#### ATOMIC ENERGY CENTRAL SCHOOL NO.4 Rawatbhata

### MCQ Examination September (2020-2021)

## CLASS 08 - ENGLISH VIII ENGLISH

Time Allowed: 30 minutes **Maximum Marks: 40 General Instructions:** All questions are compulsory This paper contains 40 multiple choice questions. Velu scratched his head and sighed. I'll do it for now, he thought, until I find a better job. What [1] 1. was that? a) Cleaner b) Servent d) Ragpicker c) Hotel boy 2. Who was Jaya in the plot, Children at work? [1] a) A rag picker b) A porter c) A domestic help d) A sweeper 3. How did Velu feel about reaching Chennai Central? [1] b) Delighted a) Enraged c) Thrilled d) Miserable Why did Velu travel without a ticket to Chennai? [1] 4. a) Just for fun b) His ticket was lost c) He had no money d) He had a travel pass 5. In the text **The Tsunami**, what was Sanjeev's occupation? [1] a) He was a teacher b) He was a doctor c) He was a policeman d) He was a sailor 6. As discussed in the text The Tsunami, why did Ignesious's wife wake him up at six in the [1] morning? a) Because she saw the waves b) Because she felt an earthquake c) Because she felt water around her d) Because she had a nightmare 7. In the text **The Tsunami**, how did Tilly Smith realize that a tsunami was about to hit [1] Thailand? a) Remembering a literature lesson b) Remembering a history lesson c) Remembering a geography lesson d) Remembering a science lesson 8. According to many people, what do animals possess, as discussed in the text **The Tsunami?** [1] a) A sense of selfishness b) Fifth sense

	c) Sixth sense	d) A loving heart	
9.	According to the text <b>The Tsunami</b> , when	did the tsunami hit Thailand?	[1]
	a) 25 December 2004	b) 27 December 2004	
	c) 26 December 2004	d) 26 December 2005	
10.	Why did the elephants run for higher ground The Tsunami?	und before the tsunami hit the coasts of Sri Lanka, in	[1]
	a) To chase other animals	b) To free themselves	
	c) To protect themselves	d) To save the people	
11.	What is another word for <b>shelter</b> from th	e text <b>The Tsunami</b> ?	[1]
	a) Resort	b) Surge	
	c) Refuge	d) Archipelago	
12.	According to the religious leaders, who we discussed in <b>Glimpses of the Past</b> ?	ere the cause of all the misery in the world,	[1]
	a) Women	b) Men	
	c) Children	d) British officials	
13.	What was sent from one village to another emperor in the prose <b>Glimpses of the Pas</b>	r to tell men about their required service for their st?	[1]
	a) Clothes	b) Chapaties	
	c) Crops	d) Letters	
14.	Who was Tipu Sultan?		[1]
	a) King of Hydarabad	b) Farmer or Mysore	
	c) Ruler of Mysore	d) Soldier of Mysore	
15.	What was circulated among the Indian so discussed in the text <b>Glimpses of the Pas</b>	ldiers as a message to be united against the British as <b>t</b> ?	[1]
	a) Lotus flowers	b) Clothes	
	c) Weapons	d) Chapaties	
16.	According to the prose <b>Glimpses of the Pa</b> languages?	ast, education in India was carried out in which	[1]
	a) Persian and Sanskrit	b) Bengali and Sanskrit	
	c) English and Persian	d) Hindi and Persian	
17.	The text titled <b>Glimpses of Past</b> has been	represented in which form?	[1]
	a) Textual representation	b) Pictorial representation	
	c) Audio-visual representation	d) Audio representation	
18.	According to the prose Glimpses of the Pa	ast, who started newspapers?	[1]
	a) Macaulay	b) Raja Ram Mohan Roy	

	c) Governor-General Bentinck	d) Uma	
19.	What did the doctor suggest Bepin do in ore <b>Choudhury's Lapse of Memory?</b>	der to recover his memory in the prose <b>Bepin</b>	[1]
	a) Visit another doctor	b) Take leave from his work	
	c) Take rest at home	d) Visit the place again	
20.	In the prose <b>Bepin Choudhury's Lapse of</b> imagination?	<b>Memory,</b> who played a trick on Bepin with his	[1]
	a) Paresh Chanda	b) Chunilal	
	c) Dinesh Mukerjee	d) Parimal Ghose	
21.	Where did Bepin Babu meet Parimal that le	ed to the narrative of the prose <b>Bepin Choudhury's</b>	[1]
	Lapse of Memory?		
	a) At Kalicharan's	b) At Ranchi	
	c) At Kanpur	d) At his office	
22.	Why was Bepin disturbed after getting assuthe text <b>Bepin Choudhury's Lapse of Men</b>	ared from everyone that he had been to Ranchi, in nory?	[1]
	a) He was upset about his brother	b) He feared to lose his memory	
	c) He was upset about his wife	d) He feared losing his job	
23.	In the prose <b>Bepin Choudhury's Lapse of</b> the book shop?	<b>Memory,</b> whom did Bepin Babu not recognize at	[1]
	a) Dinesh Mukherjee	b) Chunilal	
	c) Haridas Bagchi	d) Parimal Ghosh	
24.	In the prose <b>Bepin Choudhury's Lapse of</b> a time?	<b>Memory</b> , how many books did Bepin use to buy at	[1]
	a) Five	b) Eight	
	c) Seven	d) Six	
25.	In the prose <b>Bepin Choudhury's Lapse of</b> encounter with Parimal Ghose?	<b>Memory,</b> why was Bepin Babu disturbed after his	[1]
	a) Because he couldn't recognize him	b) Because they were long-lost friends	
	c) Because it stirred unwanted memories	d) Because he had a strange dream	
26.	What attracted man according to the logics	of geography in the poem, <b>Geography lesson</b> ?	[1]
	a) Mountains and valleys	b) Plants and flowers	
	c) Land and water	d) Sun and stars	
27.	sprang into the sky. (Geography le	esson)	[1]
	a) The parachute	b) The jet	
	c) The rocket	d) The kite	

28.	The poet clearly understood that cities are (Geography lesson)	developed in close proximity to	[1]
	a) Rivers	b) Deserts	
	c) Forests	d) Mountains	
29.	What did the poet infer about cities as the	jet ascended in the sky? (Geography lesson)	[1]
	a) Cities had developed near rivers	b) Cities were polluted	
	c) Cities had good network of roads	d) Cities had many high rise buildings	
30.	How did the city appear when viewed from	n the ground? (Geography lesson)	[1]
	a) Beautiful	b) Haphazard	
	c) Well planned	d) Densely populated	
31.	looked haphazard on the ground.	(Geography lesson)	[1]
	a) The hills	b) The city	
	c) The flowing rivers	d) The mountains	
32.	Men built around the city. <b>(Geogra</b>	aphy lesson)	[1]
	a) Walls	b) Airports	
	c) Adventure parks	d) Gardens	
33.	Macavity's eyebrows were		[1]
	a) Thick	b) Superficially lined	
	c) Missing	d) Deeply lined	
34.	What was Macavity also known as?		[1]
	a) Hidden paw	b) Hidden eyes	
	c) Mystery paws	d) Secret paws	
35.	Macavity made movements like a		[1]
	a) Crocodile	b) Butterfly	
	c) Snake	d) Tortoise	
36.	What kind of whiskers did Macavity posse	ss?	[1]
	a) Uncombed	b) Wheatish	
	c) Curly	d) Tidy	
37.	What kind of eyes did Macavity possess?		[1]
	a) Bold	b) Beautiful	
	c) Dreamy	d) Sunken	
38.	Change voice: You kill a snake		[1]
	a) a snake is killed by you	b) a snake killed by you	
	c) a snake is being Killed by you	d) a snake is been killed by you	
39.	Change voice: Reena is doing her work		[1]

a) none of these
b) her work is done by Reena
c) her work was done by Reena
d) her work is being done by Reena
40. What is the plural of mouse?
[1]
a) mouses
b) mouses
c) mice
d) mices

## परमाणु ऊर्जा केन्द्रीय विद्यालय-4, रावतभाटा वर्णात्मक परीक्षा-2020

कक्षा-आठवीं

पूर्णांक-40

विषय-हिन्दी

समय-90 मिनट

प्रश्न.1 निम्नलिखित गद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर लिखिए-

अब सब लोग नल पर टूट पड़े। यहाँ भी घमासान मची कि क्या मजाल जो एक बूँद पानी भी किसी के बर्तन में आ सके। ठूसम-ठास किसी बालटी पर पतीला और पतीले पर लोटा और भगोने और डोंगे। पहले तो धक्के चले। फिर कुहनियाँ और उसके बाद बरतन। फौरन बड़े भाइयों, बहनों, मामुओं और दमदार मौसियों, फूफियों की कुमक भेजी गई, फौज़ मैदान में हथियार फेंककर पीठ दिखा गई।

- क. पाठ के लेखक का नाम लिखिए।
- ख. नल पर घमासान क्यों मची थी।
- ग. क्मक का अर्थ क्या है?
- घ. धक्के और कुहनियाँ क्यों चलीं?
- ङ. भाइयों, बहनों, मामुओं और दमदार मौसियों की कुमक क्यों भेजी गई? 1 प्रश्न2 निम्नतिखित में से किन्हीं पाँच प्रश्नों के उत्तर तिखिए- 3x5=15
  - क. तलवार का महत्व होता है म्यान का नहीं- उक्त उदाहरण से कबीर क्या कहना चाहते हैं? स्पष्ट कीजिए
  - ख. कबीर घास की निंदा करने से क्यों मना करते हैं?
  - ग. कबीर के दोहों को साखी क्यों कहा जाता है?
  - घ. कामचोर कहानी क्या संदेश देती है?
  - ङ. बच्चों के ऊधम मचाने के कारण घर की क्या दुर्दशा हुई?
  - च. भरा-पूरा परिवार कैसे सुखद बन सकता है और कैसे दुखद?

प्रश्न3 घरेलू नौकरों को हटाने की बात किन-किन परिस्थितियों में उठ सकती है। 5 प्रश्न4.नीचे दिए गए शब्दों को शुद्ध हिन्दी में लिखिए-

ग्यान, जीभि, पाऊँ, गारी, आँखि

प्रश्न5. नीचे दिए गए उपसर्ग जोड़कर दो-दो नए शब्द बनाइए-

5

5

प्र, आ, भर, बद, बे

प्रश्न6. निम्नलिखित प्रश्नों के उत्तर दीजिए-

- क. पहला वेद कौन-सा है?
- ख. अर्थशास्त्र किसकी रचना है?
- ग. भगवद्गीता में कितने श्लोक हैं?
- घ. प्राचीन भारत के दो महाकाव्य कौन-कौन से हैं?
- ङ. चरक किसके दरबार में राजवैद्य थे?

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#### ATOMIC ENERGY CENTRAL SCHOOL NO.4 Rawatbhata

## CLASS 08 - MATHEMATICS VIII MATHEMATICS

Time Allowed: 40 minutes Maximum Marks: 40

#### **General Instructions:**

All questions are compulsory

This paper contain 40 multiple choice questions.

1. The colour of refrigerators preferred by people living in a locality are shown by the following pictograph. How many people choose red colour?

colour	Number of people ♀ 10 people
Blue	<b>? ? ? ?</b>
Green	* *
Red	*
White	* * * * *

a) 20

b) 30

c) 40

- d) 10
- 2. The range of the data 30, 61, 55, 56, 60, 20, 26, 46, 28, 56 is:

[1]

[1]

a) 30

b) 61

c) 26

- d) 41
- 3. Numbers 1 to 20 are written on twenty separate slips (one number on one slip) kept in a box and mixed well. One slip is chosen from the box without looking into it. What is the probability of getting a number less than 15?
  - a)  $\frac{7}{10}$

b) none of these

c)  $\frac{1}{10}$ 

- d)  $\frac{1}{5}$
- 4. When a die is thrown, list the outcomes of an event of getting a number greater than 5.
  - a) None of these

b) 1, 3, 5

c) 2, 4, 6

- d) 6
- 5. A glass jar contains 6 red, 5 green, 4 blue and 5 yellow marbles of the same size. Hari takes out [1] a marble from the jar at random. What is the probability that the chosen marble is of red colour?



a)  $\frac{2}{5}$ 

b)  $\frac{7}{10}$ 

c)  $\frac{4}{5}$ 

- d)  $\frac{3}{10}$
- 6. A bag has 4 red balls and 6 yellow balls. A ball is drawn from the bag without looking into the bag. Find the probability of getting a red ball.
  - a)  $\frac{1}{5}$

b)  $\frac{3}{5}$ 

c) None of these

- d)  $\frac{2}{5}$
- 7. Which type of data can be represented by histogram?

[1]

a) Continuous data

b) None of these

c) Ungrouped data

- d) Grouped data
- 8. In an experiment of tossing a coin once, what is the probability of getting a head?

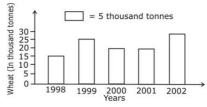
[1]

a)  $\frac{1}{2}$ 

b) 1

c) 0

- d) None of these
- 9. Bar graph given below shows the amount of wheat purchased by government during the Year [1] 1998-2002. What is the amount of wheat purchased in 2002?

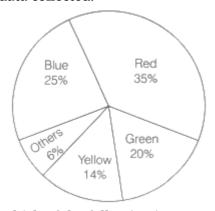


a) None of these

b) 20

c) 10

- d) 30
- 10. Students of a class voted for their favourite colour and a pie chart was prepared based on the data collected.



Which of the following is a reasonable conclusion for the given data?

- a)  $\frac{1}{20}$  th student voted for blue colour
- b) Green is the least popular colour
- c) Number of students liking together yellow and green colours is approximately the same as those for red colour
- d) The number of students who voted for red colour, is two times the number of students who voted for yellow colour

11. Tally marks are used to find:

[1]

a) upper limit

b) frequency

c) class intervals

d) range

12.	Total number of outcomes, when a ba 4 blue balls, is:	ll is drawn from a bag which contains 3 red, 5 black and	[1]
	a) 8	b) 12	
	c) 7	d) 9	
13.	The colour of refrigerators preferred	by people living in a locality are shown by the following	[1]
	pictograph. How many people choose  colour Number of people - 10 people  Blue + + + +  Green + +	blue colour ?	
	White \$ \$ \$ \$		
	a) 40	b) 20	
	c) 10	d) 30	
14.	Which of the following is a perfect squ	uare number?	[1]
	A. 225 B. 224 C. 200 D. 300		
	a) C	b) B	
	c) D	d) A	
15.	Which one of the following is a perfec	et square number?	[1]
	a) 144	b) 220	
	c) 343	d) 125	
16.	Without doing any calculation, find th	ne numbers which are surely perfect squares.	[1]
	a) 2657	b) 2673	
	c) 2025	d) 2688	
17.	Find the perfect square numbers bety	veen 100 and 130.	[1]
	a) 116	b) 121	
	c) 125	d) 118	
18.	Find the perfect square numbers bety	veen 90 and 100.	[1]
	a) 95	b) No number	
	c) 96	d) 98	
19.	The square of 39 is-		[1]
	a) 1521	b) none of these	
	c) 378	d) 1500	
20.	Without doing any calculation, find the square root.	ne numbers which are surely perfect squares.Estimate its	[1]

	a) 2209	b) 2287	
	c) 2203	d) 2278	
21.	Which of the following is not a perfect squa	re number?	[1]
	a) 2500	b) none of these	
	c) 2401	d) 2400	
22.	The sum of successive odd number 1,3,5,7,9	,11,13 and 15 is	[1]
	a) 81	b) 64	
	c) 49	d) 36	
23.	Find the perfect square numbers between 7	<sup>7</sup> 0 and 80.	[1]
	a) 77	b) No number	
	c) 78	d) 72	
24.	Find the perfect square numbers between 1	30 and 150.	[1]
	a) 137	b) 144	
	c) 136	d) 145	
25.	Which of the following is not a perfect squa	re number?	[1]
	a) 1225	b) 1296	
	c) 1521	d) 1401	
26.	In the interval 35-45, 45 is called		[1]
	a) Upper limit	b) Lower limit	
	c) Frequency	d) Range	
27.	All square numbers do not end with	_ at unit's place.	[1]
	a) 2, 3, 7 and 8	b) 1, 4, 5 and 6	
	c) 5	d) 9	
28.	The cube of 27 is		[1]
	a) 19683	b) 41234	
	c) 19273	d) 729	
29.	Find the cube root of -132651.		[1]
	a) 51	b) -51	
	c) 15	d) 41	
30.	By which smallest natural number should 1 cube?	.28 be divided so that the quotient is a perfect	[1]
	a) 6	b) 4	
	c) 3	d) 2	
31.	Find the cubes of x, 4x and 5x.		[1]
	a) $4x^3$ , $9x^3$ , $16x^3$	b) x <sup>3</sup> , 64x <sup>3</sup> , 125x <sup>3</sup>	

	c) $8x^2$ , $27x^2$ , $64x^2$	d) $4x^2$ , $9x^2$ , $16x^2$	
32.	If the digit in one's place of a number is	2, then the last digit of its cube will be:	[1]
	a) 4	b) 8	
	c) 2	d) 6	
33.	The cube root of 15625 is		[1]
	a) 27	b) 28	
	c) 25	d) 26	
34.	Find the cube of 70.		[1]
	a) 343000	b) 121000	
	c) 212000	d) 562500	
35.	If $\sqrt[3]{\frac{x}{y}} = \frac{6}{7}$ , then $\frac{x}{y} = $		[1]
	a) 216	b) $\frac{216}{343}$	
	c) $\frac{343}{216}$	d) 343	
36.	If m is ones digit and n is the tens digit of will be	f a two-digit number, then the cube of the number	[1]
	a) $(10m + n)^3$	b) $(10n + m)^2$	
	c) $(10n + m)^4$	d) $(10n + m)^3$	
37.	The cube root of 19683 is		[1]
	a) 23	b) 21	
	c) 25	d) 27	
38.	A natural number is said to be a perfect	cube, if it is the cube of some	[1]
	a) natural number	b) cuboid number	
	c) square number	d) cube number	
39.	Find the cubes of x, 2x and 3x.		[1]
	a) $8x^2$ , $27x^2$ , $64x^2$	b) $4x^3$ , $9x^3$ , $16x^3$	
	c) $4x^2$ , $9x^2$ , $16x^2$	d) $x^3$ , $8x^3$ , $27x^3$	
40.	The cube of -25 is		[1]
	a) 15625	b) 50	

d) -15635

c) -15625

## ATOMIC ENERGY CENTRAL SCHOOL NO.4 Rawatbhata

## **CLASS 08 - SCIENCE**

## **VIII SCIENCE**

Time A	Allowed: 30 minutes	Maximum Marl	ks: 40
Genera	al Instructions:		
	All questions are compulsory		
	This parer contains 40 multiple choice quest	ons.	
1.	Read the following statements :		[1]
	i) Natural gas is easy to be transported throu	igh pipes.	
	ii) It occurs below the surface of petroleum	deposits.	
	a) statement i) is correct but ii) is	b) statement ii) is correct but i) is	
	wrong	wrong	
	c) both are correct	d) both are wrong	
2.	Excessive use of coal & petroleum may lead	to:	[1]
	a) acid rain	b) greenhouse effect	
	c) energy crisis	d) all of these	
3.	Fossil fuels are :		[1]
	a) formed naturally	b) non combustible	
	c) formed artificially	d) renewable resource	
4.	Read the following statements :		[1]
	i) Coal is a mineral of plant origin.		
	ii) Process of conversion of dead vegetation	into coal is called condensation.	
	a) statement ii) is correct but i) is	b) statement i) is correct but ii) is	
	wrong	wrong	
	c) both are correct	d) both are wrong	
5.	Petroleum is a mixture of :		[1]
	a) oxygen, sulphur and carbon	b) oxygen and nitrogen	
	c) carbon and hydrogen	d) hydrocarbons	
6.	Match the following :		[1]
	i) Petroleum gasa) cattle dung		
	ii) Cokeb) domestic fuel		
	iii) Coal gasc) conversion of wo		
	iv) Biogasd) used in metal ext		
	v) Carbonisatione) an industrial fu	el	
	a) i.b,ii.d,iii.e, iv.a, v.c	b) i.c,ii.e,iii.d, iv.a, v.b	

	c) i.d,ii.a,iii.b, iv.e, v.c	d) i.d,ii.b,iii.e, iv.c, v.a	
7.	Natural gas is a resource :		[1]
	a) renewable	b) living	
	c) all the above	d) non renewable	
8.	Coke is obtained from :		[1]
	a) destructive distillation of petroleum	b) refining of petroleum	
	c) destructive distillation of coal	d) refining of coal	
9.	Combustion can be defined as a:-		[1]
	a) physical change	b) Periodic change	
	c) chemical change	d) cyclic change	
10.	In villages, people use wood as fuel because	2:	[1]
	a) Of its easy availability and low cost.	b) It is environment friendly.	
	c) It catches fire easily.	d) It is considered to be an ideal fuel.	
11.	The least hot part of the flame is:		[1]
	a) yellow	b) blue	
	c) black	d) red	
12.	Read the following statements :		[1]
	i) Matchstick burns on striking a smooth su		
	ii) Striking generates enough heat to light th		
	a) statement ii) is correct but i) is	b) statement i) is correct but ii) is	
	wrong c) both are wrong	wrong d) both are correct	
13.	Yellow flame leaves behind black residue w		[1]
10.	a) soot	b) precipitate	[+]
	c) amber	d) smoke	
14.	Read the following statements :	u) Silloke	[1]
17,	i) Substances that burn with flame are first	converted into vapour.	[1]
	ii) Wax first melts and changes into vapour before producing flame.		
	a) Both are wrong	b) Statement i) is correct but ii) is wrong	
	c) Statement ii) is correct but i) is wrong	d) Both are correct	
15.	Which of the following can catch fire on the	eir own?	[1]
	a) a matchstick	b) a piece of sodium	
	c) a cup of tea	d) a can full of kerosene	
16.	Some substances do not burn with a flame s	such as :	[1]

	a) Kerosene	b) Wax	
	c) Charcoal	d) LPG	
17.	Some combustion reactions occur suddenly combustion is:	with evolution of large amount of gas. Such a	[1]
	a) extension	b) inflammation	
	c) expulsion	d) explosion	
18.	Rekha was studying about combustible sub substance when burnt produce:	stances and she concluded that every combustible	[1]
	a) Carbon monoxide	b) methane	
	c) heat	d) light	
19.	If a combustible substance is present along	with fire:	[1]
	a) substance will not burn at all.	<ul><li>b) substance will not catch fire above its ignition point.</li></ul>	
	<ul><li>c) substance will not catch fire below its ignition point.</li></ul>	d) substance will catch fire immediately.	
20.	A substance which reacts with oxygen giving one of the following is a combustible substantial of the following is	ng heat is called a combustible substance. Which ince?	[1]
	a) Glass	b) Iron nail	
	c) Stone piece	d) Wood	
21.	Find the odd one out:		[1]
	a) soda acid fire extinguisher	b) oxygen fire extinguisher	
	c) foam fire extinguisher	d) carbon dioxide fire extinguisher	
22.	A person after fire casualty is wrapped with	n blanket to :	[1]
	a) to cut oxygen supply	b) to increase the ignition temperature of body	
	c) to cut the supply of carbon dioxide	d) to cut the supply of combustible substance	
23.	A Soda acid fire extinguisher releases	which puts out the fire.	[1]
	a) Water and carbondioxide	b) Soda	
	c) Foam	d) Carbon dioxide	
24.	Temperature of water inside paper cup held	d above candle flame :	[1]
	a) falls due to heat transferred	b) increases as flame extinguishes	
	c) remains the same as earlier	d) rise due to heat transferred	
25.	Of the following parts of a cell listed below, cell and a bacterial cell.	name the part that is common to plant cell, animal	[1]
	a) chloroplast	b) cell membrane	

	c) nucleus	d) cell wall	
26.	Read the following statements:  i) Cell wall is made up of living material.  ii) Cell wall allows substances to pass freely.		[1]
	a) both are wrong	b) statement ii) is correct but i) is wrong	
	c) both are correct	d) statement i) is correct but ii) is wrong	
27.	Read the following pairs of examples of orga The pair that belongs to the group prokaryot		[1]
	a) moss and sponge	b) bacteria and blue-green alga	
	c) yeast and Amoeba	d) penicillium and Spirogyra	
28.	Plants lack a skeletal framework in their bod	ly but this function is compensated by :	[1]
	a) plasma membrane	b) glucose layer	
	c) cell wall	d) protein coat	
29.	Read the following statements:  i) RBCs are the longest cell in the body.  ii) RBCs are red due to the presence of haeme	oglobin.	[1]
	a) both are correct	b) both are wrong	
	c) statement ii) is correct but i) is wrong	d) statement i) is correct but ii) is wrong	
30.	The most important function of cell membra	ne is that it:	[1]
	<ul><li>a) controls only the exit of materials from cells.</li></ul>	b) allows entry and exit of materials without any control.	
	c) controls only the entry of materials into cells.	d) controls the entry and exit of materials from cells.	
31.	Energy production in the cell is the responsi	oility of :	[1]
	a) mitochondria	b) ribosomes	
	c) endoplasmic reticulum	d) chloroplast	
32.	If cell membrane:: skin then Nucleus:: ?		[1]
	a) liver	b) brain	
	c) lungs	d) heart	
33.	Identify the correct statement.		[1]
	a) Tissue is a group of dissimilar cells.	b) Vacuoles are not found in plant cells.	
	c) An organ consists of similar cells.	d) Prokaryotes do not have nucleus.	
34.	Shreya tried to observe sections of cells under visible so she viewed after:	er microscope but transparent sections were not	[1]

	-)	le) et e incine	
	a) putting glycerine	b) staining	
	c) washing	d) treating with alcohol	
35.	Read the following statements :		[1]
	i) A cell cannot live long without a nucleus.		
	ii) Red blood cell of human body lack a nucl	eus.	
	a) both are correct	b) both are wrong	
	c) statement ii) is correct but i) is wrong	d) statement i) is correct but ii) is wrong	
36.	Choose the correct statement:		[1]
	a) Genes are located in the chromosomes	b) Cell is located in the nucleus	
	c) Cell membrane surrounds the nucleus	d) Chromosomes are located in the nucleolus	
37.	Read the following statements :		[1]
	i) All cells are similar in their basic structure	2.	
	ii) All cells are identical in their function.		
	<ul><li>a) statement ii) is correct but i) is wrong</li></ul>	b) statement i) is correct but ii) is wrong	
	c) both are correct	d) both are wrong	
38.	In multicellular organisms, the work is :		[1]
	a) performed by undifferentiated cells.	b) performed by single cells.	
	c) undivided	d) divided	
39.	Under a microscope Paheli observes a cell the that she observes is	nat has a cell wall but no distinct nucleus. The cell	[1]
	a) a nerve cell	b) a plant cell	
	c) an animal cell	d) a bacterial cell	
40.	Shubham was surprised to see the plastids p to be :	providing colour to leaves. He discovered its name	[1]
	a) amyloplast	b) chlorophyll	
	c) chloroplast	d) chromoplast	

## ATOMIC ENERGY CENTRAL SCHOOL NO.4 Rawatbhata

## MCQ Examination September (2020-2021)

# CLASS 08 - SOCIAL SCIENCE VIII SOCIAL SCIENCE

Time A	llowed: 30 minutes	Maximum Mark	s: 40	
Genera	l Instructions:			
	All questions are compulsory.			
	This paper contains 40 multiple choice	questions.		
1.	statements, select the one that is not a	reat Revolt of 1857 are given in the following socio-religious cause.  nd craftsmen were affected as cheap machine-made	[1]	
	goods were available.			
	B. Christian missionaries tried to convert forcibly many people to Christianity.			
	education, etc hurt the feelings of F			
	D. The introduction of Western educa	tion hurt the feelings of people.		
	a) Only B	b) Only D		
	c) Only C	d) Only A		
2.	,	history of India's freedom struggle. From the following rning point with special reference to the impact of the	[1]	
A. The rise of a feeling of nationalism and unity among the people of all parts of India.  B. The army was reorganized and new weapons replaced the outdated weapons.				
	<ul><li>C. Governor-General was made the Vi</li><li>D. No interference in the religious pra</li></ul>	-		
	a) Only C	b) Only B		
	c) Only A	d) Only D		
3.	From the names given below, which o 1857.	ne is not called as an alternative to The Great Revolt of	[1]	
	a) Uprising of 1857	b) Indian Mutiny		
	c) Sepoy Mutiny	d) Second War of Independence		
4.	Who led the revolt in Kanpur?		[1]	
	a) Mangal Pandey	b) Nana Saheb		
	c) Bahadur Shah Zafar	d) Begum Hazrat Mahal		

The Mughal emperor Bahadur Shah Zafar died in:

5.

[1]

	a) The Rangoon Jan	b) The Audience Hall		
	c) The Mosque	d) The Royal Palace		
6.	Name the able commander in chief of Nana	a Saheb who led the revolt in Kanpur.	[1]	
	a) Maulvi Ahmadullah	b) Tantia Tope		
	c) Bahadur Shah Zafar	d) Mangal Pandey		
7.	A few important changes in the Indian arm	y are given below after the revolt of 1857. Choose	[1]	
	the one that is not <b>true</b> .			
	A. More number of soldiers were recruited	from Gurkhas, Sikhs, and Pathans.		
	B. The number of Indian soldiers was incre	-		
	C. Very few soldiers were recruited from A			
	D. The army was reorganised and strength	enea.		
	a) Only D	b) Only C		
	c) Only A	d) Only B		
8.	The new law passed in 1850 made:		[1]	
	a) conversion into Christianity easier	b) people of India Christians		
	c) the life of the Indians difficult	d) none of these		
9.	Which one of the following best describes a	Resident with respect to British India?	[1]	
	A. A senior British Government administra	tive official positioned in a local place and		
	controlling the happenings of the kingdom.			
	B. A local landlord to keep a check on the la			
	C. A local money lender collecting revenue.			
	D. An official who administers an oath to the soldiers.			
	a) Only A	b) Only B		
	c) Only D	d) Only C		
10.	Since the century, nawabs and raja	s had seen their power erode.	[1]	
	a) mid-nineteenth	b) eleventh		
	c) mid-eighteenth	d) sixteenth		
11.	A few reasons for the failure of the revolt o	f 1857 are given below. Suggest the one that is not	[1]	
	considered as a reason for the failure.			
	A. The leaders were neither organized and united nor properly trained.			
	B. They used outdated weapons.			
	C. The Hindus and Muslims fought together even though the British tried to keep them divided.			
	D. The educated class of the Indians were loyal to the British due to their selfish intentions.			
	a) Only C	b) Only B		
	c) Only A	d) Only D		
12.	The British regained control of the country	,	[1]	

a) 1859	b) 1860

- c) 1858 d) 1857
- 13. In 1858, Queen Victoria issued an important proclamation. Some of the important points covered in this are given below. Pick out the one that is not related to the Proclamation.
  - A. Indian princes were given assurance that no further annexation will be made by the British.
  - B. East India Company was abolished and India was directly under the control of the British Crown.
  - C. The Proclamation abolished the Doctrine of Lapse.
  - D. The proclamation did not pardon the rebels because they attacked the British.
    - a) Only B

b) Only C

c) Only A

d) Only D

14. Ploughing parallel to the contours of a hill slope to form a natural barrier for water to flow down the slope. With the help of the picture attached, name this important method of soil conservation.



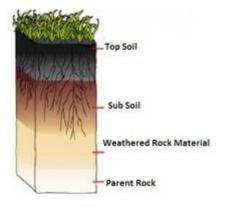
a) Shelter belts

b) Contour Ploughing

c) Rock Dams

d) Mulching

15. From the attached image of the profile of Soil, identify the one that has a fine texture, a high content of organic matter ie humus and is vital for plant growth



a) Parent Rock

b) Weathered Rock Material

c) Sub Soil

d) Top soil

16. \_\_\_\_\_ forests do not shed their leaves simultaneously in any season of the year.

[1]

[1]

[1]

a) Evergreen

b) Temperate

c) Tropical

d) Deciduous

17. What does the term Rock Dams refer to?

[1]

	A. Farming on rocky terrains.		
	B. Rocks are piled up to slow down the flow	of water to prevent gullies and soil loss.	
	C. Rows of trees planted across the rocky are	eas for soil conservation.	
	D. Natural barriers are created on rocky are cover.	as to check the wind movement to protect the soil	
	a) Only B	b) Only A	
	c) Only D	d) Only C	
18.	Soil erosion and are the major threa	ts to the soil as a resource.	[1]
	a) deforestation	b) depletion	
	c) fallow fields	d) overgrazing	
19.	According to ICAR, how many group classific	ations of soils are found in India?	[1]
	a) Six	b) Eight	
	c) Two	d) Five	
20.	Constructing tanks and percolation pits, an in	mportant method to conserve water by saving	[1]
	a) Contour Irrigation	b) Rain water harvesting	
	c) Water Sprinkler	d) Mulching	
21.	A few important facts about Oceans are given	n below. Identify the one that is not TRUE	[1]
	a) Ocean water is saline and hence fit for human consumption.	b) It was in the primitive oceans that life began almost 3.5 billion years ago	
	c) The large expanse of oceans reduce the extremes of temperature not only between the summer and winter seasons but also between day and night	d) Oceans cover about two-thirds of the earth?s surface and support a rich variety of plant and animal life.	
22.	Which of these resources covers about three-fourth's of the total surface of the earth?		[1]
	a) Air	b) Land	
	c) Water	d) Soil	
23.		eveloped with the help of stones or grass along ving list, choose the name given to this method of	[1]

	c) Terrace Farming	d) Rock Dams		
24.	Identify this major threat to the environmen	t from the image attached based on the following	[1]	
	clues:			
	A mass movement of rock, debris or earth down a slope.			
	Often takes place in conjunction with earth quakes, floods and volcanoes.			
	A major disaster in the hilly terrains and is a	major area of concern		
	a) Rising Sea Levels	b) Air Pollution		
	c) Deforestation	d) Landslide		
25.	Which of these is an example of community		[1]	
	a) Sunderban forests	b) Parliament House		
	c) A bungalow	d) None of these		
26.	Expand ICAR:	<b>3,</b> 2.02.0 <b>22 1.000</b>	[1]	
	a) The Indian Council of Agronomic Research	b) The Indian Council of Agricultural Research		
	c) The Indian Committee of Agricultural	d) The Indian Council of Agrarian		
	Research	Research		
27.	A few factors which lead to soil degradation factor for soil degradation.	are given below, pick out the one that is not a	[1]	
	a) Mulching	b) Rain wash and floods		
	c) Overuse of fertilizers	d) Deforestation		
28.	With respect to the Indian Constitution, there is no discrimination on the basis of religion i.e. all religions are treated equally, Which one of the following terms refers to the above statement?		[1]	
	a) Secular	b) Sovereign		
	c) Republic	d) Democratic		
29.	The directives to the government which ensure social and economic reforms are called		[1]	
	a) directive viewpoints	b) directive values		
	c) directive philosophies	d) directive principles		
30.	Fundamental rights refer to:		[1]	

b) Contour Barriers

a) Mulching

	B. The list of subjects of the state governmen	nt.		
	C. The basic rights which are granted to citizens for the holistic growth of the individuals.			
	D. The list of subjects of both the state and co	entral governments.		
	a) Only B	b) Only C		
	c) Only A	d) Only D		
31.	Why is it important to separate religion from appropriate answer for it.	n the State in democratic societies? Choose an	[1]	
	a) We need to protect people from being exploited	<ul><li>b) We need to ensure an equitable and just society by reducing social and economic inequalities .</li></ul>		
	<ul> <li>c) We need to protect the freedom of individuals to exit from their religion , embrace another religion or have the freedom to interpret religions teachings differently</li> </ul>	d) We need to allow people to choose an occupation of their choice.		
32.	The following statements consolidate the fact that only a secular state can realise its objectives. However, one of these statements is not <b>true</b> . Pick out the incorrect one.		[1]	
	a) Only A	b) Only D		
	c) Only C	d) Only B		
33.	Which term refers to <b>All citizens of India has elect their representatives in the government of the constitution?</b>	ave political rights which means that they can nent with special reference to the Indian	[1]	
	a) Socialist	b) Liberty		
	c) Democratic	d) Secular		
34.	Analyse the image given and identify, which	country's flag is shown here.	[1]	
	a) India	b) China		
	c) Germany	d) USA		

A. The list of subjects of the central government.

35.	The three-tier federal structure of the Indian	n government is composed of:	[1]
	a) Two at the state level and one at the local level	b) One government at the centre and two at the local level	
	c) One government at centre, another at state, another at local level	d) One government at the centre and two at the state level	
36.	<b>India is a Republic country.</b> Choose the exagiven below:	act meaning of this statement from the options	[1]
	A. The Indian Constitution proclaims that the hereditary ruler.	ne head of the state will be elected and not be a	
	B. Equal opportunities to everyone in the co	ountry.	
	C. No discrimination on the basis of religion		
	D. An independent India, no longer governe	ed by any external authority.	
	a) Only A	b) Only D	
	c) Only C	d) Only B	
37.	What does the term Socialist refer to as per Indian Constitution?		[1]
	<ul> <li>a) Equal opportunities to every one to make use of the resources of the country</li> </ul>	b) No discrimination on the basis of religion	
	c) An independent India, nol longer governed by any external authority	d) People of India govern themselves throught heir elected representatives	
38.	Name the fundamental right that guarantee the religion they desire	s the citizens the right to practise and propagate	[1]
	a) Freedom of Belief	b) Freedom of Faith	
	c) Freedom of Caste	d) Freedom of Religion	
39.	The federal structure of the Indian government is governed at levels.		[1]
	a) eight	b) three	
	c) two	d) four	
40.	The President of the Constituent Assembly v	vas	[1]
	a) Dr. Rajendra Prasad	b) Jawaharlal Nehru	
	c) Dr. Babasaheb Ambedkar	d) Mahatma Gandhi	

#### **Solution**

#### Class 08 - English

#### VIII ENGLISH

1. (d) Ragpicker

**Explanation:** He agreed to pick rubbish things from the big garbage bin.

2. **(a)** A rag picker

**Explanation:** Jaya was around eleven years old and she was compelled to do rag picking to earn a living. She was poverty-stricken and was leading a miserable life.

3. (d) Miserable

**Explanation:** Velu felt miserable and exhausted on reaching Chennai station. He sat on a bench feeling sad. He was hungry, tired, and slightly scared at the station. The poor child was homeless and had no money with him.

4. (c) He had no money

**Explanation:** Velu ran away from his home and managed to board a train to Chennai. He was penniless and so couldn't afford to buy the ticket.

5. **(c)** He was a policeman

Explanation: Sanjeev was a policeman, serving in the Katchall island of the Nicobar group of islands.

6. **(b)** Because she felt an earthquake

**Explanation:** Ignesious's wife woke him up in the morning around six because she felt an earthquake.

7. **(c)** Remembering a geography lesson

**Explanation:** Tilly and her family were at the beach when the sea started to swell up. She recollected a geography lesson that was taught at her school two weeks before she came to Thailand and remembered that she had been taught about tsunamis and earthquakes.

8. (c) Sixth sense

**Explanation:** It has been observed that animals often sense the arrival of a disaster much before humans can detect it. There were eyewitnesses in Sri Lanka who observed that before the place suffered a great loss by the tsunami, animals took shelter to keep themselves protected. They seem to possess a sixth sense.

9. **(c)** 26 December 2004

**Explanation:** The tsunami hit Thailand and parts of India on 26 December 2004. It had been triggered by a massive earthquake off northern Sumatra on that day.

10. **(c)** To protect themselves

**Explanation:** It is said that animals can understand nature better than men. It has been observed in Sri Lanka, that before the tsunami hit the Sri Lankan coasts, the elephants screamed and ran for higher ground to seek protection for themselves since they were aware of the disaster before took place.

11. **(c)** Refuge

**Explanation:** The animals that survived the tsunami took refuge before the tsunami hit the coastal regions. This explains that they found their shelter to keep themselves protected.

12. **(a)** Women

**Explanation:** The religious leaders preached of untouchability and child marriage in India. According to them, women were the cause of all the misery in the world.

13. **(b)** Chapaties

**Explanation:** Chapaties were sent from village to village to tell the people that their emperor would want their service to fight against the British.

14. **(c)** Ruler of Mysore

**Explanation:** He was a brave ruler of Mysore.

15. **(a)** Lotus flowers

**Explanation:** The way chapaties were passed from village to village to build people's integrity, soldiers too circulated lotus flowers among themselves to unite against the British and fight for their independence.

16. (a) Persian and Sanskrit

Explanation: Education in India was carried out in two languages - Persian and Sanskrit.

17. **(b)** Pictorial representation

**Explanation:** The text has been pictorially represented with speech bubbles that form the narrative of the prose.

18. **(b)** Raja Ram Mohan Roy

**Explanation:** Raja Ram Mohan Roy had started newspapers, but the suspicious British stopped them in 1823.

19. **(d)** Visit the place again

**Explanation:** The doctor advised him to visit the place again because seeing the same things again helps to regain memories of the same and prescribed some medicines for him to take.

20. **(b)** Chunilal

**Explanation:** Chunilal was very upset with Bepin on the account of not helping him out in his time of distress and confessed in his letter that he had played a trick on Bepin with his imagination as a punishment.

21. (a) At Kalicharan's

**Explanation:** Bepin Choudhury's encounter with Parimal Ghose took place at the book shop named Kalicharan's in New Market.

22. **(b)** He feared to lose his memory

**Explanation:** Bepin Babu had asked almost everyone to confirm his whereabouts in October 1958 and got assured that he had been to Ranchi. But he himself couldn't recollect this particular incident of his life. He was so disturbed that he feared that he was losing his memory.

23. (d) Parimal Ghosh

**Explanation:** Bepin Babu was at the shop buying books when a man came to him. He said that they both knew each other since Bepin Babu went to Ranchi for a trip in 1958 and introduced himself as Parimal Ghosh but Bepin couldn't recognize him neither could he remember about his trip to Ranchi.

24. **(a)** Five

**Explanation:** Bepin used to buy at least five books at a time from Kalicharan's at New Market to last him a week.

25. (a) Because he couldn't recognize him

**Explanation:** Parimal Ghose said that he was from Ranchi and coincidentally knew a lot about Bepin Babu's personal life. But Bepin Babu couldn't recognize the man and did not even remember about ever visiting Ranchi.

26. **(c)** Land and water

**Explanation:** The poet highlighted the fact that human settlements were near the water bodies and plains were densely populated.

27. **(b)** The jet

**Explanation:** The poet captured the view of the city from the sky while being seated in an aeroplane or jet.

28. **(a)** Rivers

**Explanation:** The cities are always developed near the source of water as it supports life and availability of ample water makes life easy and comfortable.

29. (a) Cities had developed near rivers

**Explanation:** The poet clearly comprehended that cities were developed near a source of water or flowing rivers as the waters supported the ecosystems and assisted the survival of all living beings.

30. **(b)** Haphazard

**Explanation:** The poet reflected that the city appeared to be haphazard, unplanned, and without style as it was impossible to get a wholesome view of it from the ground.

31. **(b)** The city

**Explanation:** The city appeared haphazard on the ground because it was impossible to get a complete and wholesome view of the city.

32. **(a)** Walls

**Explanation:** The walls referred to the barriers and boundaries that mankind had built around themselves. The walls depicted the territorial divisions and the regional disparities that existed on land.

33. (d) Deeply lined

**Explanation:** Macavity's eyebrows were deeply lined due to constant thinking and strategizing.

34. (a) Hidden paw

**Explanation:** The notorious cat was also known as **Hidden paw** for it could escape from the crime scene in no time and nobody could trace it.

35. **(c)** Snake

**Explanation:** Macavity's head moved from side to side like the movements of a snake.

36. (a) Uncombed

**Explanation:** The cat had unkempt and shabby whiskers as it did not pay much head to its appearance.

37. **(d)** Sunken

**Explanation:** Macavity had sunken eyes depicting his wits.

38. (a) a snake is killed by you

Explanation: a snake is killed by you

39. **(d)** her work is being done by Reena

Explanation: her work is being done by Reena

40. **(c)** mice

Explanation: mice

#### **Solution**

#### **Class 08 - Mathematics**

#### **VIII MATHEMATICS**

1. **(d)** 10

**Explanation:**  $10 \times 1=10$  10 people choose red colour.

2. **(d)** 41

Explanation: Range of data = Maximum value - Minimum value = 61 - 20 = 41

3. **(a)**  $\frac{7}{10}$ 

**Explanation:** Total number of outcomes = 20

number less than 15 = 14 (1,2,3,4,5,6,7,8,9,10,11,12,13,14)

probability of getting a number less than 15 =  $\frac{14}{20} = \frac{7}{10}$ 

4. **(d)** 6

**Explanation:** Total outcomes = 1,2,3,4,5,6

only 6 is the number which is greater than 5

5. **(d)**  $\frac{3}{10}$ 

**Explanation:** As, jar contains 6 red, 5 green, 4 blue and 5 yellow marbles of same size. Then, probability that the chosen marble is of red colour =  $\frac{\text{Number of red marbles}}{\text{Total number of marbles}} = \frac{6}{6+5+4+5} = \frac{6}{20} = \frac{3}{10}$ 

6. **(d)**  $\frac{2}{5}$ 

**Explanation:** Total number of balls = 10

Number of red balls = 4

Probability of getting a red ball =  $\frac{4}{10} = \frac{2}{5}$ 

7. (d) Grouped data

**Explanation:** Only Grouped data can be represented by histogram.

8. **(a)**  $\frac{1}{2}$ 

**Explanation:** Total possible outcomes = 2 ( H and T)

Probability of getting a head =  $\frac{1}{2}$ 

9. **(d)** 30

**Explanation:** The amount of wheat purchased in 2002 is 30 thousand tonnes

10. **(c)** Number of students liking together yellow and green colours is approximately the same as those for red colour

**Explanation:** Number of students liking together yellow and green colours is (14 + 20)% i.e. 34%, which is approximately the same as those for red (35%).

11. **(b)** frequency

Explanation: Tally marks are used to find the frequency of the observations.

12. **(b)** 12

**Explanation:** Given, a bag contains 3 red, 5 black and 4 blue balls.

Then, total number of outcomes = Total number of balls = 3 + 5 + 4 = 12

13. **(a)** 40

**Explanation:**  $10 \times 4 = 40$ 

40 people choose blue colour.

14. **(d)** A

**Explanation:** The answer is  $225 = 15^2$ 

15. **(a)** 144

**Explanation:** The answer is 144 which is  $12^2$ .

16. **(c)** 2025

**Explanation:** 2025 is a perfect square as it ends with 5 at unit's place whereas the other numbers 2657, 2688, and 2673 ends with 7, 8 and 3 at unit's place and a perfect square never ends with 2, 3,7 and 8 at unit's place

17. **(b)** 121

**Explanation:** The answer is 121 which is square of 11 and the next square number is 144 which does not lie between 100 and 130

18. **(b)** No number

**Explanation:** No square number lies between 90 and 100. But 100 is a square number

19. **(a)** 1521

**Explanation:**  $39^2 = 39 \times 39 = 1521$ 

20. **(a)** 2209

**Explanation:** The answer is 2209 as the other numbers are 2287,2278 and 2203 which cannot be perfect squares as they end with 3,7,8.

Now, to estimate the square root of 2209

2209 lies between  $40^2 = 1600$  and  $50^2 = 2500$ 

In 2209 the unit's digit is 9, so its square root will end with either 3 or 7 as  $3^2$ =9 and  $7^2$ = 49 So its square root can be either 43 or 47.

Now 2209 is more nearer to  $50^2$ =2500 than it is to  $40^2$ =1600 So its square root will be 47 as 47 is more nearer to 50

21. **(d)** 2400

Explanation: The answer is 2400

22. **(b)** 64

**Explanation:** 64

23. **(b)** No number

Explanation: No square number lies between 70 and 80

24. **(b)** 144

**Explanation:** The answer is 144 which is sqaure of 12 and the next square number is 169 which does not lie between 130 and 150

25. **(d)** 1401

**Explanation:** The answer is 1401

26. (a) Upper limit

Explanation: Upper limit

27. **(a)** 2, 3, 7 and 8

**Explanation:** All square numbers do not end with 2, 3, 7 and 8 at unit's place as  $1^2 = 1$ ,  $2^2 = 4$ ,  $3^2 = 9$ ,  $4^2 = 16$ ,  $5^2 = 25$ ,  $6^2 = 36$ ,  $7^2 = 49$ ,  $8^2 = 64$ ,  $9^2 = 81$ ,  $10^2 = 100$  and same follows with higher square numbers and none of these squares ends with 2, 3, 7 or 8 at unit's place

28. **(a)** 19683

**Explanation:**  $(27)^3 = 27 \times 27 \times 27 = 19683$ 

29. **(b)** -51

**Explanation:** -132651 = (3) × (3) × (3) × (-17) × (-17) × (-17) 
$$\sqrt[3]{-132651} = \sqrt[3]{3} \times (-17) \times ($$

30. **(d)** 2

one 2 is left out and could not make a triplet, so 2 is the smallest natural number by which 128 should be divided so that the quotient is a perfect cube.

31. **(b)**  $x^3$ ,  $64x^3$ ,  $125x^3$ 

**Explanation:** The cubes of  $x = x \times x \times x = x^3$ 

$$4x = 4x \times 4x \times 4x = 64x^3$$

$$5x = 5x \times 5x \times 5x = 125x^3$$

32. **(b)** 8

**Explanation:** 8

33. **(c)** 25

**Explanation:** 
$$\sqrt[3]{15625} = \sqrt[3]{5 \times 5 \times 5 \times 5 \times 5 \times 5}$$
  
 $\sqrt[3]{15625} = \sqrt[3]{5^3 \times 5^3}$ 

$$\sqrt[3]{15625} = \sqrt{5}^{3} \times \sqrt[3]{15625} = 5 \times 5$$

$$\sqrt{15025} - 5 \times \sqrt[3]{15625} = 25$$

**Explanation:** The cube of 70 is  $70 \times 70 \times 70 = 343000$ 

35. **(b)**  $\frac{216}{343}$ 

Explanation: 
$$\sqrt[3]{\frac{x}{y}} = \frac{6}{7}$$

Cubing both sides

$$\sqrt[3]{\left(\frac{x}{y}\right)^3} = \left(\frac{6}{7}\right)^3$$

$$\frac{x}{y} = \frac{216}{343}$$

36. **(d)**  $(10n + m)^3$ 

**Explanation:** Ones digit = m

tens digit = n

Number = 
$$(10 \times n) + m = (10n + m)$$

Now the cube of number =  $(10n + m)^3$ 

37. **(d)** 27

**Explanation:** 19683 =  $3 \times 3 \times 3$  (By taking triplets)

$$\sqrt[3]{19683} = \sqrt[3]{3^{\ 3} \times 3^{\ 3} \times 3^{\ 3}}$$

$$\sqrt[3]{19683} = 3 \times 3 \times 3$$

$$\sqrt[3]{19683} = 27$$

38. **(a)** natural number

**Explanation:** The answer is <u>natural number</u>

The cube of a natural number is always a natural number.

39. **(d)**  $x^3$ ,  $8x^3$ ,  $27x^3$ 

**Explanation:** The cubes of  $x = x \times x \times x = x^3$ 

$$2x = 2x \times 2x \times 2x = 8x^3$$

$$3x = 3x \times 3x \times 3x = 27x^3$$

40. **(c)** -15625

**Explanation:** 
$$(-25)^3 = (-25) \times (-25) \times (-25)$$

= -15625 (The cube of a negative integer is negative)

#### **Solution**

#### Class 08 - Science

#### **VIII SCIENCE**

1. (a) statement i) is correct but ii) is wrong

**Explanation:** Natural gas is easy to be transported long distance through pipes. Natural gas is found alone or above the surface of petroleum deposits.

2. (d) all of these

**Explanation:** Excessive use of coal and petroleum causes green house effect, acid rain and energy crisis in future. Burning of fossil fuels release carbon dioxide gas. Carbon dioxide gas causes green house effect.

3. (a) formed naturally

**Explanation:** Dead remains of plants and animals are called fossils. Fossils used as source of energy are called fossil fuels. Fossil fuels are formed naturally.

4. **(b)** statement i) is correct but ii) is wrong

**Explanation:** Coal is formed by carbonisation of dead plants due to high temperature and pressure of earth crust. The process of conversion of dead vegetation into coal is called carbonisation.

5. **(d)** hydrocarbons

**Explanation:** Petroleum is a mixture of different hydrocarbons starting from methane (CH4) to higher hydrocarbons. Compounds of carbon and hydrogen are called as hydrocarbon.

6. **(a)** i.b,ii.d,iii.e, iv.a, v.c

**Explanation:** Petroleum gas is used as domestic fuel in form of LPG. Coke is used in metal extraction. Coal gas is used as industrial fuel. Biogas is obtained from cattle dung and carbonisation is the conversion of wood to carbon (coal).

7. **(d)** non renewable

**Explanation:** Natural gas is a non renewable resource of energy. Natural gas is a kind of fossil fuel that takes millions of years in its formation and cannot be reused again and again.

8. **(c)** destructive distillation of coal

**Explanation:** Coke is obtained by heating coal to a high temperature in the absence of oxygen or in limited supply of oxygen. It contains less impurities and high carbon content.

9. **(c)** chemical change

**Explanation:** The process of burning of any substance in presence of oxygen is called combustion. Combustion is a chemical change as in combustion new substance is formed that cannot be reversed.

10. **(a)** Of its easy availability and low cost.

Explanation: In villages, people use wood as a fuel because of its easy availability and low cost.

11. **(c)** black

**Explanation:** The least hot part of the flame is black. This part is situated at the top of flame containing unburnt particles.

12. **(a)** statement ii) is correct but i) is wrong

**Explanation:** Matchstick burns on striking a rough surface having friction. The striking of matchstick over rough surface generates enough heat to light the matchstick. Matchstick contains phosphorus that catch fire easily.

13. **(a)** soot

**Explanation:** Yellow flame is formed due to incomplete combustion of fuel. Yellow flame leaves behind black residue which is also called as soot.

14. **(d)** Both are correct

**Explanation:** The substances which vapourise during burning, give flames. For example, kerosene oil and molten wax rise through the wick and are vapourised during burning and form flames. Charcoal, on the other hand, does not vapourise and so does not produce a flame.

15. **(b)** a piece of sodium

**Explanation:** Sodium metal catches fire on its own. The ignition temperature of sodium is less than room temperature and catches fire when come in contact of oxygen.

16. (c) Charcoal

**Explanation:** Substances like wax, LPG and kerosene burns with flame but charcoal do not produce flame. Flame is formed only when combustible substance first change into vapour state.

17. (d) explosion

**Explanation:** Some combustion reactions occur suddenly with evolution of large amount of gas and energy in form of heat and light. Such sudden combustion is called explosion.

18. **(c)** heat

**Explanation:** Every combustible substance when burnt produce heat. The quantity of heat depends upon the calorific value of fuel and physical state of fuel.

19. **(c)** substance will not catch fire below its ignition point.

**Explanation:** If a combustible substance is present along with fire, the substance will not catch fire below its ignition point. Ignition temperature is necessary for combustion of fuel.

20. (d) Wood

**Explanation:** Wood is a combustible substance. It is a solid fuel and produces smoke during combustion.

21. **(b)** oxygen fire extinguisher

**Explanation:** There is different kind of fire extinguisher like soda acid fire extinguisher, foam fire extinguisher and carbon dioxide fire extinguisher but oxygen is not used to extinguish fire as it favours combustion.

22. (a) to cut oxygen supply

**Explanation:** A person after fire casualty is wrapped with blanket to cut oxygen supply. Cutting of oxygen supply extinguish the fire due to absence of support of combustion.

23. (a) Water and carbondioxide

**Explanation:** A soda-acid extinguisher was patented in the U.S. in 1881 by Almon M. Granger. Once the acid was mixed with the bicarbonate solution, carbon dioxide gas was expelled and thereby pressurized the water. A soda acid fire extinguisher releases water and carbon dioxide gas that lower the temperature and cut off the supply of oxygen.

24. **(d)** rise due to heat transferred

**Explanation:** The temperature of water inside paper cup held above candle flame rise due to heat transfer. But paper does not attain ignition temperature until all the water get vaporised.

25. **(b)** cell membrane

**Explanation:** The cell membrane is a common part of every cell. It encloses the protoplasm, protects the cell, gives the cell its shape, and controls the entry and exit of substances.

26. **(b)** statement ii) is correct but i) is wrong

**Explanation:** Cell is the outermost layer of plant cell. Cell wall is made up of non-living material called cellulose. Cell wall allows substances to pass freely.

27. **(b)** bacteria and blue-green alga

**Explanation:** Bacteria and blue-green algae are examples of prokaryotes. These organisms consist of the prokaryotic cells (no nuclear membrane, no well-defined nucleus, and no other cell organelles).

28. **(c)** cell wall

**Explanation:** Skeletal framework is absent in plant body but rigidness in cell body is due to presence of cell wall which is made up of cellulose.

29. **(c)** statement ii) is correct but i) is wrong

**Explanation:** Nerve cell is the longest cell in the body that transfer message from one part of the body to other. Red blood cells (RBC's) are red due to presence of haemoglobin.

30. **(d)** controls the entry and exit of materials from cells.

**Explanation:** The cell membrane controls the entry (movement into the cell) and exit (movement out of the cell) of materials. It also protects and gives shape to the cell.

#### 31. (a) mitochondria

**Explanation:** Mitochondria is called as the powerhouse of the cell as energy production in the cell is the responsibility of mitochondria. In mitochondria energy is produced in form of ATP.

#### 32. **(b)** brain

**Explanation:** Cell membrane controls the entry and exit of substances in and out of the cell as skin protects the body. Nucleus is called brain of the cell as it controls the functioning cell.

#### 33. **(d)** Prokaryotes do not have nucleus.

**Explanation:** Prokaryotes do not have a well-defined nucleus. The irregularly-shaped region that contains their genetic material is called the nucleoid.

The other statements incorrect form are:

- The tissue is a group of similar cells.
- An organ consists of different tissues.
- Large vacuoles are found in plant cells.

#### 34. **(b)** staining

**Explanation:** Size of the cell is related to size of the animal body. Multicellular organism contains many cells arranged to form organs. Different cells are specialised to perform particular function in the body of organism but not the size.

#### 35. **(a)** both are correct

**Explanation:** A cell cannot survive long without a nucleus. Nucleus is called brain of the cell. Mature red blood cell of human lacks nucleus, hence called as red blood corpuscles.

#### 36. **(a)** Genes are located in the chromosomes

**Explanation:** Genes are the unit of inheritance located in the chromosomes. The other statements are incorrect are their correct form are as:

- The nucleus is located in the cell Chromosomes are located in the nucleus.
- The cell membrane surrounds the cell and the nuclear membrane surrounds the nucleus.

#### 37. **(b)** statement i) is correct but ii) is wrong

**Explanation:** All cells are similar in their basic structure initially but later change in shape and size to perform different functions. Different cells perform specialised functions.

#### 38. **(d)** divided

**Explanation:** In multicellular organisms, the work is divided. Division of labour is essential for proper functioning of multicellular organism.

#### 39. **(d)** a bacterial cell

**Explanation:** The cell observed by Paheli is a bacterial cell. It is a prokaryotic cell that has a cell wall (like plants) but no distinct nucleus. A plant cell has a cell wall and a well-defined nucleus, whereas, in an animal cell, the former is not present. A nerve cell is an animal cell that is long and branched to function as a transmitter between the brain and other parts.

#### 40. (c) chloroplast

**Explanation:** Plastids provide colours to green colour to leaves. Plastids that provide green colour to leaf is called chloroplast that contains chlorophyll for photosynthesis. Chloromoplast impart all other colours except green.

#### **Solution**

#### Class 08 - Social Science

#### VIII SOCIAL SCIENCE

#### 1. (d) Only A

**Explanation:** The effect on the livelihood of artisans and craftsmen due to the availability of cheap machine-made goods is an economic cause and not socio-religious cause.

#### 2. **(c)** Only A

**Explanation:** The revolt of 1857 was the first great struggle of the Indians for freedom from British Imperialism. For the first time, people from all parts of the country united to fight for a common cause. It also heightened the sense of Indian nationalism.

#### 3. (d) Second War of Independence

**Explanation:** The revolt of 1857 or the Sepoy Mutiny is popularly known as the First War of Independence and not the Second War. It was the first War in which people from almost all parts of the country fought against the British of a single motive of Independence.

#### 4. **(b)** Nana Saheb

**Explanation:** In Kanpur the revolt was led by Nana Saheb, the adopted son of the last Peshwa Baji Rao II. Nana Saheb expelled the British from Kanpur with the help of the Sepoys and proclaimed himself as the Peshwa.

#### 5. (a) The Rangoon Jail

Explanation: He was tried and awarded life imprisonment for his support to the rebellions.

#### 6. (b) Tantia Tope

**Explanation:** Tantiya Tope was Maratha Brahmin in the service of former Peshwa Baji Rao II and his adopted son Nana Saheb. He was an intimate friend and the commander in chief of Nana Saheb's rebel forces and was present at Nana Saheb's massacre of the British colony in Kanpur.

#### 7. **(d)** Only B

**Explanation:** The Indian army was carefully reorganised after 1858 to prevent the recurrence of another Revolt. Several steps were taken to minimise if not eliminate the capacity of the Indian soldiers to revolt. The proportion of Europeans to Indians was raised. So it would be incorrect to say that after the Sepoy Mutiny the number of Indian soldiers increased and Europeans decreased.

#### 8. (a) conversion into Christianity easier

**Explanation:** Britishers wanted to encourage Indians to convert into Christians. This law also allowed converted Christians to inherit the property of their ancestors.

#### 9. (a) Only A

**Explanation:** The British Resident, also known as Political Agents of British East India Company, was a government official who took up residence in a princely state and conducted several official diplomatic functions that aided in the British indirect rule.

#### 10. **(c)** mid-eighteenth

**Explanation:** Since the mid-eighteenth century, nawabs and rajas had seen their power erode. They had gradually lost their authority and honour.

## 11. **(a)** Only C

**Explanation:** One major feature of the Revolt of 1857 was the remarkable unity between the Hindus and the Muslims. Sepoys and civilian rebels from both the communities fought side by side to take back their country from the alien rule and respected each other's religion. So the unity of both the communities cannot be a cause of failure of the Mutiny.

#### 12. **(c)** 1858

**Explanation:** In 1858, the British parliament passed a new Act transferring the powers of the East India Company to the British Crown to rule the territory and suggested few measures to be followed.

#### 13. **(d)** Only D

Explanation: The Queen's Proclamation of 1858 granted a general amnesty (pardon) to the rebels except

those who were directly involved in the killing of the British subjects.

14. **(b)** Contour Ploughing

**Explanation:** The given method is Contour Ploughing: Ploughing along contours can decrease the flow of water down the slopes.

15. **(d)** Top soil

**Explanation:** A horizon: Top layer of soil is called A-horizon or top-soil. A-horizon is generally dark in colour and rich in humus. A horizon is generally soft and fertile vital for growth of plant.

16. (a) Evergreen

**Explanation:** Forests are broadly classified as evergreen and deciduous depending on when they shed their leaves. Evergreen forests do not shed their leaves simultaneously in any season of the year.

17. **(a)** Only B

**Explanation:** Rock dam is one of the methods of soil conservation. Under this method, Rocks are piled up to slow down the flow of water. This prevents gullies and further soil loss.

18. **(b)** depletion

**Explanation:** Soil erosion and depletion are the major threats to the soil as a resource. Both human and natural factors can lead to degradation of soils.

19. **(b)** Eight

**Explanation:** According to **ICAR**(Indian Council of Agricultural Research) soils are divided into 8 categories. They are alluvial soils, Black cotton soils, Red soils, Laterite soils, Mountainous or forest soils, Arid or desert soils, Saline and alkaline soils, Peaty and marshy soils.

20. **(b)** Rain water harvesting

**Explanation:** Rain water harvesting is the process of collecting rain water from roof tops and directing it to an appropriate location and storing if for future use.

21. (a) Ocean water is saline and hence fit for human consumption.

**Explanation:** The ocean water is saline and <u>not</u> fit for human consumption.

22. **(c)** Water

**Explanation:** Water is a vital renewable natural resource. Three-fourth's of the earth's surface is covered with water.

23. **(b)** Contour Barriers

**Explanation:** Contour Barriers: Stones, grass, soil are used to make barriers. Trenches are made in front of the barriers to collect water.

24. (d) Landslide

**Explanation:** Landslides are simply defined as the mass movement of rock, debris or earth down a slope. They often take place in conjunction with earthquakes, floods and volcanoes. A prolonged spell of rainfall can cause heavy landslide that can block the flow of river for quite some time.

25. (a) Sunderban forests

**Explanation:** Community land is owned by the community for common uses like the collection of fodder, fruits, nuts, or medicinal herbs. Eg: The Sunder ban forests.

26. **(b)** The Indian Council of Agricultural Research

**Explanation:** The Indian Council of Agricultural Research (ICAR) is an autonomous body responsible for co-ordinating agricultural education and research in India.

27. (a) Mulching

Explanation: Mulching is the methods of soil conservation.

28. (a) Secular

**Explanation:** A secular state is one in which the state does not officially promote any one religion as the state religion.

29. **(d)** directive principles

**Explanation:** Directive Principles of State Policy: This section was designed by the members of the Constituent Assembly to ensure greater social and economic reforms, and to serve as a guide to the independent Indian State to institute laws and policies that help reduce the poverty of the masses.

30. **(b)** Only C

**Explanation:** The Fundamental Rights, embodied in Part III of the Constitution, guarantee civil rights to all Indians and prevent the State from encroaching on individual liberty while simultaneously placing upon it an obligation to protect the citizens' rights from encroachment by society.

31. **(c)** We need to protect the freedom of individuals to exit from their religion, embrace another religion or have the freedom to interpret religions teachings differently

Explanation: To protect religious freedom of an individual.

To stop domination of one religious community over other.

32. (a) Only A

**Explanation:** Secularism: A secular state is one in which the state does not officially promote any one religion as the state religion.

33. (c) Democratic

**Explanation:** A democratic country, government, or political system is governed by representatives who are elected by the people.

34. **(d)** USA

**Explanation:** It is the flag of United States of America.

35. **(c)** One government at centre, another at state, another at local level

**Explanation:** In India, we have three levels of government federal, state, and local. The power is shared between these three levels.

36. (a) Only A

#### **Explanation:**

- i. A state in which the supreme power rests in the body of citizens entitled to vote and is exercised by representatives chosen directly or indirectly by them.
- ii. A state in which the head of government is not a monarch or other hereditary head of state.
- 37. **(a)** Equal opportunities to every one to make use of the resources of the country **Explanation:** The term 'Socialism' in Indian Constitution seeks to establish a welfare State.It gives qual opportunities to every one to make use of the resources of the country
- 38. **(d)** Freedom of Religion

**Explanation:** The right to choose a **religion** (or no **religion**) without interference by the government.

39. **(b)** three

**Explanation:** India has a quasi-federal form of government, called "union" or "central" government, with elected officials at the union, state, and local levels.

40. (a) Dr. Rajendra Prasad

Explanation: Dr Rajendra Prasad was the President of the Constituent Assembly.