ADMISSION TEST 2011: GEOGRAPHY
Model Questions

Syllabus: Plus 2 Level –
(a) <u>for students with Geography</u>: Physical geography, Human geography, Economic geography, Regional Geography (India & World), Practical geography, General Science, and Elementary Mathematics
(b) <u>for students without Geography in HS</u>: General Information about Earth, India and World, Physics, Chemistry, Mathematics, Life Science, and EV

A. Objective Type (Full Marks = 50)
Compulsory **(Full Marks = 30)**
1. On the given outline map (রেখা মানচিত্রে) of India, mark, shade and name the following (চিহ্নিত করো /শেড দাও এবং নাম লেখ) —
A mountain gap (গিরি -ফাঁক) in south India, The Siwalik mountain range (শিবালিক পর্বত শ্রেনী), Areas affected by Nor' Wester (কালবৈশাখী অধ্যুষিত অঞ্চল), The Ganga - Yamuna doab (গঙ্গা - যমুনা দোয়াব), Tea producing region, Area under Monsoon forest, The Assam valley, The region, called the *mineral reserve* (খনিজভাণ্ডার) *of India.*
2. At the winter solstice (মকরসংক্রান্তি), the altitude (উচ্চতা) of the noon sun (দুপুরসূর্য) at 23½°S is _____°.
3. If at A (20°E, 20°S) the local time (স্থানীয় সময়) is 10:00 a.m., at B (20°E, 20°N) it will be _____
4. Place where sun shines vertically <u>twice</u> a year: *Kolkata / Karachi / Kathmandu*
5. Relative Humidity of the *ascending air* decreases. *True / False.*
6. The value of $\cos^2 45 - \sin^2 15 =$ _____ , and if $\sin^2 x + \sin x - 2 = 0$, x = _____°
7. A vehicle moving with a speed of 72 km / hour covers (অতিক্রম করে) a distance of _____ m in 1 sec.

Any 10Q from the following (example) **(Full Marks = 20)**
8. Interlocking spurs (শৃঙ্খলিত শৈলশিরা) are found in the *upper / middle / lower* course of a river
9. *Nimbostratus / Cumulus / Cirrus* is a rain bearing (বৃষ্টিবাহী) cloud.
10. *Basket of eggs* topography (ভূমিরূপ) is associated with: *glacier / wind / deltaic rivers*
11. Man-land ratio is very <u>low</u> in: *extensive commercial* (বাণিজ্যিক কৃষি) */ plantation* (বাগিচাকৃষি) */ intensive subsistence farming* (নিবিড়জীবিকাসত্ত্বাভিত্তিক কৃষি).
12. Tick the <u>correct </u>match: *millets – kharif / cotton – rabi / maize – rabi*
13. Transhumance (ঋতুভেদে স্থানপরিবর্তন) is practiced by: *Guddies & Gujjars / Santals & Bhils / Birhores & Nagas*
14. A satellite revolves round the earth in a circular orbit; find the work done by it. _____
15. Electromagnetic waves (তড়িৎচুম্বকীয় তরঙ্গ) are transverse (আড়াআড়ি / তির্যক) waves. *True / False*
16. *Citric / Carbonic / Acetic acid* is used for food preservation (খাদ্য সংরক্ষণে).
17. Bio-diversity (জীববৈচিত্র) is greatest (সর্বোচ্চ) in *equatorial rainforests / high mountains / deep oceans*.
18. If ratio between the length of a pole and its shadow is $1 : \sqrt{3}$, the elevation of sun = _____°
19. If AB is a fixed line, state the locus (সঞ্চার পথ) of P so that $AB^2 = AP^2 + BP^2$. _____
20. If the weights of two bodies are 2.0N and 2 kgf respectively, their masses are _____ and _____

B. Short Answer Type: (Full Marks = 50)
Compulsory **(to be answered in <u>English</u>; Full Marks = 10)**
1. What are the present career options (বিভিন্ন বৃত্তি) of a geography graduate and which one will you choose and why (কোনটা তুমি নেবে এবং কেন)?
2. *Give reasons* for sharp rise (অতি দ্রুত বৃদ্ধি) in world human population (পৃথিবীর জনসংখ্যা).

Any 4Q from the following (example) **(Full Marks = 40)**
3. Why is the rainforest (বৃষ্টিঅরণ্য) so named?
4. Most of the hot deserts (উষ্ণমরু) are located on the western part of the continents (মহাদেশ). Why?
5. *Give reasons* — iron (লোহা) is not extracted (নিষ্কাসিত) by electrolysis (তড়িৎবিশ্লেষণ) of its oxides, but aluminium is.
6. The base (ভূমি) of a right angled (লম্ব) pyramid is a regular hexagon (ষড়ভুজ) whose area is $24\sqrt{3}$ sq cm. If the area of a side face (পার্শতল) is $4\sqrt{6}$ sq cm, what is its volume (আয়তন)?