene
d) Acetylene
Q52. The Boiling point of water is
a) 101°C
b) 273k
c) 0°C
d) OK
Q53. When a magnesium ribbon is burnt in air, the ash formed is
a) Black
b) White
c) Yellow
d) Pink

Q54. Fatty foods become rancid due to the process of
a) Oxidation
b) Corrosion
c) Reduction
d) Hydrogenation
Q55. A train running at 36 km/h takes 10 s to pass a telegraph pole. How long would it take to cross a platform 110 m long
a) 24s b) 31s c) 21s d) 33s
Q56. If $25^{7.5}$ x $5^{2.5} \div 125^{1.5} = 5^x$ , then the value of x is
a) 16
b) 17.5
c) 8.5
d) 13
Q57. The least number of square tiles required to pave the floor of a room is $15m \times 17cm$ long and $9m \times 2cm$ broad is
a) 656
b) 814
c) 902
d) 738
Q58. A fraction is such that if the numerator is multiplied by 3 and the denominator is reduced by 3, we get $18/11$ , but if the numerator is increased by 8 and the denominator is doubled, we get $2/5$ then the fraction is
a) 8/15
b) 12/25
c) 11/21
d) 9/28

Q59. The difference between two positive numbers is 3 and the sum of their squares is 369. The the sum of the numbers is

- a) 33
- b) 20
- c) 81
- d) 27

Q60. If two numbers are in the ratio of 5:8 and if 9 is added to each, the ratio becomes 8:11. Find the sum of the numbers.

- a) 39
- b) 49
- c) 64
- d) 19

Q61-65.

## Study the following table and answer the questions based on it.

Expenditures of a Company (in Pesetas) per Annum Over the given Years.

Vanu	Item of Expenditure				
Year	Salary	Fuel and Transport	Bonus	Interest on Loans	Taxes
1998	288	98	3.00	23.4	83
1999	342	112	2.52	32.5	108
2000	324	101	3.84	41.6	74
2001	336	133	3.68	36.4	88
2002	420	142	3.96	49.4	98

Q61. What is the average amount of interest per year which the company had to pay during this period?

- a) 32.43
- b) 33.72
- c) 34.18
- d) 36.66

Q62. The total amount of bonus paid by the company during the given period is approximately what percent of the total amount of salary paid during this period?

- a) 0.1%
- b) 0.5%
- c) 1.0%
- d) 1.25%

Q63. Total expenditure on all these items in 1998 was approximately what percent of the total expenditure in 2002?

- a) 62%
- b) 66%
- c) 69%
- d) 71%

Q64. The total expenditure of the company over these items during the year 2000 is?

- a) 544.44
- b) 501.11
- c) 446.46
- d) 478.87

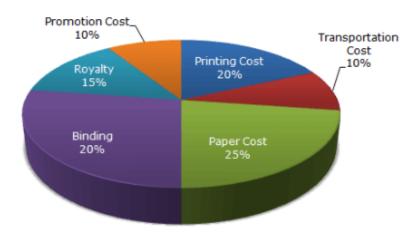
Q65. The ratio between the total expenditure on Taxes for all the years and the total expenditure on Fuel and Transport for all the years respectively is approximately?

- A) 4:7
- B) 10:13
- C) 15:18
- D) 5:8

Q66-70.

The following pie-chart shows the percentage distribution of the expenditure incurred in publishing a book. Study the pie-chart and the answer the questions based on it.

Various Expenditures (in percentage) Incurred in Publishing a Book



Q66. If for a certain quantity of books, the publisher has to pay Rs. 30,600 as printing cost, then what will be amount of royalty to be paid for these books?

- a) Rs. 19,450
- b) Rs. 21,200
- c) Rs. 22,950
- d) Rs. 26,150

Q67. What is the central angle of the sector corresponding to the expenditure incurred on Royalty?

- a) 15
- b) 24
- c) 54
- d) 48

Q68. The price of the book is marked 20% above the CP. If the marked price of the book is Rs. 180, then what is the cost of the paper used in a single copy of the book?

- a) Rs. 36
- b) Rs. 37.50
- c) Rs. 42
- d) Rs. 44.25

Q69. If 5500 copies are published and the transportation cost on them amounts to Rs. 82500, then what should be the selling price of the book so that the publisher can earn a profit of 25%?

- a) Rs. 187.50
- b) Rs. 191.50
- c) Rs. 175
- d) Rs. 180

Q70. Royalty on the book is less than the printing cost by:

- a) 5%
- b) 33 1/5%
- c) 20%
- d) 25%

### **Answer Key.**

1)b 2)a	11)d 12)b	21)c 22)c	31)a 32)c	41)a 42)d	51)c 52)a	61)d 62)c
3)d	13)c	23)c	33)c	43)a	53)b	63)c
4)b	14)b	24)b	34)a	44)b	54)a	64)a
5)a	15)c	25)d	35)d	45)a	55)a	65)b
6)c	16)d	26)a	36)a	46)d	56)a	66)c
7)d	17)a	<b>27)</b> a	37)c	47)b	57)b	67)c
8)d	18)b	28)c	38)c	48)b	58)b	68)b
9)b	19)b	29)d	39)c	49)d	59)d	69)a
10)d	20)b	30)c	40)d	50)c	60)a	70)d

## **COURSE:**

# 7. B. Voc. (BPM and Analytics)

# **Examination Scheme:**

Online Entrance Test
 Time duration: 1 hr
 No negative marking
 No of questions: 70

> 1 mark for each correct answer

ightharpoonup The Difficulty Level will be of 10<sup>th</sup> Standard

# • Syllabus:

Sr No.	Topic	Sub Topics	Approximate No. of Questions (1 marks each)
1	English	Synonyms, Antonyms, Tenses, Spelling Correction, Correct Sentence Selection	20
2	Reasoning Quantitative Aptitude	Number Series     Coding-Decoding	05 05
	Aptitude	Problem on Trains	05
		Time & Work Question	05
		General Arithmetic (P&L, SI, Average, etc)	05
		Relationship Concept	05
		Word Arrangement	05
3	Computer	Basic Computers	10
4	General Knowledge	Current Affairs, Haryana Current Affairs	05

### • Sample Paper:

### Instructions:

- This question paper consists of 70 questions
- ➤ Each Question Carries 1 Mark
- There is no negative marking
- Use of Electronic/Manual Calculator is Prohibited

## Section I

### 1. Give the Antonym of Arrest

(a) Trap (b) Imprison (c) Catch (d) Release

Ans: (d) Release

## 2. Give the Antonym of Withdraw

(a) Reduce (b) Need (c) Advance (d) Want

Ans. (c) Advance

## 3. Give the Antonym of Impartial

(a) Hostile (b) Biased (c) Dislike (d) Worried

Ans. (b) Biased

### 4. Give the Antonym of Secret

(a) Friendly (b) Covert (c) Hidden (d) Overt

Ans. (d) Overt

### 5. Give the Synonym of Hint

(a) Advice (b) Clue (c) Truth (d) Nod

Ans: (d) Clue

## 6. Give the Synonym of Remote

(a) Automatic (b) Distant (c) Savage (d) Mean

Ans. (b) Distant

## 7. Give the Synonym of Gracious

(a) Pretty (b) Clever (c) Pleasant (d) Present

Ans. (c) Pleasant

## 8. Give the Synonym of Predict

(a) Foretell (b) Decide (c) Prevent (d) Discover

Ans. (a) Foretell

9. Sam's cell phoneby the	e guard
(a) was stolen (b) was stealing (c) stole (d) steal	ls
Ans: (a) was stolen	
10. Waiting for a bus is a experience.	
(a) kills (b) kill (c) killing (d) killed	
Ans (c) killing	
11. He went on foolishly.	
(a) spoke (b) to speaking (c) speaking (d) spe	aks
Ans. (c) speaking	
12. I shall visit the book fair tomorrow.	
(a) Simple past (b) Simple present (c) Simple futu	ure (d) Future continuous
Ans. (c) Simple future	
13. Choose the correct spellings	
(a) Acceleration (b) Acclration (c) Acsclration (d) A	Acccleration
Ans: (a) Acceleration	
14. Find correct spelling:	
(a) Abbreviate (b) Abreviate (c) Abrrviate (d) A	bbreviat
Ans: (a) Abbreviate	
15. Find correct spelling:	
(a) Aceelerate (b) Acelerate (c) Accelerate	(d) Acellrate
Ans. (c) Accelerate	
16. Find correct spelling:	
(a) Accoomodate (b) Accommodate (c) Accomo	date (d) Accommodate
Ans: (b) Accommodate	
17. Choose the correct alternative to fill in the b	olanks
Do you dreamnight? Do you reme	mber your dreamsthe morning
(a) in, at (b) at, in (c) at, at (d) in, in	
18. I am going to hospital to v	visit a sick friend
(a) the (b) an (c) a (d) No article	
Ans: (d) No article	

19. They will do most of the work
(a) Itself (b) Ourselves (c) Themselves (d) Myself
Ans. (c) Themselves
20. We've proved that he was guilty but he doesn't admit it.
(a) Yet (b) already (c) still (d) correct sentence
Ans. (c) still
Section II
1. Which of the following number is fully divisible by 6?
(a) 5342 (b) 2536 (c) 5658 (d) 9352
Ans: (c) 5658
2. What number should come next: 2, 3, 5, 7, 11, ?, 17
(a) 12 (b) 13 (c) 14 (d) 15
Ans: (b) 13
3. What number should come next: 30, 34, 43, 59, 84, 120, ?
(a) 169 (b) 148 (c) 153 (d) 176
Ans: (a) 169
4. Complete series ELFA, GLHA, ILJA,, MLNA
(a)OLPA (b) KLMA (c) LLMA (d) KLLA
Ans: (d) KLLA
5. The missing term in the sequence 0,32, 8, 15, 24,, 48
(a) 35 (b) 30 (c) 36 (d) 39
Ans: (a) 35
6. WAITRESS: RESTAURANT
(a) actor : role (b) author : book (c) driver : truck (d) teacher : school
Ans: (d) teacher: school
7. If TAP is coded as SZO, then how is FREEZE coded?
(a) ATSSTS (b) EQDDYD (c) ESDDYD (d) EQDDZD
Ans: (b) EQDDYD

8.In a certain code, SIKKIM is written as THLJJL, how is TRAINING written in that code?

(a) SQBHOHOF

(b) UQBHOIOF (c) UQBHOHOI (d) UQBHOHOF

Ans: (d) UQBHOHOF

9. In a certain language, MADRAS is coded as NBESBT, how is BOMBAY coded in that code?

(a)CPNCBZ (b) CPNCBX (c) DPNCBZ (d) DPNCBX

Ans: (a)CPNCBZ

10.In a certain code, TRIPPLE is written as SQHOOKD. How is DISPOSE written in that code?

(a) EJTQPTF (b) EJTQPTG (c) CHRPNRD (d) CHRONRD

Ans: (d) CHRONRD

11. A man observed that a train 120 m long crossed him in 9 seconds. The speed (in km/hr) of the train was:

(a) 42 (b) 45 (c) 48 (d) 55

Ans: (c) 48

12. A and B are tow stations. A trains goes from A to B at 64 km/hr and returns to A at a slower speed. If its average speed for the whole journey is 56 km/hr. at what speed did it return:

(a) 49.77 km/hr (b) 48km/hr (c) 52 km/hr (d) 47.46 km/hr

Ans: (a) 49.77 km/hr

13. A train is moving with a speed of 92.4 km/hr. How many metres will it cover in 10 minutes

(a) 1540 (b) 154 (c) 15.4 (d) 15400

Ans: (d) 15400

14. Rahim covers a certain distance in 14 hrs 40 min. He covers one half of the distance by train at 60km/hr and the rest half by road at 50 km/hr. The distance travelled by him is:

(a) 960km (b) 720km (c) 1000km (d) 800km

Ans: (d) 800km

15. If a train runs at 40 km/hr, it reaches its destination lake by 11 min but if its runs at 50 km/hr, it is late by 5 min. only. The correct time for the train to cover its journey is

(a) 13min (b) 15min (c) 21min (d) 19min

Ans: (d) 19min

16. If two pipe can fill a tank separately in 20 minutes and 30 minutes respectively. Of both pipes are opened simultaneously, then the tank will be filled in				
(a) 10 min (b) 12 min (c) 15 min (d) 25 min				
Ans: (b) 12 min				
17. A and B can together complete a piece of work in 4 days. If A alone can complete the same work in 12 days, in how many days can B alone complete that work?				
(a) 4 days (b) 5 days (c) 6 days (d) 7 days				
Ans: (c) 6 days				
18. A does a work in 10 days and B does the same work in 15 days. In how many days they together will do the same work?				
(a) 5 days (b) 6 days (c) 7 days (d) 8 days				
Ans: (b) 6 days				
19. 4 men and 6 women finish a job in 8 days, while 3 men and 7 women finish it in 10 days. In how many days will 10 women working together finish it?				
(a)30 days (b) 40 days (c) 50 days (d) 60 days				
Ans: (b) 40 days				
20. A piece of work can be done by 6 men and 5 women in 6 days or 3 men and 4 women in 10 days. It can be done by 9 men and 15 women in how many days?				
(a)3 days (b) 4 days (c) 5 days (d) 6 days				
Ans: (a)3 days				
21. The sum of the squares of three numbers is 138, while the sum of their products taken two at a time is 131. Their sum is				
(a) 15 (b) 20 (c) 25 (d) 35				
Ans: (b) 20				
22. What will be the fraction of 20%				
(a) (1/4) (b) (1/5) (c) (1/10) (d) None of above				
Ans: (b) (1/5)				
23. If 16 toys cost 240, then what do 40 toys cost?				
(a) Rs. 600 (b) Rs. 620 (c) Rs. 640 (d) Rs. 660				
Ans: (c) Rs. 640				
24.Find the HCF of 54, 288, 360?				
(a) 18 (b) 36 (c) 54 (d)108				
Ans: (a) 18				

25. Find the simple interest on Rs 7000 at 50/3 % for 9 months				
(a) Rs. 1075 (b) Rs. 975 (c) Rs. 875 (d) Rs. 775				
Ans: (c) Rs. 875				
26. A is B's Brother, C is A's mother, D is C's father, E is B's Son. How is D related to A?				
(a) Son (b) Grandson (c) Grandfather (d) Great Grand father				
Ans: (c) Grandfather				
27. M and N are sisters. X and Y are brothers. M's daughter is X's sister. what is N's relation to Y?				
(a) Aunt (b) Sister (c) Mother-in-law (d) Daughter				
Ans: (a) Aunt				
28. Pointing towards a person, a man said to woman, "His mother is the only daughter of your father." How is the women related to that person?				
(a) Daughter (b) Sister (c) Mother (d) Wife				
Ans: (c) Mother				
29. Pointing out to a lady, ram said, "She is the daughter of the women who is the mother of the husband of my mother." Who is the lady to ram?				
(a) Aunt (b) Grandfather (c) Sister (d) Daughter				
Ans: (a) Aunt				
30. Pointing towards a person in the photograph, Anu said, "He is the only son of the father of my sister's brother." How is that person related to Anu?				
(a) Father (b) Mother (c) Cousin (d) None of these				
Ans: (c) Cousin				
31. Arrange the words given below in a meaningful sequence.				
1. Elephant 2. Cat 3. Mosquito 4. Tiger 5. Whale				
(a) 1, 3, 5, 4, 2 (b) 2, 5, 1, 4, 3 (c) 3, 2, 4, 1, 5 (d) 5, 3, 1, 2, 4				
Ans: (c) 3, 2, 4, 1, 5				
32. Arrange the words given below in a meaningful sequence.				
1. Book 2. Pulp 3. Timber 4. Jungle 5. Paper				
(a) 2, 5, 1, 4, 3 (b) 3, 2, 5, 1, 4 (c) 4, 3, 2, 5, 1 (d) 5, 4, 3, 1, 2				
Ans: (c) 4, 3, 2, 5, 1				

33. Arrange the words given below in a meaningful sequence.
1. College 2. Child 3. Salary 4. School 5. Employment
(a) 1, 2, 4, 3, 5 (b) 2, 4, 1, 5, 3 (c) 4, 1, 3, 5, 2 (d) 5, 3, 2, 1, 4
Ans: (b) 2, 4, 1, 5, 3
34. Arrange the words given below in a meaningful sequence.
1. Leaf 2. Fruit 3. Stem 4. Root 5. Flower
(a) 3, 4, 5, 1, 2 (b) 2, 4, 1, 5, 3 (c) 4, 3, 1, 2, 5 (d) 4, 3, 1, 5, 2
Ans: (d) 4, 3, 1, 5, 2
35. Arrange the words given below in a meaningful sequence.
1. Atomic Age 2. Metallic Age 3. Stone Age 4. Alloy Age
(a) 1, 3, 4, 2 (b) 2, 3, 1, 4 (c) 3, 2, 4, 1 (d) 4, 3, 2, 1
Ans: (c) 3, 2, 4, 1
Section III
1. Which of following produces high-quality output?
(a) impact printer (b) Non-impact printer (c) plotter (d) both '1' '2'
Ans (b) non-impact printer
2. In MICR,C Stands for?
(a) code (b) colour (c) computer (d)character
Ans (d) character
3. There are several primary categories of procedures. Which of the following is not a primary category of procedures?
(a) Testing (b) Backup and recovery (c) Firewall development (d) Design
Ans. (c) Firewall development
4. By default, your documents print in mode
(a) Page setup (b) Portrait (c) Landscape (d) Print preview
Ans. (b) Portrait
5. The path of the creation of an executable program is
(a) coding, linking, compiling, parsing (b) coding, parsing, compiling, linking
(c) coding, compiling, parsing, linking (d) coding, compiling, linking, parsing
Ans. (d) coding, compiling, linking, parsing

6. Which of the following is a specification that combines video and audio into a single digital interface?				
(a) MHL (b) HDMI (c) Serial Port (d) All of these				
Ans. (b) HDMI				
7. Which of the following is open source project?				
(a) Firefox (b) MySQL (c) Open Office (d)All of these				
Ans. (d) All of these				
8. When a hardware component fails, the computer switches over to a redundant component without the service to the user being interrupted is termed as				
(a) Payload (b) Failover (c) Tolerant (d) All of these				
Ans. (b) Failover				
9. Which of the following source code is highly protected and only available to trusted employees and contractors?				
(a) Machine Code (b) Code written by human (c) Closed Source (d) Open Source				
Ans. (c) Closed Source				
10. LAN stands for				
(a) Location access network (b) Local anti network				
(c) Local area network (d) Location area network				
Ans. (c) Local area network				
Section IV				
1. Animals that feed on grass.				
(a) Carnivorous (b) Herbivorous (c) Insectivorous (d) Graminivorouos				
Ans: (b) Herbivorous				
2. The substance causing worst air pollution				
(a) Smoke (b) Sulphur dioxide (c) Carbon dioxide (d) Carbon monoxide				
Ans: (d) carbon monoxide				
3. The world's tallest twisted tower is?				
(a) Infinity Tower (b) Burj Khalifa (c) BREN Tower (d) Tokyo Sky Tree				
Ans: (a) Infinity Tower				

# 4. Who is Present Chief Minister of Haryana

(a) O.P. Chautala (b) B.S. Hooda (c) Bansi Lal (d) Manohar Lal

Ans: Manohar Lal

# 5. Which is largest city in population?

(a) Faridabad (b) Ambala (c) Rohtak (d) Mahendarghar

Ans: (a) Faridabad

## **COURSE:**

8. Advance Diploma (Geo-Informatics)

# • Examination Scheme:

Online Entrance Test
 Time duration: 1 hr
 No negative marking
 No of questions: 70

> 1 mark for each correct answer

➤ The Difficulty Level will be of 12<sup>th</sup> Standard

# Syllabus:

S. No.	Topic	Sub Topics	Approximate No. of
			Questions (1 mark
			each)
1	English Language	Synonyms, Antonyms, Sentence Completion, Spelling Correction	10
2	Reasoning (Verbal)	Letter & Symbol Series, Statement and Argument, Alphabet Test, Passage and	10
		Conclusions, Blood Relations, Direction Sense Test, Coding-Decoding, Number	
		Ranking, Making Judgments, Analogy, Series, Logical Arrangement of Words,	
		Inserting the Missing Character, Clock, Calendar, Sitting arrangements, Syllogism	
3	Quantitative	Simplification/Approximation, Number Series, Quadratic Equation, Average, Simple	10
	Aptitude	& Compound Interest, Profit Loss, Ratio & Proportion, Time & Work, Speed &	
		Distance, Boats & Streams, Area & Volume	
4	Data Analysis	Tables, Column Graphs, Bar Graphs, Line Charts, Pie Chart, Venn Diagrams	10
5	General Knowledge	Current Affairs	05
6	Haryana State	Haryana Current Affairs	05
	Special		
7	Computer	Computer Fundamentals	10
8	GIS	Geo Informatics	10

## **Sample Paper:**

### Instructions:

- > This question paper consists of 70 questions
- > Each Question Carries 1 Mark
- > There is no negative marking
- > Use of Electronic/Manual Calculator is Prohibited
- Q1. Synonym of ABANDON
- a) Try
- b) Join
- c) Keep with
- d) Forsake
- Q2. Synonym of AGGRAVATE
- a) Decline
- b) Acquire
- c) Excited
- d) Irritate
- Q3. Opposite of EXPAND is
- a) Convert
- b) Condense
- c) Congest
- d) Conclude
- Q4. Opposite of QUIESCENT is
- a) Active
- b) Dormant
- c) Weak
- d) Unconcerned

DIRECTIONS for the question 5 to 7: Complete the sentence by filling in the appropriate blank/blanks from the options provided.

- Q5. Suresh is a.....who can dupe even the not so gullible.
- a) Smooth operator
- b) Perfect gentleman
- c) Knowledgeable person
- d) Jack of all trades
- Q6. The news is too good ........
- a) to be bad
- b) to be acceptable
- c) to be true
- d) and can be credible

Q7. Vinod is clearlywhen it comes to speaking English.
<ul><li>a) To a disadvantage</li><li>b) At a disadvantage</li><li>c) From a disadvantage</li><li>d) In a disadvantage</li></ul>
Q8. Find the correctly spelt word
<ul><li>a) Efficient</li><li>b) Treatmeant</li><li>c) Betement</li><li>d) Employd</li></ul>
Q9. Find the correctly spelt word
<ul><li>a) Benefitted</li><li>b) Benifited</li><li>c) Benefited</li><li>d) Benefeted</li></ul>
Q10. Find the correctly spelt word  a) Exaggerate  b) Exeggrate  c) Exagerate  d) Exadgerate
Directions to Solve In these series, you will be looking at both the letter pattern and the number pattern. Fill the blank in the middle of the series or end of the series.
Q11. $ZA_5$ , $Y_4B$ , $XC_6$ , $W_3D$ , a) $E_7V$ b) $V_2E$ c) $VE_5$ d) $VE_7$
Q12. What should come next in the following letter sequence?
AABABCABCDABCDEABCD
a) A b) E c) C d) B

Q1.	3. If P + Q means P is the brother of Q; P x Q means P is the father of Q and P - Q means P is the sister of Q, which of the following relations shows that I is the niece of K?
a۱	K + Y + Z - I
-	K + Y x I - Z
•	Z - I x Y + K
•	K x Y + I – Z
Nort a)	. Rahul put his timepiece on the table in such a way that at 6 P.M. hour hand points to the In which direction the minute hand will point at 9.15 P.M. ?  South-East  South
•	North West
a) b)	. If FRIEND is coded as HUMJTK, how is CANDLE written in that code ?  EDRIRL  DCQHQK  ESJFME  DEQJQM
5 9 a k	. How many 4's are there preceded by 7 but not followed by 3? 3 2 1 7 4 2 6 9 7 4 6 1 3 2 8 7 4 1 3 8 3 2 5 6 7 4 3 9 5 8 2 0 1 8 7 4 6 a) Four b) Three c) Six d) Five
a) b) c)	7. In each of the following questions find out the alternative which will replace the question mark.  Ornithologist: Bird:: Archealogist:?  Islands  Mediators  Archealogy  Aquatic
Q(a) b) c)	18. In the series 2, 6, 18, 54, What will be the 8 <sup>th</sup> term? 4370 4374 7443
Q19	9. Arrange the words given below in a meaningful sequence 1. Tree 2. Seed 3. Flowers 4. Fruit 5. Plant 5, 2, 1, 3, 4

b) 2, 5, 1, 4, 3 c) 2, 5, 1, 3, 4 d) 2, 5, 3, 1, 4

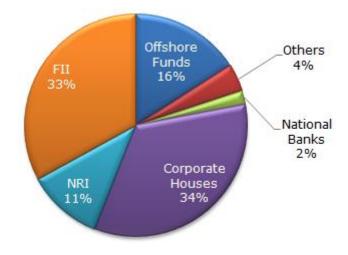
Q20. January 1, 2008 is Tuesday. What day of the week lies on Jan 1, 2009?  a) Monday b) Wednesday c) Thursday d) Sunday Q21. 60 + 5 * 12 / (180/3) = ? a) 60 b) 120 c) 13 d) 61
Q22. In following question, a number series is given with one term missing. Choose the correct alternative that will same pattern and fill in the blank spaces.:  20, 19, 17, x, 10, 5  a) 12  b) 13  c) 14  d) 15
Q23. Find the roots of the quadratic equation: $x^2 + 2x - 15 = 0$ ?  a) -5, 3  b) 3, 5  c) -3, 5  d) -3, -5
Q24. A grocer has a sale of Rs. 6435, Rs. 6927, Rs. 6855, Rs. 7230 and Rs. 6562 for 5 consecutive months. How much sale must he have in the sixth month so that he gets an average sale of Rs. 6500?  a) Rs. 4991  b) Rs. 5991  c) Rs. 6001  d) Rs. 6991
Q25. There is 60% increase in an amount in 6 years at simple interest. What will be the compound interest of Rs. 12,000 after 3 years at the same rate?  a) Rs. 2160  b) Rs. 3120  c) Rs. 3972  d) Rs. 6240
Q26. A vendor bought toffees at 6 for a rupee. How many for a rupee must he sell to gain 20%?  a) 3  b) 4  c) 5  d) 6

- Q27. Two numbers are respectively 20% and 50% more than a third number. The ratio of the two numbers is:
- a) 2:5
- b) 3:5
- c) 4:5
- d) 6:7
- Q28. A alone can do a piece of work in 6 days and B alone in 8 days. A and B undertook to do it for Rs. 3200. With the help of C, they completed the work in 3 days. How much is to be paid to C?
- a) Rs. 375
- b) Rs. 400
- c) Rs. 600
- d) Rs. 800
- Q29. A train can travel 50% faster than a car. Both start from point A at the same time and reach point B 75 kms away from A at the same time. On the way, however, the train lost about 12.5 minutes while stopping at the stations. The speed of the car is:
- a) 100 kmph
- b) 110 kmph
- c) 120 kmph
- d) 130 kmph
- Q30. A motorboat, whose speed in 15 km/hr in still water goes 30 km downstream and comes back in a total of 4 hours 30 minutes. The speed of the stream (in km/hr) is:
- a) 4
- b) 5
- c) 6
- d) 10

Direction: For questions: (31-34) The following table gives the percentage distribution of population of five states, P, Q, R, S and T on the basis of poverty line and also on the basis of sex:

State	Percentage of	Proportion of Males and Females		
	Population below	Below Poverty Line	Above Poverty Line	
	the Poverty Line	M : F	M : F	
Р	35	5:6	6:7	
Q	25	3:5	4:5	
R	24	1:2	2:3	
S	19	3:2	4:3	
Т	15	5:3	3:2	

- Q31. If the male population above poverty line for State R is 1.9 million, then the total population of State R is?
- a) 4.5 million
- b) 4.85 million
- c) 5.35 million
- d) 6.25 million
- Q32. What will be the number of females above the poverty line in the State S if it is known that the population of State S is 7 million?
- a) 3 million
- b) 2.43 million
- c) 1.33 million
- d) 5.7 million
- Q33. What will be the male population above poverty line for State P if the female population below poverty line for State P is 2.1 million?
- a) 2.1 million
- b) 2.3 million
- c) 2.7 million
- d) 3.3 million
- Q34.If the population of males below poverty line for State Q is 2.4 million and that for State T is 6 million, then the total populations of States Q and T are in the ratio?
- a) 1:3
- b) 2:5
- c) 3:7
- d) 4:9
- Direction: For questions: (35-40) The following pie chart shows the amount of subscriptions generated for India Bonds from different categories of investors.



Q35. In the corporate sector, approximately how many degrees should be there in the central angle ?  a) 120  b) 121  c) 122  d) 123
Q36. If the investment by NRI's are Rs 4,000 crore, then the investments by corporate houses and FII's together is: a) 24,000 crore b) 24,363 crore c) 25,423 crore d) 25,643 crore
Q37. What percentage of the total investment is coming from FII's and NRI's ? a) 33 % b) 11 % c) 44 % d) 22 %
Q38. If the total investment other than by FII and corporate houses is Rs 335,000 crore, then the investment by NRI's and Offshore funds will be (approximately)?  a) 274,100  b) 285,600  c) 293,000  d) Cannot be determined
Q39. If the total investment flows from FII's were to be doubled in the next year and the investment flows from all other sources had remained constant at their existing levels for this year, then what would be the proportion of FII investment in the total investment into India Bonds next year (in US $\$$ millions)?  a) 40 % b) 50 % c) 60 % d) 70 %
Q40. What is the approximate ratio of investment flows into India Bonds from NRI's to corporate houses?  a) 1:4  b) 1:3  c) 3:1  d) Cannot be determined

Q41. What is the theme of the 2018 World Earth Day (WED)?

- a) Save Your Earth from Plastic
- b) Environmental and Climate Literacy
- c) Beware from Plastic Pollution
- d) End Plastic Pollution

Q42. What is the India's position in the world in terms of economy, as per IMF's World Economic Outlook (WEO) for April 2018?

- a) 10<sup>th</sup>
- b) 6th
- c) 8th
- d) 11<sup>th</sup>

Q43. Which Indian organisation has won the 'Most Informative Pavilion' award at the 105th Indian Science Congress (ISC-2018)?

- a) ISRO
- b) VSSC
- c) DRDO
- d) BARC

Q44. NITI Aayog has launched the first GIAN course on Sustainable Urban planning using Remote Sensing and GIS in which IIT institute?

- a) IIT Kanpur
- b) IIT Indore
- c) IIT Delhi
- d) IIT Bombay

Q45. Which of the following has become the North India's first city to install digital automatic speed gun cameras for traffic management?

- a) New Delhi
- b) Chandigarh
- c) Shimla
- d) Ranchi

Q46. The Union Government will launch GOBARdhan Yojna, a central government scheme nationally from which district of Haryana by end of April 2018.

- a) Faridabad
- b) Karnal
- c) Sonipat
- d) Ambala

Q47. Which country was the partner nation this year for 32<sup>nd</sup> Surajkund International Crafts Mela held at Faridabad.

a) Kazakhstan
b) Uzbekistan
c) Tajikistan
d) Kyrgyzstan

Q48. India's first and only design university World University of Design (WUD) has opened its campus at...

a) Gurugram
b) Sonipat
c) Panipat

d) Faridabad

Q49. Smart Grid Pilot Project was inaugurated at Panipat, Haryana. Which country is the partner with India in this project.

- a) Russia
- b) America
- c) Japan
- d) Germany

Q50. International Gita Mahotsav 2017 was held at

- a) Kurukshetra
- b) Ambala
- c) Chandigarh
- d) Hisar

Q51. USB is a type of:

- a) Processor
- b) Port
- c) Program
- d) Monitor

Q52. ..... runs on a computer hardware and serves as a platform for other system to run on

- a) Operating system
- b) Application system
- c) System software
- d) All of above

### Q53. An ISP

- a) is a CPU register
- b) is a CPU functional unit
- c) make of processor
- d) Provides access to the Internet

### Q54. Which is not the requirement of internet

- a) Operating System
- b) Web browser
- c) DOS
- d) Modem

## Q55. A graphics text or HTML file sent with an e-mail message

- a) Cc
- b) Attachment
- c) Bcc
- d) None of these

## Q56. "Replace" option is available in

- a) Edit Menu
- b) File Menu
- c) Tools Menu
- d) Insert Menu

### Q57. What is the full form of URL?

- a) Uniform Resource Library
- b) Uniform Resource Locator
- c) United Resource Library
- d) None of these

### Q58. A website is a collection of

- a) Graphics
- b) Programs
- c) Algorithms
- d) Web Pages

### Q59. what will be the use of Ctrl + J?

- a) Insert image
- b) Insert hyperlink
- c) Align justify
- d) Search file

## Q60. Landscape is?

- a) A font style
- b) Paper size
- c) Page layout
- d) Page orientation

## Q61. A perfectly black body:

- a) is a diffuse emitter
- b) absorbs all the radiations of every wave lengths
- c) emits power of every wave length
- d) All the above

## Q62. The reflectance from a surface is called specular reflection if it follows:

- a) Snell's law
- b) Lambert's cosine law
- c) Planck's law
- d) All of these

## Q63. Google Earth is an example of a

- a) social map
- b) satellite map
- c) virtual globe
- d) GPS

## Q64. The origin point for 0 degrees' longitude is

- a) Greenwich, England
- b) Washington, D.C., USA
- c) Paris, France
- d) San Salvador Island, the Bahamas

### Q65. The 180th meridian refers to the

- a) compass rose line
- b) equator
- c) prime meridian
- d) international date line

## Q66. The altitudinal distance of a geostationary satellite from the earth is about:

- a) 44,000 km
- b) 30,000 km
- c) 26,000 km
- d) 36,000 km

Q67.Visible light has wavelengths from 0.4  $\mu m$  (Blue) to 0.7  $\mu m$ (Red). Which color has the highest frequency?

- a) Blue
- b) Green
- c) Yellow
- d) Red

Q68. What sensing is used under water to detect things

- a) Radar
- b) Infrared
- c) Sonar
- d) Microwave

Q69. The Russian equivalent of GPS is

- a) Comrade
- b) Glonass
- c) Rodina
- d) Compass

Q70. Which of the following satellite navigation systems is designed to operate in India?

- a) GLONASS
- b) Beidou
- c) IRNSS
- d) QZSS

## Answer Key.

1)d	11)d	21)d	31)d	41)d	51)b	61)d
2)d	12)b	<b>22)</b> c	32)b	42)b	52)a	62)a
3)b	13)b	23)a	33)d	43)c	53)d	63)c
4)a	14)d	24)a	34)b	44)a	54)c	64)a
5)a	15)a	25)c	35)c	45)b	55)b	65)d
6)c	16)a	26)c	36)b	46)b	56)a	66)d
7)b	17)c	27)c	37)c	47)d	57)b	67)a
8)a	18)b	28)b	38)a	48)b	58)d	68)c
9)c	19)c	29)c	39)b	49)c	59)c	69)b
10)a	20)c	30)b	40)b	50)a	60)d	70)c