

## Bihar Public Service Commission

Assistant, Bihar Public Service Commission (Preliminary) Competitive Examination  
(Advt. No. 06/2022)

**(Examination Date : 28.04.2023)**

### **PROVISIONAL ANSWER KEY : General Knowledge**

आयोग द्वारा उपलब्ध कराये गये उत्तर पूर्णतः औपबधिक (Provisional) हैं। उपर्युक्त निर्धारित तिथि तक आपत्तिकर्ताओं से प्राप्त आपत्ति की गहन समीक्षा विषय विशेषज्ञों की समिति द्वारा की जायेगी और गहन समीक्षोपरान्त सभी प्रश्नों का अन्तिम आदर्श उत्तर तैयार किया जायेगा। विषय विशेषज्ञों की समिति द्वारा तैयार किये गये उक्त अन्तिम आदर्श उत्तर का आयोग द्वारा अनुमोदनोपरान्त उसके आधार पर ओ.एम.आर. उत्तर पत्रक (OMR Answer Sheet) का मूल्यांकन किया जायेगा।

Series-A		Series-B		Series-C		Series-D		Remarks
Question No.	Answer	Question No.	Answer	Question No.	Answer	Question No.	Answer	
1	B	12	C	24	D	36	A	
2	A	13	B	25	C	37	D	
3	B	14	C	26	D	38	A	
4	C	15	D	27	A	39	B	
5	C	16	D	28	A	40	B	
6	D	17	A	29	B	41	C	
7	B	18	C	30	D	42	A	
8	D	19	A	31	B	43	C	
9	B	20	C	32	D	44	A	
10	B	21	C	33	D	45	A	
11	C	22	D	34	A	46	B	
12	A	23	B	35	C	47	D	
13	C	24	D	36	A	48	B	
14	B	25	C	37	D	49	A	
15	D	26	A	38	B	50	C	
16	A	27	B	39	C	1	D	
17	C	28	D	40	A	2	B	
18	D	29	A	41	B	3	C	
19	B	30	C	42	D	4	A	
20	C	31	D	43	A	5	B	
21	A	32	B	44	C	6	D	
22	B	33	C	45	D	7	A	
23	C	34	D	46	A	8	B	
24	D	35	A	47	B	9	C	
25	D	36	A	48	B	10	C	
26	C	37	D	49	A	11	B	
27	A	38	B	50	C	12	D	
28	A	39	B	1	C	13	D	
29	C	40	D	2	A	14	B	
30	D	41	A	3	B	15	C	
31	A	42	B	4	C	16	D	
32	C	43	D	5	A	17	B	
33	A	44	B	6	C	18	D	

Series-A		Series-B		Series-C		Series-D		Remarks
Question No.	Answer	Question No.	Answer	Question No.	Answer	Question No.	Answer	
34	D	45	A	7	B	19	C	
35	B	46	C	8	D	20	A	
36	C	47	D	9	A	21	B	
37	A	48	B	10	C	22	D	
38	C	49	D	11	A	23	B	
39	D	50	A	12	B	24	C	
40	B	1	C	13	D	25	A	
41	B	2	C	14	D	26	A	
42	C	3	D	15	A	27	B	
43	A	4	B	16	C	28	D	
44	A	5	B	17	C	29	D	
45	D	6	A	18	B	30	C	
46	C	7	D	19	A	31	B	
47	A	8	B	20	C	32	D	
48	C	9	D	21	A	33	B	
49	B	10	C	22	D	34	A	
50	D	11	A	23	B	35	C	
51	B	59	C	75	B	83	C	Samudragupta is regarded as Napoleon of India due to his extensive conquests.
52	D	60	D	76	D	84	D	Material culture covered trade and commerce, religious institutions and monuments. All the three groups contributed in these activities.
53	D	61	A	77	B	85	C	A cess "Haq-e Sharb" @ 10% of produce was levied on peasants for construction and maintenance of Canals.
54	B	62	C	78	D	86	A	"Ain-e Akbari" was written by Abul Fazl, court historian of Akbar.
55	C	63	D	79	A	87	B	Permanent Settlement was introduced by Lord Cornwallis in 1793.
56	B	64	C	80	D	88	A	Lord Minto, the Viceroy, observed this in his letter addressed to Lord Morley, Secretary of State.
57	C	65	D	81	A	89	B	Dadabhai Naoroji was the earliest nationalist to criticise the drain of wealth from Bengal by the British. Reference: "Poverty and Un-British Rule in India"
58	D	66	A	82	B	90	C	Krishnadeva Raya (1509-29) of the Tuluva dynasty was the greatest ruler of Vijayanagar.
59	D	67	A	83	B	51	C	Ziauddin Barani in his "Tarikh-e Firoz Shahi" mentions this as a cause of revolts as determined by Alauddin Khalji, Sultan of Delhi (1296-1316).
60	C	68	A	84	B	52	C	Some of its members were suspected for seditious activities by British officers.
61	D	69	A	85	B	53	C	86 <sup>th</sup> Constitutional Amendment 2002 Act-amended Article 21 to make education free for children up to 14 years.

Series-A		Series-B		Series-C		Series-D		Remarks
Question No.	Answer	Question No.	Answer	Question No.	Answer	Question No.	Answer	
62	C	70	D	86	A	54	B	According to the constitution of India. The Members of the Legislative Assembly are elected directly.
63	B	71	C	87	D	55	A	Article 368 only Parliament to has the power to amend the constitution.
64	D	72	A	88	B	56	C	J.P. was critical of Pol. Parties because he believed that they impeded self govt. and liberisation of local initiative J.P. is ultimate idea was "Party less democracy". The all India Panchyat Parishad. (Chairman J.P.) in 1961.
65	D	73	A	89	B	57	C	The power to reorganise the states has been given to Parliament by article 3 and 4 of the constitution.
66	D	74	A	90	B	58	C	Definition of cities according to Census of India is 1,00,000 and above; for metropolitan cities 40,000,00 and above; Class I town is 1,00,000 and above while no mention of medium cities are there for Municipal Corporations the population should be 3,000,00 and above(Bharat ka Samvidhan by Braj Kishore Sharma page no 294) Here Big Towns option is closest.
67	C	75	D	51	A	59	B	Panchayati Raj was first set up in Rajasthan Ref. – Bharat mein Sthaniye Shasan, Sri Ram Maheshwari, Page No-146
68	C	76	D	52	A	60	B	73 <sup>rd</sup> constitutional amendment Provided real swaraj to people of rural areas through Panchayati Raj.
69	A	77	B	53	C	61	D	Rajni Kothari said the quobed lines. Ref.- Politics in India 'by Rajani Kothari'
70	B	78	C	54	D	62	A	The Indian constitution draws the ideas from many sources. Ref.- Indian constitution A Bag of borrowings by Ijalr. International formal of advanced legal Research ISNN. 2582-7340.
71	B	79	C	55	A	63	B	Bihar and. Jharkhand was leading Producer of minerals in India before 1970. According to Indian Mineral Year Book 1970 Table 42 page 81.
72	D	80	A	56	B	64	C	Tisco is located between Subarnarekha river in the north and Kharkai river in the west, near their confluence.
73	A	81	B	57	C	65	D	Green Revolution is the term given to intensive application of hybrid seeds and artificial fertilization to food crops. It was applied after 1960. Other crops were involved later.
74	D	82	D	58	D	66	D	Canals are in widespread use in North India. Tank irrigation is more common in South India. Tube wells are used wherever ground water supply is adequate. So all are correct.

Series-A		Series-B		Series-C		Series-D		Remarks
Question No.	Answer	Question No.	Answer	Question No.	Answer	Question No.	Answer	
75	D	83	A	59	B	67	C	Hybrid technology means use of traditional technology together with modern technology in both agriculture and industry. Only China has made extensive use of hybrid technology.
76	D	84	D	60	D	68	D	All volcanoes are periodotic and may erupt in past, present or future.
77	C	85	D	61	A	69	B	Although people below poverty line are considerable in all developing countries percentage of such people is higher in African countries.
78	B	86	C	62	D	70	A	Godavari Basin is located in the northern part of Deccan region, river Krishna flows in the middle Deccan and river Kaveri in the southern part of Deccan region.
79	A	87	B	63	C	71	D	Murrah buffaloes are the typical breed of Haryana and Punjab. They are not common breed in other areas.
80	B	88	C	64	D	72	A	The exact figure is 21.9% according to official data, which can be rounded off as 22%.
81	C	89	D	65	A	73	B	Before 2020, China had the largest share of population in the world, followed by India. Option 'B' is wrong because America is not a country, but two Continents.
82	B	90	C	66	D	74	A	Planning Commission came into existence in 1950.
83	C	51	D	67	A	75	B	AITUC was founded in 1920 but took a permanent footing after the AITUC Act 1926.
84	A	52	B	68	C	76	D	Bipin Chander in his book "Rise and Growth of Economic Nationalism" observes this in connection with Economic Policies of Indian National Leadership.
85	D	53	A	69	B	77	C	Railways were a veritable boon during World War II for facilitating war-efforts, primarily movement of soldiers, supplies and war-materials.
86	B	54	C	70	D	78	A	Dadabhai Naoroji put forward the "drain theory" in his writings.
87	C	55	D	71	A	79	B	In 2011 census, Kerala had the highest sex ratio of 1084 females per 1000 males.
88	D	56	D	72	D	80	D	Diarrhoea, Typhoid and paratyphoid are important water-borne diseases.
89	B	57	C	73	A	81	B	Agrarian reform is concerned with Govt. initiated or backed redistribution of Agricultural Land one of the objective of the Reform is to eliminate all the elements of exploitation. Tenancy Reforms were introduced to help the peasants.
90	C	58	D	74	A	82	B	Census in India has been undertaken every 10 years since 1881. It could not be held in 2021 because of Covid pandemic.

Series-A		Series-B		Series-C		Series-D		Remarks
Question No.	Answer	Question No.	Answer	Question No.	Answer	Question No.	Answer	
91	D	93	A	96	B	98	C	His name was announced on 27.02.2023 to be effective from 01.03.2023.
92	C	94	D	97	A	99	B	Padma Vibhushan - 4 Padma Bhushan - 17 Padma Shri - 107
93	C	95	D	98	A	100	B	Spain won the title for the FIFA U-17 Women's World Cup, 2022.
94	D	96	A	99	B	91	C	It was hosted at Sharm - El -Sheikh in Egypt.
95	C	97	D	100	A	92	B	The ministry of Housing and Urban Affairs Presents Smart Solutions Challenge and Inclusive Cities Awards.
96	A	98	B	91	C	93	D	Hydrogen is a colourless gas. Hydrogen produced by electrolysis from carbon-free nuclear energy is given the name pink hydrogen.
97	B	99	C	92	D	94	A	On 2nd Dec 2022 Chhattisgarh passed the bill to raise the reservation to 76%.
98	D	100	A	93	B	95	C	Chaitya Bhoomi is the resting place of Dr. B. R. Ambedkar.
99	A	91	B	94	C	96	D	The agreement aims to speed up and enhance the use of AI to improve agriculture, healthcare emergency responses, climate forecasting and electric grid.
100	D	92	A	95	B	97	C	It was held at Thane, Maharashtra.
101	D	109	A	121	B	133	C	Thermal power plants use coal for generating electricity. Coal is a fossil fuel.
102	B	110	C	122	D	134	A	Wind turns the propeller like blades of a turbine around a rotor, which spins a generator, which creates electricity. Hence, wind velocity affects generated power.
103	B	111	C	123	D	135	A	An ammeter measures the amount of current flowing through a circuit.
104	B	112	C	124	D	136	A	Tungsten has a very high melting point, hence used in incandescent electric bulb.
105	B	113	C	125	A	137	B	Magnetic lines of force emerge from the north pole of the magnet and go into the south pole.
106	D	114	D	126	D	138	D	Blue colour, having shortest $\lambda$ (Wavelength) Scatter the most according to Rayleigh formula. Hence, it is found prominently all over the sky so that sky appears blue. At sunrise, as well as, at sunset, all colours except red are scattered away so that the red colour looks prominent.
107	C	115	D	127	A	139	B	The action of ciliary muscles produces change in curvature of the eye lens causing a change in its focal length.
108	C	116	D	128	A	140	B	The rear view mirror is a convex mirror and the image formed by this has always a magnification less than 1.

Series-A		Series-B		Series-C		Series-D		Remarks
Question No.	Answer	Question No.	Answer	Question No.	Answer	Question No.	Answer	
109	C	117	D	129	A	101	B	Among all the options, refractive index of air in the smallest and so light will travel faster in air.
110	C	118	D	130	A	102	B	Superconductors are defined to have a zero resistance.
111	D	119	D	131	D	103	D	Options (A), (B) and (C) are all acidic.
112	A	120	B	132	C	104	D	An acid turns a blue litmus red. Only option (A) vinegar contains acetic acid.
113	C	121	A	133	B	105	C	$\text{pH} = -\log[H^+] = 4$ Molarity of hydrogen ions = $10^{-4} = 0.0001 \text{ M}$ .
114	D	122	A	134	B	106	C	Caustic potash stands for potassium hydroxide.
115	C	123	A	135	B	107	C	Rust is hydrated ferric oxide.
116	B	124	C	136	D	108	A	Only option 'B' is applicable to both $\text{CO}_2$ and $\text{H}_2$ as colourless.
117	C	125	D	137	A	109	B	The chemical formula for lead sulphate is $\text{PbSO}_4$ .
118	A	126	B	138	C	110	D	A fat is a carbon chain compound (ester). Atmospheric oxygen reacts at a carbon to produce a hydroperoxide, which produces rancidity in a fatty food. The process is oxidation.
119	C	127	A	139	B	111	C	Silver chloride is decomposed by U.V. light.
120	C	128	D	140	A	112	B	Short name for Vitamin $\text{B}_{12}$ is cobalamin.
121	A	129	B	101	C	113	D	A three month old baby elephant weights about 190-200 kg in average i.e. equivalent to 2 quintals.
122	A	130	B	102	C	114	D	Pigeons belong to class Aves. The members of class Aves and mammals are warm blooded (Homeothermic) animal.
123	A	131	B	103	C	115	D	Fish oil (body oil and liver oil) is a good source of vitamin A.
124	C	132	D	104	A	116	B	The rising of dough is due to production of $\text{CO}_2$ . By the process of fermentation, yeast transforms sugar present in the dough into carbonic acid (carbon dioxide) and alcohol (ethanol). The trapped $\text{CO}_2$ makes the dough rise.
125	A	133	B	105	C	117	D	Tomato contains oxalic acid. Others are not correctly matched.
126	A	134	B	106	C	118	D	The growth of bacteria increases with the increase in temperature That's why milk turns into curd faster in summer.
127	C	135	D	107	A	119	B	Adrenal, Pituitary and thyroid are major endocrine glands while lacrimal gland is an epidermal gland.
128	A	136	B	108	C	120	A	In 1978, Nobel Prize for physiology and Medicines were shared jointly by Werner Arber, Hamilton Smith and Nathan.
129	B	137	C	109	D	121	A	Gustatory receptors detect taste, the photoreceptors detect light. Olfactory receptors are responsible for detecting smell while mechanoreceptors are involved in sensing touch stimuli.

Series-A		Series-B		Series-C		Series-D		Remarks
Question No.	Answer	Question No.	Answer	Question No.	Answer	Question No.	Answer	
130	D	138	D	110	D	122	D	The brain is responsible for all three functions mentioned in option 'A', 'B' & 'C'.
131	A	139	B	111	C	123	D	In the given options only DDT is non - biodegradable.
132	D	140	A	112	B	124	C	Movement of the whole plant or part of it (leaves) towards direction of light is called as phototropism.
133	D	101	A	113	B	125	C	Insulin, thyroxin and oestrogen are typical animal hormones, while cytokinin is a plant hormone that promote cell division.
134	A	102	B	114	C	126	D	Ground water will not be depleted due to a forestation while option 'B', 'C' & 'D' are associated with ground water depletion.
135	B	103	C	115	D	127	A	Pungency in chillies is due to the presence of capsaicin.
136	C	104	D	116	A	128	B	Wildlife includes both wild plants and animals.
137	D	105	D	117	D	129	D	Bt cotton, Bt brinjal and golden rice-all are genetically modified crops.
138	B	106	C	118	D	130	A	The first transgenic plant (genetically modified crop) was tobacco plant, which was produced in 1982.
139	B	107	C	119	D	131	A	Leaves are directly exposed to air pollutants and therefore effects of air pollution are first seen on leaves.
140	D	108	A	120	B	132	C	Stem tubers (true tubers) are bulbous modified stems that grow underground. Potato is the most common example of stem tuber. Ginger is a rhizome. Onion and garlic are a bulb.
141	C	143	D	145	A	148	B	
142	B	144	C	146	D	149	A	
143	A	145	B	147	C	150	D	
144	D	146	A	148	B	141	C	
145	B	147	C	149	D	142	A	
146	C	148	D	150	A	143	B	
147	D	149	A	141	B	144	C	
148	C	150	D	142	A	145	B	
149	A	141	B	143	C	146	D	
150	C	142	D	144	A	147	B	